

# From Taxation to Fighting for the Nation: Historical Fiscal Capacity and Military Draft Evasion during WWI

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## Abstract

Do strong states affect the culture and actions of their citizens in a persistent way? And if so, can the capacity to tax, by itself, have a role in driving this effect? I study how the historical capacity of a state to collect taxes affects the decision of citizens to evade the mandatory military draft. I look at Italy during World War I and identify quasi-exogenous variation in tax collection induced by the administrative structure of Piedmont during the 1814-1870 period. Using newly collected and digitised individual data on nearly all the men of the 1899 cohort drafted in the province of Turin, I find that citizens born in towns with lower historical fiscal capacity are more likely to evade the military draft, and that the effect transmits through changes in culture. Results are consistent with fiscal capacity spurring norms of rule-following able to persist in the long run. Placebo estimates from other Italian territories confirm that the effect I estimate can be attributed to fiscal capacity, and it is not confounded by legal capacity.

**Keywords:** Fiscal capacity, Tax collection, Culture, Military draft, Italy, World War I

**JEL classification:** D73; D74; D91; H20; N43

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# 1 Introduction

The ability of a state to enforce laws and collect taxes efficiently (i.e., *state capacity*) is a fundamental driver of economic development (Kaldor, 1963; Besley and Persson, 2009, 2010; Acemoglu et al., 2015; Dell et al., 2018; Dincecco et al., 2020).

State capacity does not only affect the economic situation of its citizens, but may also have an impact on citizens' culture (Weber, 1976; Dell et al., 2018; Lowes et al., 2017; Heldring, 2021). Norms developed under strong states can persist over time, and societies exposed to strong state capacity may show the effects of such exposure in the actions of their citizens even generations after the establishment (and the removal) of the institutions that make a state strong.

In order to build state capacity, governments need to collect taxes effectively (Pomeranz and Vila-Belda, 2019). Historically, for most citizens, taxation was the activity through which the state started to be present in their lives (Cantoni et al., 2019; Weigel, 2020), which makes the ability to collect taxes a hallmark of the state (Scott, 2017). Despite the relevance of fiscal capacity (the capacity of a government to collect taxes effectively), assessing its effects causally is a nontrivial task, as higher levels of fiscal capacity are typically associated with other phenomena, such as legal capacity.<sup>12</sup> Still, research suggests the act of enforcing taxation on citizens can affect their attitudes towards the government in the short run (Weigel, 2020): thereby, improving the capacity of a government to raise taxes may have important effects on citizens' culture and their actions, also in the long run.

In this paper I use individual data on military enlistment and draft evasion during World War I to study how historical exposure of local communities to fiscal capacity affects citizens' actions in the long run, and more specifically actions that involve a duty towards the government. I look at the Italian military draft in 1917, when the Italian Kingdom was involved in a demanding war and its male population was subject to mass mobilization to fight, through mandatory military service for every Italian man able to serve.

I investigate the effect of the historical capacity of a state to extract taxes on the norms of local communities, which may have persisted in the long run and ended up affecting citizens' decision to enlist or to evade the military draft. I do this by analysing the long run effects of

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<sup>1</sup>Legal capacity is intended as the general ability of a state to enforce laws. The association between legal and fiscal capacity happens because investments in the two are complements (Besley and Persson, 2009) and most determinants of fiscal capacity lead to higher legal capacity too.

<sup>2</sup>It is also common to use information of tax revenues of countries (or other administrations) as a measure of state capacity at large, abstracting from consideration on its legal and fiscal components (Gennaioli and Voth, 2015; Johnson, 2015; Heldring, 2020).

exposure to institutions for tax collection in place during the 1814-1870 period in Piedmont, a region in Northwestern Italy previously belonging to the Sardinia Kingdom. In particular, given the partition of the Sardinia Kingdom into small tax districts and the allocation of tax collectors by the government, I leverage distance from tax collectors to identify variation in the capacity of the government to extract taxes from the different towns of the Kingdom. Between 1814 and 1870 every tax of the Kingdom district was assigned to one tax collector only, who was required to live and work in a specific town of the district chosen by the government (the tax district capital) and to visit each town of his district at least once a month. While tax collectors respected the first requirement, anecdotal evidence suggests the second rule was not enforced, so that tax collectors did not move around their tax districts in a systematic way. After 1870 this tax collection system was removed, and replaced by a new system under which tax collection was assigned to private citizens separately for each town, so that the previously existing tax districts did not have any role for tax collection in 1917. Being the tax collection system under analysis not in place anymore in 1917, the purpose of my analysis is to identify the *historical* fiscal capacity effect, i.e. the long run effect on citizens' actions of exposure to institutions granting higher fiscal capacity *after* they were removed, inspecting whether such an effect may persist over time through changes in the norms and culture of the local communities.

Motivated by the evidence on tax collectors' behaviour, I use the distance of a town from the residence of its tax collector as a measure of the capacity of the government to extract taxes from it in the 1814-1870 period. While distance from governmental offices is a reasonable and widely used measure of their capacity to act ([Michalopoulos and Papaioannou, 2014](#); [Restrepo, 2015](#); [Henn, 2020](#)), in this setting the estimation of the (historical) fiscal capacity effect poses important identification challenges. First, as tax collectors resided in tax district capitals, these towns were likely to be chosen because they were particularly relevant for the district surrounding them: therefore, distances from former residences of tax collectors are likely to correlate with several socio-economic characteristics of towns and of citizens living in these towns (e.g. income, market access, social structures), which may in turn prove to be drivers of the decision to evade the military draft. Second, as tax districts were centers of administrative divisions (albeit very small ones), it is possible that they were hosting other public offices: if this were the case, distance from a former tax collector's residence could predict not only historical fiscal capacity, but also other components of state capacity. In order to address the first threat to identification I exploit discontinuities in distance from a historical tax collector's residence created by tax district borders. More specifically, I focus on variation in distance from tax collectors' residences within *pairs* of towns that are neighbour-

ing, but belong to two different (and adjacent) tax districts. Neighboring towns, because of their geographical proximity, have similar observable characteristics, but because of their assignment to two different tax districts, they differ in distance from their former tax collectors' residences. I therefore match each town on the border of a tax district to every neighbouring town on the other side of the border, and estimate the effect of distance from a former tax collector's residence on draft evasion controlling for a full set of town-pairs fixed effects (following [Dube et al., 2010](#)). In this way, the effect of historical fiscal capacity on the likelihood of evading the draft is identified by exploiting variation in distance from a tax collector's residence between neighbouring towns (or citizens born in two neighboring towns) belonging to different tax districts. To address the second challenge, i.e. the presence of other public offices, I exploit three strategies. First, I exclude from the sample towns for which the distance from a former tax collector's residence corresponds to the distance from other public offices or from a police station, an arguably important driver of draft evasion which may contaminate the historical fiscal capacity effect. Second, I verify that no other public office was located one-to-one in tax district capitals, except local courts for minor cases. Third, to disentangle the historical fiscal capacity effect from the effect of proximity to a court (a potential proxy for legal capacity) I perform a placebo test using data from the Italian province of Vicenza, where districts were used for judicial purposes but never for tax collection purposes.

To study my research question, I assemble a unique dataset combining town-level information on both pre- and post-1870 characteristics and newly collected and digitised individual data on all the men from the 1899 cohort drafted in the towns of the Province of Turin. The dataset includes rich information on drafted Italian citizens coming from their medical examination and the record of their history in the military until the moment of actual enlistment. Crucially, the dataset contains information on a citizen's name, town of birth, town of residence, and whether they enlisted or evaded the military draft. The individual-level dataset has a coverage of 92-98% of all the men born in 1899 in the Province of Turin that were estimated to have survived until the age of 18, reaching nearly-full coverage: accordingly, the estimated results are likely to be representative of the male population born in the towns of the sample.

In a first result, I provide evidence that the distance of a town from a tax collector's residence did lead to less taxes collected in that town before 1870, looking at taxes raised by the tax collector on behalf of the town in the areas of Ivrea and Saluzzo. These results support the strategy of using distance from a tax collector as a valid measure of (historical) fiscal capacity.

In my main result, I show that historical fiscal capacity lowers the likelihood of citizens to evade the military draft during World War I: being born in a town farther from the former residence of a

tax collector predicts a higher likelihood to evade the military draft in 1917, both in town-level and individual-level analyses. A 1 kilometer increase in distance from a tax collector's residence leads to 0.2/0.55 percentage points increase in the share of draft evaders in the town, compared to a mean evasion rate of 4,68%. This positive result is robust to controlling for a large array of town and individual characteristics; importantly, the effect is sizeable (despite being noisily estimated) also when including town-of-residence fixed-effects, exploiting variation in distance from tax collector only between citizens born in two neighbouring towns, but living in the same town at the time of the draft. To further attenuate concerns regarding a confounding effect of differences in draft enforcement, I also show that, when estimating the effect of distance from a former tax collector's residence and the one of distance from a police station jointly, the historical fiscal capacity effect is basically unaffected in its magnitude and significance. This result, together with the sample selection I impose, shows that the effect I identify is not driven by towns more difficult to tax being also more difficult to patrol.

The main results of the analysis are consistent with historical fiscal capacity having a positive effect on the likelihood of citizens to enlist and fight for the nation during World War I, reducing the likelihood that citizens evade. However, this effect may conflate both the historical fiscal capacity effect and the (historical and contemporary) legal capacity effect, as tax collectors' residences also hosted local courts. Since the correspondence between the two offices is one-to-one, it is impossible in the context of Piedmont to credibly disentangle the two effects. However, taking advantage of the administrative system of the unified Italian Kingdom, I am able to run a placebo test using distances from judicial district capitals that never hosted the residence of a tax collector. Using data from the province of Vicenza, I show that there is scarce evidence that proximity to a local court might have an effect on the decision to evade the military draft, or to enlist: estimated coefficients are small (compared to the ones estimated in the sample from Turin), often negative, noisily estimated, and unstable across specifications.

Next, I study mechanisms of transmission, exploring whether the effect of historical fiscal capacity is transmitted through culture (affecting the norms of communities more or less exposed to fiscal capacity), instead of transmitting through persistent differences in the strength of the state's institutions. I repeat the analysis focusing only on the sample of migrants and including town-of-residence fixed effects, keeping fixed every current institutional factor that may affect the decision to evade the military draft. Intuitively, for migrants, variation in distance of their town of birth from a former tax collector's residence predicts a cultural component in the effect of historical fiscal capacity; distance from a tax collector of the town of residence, instead, would predict persistent

differences in institutions. While the small number of migrants makes results noisier, I find that distance of the town of birth of a citizen from the former residence of a tax collector has a positive effect on the likelihood of a citizen to evade; estimated coefficients are also larger in size compared to the ones estimated on the pooled sample that includes also natives. These results corroborate the hypothesis that historical fiscal capacity transmits its effect in the long run through culture.

As a next step, I analyse how historical fiscal capacity interacts with the culture of a local community, using commonness of first names as a measure of conformism and shared identity in a town. I find suggestive evidence of substitutability between the norms of a town and the norms induced by fiscal capacity: in towns where norms were stronger, the effect of historical fiscal capacity on draft evasion is smaller. While the measure of norms' strength in a town I use is computed using post-treatment characteristics, I provide evidence that the effect of historical fiscal capacity on name commonness is not a serious concern.

A plausible mechanism driving the results is the emergence of norms of rule-following as a result of exposure to higher tax collection. Citizens living in towns where fiscal capacity was higher may have gotten accustomed to paying taxes, favouring the emergence of norms of tax compliance. If complying with tax obligations induced citizens to comply with other laws too (Keizer et al., 2008), then tax enforcement could have fostered the emergence of a generalised norm of rule-following,<sup>3</sup> inducing citizens to comply with the law (and arguably accept the state's requests) also in domains different from tax compliance. The persistence of such a norm over time would, then, induce drafted citizens to evade less the military draft many years later. While I am not able to empirically test for this mechanism, it is consistent with results on the interaction between historical fiscal capacity and the culture of towns: under the hypothesis of emergence of norms of rule-following, fiscal capacity favoured the emergence of such norms mostly where they were not very strong, i.e. in towns where conformism and shared identity were weaker.

Another potential mechanism is public good provision. Intuitively, if taxation were not extractive, better tax collection could have allowed towns to fund more public goods, and this may have in turn induced gratitude towards the state. However, looking at effects on funds for primary schools and charity institutions, I find no evidence that public good provision was higher in towns where fiscal capacity was higher; consequently, public good provision is unlikely to drive the main effect. I also provide evidence that proximity to tax collectors did not increase the patriotism of citizens: while state presence (signaled by a tax collector) may have induced citizens to identify

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<sup>3</sup>Heldring (2021) provides evidence that strong states foster the emergence of norms of obedience, and that these norms persist over time.

more with the central state, I find no consistent effects of distance from a former tax collector's residence on Medals of Honor during World War I.

Finally, the evidence of this paper are also consistent with two other mechanisms. The first one is perceived fairness of taxation: keeping the tax level fixed, more systematic tax collection may have been perceived fairer by citizens (Weigel and Ngindu, 2021), leading them to recognise higher legitimacy to the state's requests. While tax collectors had no power in determining the tax base (and correcting its flaws), increased perceived fairness of tax collection can potentially be a channel through which high historical fiscal capacity decreases draft evasion in the long run.

The second alternative mechanism is updating of citizens' beliefs about the state: if tax collection sends a signal of higher state capacity,<sup>4</sup> then citizens may perceive higher value in defending the country, and would therefore be less prone to evade the military draft. While this interpretation seems inconsistent with the results on patriotism, it is theoretically possible that citizens who perceive higher state capacity enlist more, without being more patriotic or prone to heroic actions.

Ultimately, evidence from this paper is mostly consistent with fiscal capacity inducing norms of rule-following; however, I cannot rule out the hypotheses that perceived fairness of tax collection and positive updating in perceived state capacity might be mechanisms behind the main result.

This paper contributes to four strands of literature. First, it relates to the literature on the consequences of establishing state capacity (Dincecco and Katz, 2016; Dincecco et al., 2020; Cantoni et al., 2019) and more specifically on literature studying the impact of state capacity on the attitudes and actions of their citizens (Weber, 1976; Elias, 1994; Pinker, 2011; Becker et al., 2016; Lowes et al., 2017; Johnson, 2015; Heldring, 2021, 2020), which found mixed evidence on how strong states affect trust, rule-following, and nation building in the long run. While these studies looked at effects of state capacity that arise several generations after the institutions under study are discontinued, the main contribution of my paper is to complement this body of literature focusing on the effects of *fiscal capacity* on culture and actions, and isolating them from other components of state capacity like legal capacity and military enforcement.

Second, this paper also contributes to the literature on the drivers of participation in war, and on the determinants of patriotism in general. A branch of research analysed how socio-economic environmental factors (Kleykamp, 2006) and economic policies of the state (Alesina et al., 2020, 2021; Caprettini and Voth, 2021) can induce citizens to join the army, e.g. through the provision of public goods and welfare spending. Another strand of this literature studies the cultural determinants of war service and patriotism (Campante and Yanagizawa-Drott, 2015; Chen, 2017; Qian and

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<sup>4</sup>That is, higher ability of the state to implement policies potentially useful to citizens.



Tabellini, 2021; Esposito et al., 2021), highlighting how participation in war and desertion can be significantly affected by cultural transmission from fathers, deterrence of death penalty, perceived state legitimacy, experiences of discrimination, and racist and revisionist narratives about civil wars. I contribute to this literature investigating the role of a novel driver in the decision to enlist or evade the draft, namely the long run effect of past fiscal capacity experienced by a community, an arguably powerful signal of the presence of the state; I also focus on a setting where military draft was mandatory, therefore looking at a decision involving both patriotic considerations and obedience to the law.

Third, this paper is also related to research on mobilization for World War I (Abramitzky et al., 2011; Koenig, 2015; Berg and Dahlberg, 2016; Acemoglu et al., 2020; Boehnke and Gay, 2020), which mostly studied the effects of participation in war on various social and political outcomes. Similarly to Esposito et al. (2021), I contribute to this strand of literature focusing on a novel determinant of participation in World War I.

Finally, this paper speaks to the literature analysing how taxation and tax collection influence the intrinsic motivation to pay taxes, social unrest, and citizens' perception of a state's capacity (Levi, 1996; Besley et al., 2019; Lax-Martinez et al., 2020; Weigel and Ngindu, 2021). I contribute to this literature by studying the long run cultural effect of imposing fiscal capacity on a community, and focusing on an outcome other than tax morale, namely law-abiding behaviour when obligations towards the state are involved.

The rest of this paper is organised as follows: section 2 provides an overview of the tax collection system in Piedmont before 1870 and of the Italian military draft in 1917; section 3 describes the data used in the empirical analysis; section 4 presents the identification strategy; section 5 shows balancedness in observable characteristics between more and less intensely treated units; section 6 presents the main empirical results; section 7 studies mechanisms and section 8 concludes.

## **2 Background**

### **2.1 Tax collection in the Sardinia Kingdom, 1814-1870**

The Sardinia Kingdom was one of the eight most relevant political units of the Italian territories in the first half of the XIX century, i.e. after the Napoleonic wars and before unification. Its territories mainly coincided with four Italian regions, namely Piedmont, Liguria, Aosta Valley and the Sardinian Island.



Except for the years under the French domination,<sup>5</sup> the Sardinia Kingdom (or Piedmont) was a long-living independent state dominated by the House of Savoy. Starting 1814, the kingdom underwent several political and economic changes, also as a consequence of the revolutions of 1848 and the Italian Wars of Independence, culminating with the unification and the establishment of the Italian Kingdom in 1861, a process that the Sardinia Kingdom led.

The kingdom had a rather complex geographical administrative structure, which it partially inherited from the policies promoted by the French rulers. In particular, after coming back in power in 1814, the House of Savoy kept in place most of the judicial system established by the French, including the partition of Piedmont's territories into a large number of small judicial districts.

The judicial districts were established according to a French law<sup>6</sup> following the requirement of having around 10.000 citizens living in each of them. In addition, the law required the judge to live in a designated town of the district, chosen according to its relevance and its centrality with respect to the other towns. The Piedmontese government expanded this system to all its other territories; furthermore, starting 1814, the judicial districts were also used for tax purposes, assigning one tax collector to each judicial/tax district, and requiring him to live in the same city of the judge.<sup>7</sup> This administrative division was relevant only for tax and judicial purposes; there was no other public office located in the district capital on a systematic basis, and the district did not have a local government.

Through this system, the collection of direct taxes was centralized and internalized. Tax collectors were public employees, and they were entrusted with the task of collecting all direct taxes for the central and provincial government,<sup>8</sup> on top of every direct or indirect local tax the town government decided (at its discretion) to levy.

The tax collector was required to visit each town of the district at least once a month. However, transcripts from a debate of the Sardinian Parliament from 1854<sup>9</sup> clarify this rule was not respected: tax collectors' visits to their assigned towns were highly irregular, or completely absent; as a consequence, tax payments were often taking place at the residence of the tax collector, forcing citizens to travel to the tax district capital in order to pay taxes.

This tax collection system was kept in place in Piedmont from 1814 until the Italian unification,

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<sup>5</sup>The mainland regions of the Sardinia Kingdom were completely annexed to France between 1802 and 1814.

<sup>6</sup>*Règles générales sur l'administration de la Justice et sur l'organisation des Tribunaux dans le Piémont (1801).*

<sup>7</sup>The overlap of judicial and tax districts poses concerns to the identification of the effect of historical fiscal capacity on military draft evasion; in section 4.3 I propose a way to address this issue.

<sup>8</sup>Direct taxes grew of importance for the Sardinia Kingdom in XIX century, almost doubling between 1825 and 1859 and amounting to 19% of tax revenues in 1859 (Dincecco et al., 2011).

<sup>9</sup>*Camera dei Deputati (1870).*

and on a temporary basis also in the first years following the unification process. Starting 1870, collection of direct taxes was reorganised and homogenised across Italy: rights to collect taxes were assigned to private citizens on a town-level basis, hence making the districts irrelevant for tax collection purposes. Since 1861 the whole Italian territory was partitioned in *judicial* districts comparable to the districts used in the Sardinia Kingdom for judicial and tax purposes; this judicial administrative system was still in place in 1917.

## 2.2 Italian military draft in 1917

In 1917 the Italian Kingdom was participating in World War I since two years, fighting against the Austro-Hungarian Empire on its Northeastern border. The Italian male population was called for mass mobilization, so that the vast majority of men able to serve in the Army were asked (compulsorily) to enlist.<sup>10</sup>

Military service had been mandatory for every Italian man aged 20 (or older) since 1875 (L. 2532/1875), and for territories formerly under the Sardinia Kingdom since 1854 (L. 1676/1854). Before World War I, mandatory military service lasted two years. When drafted for military service, Italian men were asked to visit their division (or *circondario*<sup>11</sup>) capital to undergo a medical examination; if they were considered suitable to serve, they were soon enlisted and sent to military camps.<sup>12</sup> As a division included several judicial/former tax districts, for most citizens the district capital was not their division's capital.

Because of the considerable losses, in 1916 the Italian Army started to call men to serve before they turned 20. In particular, almost the entire cohort of 1899 was called to enlist before the age of 18.<sup>13</sup>

Evasion of the military draft was a widespread phenomenon. During the entire war, 11,31% of drafted Italian men (and 10% in the 1899 cohort) evaded the military draft (Ilari, 1990), by not showing up for medical examination or not enlisting after being considered suitable to serve. It was common for evaders to hide in mountain areas; however, many were found also in large cities

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<sup>10</sup>By the end of the war in 1918 around 5,9 million men were enlisted, out of around 12,2 million men belonging to 27 birth cohorts that were called to serve (Ilari, 1990).

<sup>11</sup>A *circondario*, or a *division* as I call it in the paper, was the most relevant local administrative unit of the Sardinia Kingdom, with the ability to collect taxes and fund public goods (mostly roads). After the Italian unification, the *circondario* remained present as an administrative unit but lost its relevance, losing any power as a local government: essentially, it served to delimit judicial districts for the main courts of the Italian Kingdom, and hosted in its capital a court and a representative of the central government.

<sup>12</sup>In times of peace, and during the first periods of the war, enlisted soldiers could be sent to every camp on the Italian territory; however, by 1917 the system was mixed and often soldiers would be enlisted in camps in their region, before being sent to the front.

<sup>13</sup>Men born in the first four months of the year were called for medical examination in February 1917; men born in the following months were called in May 1917.

like Turin ([Melograni, 1969](#)).

The considerably high proportion of draft evaders includes the Italian emigrants who did not repatriate and did have a second citizenship. Indeed, more than 78% of draft evaders were migrants who did not repatriate for military service. While the Italian government organized repatriation for drafted men living abroad and their families, many emigrants did not know the precise duties they had towards the Italian Army, especially when living far from Italian embassies and consulates ([Commissariato Generale dell’Emigrazione, 1923](#)).

Before and during the war, drafted men could be exempted from military service for health reasons. However, in 1917 the Army considerably tightened its rules for granting exemptions, also calling previously exempted citizens to review the first visit and enlist them.

### 3 Data

In the following section I present the dataset I assembled and describe the main variables used in the empirical analysis. In [Appendix B](#), I provide a detailed list of all the variables used in the analysis, their sources and their construction.

#### 3.1 Fiscal capacity

The main explanatory variable is the (log of) walking distance of a town from the capital of its tax district (the residence of its tax collector) during the 1814-1870 period, which I use as a proxy for historical fiscal capacity of the state in that town. I obtain the list of towns for the 1814-1870 period and their partition in tax districts from [Stefani \(1855\)](#).

I compute the walking distance (in meters) as the length of the least-cost path between the centroid of a town and the centroid of its (former) tax district capital. I follow [Özak \(2010\)](#) and determine the cost of moving through cells according to elevation, weather patterns and soil conditions,<sup>14</sup> and using Tobler’s hiking speed function to determine the walking-time cost of moving through cells.

As an alternative measure, I use the (log) euclidean distance of a town from its (former) tax district capital.

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<sup>14</sup>More specifically, [Özak \(2010\)](#) proposes a Human Mobility Index, computing the travel time (in days) keeping into account the aforementioned characteristics. In the main analysis of this paper I compute a path using the HMI procedure, but I use the (log of) length in meters of the path instead of travel time as main variable of interest. Results are robust to using the Human Mobility Index between a town and its former tax district’s capital as an alternative measure.

### 3.2 Draft evasion and other data from military records

Using the enlistment records from 1917 kept by TSA, I collect and digitise individual data on all the men called to serve in the Italian Army who belonged to the 1899 cohort and were registered as residents in the province of Turin.<sup>15</sup> The 1899 cohort includes all men born in 1899 and a limited number of older men whose enrollment was deferred for medical reasons.

The men I observe in my sample were considered residents in the province of Turin if they were born there and never changed their residence, or if they were born out of the province of Turin but registered there as residents. The enlistment records also contain information on Italian emigrants born in the province of Turin who did not change their citizenship, and were therefore asked to serve in time of war.

For each drafted man, the digitised data from enlistment records contain information on his personal details (name, surname, name of his father, height, literacy level), his town of birth and current town of residence, and information on his enlistment process (actual enlistment, exemptions for medical reasons, other types of exemptions, declaration of draft evasion). Using information from the enlistment records, a man is coded as a draft evader if he was declared as an evader and such a declaration was never cancelled.<sup>16</sup> Figure B.1 shows an example of the original data from military lists.

Furthermore, I use data from enlistment records of all the men called to serve in the Italian Army that belonged to the 1899 cohort and were registered as residents in the province of Vicenza (digitised by the Vicenza State Archive, henceforth VSA). Data provided by VSA contain many information comparable to the data collected from AST; however, they do not contain information on citizens' height and literacy levels, and provide less detailed information on their enlistment process.

### 3.3 Taxes collected by towns before 1870

I use data on all local taxes raised by tax collectors on behalf of towns for 148 towns belonging to the Sardinia Kingdom (Piedmont) before 1861. The towns in this sample belonged to two divisions of the Sardinia Kingdom, Ivrea and Saluzzo. I collect these data from two different sources:

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<sup>15</sup>For the city of Turin, because of the large amount of data, I collect data on all the men born in another town, and a subsample of data for men born in Turin. As explained in section 4.3, men born in the city of Turin would be in any case excluded from the analysis sample.

<sup>16</sup>In many cases, drafted citizens were declared evaders when not attending their medical examination, but were acquitted if they showed up shortly later (e.g. after one month). In a limited number of cases, citizens were mistakenly classified as evaders if their change of residence had not been recorded, and were therefore enlisted in another town. In cases like these ones men are classified as *non*-evaders.

for the division of Ivrea, I use archival records from 1847 kept by the Turin State Archive (henceforth TSA) ; for the division of Saluzzo, I use data from [Eandi \(1835\)](#), which reports information on average tax revenues collected in Saluzzo between 1831 and 1834.

### **3.4 Other town-level variables**

I collect information on the population of Piedmontese towns in 1821 from [Regno di Sardegna \(1824\)](#). From [Santi \(1902\)](#) I collect information, for each town, of its population in 1901, presence of police stations, post offices, train stations, and distance from the closest station or port. I calculate towns' distances from Turin, Genoa, their province capitals, their division capitals, the closest police station and three international borders (with France, Switzerland and the Austrian Empire). I use FAO-GAEZ ([FAO, 2015](#)) data to measure towns' land suitability for nine crops including wheat, rice, maize and potato. Finally, I obtain measures on towns' altitudes and land area from ISTAT.

## **4 Identification Strategy**

### **4.1 Empirical challenges**

In order to estimate the effect of historical fiscal capacity of the state on draft evasion in 1917, I test whether the distance of the town of birth of men from the historical residence (during the 1814-1870 period) of a tax collector predicts higher or lower likelihood that such men evade the military draft. Simple OLS estimates of this relationship pose two important empirical challenges to the identification of a causal relationship between fiscal capacity and draft evasion.

First, as towns hosting the residences of tax collectors were district capitals, they were likely to be chosen because of a particular importance for the territory of their tax districts (e.g. because of higher population, higher economic importance, better connections to the road and railway network): if this were the case, towns closer to the historical residences of their tax collectors would also likely be larger, wealthier, and with different socio-economic structures. As a consequence, the distance of a town from the historical residence of a tax collector would likely be correlated with characteristics other than historical fiscal capacity that could nonetheless affect the decision to enlist or to evade the military draft.

Second, being the center of an administrative division (albeit a very small one) the district capital was likely to host not just the residence of a tax collector, but also other relevant public offices since the time a tax collector was allocated there. If this were the case, the distance from a

tax district capital would conflate both a fiscal capacity effect and effects from other dimensions of state presence (or state capacity).

In the following sections I describe how address these two issues.

## 4.2 Town-Pairs Fixed Effects

A source of plausibly exogenous variation in historical fiscal capacity may come from discontinuities in distance from a historical tax collector's residence for towns close to each other, but belonging to two different (although adjacent) tax districts. Indeed, neighbouring towns on the two sides of a tax district, being very close to each other, have similar characteristics, on average; however, because of their assignment to two different tax districts, they differ in the distances from where their tax collectors were living in the 1814-1870 period.

In order to maximize the comparability of towns that differ in their distance from a former tax collector's residence I compare *pairs* of neighbouring towns that straddle a tax district boundary,<sup>17</sup> so that each town on the border of its tax district is matched with *every* other neighbouring town on the other side of its tax district.<sup>18</sup>

Formally, when analysing aggregate town-level outcomes, I estimate equations of the following form:

$$Outcome_{ip} = \gamma_p + \beta \log Dist. Tax Collector_t + V_t + \varepsilon_{ip} \quad (4.1)$$

where a town-level outcome for town  $t$  in pair  $p$  is regressed on  $\log Dist. Tax Collector_t$ , the distance of the town from the (former) residence of its tax collector, a full set of town-pairs fixed effects  $\gamma_p$  and (in some specifications) town-level controls  $V_t$ .

When looking at individual-level outcomes, the estimating equations takes the following form:

$$Draft\_Evader_{itp} = \gamma_p + \beta \log Dist. Tax Collector_t + \mathbf{V}_t + \varepsilon_{itp} \quad (4.2)$$

where  $Draft\_Evader_{itp}$  is a binary variable indicating whether citizen  $i$  born in town  $t$  in town-pair  $p$  evaded the military draft or not,  $\gamma_p$  is a full set of town-pairs fixed effects,  $\log Dist. Tax Collector_t$  is the distance of the town of birth of a soldier from the former residence of its tax collector, and  $V_t$  are town-level controls for town of birth of a citizen.

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<sup>17</sup>I follow this approach as an alternative to comparing all towns on one side of a district border to all the towns on the other side of the border.

<sup>18</sup>While in principle also pairs of towns within the same tax district could be used for this estimation strategy, being the treatment of interest varying also within towns in the same tax district, I focus on towns on the border of their tax districts in order to maximize power and differences in distance from a tax collector's residence.

If a town borders with several other towns, it appears in the estimation sample multiple times: more precisely, a town appears in the sample as many times as the number of town-pairs it is in. Similarly, for the individual-level analysis, a drafted man appears in the estimation sample as many times as the number of pairs its town of birth is in. The presence of a single town within multiple pairs along a tax district border induces mechanical correlation in the residuals across town-pairs. Additionally, given the small size of the districts I look at, most towns (and as a consequence, in the individual-level analysis, most drafted citizens) appear on more than one border, inducing correlation in the residuals across several borders. To address this issue and avoid bias in the estimation of standard errors, I follow [Dube et al. \(2010\)](#) and [Cantoni \(2020\)](#) and throughout my empirical analysis I use two-way clustering by border and tax district.

Figure 2 illustrates the identification strategy using the border between the Corio and the Rivara tax district. The polygons bordered in white represent towns, and the blue line represents the border between the two tax districts. Centroids of district capitals are denoted by blue dots. The two towns of Rocca Canavese and Levone (with borders highlighted in red) are located on the border of their tax districts and they are adjacent to each other, so they enter the estimation sample and will be matched in one town-pair (i.e. sharing the same town-pair fixed effect). Because of geographical proximity, the two towns are likely to be extremely comparable in many characteristics;<sup>19</sup> similarly, also the men born in the two towns are likely to be similar. However, while Levone is 2.8 kilometers far from the historical residence of its tax collector, the corresponding distance for Rocca Canavese is almost two times larger. Equations 4.1 and 4.2 exploit variation in distances from historical residences of tax collectors only within pairs like the Rocca Canavese/Levone one, and test whether it predicts differences in likelihood to evade the military draft for men born in the pair.

### 4.3 Presence of other relevant offices

Being centers of administrative divisions, tax district capital could be hosting other relevant offices, on top of residences of tax collectors during the 1814-1870 period. In this case, the matching strategy described in section 4.2 would isolate the effect of all the offices hosted in the district capital, and not only the historical fiscal capacity effect.

In order to address these issues, I impose some restrictions on the towns I include in the sample. First, I exclude tax district capitals from the estimation sample of my main analysis,<sup>20</sup> as their

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<sup>19</sup>Including, for example, the proximity to the same relevant town: Rocca Canavese and Levone are less than 3 kilometers apart, and from Rocca Canavese it is virtually indifferent to travel to Corio or to Rivara (that are likely to be the relevant towns of the area, and to host amenities such as a train station or a local market).

<sup>20</sup>Because of the small size of the districts under analysis, tax district capitals were often on the borders of their tax districts.



designation as capitals signals they might be too different from the other towns of the district (or the bordering district). Second, I exclude towns for which the distance from a former tax district capital coincides with distance from a division capital, which would be hosting other relevant public offices.<sup>21</sup> Third, to attenuate confounding effects from enforcement capacity of the state, I exclude towns for which the closest police station was located in the former tax district capital.<sup>22</sup>

Finally, the allocation of tax collectors mapped one-to-one into the allocation of local judges. This implies that estimates of distance from a tax district capital would conflate both fiscal capacity and legal capacity effects. While I am not able to disentangle the two effects in the context of Turin, I can rely on the presence of judicial districts in the rest of Italy comparable to the tax districts in Piedmont, but that were never used for tax purposes. I therefore estimate placebo regressions of the distance from judicial district capitals using the same strategy described in section 4.2 and data on drafted men from the province of Vicenza, as explained in higher detail in section 6.3.

## 5 Summary statistics and balance of observables

Table B.1 summarizes the characteristics of the towns and the individuals of the Turin sample, which I will use in the main analysis. Towns in my sample are arguably small (on average, with less than 1800 citizens in 1901), and only a minority of them hosted a police or a train station. The tax districts these towns belonged to during 1814-1870 were small, with around five towns per district; related to this observation, towns of birth of drafted citizens are on average less than 8 kilometers far from their former tax district capitals. Towns in the regression sample (selected as explained in section 4.3) tend to be less populated, and arguably more isolated (by looking at distance from province and division capitals, or at the presence of a train station) than the towns of birth of all the citizens drafted in 1917 in the province of Turin; most of these differences are likely to be driven by the exclusion of tax district capitals from the regression sample; because of this, walking distance from a former tax collector's residence is almost twice as large in the regression sample than in the full sample.<sup>23</sup> Reassuringly, the share of draft evaders born in the

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<sup>21</sup>I also include province fixed-effects in every specification, so to focus on variation between towns differing only in their distance from a former tax collector's residence, and not only differences in the policies of their province. I choose fixed-effects for provinces instead of divisions because of comparability between the Turin and the Vicenza sample (as better described in section 6.3) and because provinces were the relevant political unit, likely to enforce differential policies at the time of the war. Results using division fixed-effects are generally stronger.

<sup>22</sup>While this restriction does not rely on precise administrative division boundaries, I use closeness to a police station as the best approximation of the catchment area of the station, and impose this restriction to attenuate problems deriving by the overlap of a tax district and a police station catchment area, for which information are not available.

<sup>23</sup>where such a distance would be zero for district capitals

town is comparable across samples.<sup>24</sup>

Figure 3 presents estimates of  $\beta$  from equation 4.1 using (standardized) town characteristics as outcomes; Tables C.1 and C.2 report results from the same regressions. Under the identification assumption, these characteristics should be indistinguishable within couples of towns, on average; the estimates of such placebo regression should, therefore, be small and not significant. In each column of the tables I report a separate regression, where I always include town-pairs fixed effects (crucial for my identification strategy), historical province fixed effects, and I apply the sample restrictions described in section 4.3. Results show that controlling for town-pairs fixed-effects succeeds in making towns comparable, despite their differences in distance from a former tax collector's residence: most pre-determined variables (such as geographical characteristics, distance from relevant cities, or population right-after the introduction of tax districts), and post-treatment variables (such as the presence of a train station, a post office or distance from a police station) do not show significant differences between towns closer or farther from their tax collector in the 1814-1870 period; furthermore, most coefficients are small in size.<sup>25</sup>

Figure 4 presents similar placebo regressions, using as outcomes the town-level averages of individual characteristics of drafted soldiers.<sup>26</sup> The focus here is on characteristics which may directly influence the likelihood to show up (or not) for medical examination, or that may lead to differential ways of not enlisting. Within town-pairs, citizens born in towns farther from a former tax collector's residence do not differ significantly in their likelihood to be illiterate, or their height. In addition, within town-pairs, distance from a former tax district capital does not predict differences in two indicators of potential frauds in the process of the draft: the distance of interest does not predict higher share of citizens shorter than 150cm,<sup>27</sup> or a smaller cohort size as a share of the population of the town.<sup>28</sup> In sum, the town-pairs fixed effects design greatly attenuates

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<sup>24</sup>3,92% in the regression sample, 4,45% in the full sample.

<sup>25</sup>Towns farther away from a former tax collector's residence are also significantly farther from a division capital, which was also the location where medical examinations for the draft took place. In all the results, distance from a division capital is included as a control in the regressions together with other geographical and pre-determined characteristics; when including it as the only other covariate in the baseline specification (on top of fixed effects) the coefficient of interest becomes larger in magnitude, and marginally significant. This suggests the effect of fiscal capacity on draft evasion is not confounded by its correlation with distance from a division capital.

<sup>26</sup>While these outcomes are available at the individual-level, they are absent for most draft evaders, as the more common way to evade the draft during the war was to simply not show up for medical examinations: as a consequence, more than 88 percent of the draft evaders would be missing when using available individual-level information. I use town-level averages of individual characteristics in order to alleviate concerns arising from nonrandom missing data.

<sup>27</sup>This threshold was the minimal height possible to fight in the Italian Army, which had been lowered from 154cm in the first months of 1917. Anecdotal evidence suggests lowering the height was a common way to obtain exemptions for medical reasons before the war, however by 1917 exemption criteria had been substantially tightened.

<sup>28</sup>Differences in such an outcome, assuming no differences in the age structure of towns, could indicate both errors in the way

concerns that my measure for historical fiscal capacity could indeed be capturing effects of other relevant drivers of the decision to enlist or evade the military draft.

## 6 Results

### 6.1 Distance from tax collectors and local taxation before 1870

As a preliminary result, Figure 5 presents evidence on the effect of (log) distance from a tax collector's residence on the amount of local taxes raised by tax collectors on behalf of the town<sup>2930</sup> in the 1814-1870 period, looking at towns from the provinces of Ivrea and Saluzzo.<sup>31</sup> Table D.1 presents results from the same specification. Because of the very small number of towns with tax data available, I first present results from all the towns in my sample not hosting a tax collector's residence (columns 1 and 2); I later show results for towns from a sample selected according to the criteria presented in section 4 (columns 3 and 4). Columns (1) and (3) of Table D.1 estimates equation 4.1 including only town-pair and (historical) province fixed-effects, focusing on towns not hosting a tax collector's residence. In columns (2) and (4) I also include several pre-determined controls, including the population of the town in 1821, geographical characteristics of the town, and the distances from relevant towns (Turin, province capitals, and historical division capitals). In Figure D.1 and Table D.2 I present results from the same regressions, using per capita local tax revenues as outcome.

Results from Figure 5 and Table D.1 show a negative effect of distance from a tax collector on the taxes levied by towns, both in the extended and the restricted sample. In the extended sample the estimate of the coefficient of interest is lower in size when including all the controls, but remains significant at the 5% level. Interpreting inverse hyperbolic sine transformations as percent changes, a 1% increase in distance from tax collector's residence leads to 0.31%/0.56% reduction in taxes levied by municipalities; a 1km increase in such a distance leads to around 8%/14% decrease in local taxes raised. When restricting the analysis to the sample defined in section 4 the estimated coefficient is less stable across specifications; however, it is consistently negative, and marginally significant (on top of being larger in size) when controlling for pre-determined characteristics.

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birth registries/draft lists were kept, or intentional tampering of these records.

<sup>29</sup>Given the skewed distribution of local taxes and the presence of towns raising zero taxes, I use an inverse hyperbolic sine transformation of the outcome.

<sup>30</sup>As described in section 2.1, towns' governments relied on tax collectors to raise both direct and indirect taxes; according to calculations based on Fossati (1930) local taxes accounted for 15% of all the taxes a collector had to raise.

<sup>31</sup>The relationship showed in the Figure 5 is based on the same specification defined in equation 4.1 and the sample restriction presented in section 4, plotting the binned scatter of the residual variation underlying the estimation of  $\beta$  after accounting for population and geographical controls.

Taxes collected by the municipality may vary both because of differences in effectiveness of tax enforcement, or because towns simply decide to levy less taxes; in this context, distance of a town from a tax collector's residence is likely to affect the enforcement capacity in that town, but also the amount of taxes a local administration decides to levy, being aware of the enforcement capacity available. While potentially arising from both these channels, and being estimated in a low number of towns (148 in total, 115/39 in the estimation samples) and clusters (29/19) the effects in Table D.1 strongly suggest how distance from a tax collector was indeed associated to citizens paying less taxes in the 1814-1870 period. Therefore, these results support the strategy of using distance from the residence of a tax collector's residence as a measure for fiscal capacity of the government in the 1814-1870 period.

## 6.2 Historical fiscal capacity and draft evasion in WWI

In Table 1 I present estimates of equation 4.1 testing the effects of distance from former residences of tax collectors on the share of draft evaders from the 1899 cohort. Column (1) of Table 1 shows results including only town-pair and province fixed-effects. In columns (2), my preferred specification, I include controls for town-level geographical characteristics (which may have influenced the location of tax collectors' residences before 1870), while in columns (3) and (4) I controls for, respectively, town-level averages of individual level variables ( height, literacy, being exempted for health reasons, resident abroad), and several town-level variables potentially determined after the implementation of the treatment (e.g. presence of other public offices; presence of a train station and distance from it; population in 1901), which may nonetheless affect the decision to evade the military draft.<sup>32</sup> Results show that towns farther from the former residence of a tax collector have significantly higher shares of draft evaders in the 1899 cohort. The estimated effect of distance almost doubles in size when including town-level geographical controls, and it is significant (on top of being larger in size) also when including controls for individual characteristics and also post-treatment town-level characteristics. A 1% increase in distance from former tax collector's residence leads to a 0.015/0.04 percentage points increase in the share of evaders in the town; the effect is non-negligible in size, as 1km increase in distance corresponds to almost 0.4 p.p. higher draft evasion rate when controlling for geographical and pre-determined controls, a 8.5% increase compared to mean evasion in the estimation sample.

In Tables 2 and 3 I exploit the individual nature of my draft evasion data, and report estimates

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<sup>32</sup>Figure 6 plots the binned scatter of the residual variation underlying the estimation of  $\beta$  in the specification from column (1) of Table 1.

of equation 4.2, testing the effects of distance from former residences of tax collectors on the likelihood of individual citizens to evade the military draft, as measured by a binary individual-level variable. Specifications (1) to (4) are comparable to the corresponding ones in Table 1. Consistently with results at the aggregate level, Table 2 shows a negative and significant effect of my proxy of historical fiscal capacity on the likelihood that a citizen born in the towns evade the military draft. In column (5) I exploit the presence of internal migrants in my sample and add town-of-residence fixed-effects to the regression, leveraging variation in distances from former residences of tax collectors' only within citizens born in two neighbouring towns, but living in the same town at the time of the draft. This exercise aims at comparing individuals who are equal in their incentives to evade the draft arising from their current living conditions, but differ in their culture and specifically in norms and values induced by historical fiscal capacity. Consistently with previous specifications, results with town-of-residence fixed-effects show positive effect of distance of town of birth from former tax collector's residence on draft evasion, although imprecisely estimated.

In order to inspect how the effect of historical fiscal capacity compares to (or is correlated with) the capacity of the government to enforce the military draft in 1917, in Table 3 I estimate regressions comparable to the ones Table 2 but augmented with the inclusion of the distance of the town of residence of a citizen to the closest police station. Column (1) reports the same coefficient from column (1) of Table 2, column (2) shows the association between distance from a police station and likelihood of draft evasion without covariates, and columns (3) to (6) report the two coefficients together, adding covariates in the same fashion as in Table 2. Results from Table 3 show that the historical fiscal capacity effect remains positive and significant; remarkably, the estimated size of the effect is essentially unchanged with respect to the specification without distance from a police station.<sup>33</sup> As expected, distance from a police station is positively (and significantly) associated with the likelihood of evasion of the military draft; however, its estimated effect is substantially smaller compared with the historical fiscal capacity effect.

It is important to notice that police stations are not allocated randomly on the territory: as a consequence, in absence of information on their precise catchment areas, the effect of distance from them cannot be estimated causally in this context. Furthermore, while proximity to a police station may look like an intuitive proxy of law and draft enforcement (also, for draft enforcement, anecdotal evidence is strongly consistent with the territorial police having an important role in chasing evaders), it is likely that in times of war the allocation of policemen on the territory might be altered, so introducing measurement bias in the enforcement capacity of the Italian state.

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<sup>33</sup>This pattern is observed also in a similar regression at the town  $\times$  town-pair level.

Nonetheless, results from Table 3 show how the effect of historical fiscal capacity is distinct from effect of differential capacity to enforce the draft.<sup>34</sup>

### 6.3 Placebo test: legal capacity and draft evasion in WWI

In this section I replicate the aggregate analysis proposed insofar on another sample, the one of citizens drafted in the Italian province of Vicenza (the Vicenza sample),<sup>35</sup> applying sample restrictions similar adopted for the main sample and described in section 4.3.<sup>36</sup> As mentioned in section 2.1, citizens born in this province were also living in towns partitioned in districts; however, these districts were only used for judicial purposes (with the district capital hosting a court in charge of handling minor cases), but not for tax collection purposes, with tax collection assigned to tax farmers separately for each municipality. As a consequence, this analysis provides evidence on the effect that *legal* capacity (both historical and contemporaneous, as proxied by distance from a local court) has on the likelihood of citizens to evade the military draft.

In Table 4 I report estimates of equation 4.1 on the Vicenza sample,<sup>37</sup> while in Figure 7 I show the relationship between distance from a judicial district and the share of draft evaders in a town of the Vicenza sample (controlling for town-pair fixed effects).

Results from the Vicenza sample suggest the effect of distance from a (judicial) district capital is very different from the ones estimated on the sample from Turin (which could potentially conflate legal capacity and historical fiscal capacity effects). Coefficient estimates are mostly negative,<sup>38</sup> substantially smaller in size compared to the analysis in Turin, and consistently not significant.<sup>39</sup> The estimation sample from the province of Vicenza has around 14% fewer draft evaders than the province of Turin, which could be a result of the different coding of the *Draft\_Evader* variable performed by VSA; in addition, the number of towns in the estimation sample is sensibly lower than the Turin sample. More importantly, Vicenza was part of the Italian battlefield during WWI,

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<sup>34</sup>Note that the estimation sample does not include individuals born in towns that had the closest police station in the tax district capital.

<sup>35</sup>Table E.2 presents summary statistics of town-level characteristics in the Vicenza sample.

<sup>36</sup>Provinces of Veneto like Vicenza, from its annexation to Italy until World War I, had a slightly different administrative structure than other Italian provinces: they were partitioned in *distretti*, and not divisions (*circondari*). As *distretti* were much smaller than *circondari*, excluding towns for which a judicial district capital hosted a *distretto* would reduce too much the number of observations. As a second-best alternative, for the Vicenza sample, I exclude towns for which the judicial district capital was also the province capital. Results from the Turin sample using this alternative sample restriction

<sup>37</sup>The set of covariates used as control variables in this analysis are fewer than those used in the analysis for the sample of Turin, as town-level information from before the Italian unification (e.g. population in 1821 and distance from fairs and markets in 1842) are missing. I also miss some individual-level controls for every drafted citizens, i.e. height and literacy level.

<sup>38</sup>The estimated coefficient is positive only in column (4), where I control for post-treatment town-level characteristics.

<sup>39</sup>in Table E.1 I present results from individual-level regressions on the Vicenza sample, that confirm how the estimated effect of legal capacity does not seem to affects draft evasion, or at best has a very different effect on it.

hosting the headquarters of many regiments; as a consequence, the draft may have been more harshly enforced in Vicenza compared to the Turin province. However, despite a slightly lower baseline evasion level, equations 4.1 and 4.2 would be able to recover the causal impact of legal capacity on draft evasion provided that distance from a local court would not be correlated with differential enforcement of the draft, something that is not obvious to happen as most districts were far from the battlefield and local courts were not responsible to handle cases of draft evasion or desertion. While the specificity of the Vicenza province suggests caution in interpreting results from it, evidence from the Vicenza sample supports the claim that the effects observed in Turin should be attributed to the historical fiscal (rather than legal) capacity.

It may be surprising to see a measure of legal capacity having no effects on draft evasion, a decision linked to rule-following. However, the particular nature of the courts under analysis may explain the effects found in the Vicenza sample. Indeed, courts in the judicial district capitals only handled minor criminal and civil cases; as a consequence, it is possible that the legal capacity of the Italian state (and Piedmontese state before) would not be primarily signaled by the distance from a local court. While the analysis from the Vicenza sample may not provide conclusive evidence on the effect of legal capacity on culture, it is valid in attenuating concerns about legal capacity driving the effects found in the Turin sample.

## 6.4 Robustness

I provide evidence that the results from the Turin sample presented in this section are robust to alternative measures of historical fiscal capacity or to other sample selections.

In Table F.1 I present results using the log of euclidean distance from a former tax collector's residence as main explanatory variable, while in Table F.2 I use (log) cost-distance (computed using the Human Mobility Index by Özak (2010)); finally, in Tables F.3 and F.4 I show results where I measure historical fiscal capacity with a binary variable, indicating whether a town (within a couple) is farther from its former tax collector's residence compared to the other town. The effect of historical fiscal capacity on draft evasion remains negative regardless of the measure adopted; using a binary treatment I disregard important variation in the main distance of interest, and coefficients of distance from tax collector's residence are noisily estimated when looking at town-level outcomes; nevertheless, they are consistently positive, and stable across specifications; furthermore, estimates from individual-level regressions in Table F.4 are very similar to town-level ones, and more precisely estimated when controlling for geographic, pre-determined and mean of individual characteristics of drafted citizens.



To alleviate potential concerns related to multiple counting of towns in my matching procedure, in Tables F.5 and F.6 I replicate the analysis conducted above, but using only one match for each town in the regression sample. More specifically, I use the following procedure: first, I select towns and town-pairs using the same criteria as in section 4.3; second, I match them to all the contiguous towns on the other side of the district border (that respect the criteria described in section 4.3); third, for each town, I keep only the pair with the closest<sup>40</sup> matched town on the other side of the border.<sup>41</sup> Results are remarkably comparable in magnitude to the ones obtained using all the couples, while being more noisily estimated when using town-level outcomes. Results in Tables F.5 and F.6 suggest the results of the main analysis are not simply driven by the presence in the sample of multiple observations per town.

In Table F.7 I slightly vary the sample composition, excluding towns whose tax collectors' residence coincided with the province capital (instead of the division capital); results are similar with the ones presented in section 6.2. In Tables F.9 and F.10 I also allow for tax collectors' capitals to be in the sample, provided they did not host a police station. Using this (unbalanced) sample, the effect of distance from a tax collector remains mostly positive,<sup>42</sup> and mostly significant in individual-level regressions; however, across specifications, its size is substantially smaller compared to the main results.

## 7 Mechanisms

### 7.1 Transmission through culture

In this section I provide evidence on the potential mechanisms of transmission of the effect of historical fiscal capacity in Piedmont. While institutions for tax collection under analysis were no longer in place in 1917, they might have shaped the subsequent institutions of towns that were in place under the Italian Kingdom, including institutions related to the decision to enlist in the Army, or evade the military draft (e.g. draft enforcement or rule enforcement in general). On the other side, historical fiscal capacity may affect military draft evasion in the long run because it affects the culture of individuals, and potentially a community in a persistent way (see e.g. Nunn and Wantchekon, 2011). I test for culture as a mechanism of transmission focusing on the sample of internal migrants in my data. These citizens were born in a given town, but were living at age

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<sup>40</sup>I measure closeness between two towns using the euclidean distance between their centroids.

<sup>41</sup>Note that, while reducing the number of observations, following this approach some towns are still repeated multiple times in the dataset: this is a consequence of a town being the closest match for more than one other town. Therefore, I adopt the same empirical specifications described in 4.2, including the double clustering procedure.

<sup>42</sup>Except in the specification with contemporaneous town-level controls and town-of-residence fixed-effects.

18 in a different town. As a consequence, studying their decision to evade the military draft allows to disentangle institutional factors (which pertain to the town of residence of the citizen) from cultural determinants of the decision to evade the military draft (more likely to be a characteristic of the town of birth of citizens, and arguably of their parents). I therefore estimate equation 4.2 on the sample of migrants only, and include town-of-residence fixed-effects in the regression. In such a demanding specification, I estimate the effect of historical fiscal capacity on draft evasion leveraging only variation between individuals born in two neighbouring towns (on borders of their tax districts), but living in 1917 in the same town. This analysis is in the same spirit of the one presented in column (6) of Table 2; however, here I compare only migrants to migrants, while the analysis on the main sample including town-of-residence fixed-effects leverages also variation between native and migrants living in the same town in 1917. Town-of-residence fixed-effects allow to estimate the cultural component in historical fiscal capacity, as every external (institutional) factor would be the same for citizens under analysis, while historical fiscal capacity in their towns of birth would be different.

In Table 5 I present results from such analysis. While coefficients are less stable than in the main results (possibly because of the smaller sample size), they are all substantially larger than those estimated on the sample of natives and migrants; furthermore, they are statistically significant in the baseline specification and when controlling for geographical and predetermined town characteristics. These results are consistent with the hypothesis that the effect of fiscal capacity persists in time by affecting the culture of communities exposed to it, rather than through persistent differences in institutions.

Fiscal capacity is likely to induce norms of rule-following able to persist in time, in particular when the citizen has to interact with the state, and the state imposes requests to the citizen. Because of the sample selection and the results in section 5, the effect is unlikely to be driven by fear of police enforcement that transmits over time. This hypothesis is also supported by the results from the placebo test on the Vicenza sample, which show no effect of distance from a minor court on draft evasion. While it is possible that citizens are less likely to evade because of a general fear of enforcement instilled by tax collection that persists in time, it is not straightforward to interpret these results as fear of enforcement when the estimated effect of distance from a police station (presented in table 3) is consistently smaller than the estimated effect of historical fiscal capacity. Rather, these results are consistent with fiscal capacity incentivizing citizens to engage in patterns of rule-following behaviour, and ultimately getting used to being required of something from the state.

## 7.2 Interaction with culture of the town

Results presented insofar suggest historical fiscal capacity affects military draft evasion through culture, arguably inducing norms of rule-following able to persist in time. Communities living in towns exposed to higher fiscal capacity in the 1814-1870 period may have differed in their culture even before the Piedmontese tax collection system was introduced. As a consequence, fiscal capacity may affect the culture of communities in an heterogeneous way, according to the norms already in place in exposed towns.

I here test for heterogeneous effects of historical fiscal capacity by culture, focusing on the strength of local norms as a source of heterogeneity. In particular, I use name patterns of citizens in a given town and measure the commonness of their names as a proxy of conformism in the town's population.

The effect of the interaction between historical capacity and local norms is ex-ante ambiguous: on the one side, the effect of fiscal capacity on culture may be reinforced in towns where norms were stronger, as the diffusion of a new cultural trait may be easier;<sup>43</sup> on the other side, new norms may have less bite in communities where a sense of shared identity was stronger.

First names have been widely used to measure cultural traits: naming of a child is an important decision for the parent, who can in this way signal her cultural preference. A large literature in economics has used naming patterns to measure identification with racial, ethnic, national groups (Fryer Jr and Levitt, 2004; Fouka, 2019; Abramitzky et al., 2020; Russo, 2019); more importantly, name commonness (or its uniqueness) has been used to measure the desire to fit-in, or to signal independence (Bazzi et al., 2020; Beck Knudsen, 2019; Varnum and Kitayama, 2011).

In the spirit of Beck Knudsen (2019) I use name commonness as a measure of conformism in a community, or its sense of shared identity; however, because of the limited number of citizens I observe for each town (pertaining only to two generations) I take a different approach to measure name commonness.<sup>44</sup> For each town, I first compute a Herfindahl-Hirschman Index of first names

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<sup>43</sup>This mechanism would be consistent with Satyanath et al. (2017), who find that the spread of Nazism in Germany was higher in cities with denser social networks.

<sup>44</sup>The most widely used measure of name commonness is the share of individuals (out of the population of interest) being named with one of the most common ten names. However in my setting, looking at one cohort only, I observe very few citizens per town (often less than ten); this makes difficult to use such a measure relying on towns' patterns only. While in principle I could use the most common ten names at a more aggregate level (such as the tax district, or the administrative division), this strategy poses another important threat, namely that most common names are the ones of saint patrons of towns: as a consequence, they could capture patterns in religiousness. A concentration index detects conformity also in the case of two individuals having a same first name that is not overly common; therefore, my strategy attenuates the concern that measures of name commonness could signal religiousness.

of fathers of drafted citizens born in a given town  $t$ :

$$HHI_t^{fathers' names} = \sum_{n \in N_t} share_{nt}^2, \quad (7.1)$$

where  $n$  is a first name,  $N_t$  is the total number of fathers' first names in town  $t$ , and  $share_{nt}$  is the share of fathers of drafted citizens in the town with first name  $n$ . Intuitively, this index uses the concentration of first names to measure their commonness, and therefore to proxy for conformism in the town, a phenomenon arguably related to the strength of social norms. Second, I create a binary variable (*High Names' Concentration*) for whether soldiers were born in a high-concentration or a low-concentration town, assigning towns to two groups according to whether their  $HHI_t^{fathers' names}$  is above or below its median of towns in my sample.<sup>45</sup>

As the measure of naming patterns comes from military records in 1917, the naming decision of fathers takes place around 30-50 years before 1899, when the Piedmontese tax collection system was still in place; therefore, such an indicator can be affected by fiscal capacity. I therefore use naming patterns of fathers to go as back in time as possible, and show that historical fiscal capacity does not significantly predicts differences in the Index under use.

In Table F.11 I show that being born in a town where conformity is higher affects negatively the likelihood to evade the military draft; such a correlation may suggest social concerns play a role in the decision to evade, and the cost of evading is higher in towns where conformism is high.

In Table 6 I present results from individual-level regressions, testing for heterogeneous effects of historical fiscal capacity on draft evasion according to higher or lower concentration of fathers' first names. The table shows estimates of the following specification:

$$\begin{aligned} Draft\_Evader_{itp} = & \gamma_p + \beta_1 \log Dist. Tax Collector_t + \beta_2 High Names' Concentration_t \\ & + \beta_3 \log Dist. Tax Collector \times High Names' Concentration_t + \mathbf{V}_t + \varepsilon_{itp}, \end{aligned} \quad (7.2)$$

that is, the same specifications presented in Table 2, augmented with a binary variable for high concentration of fathers' first names and the interaction between such a binary variable and my proxy for historical fiscal capacity. The effect of historical fiscal capacity on the likelihood to evade the military draft for towns where local norms were likely to be weaker (i.e.,  $\beta_1$ ) is consistently positive and significant, and larger in size compared to pooled estimates presented in section 6.2.

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<sup>45</sup>In Table F.12 I present results using  $HHI_t^{fathers' names}$  as a measure of conformity; results are mostly consistent with the ones obtained using *High Names' Concentration*, albeit imprecisely estimated.

On the contrary, historical fiscal capacity for citizens born in a town where the concentration of fathers' first names was higher has a smaller effect on draft evasion. The effect is stable across specifications, and mostly significant.<sup>46</sup> Table 7 presents evidence from regressions on town-level outcomes:<sup>47</sup> results are consistent with the ones presented in the individual-level analysis, albeit less precisely estimated.

Results from Tables 6 and 7 suggest substitutability between the norms of a community and the norms induced by later exposure to state presence (through higher fiscal capacity). While institutions for tax collection induce changes in norms that affect draft evasion, this effect seems weaker in towns where conformism and shared identity were stronger.

Because I use names of men born after 1814, the results from this section can be interpreted as substitutability between culture and fiscal capacity under the assumption that historical fiscal capacity did not affect conformism in a town, while affecting norms of rule-following when the state asks to enlist for war. While this seems like a plausible assumption in my setting, I find that potential correlations between fiscal capacity and my proxy for conformism seems not to be driving the results. First, adding concentration of fathers' names as a control in the baseline regressions (as in the main results) does not affect the magnitude or the coefficient of interest (nor its significance). Second, in Table F.15 I show that historical fiscal capacity does not predict significant differences in concentration of fathers names, nor in the likelihood that a town has above-median concentration of names. Lastly, in Table F.16, I show that the concentration of names is highly correlated across generations: while it is not possible to look at naming patterns further back in time, this evidence is consistent with the norm being quite stable across generations. In sum, results from these checks suggest that concentration of fathers' first names is a good proxy for pre-determined levels of conformism in the towns of my sample.

do not disprove the assumption that after-1814 name data can be informative of the norms of the town, despite the threat posed by the confounding effect of fiscal capacity on them.

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<sup>46</sup>In Table F.14 I present evidence using a binary variable for the concentration of drafted citizens' first names (instead of their fathers' names). Results are consistent with the ones of Table 6; however, they are smaller in size and very imprecisely estimated. In Table F.13 I present I interact every control variable with  $HHI_t^{fathers' names}$ : while being less stable in magnitude, the estimated coefficient of  $\beta_3$  is consistently negative, and significant when controlling for geographical and pre-determined characteristics, which are the variables in my dataset that were determined *before* the naming decision of fathers took place.

<sup>47</sup>For this analysis, I estimate the equation:

$$\begin{aligned} share\ Draft\ Evaders_{ip} = & \gamma_p + \beta_1 \log Dist. Tax Collector_t + \beta_2 High Names' Concentration_t \\ & + \beta_3 \log Dist. Tax Collector \times High Names' Concentration_t + \mathbf{V}_t + \varepsilon_{ip}. \end{aligned} \quad (7.3)$$

### 7.3 Norms of rule-following

Results of the analysis show that the capacity of a state to tax citizens, in the context of Piedmont, is able to shape the cultural norms of communities, and affect high-stakes decisions (such as enlistment in the Army or draft evasion) in the long run. Additionally, results from section 7.2 on the interaction between fiscal capacity and culture of towns provide suggestive evidence that this effect is weaker in communities where conformism and shared identity were stronger.

In light of these results, a potential mechanism through which the capacity to collect taxes may affect draft evasion in the long run is the emergence of norms of rule-following, that prescribe how to interact with the central state, and potentially to obey to its requests.

Citizens exposed for more than 50 years to higher fiscal capacity probably got accustomed to paying taxes, and recognize legitimacy of the state's financial requests: such a behaviour would generate a norm of tax compliance. If respecting norms of tax compliance produced spillovers on other norms or rule-following (in a logic similar to [Keizer et al., 2008](#)), then fiscal capacity would be able to foster the emergence of a general norm of rule-following, able to affect also the decision to evade the military draft.

While I cannot empirically confirm nor disprove this hypothesis, it is consistent with the main results and with evidence on the interaction between fiscal capacity and culture of towns. Indeed, norms of rule-following may be already present (or stronger) in communities where conformism was higher; as a consequence, in these communities fiscal capacity might have had less success in fostering norms of rule-following, because the society was already able to make citizens respect the rules, including the mandatory enlistment. This interpretation is also consistent with evidence showing that draft evasion was lower in towns where conformism was higher. Additionally, the fact that the effect of fiscal capacity is mostly transmitted through culture (instead of institutions) makes more plausible that the effect of fiscal capacity persists thanks to the emergence of norms of rule-following.

Even if citizens may get accustomed to follow rules simply because of obedience, rule-following may emerge also if higher fiscal capacity leads to fairer tax collection, and this may induce citizens to recognize the state as legitimate. Tax collectors in Piedmont were only asked to collect taxes, and were not involved in broadening the tax base (or update taxpayers' lists); as a consequence, their role was to simply enforce tax obligations, and not increase the fairness of the tax system. Nonetheless, it is still possible that systematic tax collection may have been perceived as fairer in towns where fiscal capacity was higher, even keeping fixed the distortions of the tax base. As I am not able to test for the presence of this channel, it is a potential mechanism driving my main

results.

## 7.4 Public good provision

A plausible interpretation of the main result links the decision to go to war to the provision of public goods, or public funds more generally (Caprettini and Voth, 2021). Indeed, if higher fiscal capacity in a town allowed to fund more public goods, public good provision could induce a sense of gratitude towards the state; this may in turn explain lower levels of draft evasion in towns closer to a former tax collector's residence.

Columns (3) to (6) of Table 8 study the effect of fiscal capacity on public funds received by towns, looking at central government spending on charity institutions and hospitals (measured in 1840) and at total spending on primary schools in 1863 (where funds came almost entirely from town governments). Results show that towns subject to higher fiscal capacity were not receiving more public goods provision. Also, this evidence complements the result shown in columns (4) and (5) of Table C.2, where I show that towns where historical fiscal capacity was higher were not significantly more likely to have a post office or a train station, two other outcomes that can be related to public good provision.

Taken together, these results suggest that provision of public goods is unlikely to be the channel through which fiscal capacity induced lower draft evasion.

## 7.5 Higher returns from participation and nationalism

Another potential channel through which historical fiscal capacity may affect the decision to enlist for war is perceived higher state capacity. Related to this channel, fiscal capacity may affect patriotism of citizens exposed to more effective tax collection. The rationale for this mechanism is the following: tax collection may send a signal of higher state capacity in general, and citizens may react perceiving higher returns from participating to war, as they may be more likely to think their country is an entity worth defending.<sup>48</sup> This effect may translate into patriotism if state presence (signaled by the presence of tax collectors) induces citizens to identify more with the central state.

In columns (1) and (2) of Table 8 I test for the effect of historical fiscal capacity on patriotism using as an outcome the share of citizens born in a town who received a Medal of Honor during WWI.<sup>49</sup> Receiving a Medal of Honor is an outcome that signals heroic actions, and therefore more

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<sup>48</sup>This theory has recently found support in Weigel (2020) who studied the causal effects of tax collection on political participation in Congo.

<sup>49</sup>Data on Medals of Honor pertain only soldiers who died in war; the construction of the variable is explained in detail in Appendix B.3. Additionally, dead soldiers who received a Medal of Honor could be only citizens who did not evade the military draft; this sample could, therefore, potentially suffer from selection issues.



correlated to genuine patriotism, rather than rule-following. While the baseline estimate shows that distance from a tax collector has a negative and marginally significant effect on the share of medals received by citizens, the coefficient is very unstable and turns positive when controlling for geographical and predetermined characteristics. These results do not support the hypothesis that historical fiscal capacity of the state increases patriotism of citizens, nor that it affects the enlistment or evasion decision through this channel.

I cannot test the hypothesis that citizens (as a consequence of higher historical fiscal capacity) may enlist because they perceive higher value in defending the country, while not being more patriotic. On the one side, results on public good provision in section 7.4 (where I find no effects on public good provision) may be inconsistent with the hypothesis that more effective tax collection signaled higher state capacity in general: indeed, even if this were the case, by 1917 citizens would have perceived that higher tax collection was not translating into higher capacity of the state to provide public goods to citizens. On the other side, focusing on town-level variation in a sample of very small towns may make difficult to observe public good provision that may happen at a more aggregate (potentially national) level. Faced with the provision of public goods at the aggregate level, citizens from towns where fiscal capacity was different should update their perception of state capacity in the same way; however, it may theoretically be possible that citizens from more heavily treated towns could be more likely to associate the provision of public goods to tax enforcement, and therefore perceive higher value from defending the state by participating in war.

## 8 Conclusion

In this paper I provide evidence that higher fiscal capacity of the state increases citizens' compliance with rule that ask them to perform costly actions. This increase in compliance is visible generations after the removal of the institutions that created differences in the capacity of the state to collect taxes. By enforcing taxes, the state can induce compliance with the law also in domains that are not directly related to taxation.

Crucially, tax collection improves compliance by shaping the cultural norms of citizens. By collecting more tax revenues, a state with high fiscal capacity is clearly able to build a higher capacity to enforce laws and implement public policies effectively. However, evidence from this paper show that even in cases where fiscal capacity does not generate differences in other dimensions of state capacity (such as within pairs of neighbouring towns) tax collection may prove to be a precious tool for the government, by fostering the emergence of norms of rule-following.

My results point to a new interpretation of the contribution of fiscal capacity to the process of

state capacity building. While tax collection is often the starting point needed to build an effective state infrastructure, this paper shows that, by increasing compliance with the law, fiscal capacity can indirectly facilitate state building, by reducing the resources that a state needs to allocate for law enforcement. Finally, looking specifically at compliance with the military draft, this paper shows that fiscal capacity contributes to state capacity by improving military enlistment ([Qian and Tabellini, 2021](#)), which makes a state more able to fight –and defend itself– during wars.

It is still to be understood how other components of state capacity (as, for instance, legal capacity) affect cultural norms, and which component of state capacity has the larger effect on culture. Furthermore, this paper leaves open the question of how long run effects of fiscal capacity may influence cultural norms more generally, and not only in situations when the citizens had a direct interaction with the state.

Finally, while this paper shows that systematic tax collection can induce citizens to respond more positively to the requests of the state, intuitively the act of taxing citizens can also make them hostile to the state, and ultimately reduce compliance with the law ([Besley et al., 2019](#)). Future research on the conditions that make one of these two channels prevail will be important to inform policymakers on how to fine-tune tax enforcement policy.

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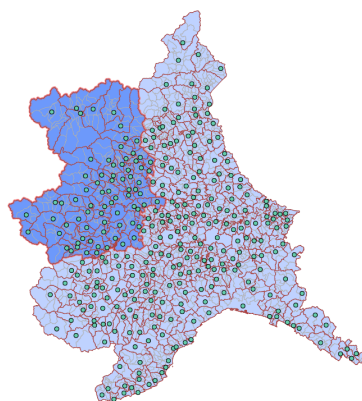


## Figures

**Figure 1: Italy, Piedmont and Tax Districts**



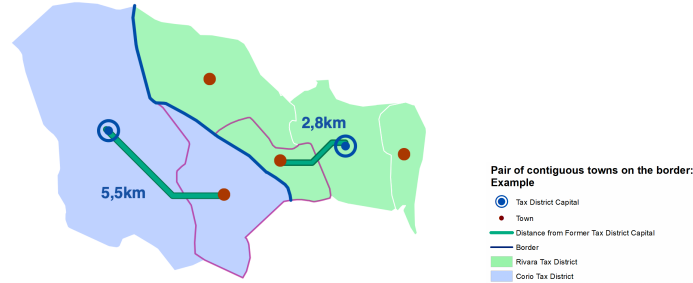
**(a)**



**(b)**

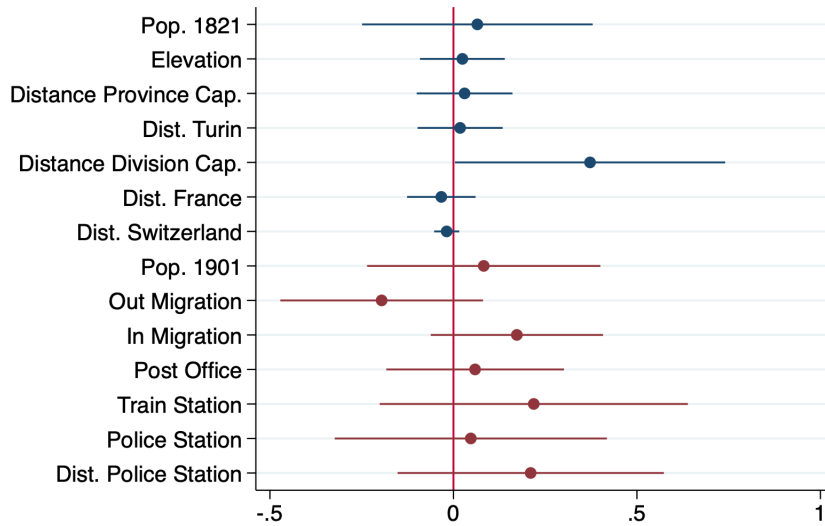
*Notes:* Panel (a) shows a map presenting in darker blue the territories of the Sardinia Kingdom (formal name of the area mostly corresponding to Piedmont) as a part of Italy; panel (b) zooms into Piedmont and presents its towns (the blue polygons), its tax districts (delimited by red borders), tax districts' capitals (green dots) and in darker blue the towns of the province of Turin in 1917, where the citizens' of the dataset lived at the time of the war. The shapefile of towns is constructed as explained in [B.1](#), using data from ISTAT; the assignment of towns to tax districts follows [Stefani \(1855\)](#).

**Figure 2: Town-pairs fixed-effects and walking distances from tax collectors' residences: example**



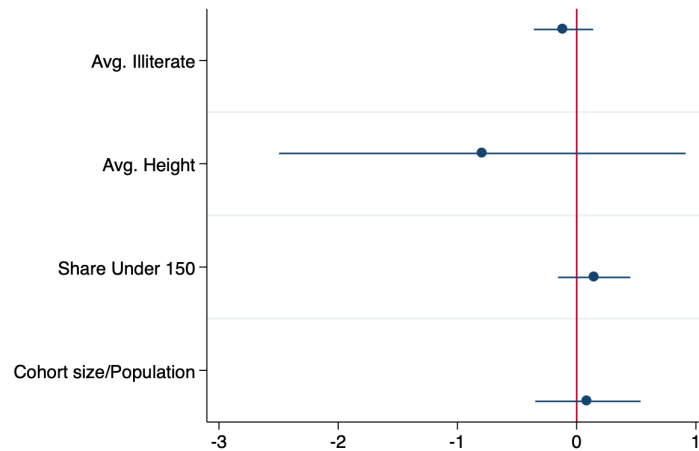
*Notes:* This map illustrates the identification strategy, showing two tax districts and highlighting one of the town-pairs used for identification. Blue circles represent tax district capitals (Corio and Rivara); red dots are the centroids of the other towns of the two districts; the red borders highlight two towns (Levone and Rocca Canavese) composing a matched pair of contiguous towns on the border; the two green lines represent the walking path between the town and its tax district capital (residence of a tax collector), computed as explained in 3.1. The shapefile of towns is constructed as explained in B.1, using data from ISTAT; the assignment of towns to tax districts follows Stefani (1855).

**Figure 3: Balancedness of observable town-level characteristics**



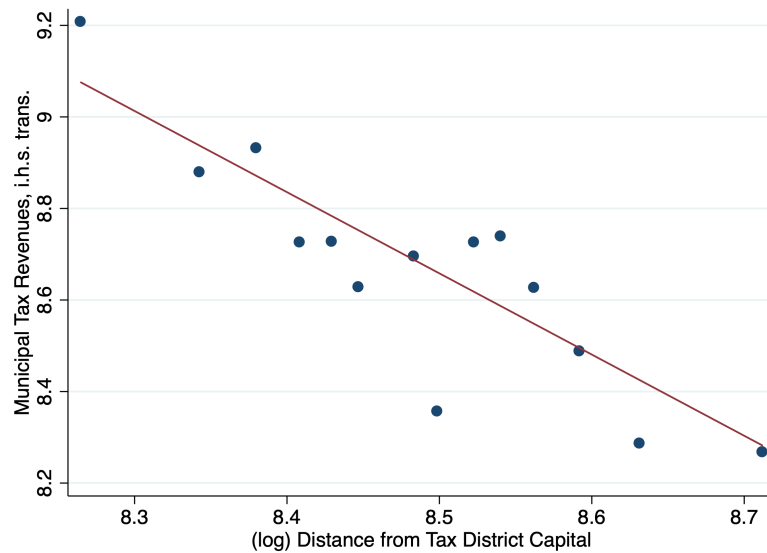
*Notes:* This figure shows  $\beta$  coefficients and 95% confidence intervals of separate regressions based on Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are a town  $\times$  town-pair. The sample includes all the towns in Piedmont selected as explained in sections 4.2 and 4.3. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period. Dependent variables of the first set of regressions (in blue) are geographical or pre-determined characteristics, namely: population of the town in 1821; logarithm of elevation of the town; distance from province capital, distance from division capital (*Circondario*), distance from Turin; distances from the Italian borders with France and Switzerland. Dependent variables of the second set of regressions (in red) are other town-level characteristics, namely: population in 1901; share of internal immigrants living in the town; share of citizens born in the town living elsewhere; indicator variables for the presence in the town of a post office, a train station, or a police station; walking distance to the closer police stations.

**Figure 4: Balancedness of observable characteristics, town-level averages of individual characteristics**



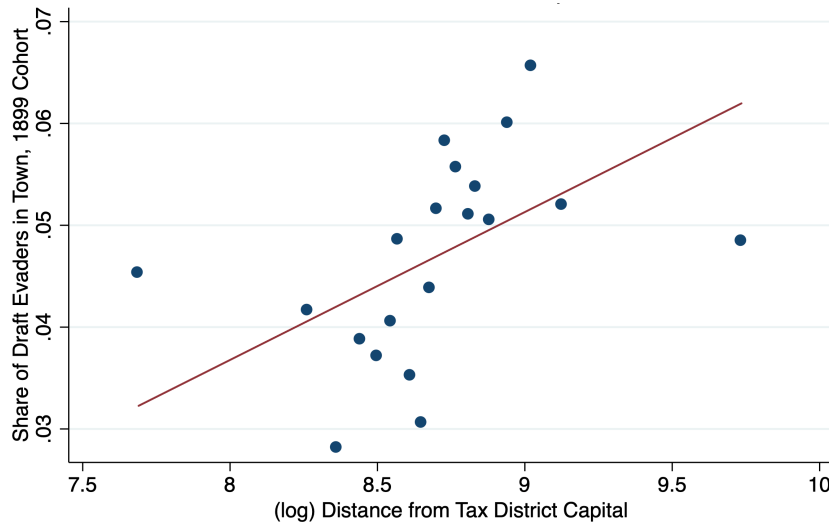
*Notes:* This figure shows  $\beta$  coefficients and 95% confidence intervals of separate regressions based on Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are a town  $\times$  town-pair. The sample includes all the towns in Piedmont selected as explained in sections 4.2 and 4.3. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period. Dependent variables are: share of illiterate citizens born in the town; average height for citizens born in the town; ratio between the number of citizens born in the town that appear in the 1917 lists and the population of the town in 1901; share of citizens born in a town less than 150cm tall (the threshold for exemption for medical reasons).

**Figure 5: Distance from tax collector and municipal tax revenues, Ivrea and Saluzzo**



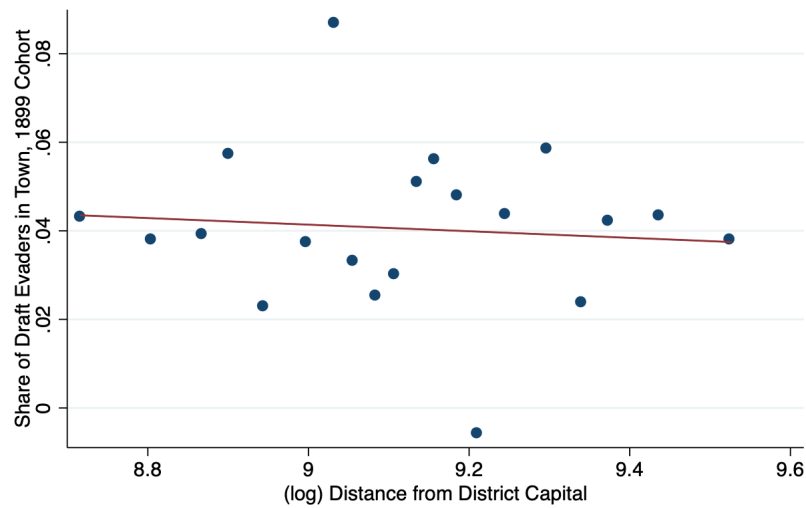
*Notes:* This figure presents graphical evidence on the relationship between the (log) walking distance of a town from a former tax collector's residence in the 1814-1870 period (computed as explained in 3.1) and the amount of taxes raised on behalf of the town government before 1870, transformed using the inverse hyperbolic sine function. Tax data are from 1847 and 1831-1834, and come from towns of the divisions of Ivrea and Saluzzo, selected as explained in sections 4.2 and 4.3. The binscatter shows the association between the two variables after controlling for town-pair fixed effects, province fixed effects, and geographical and pre-determined characteristics (see B.3 for their descriptions).

**Figure 6: Distance from tax collector and share of draft evaders**



*Notes:* This figure presents graphical evidence on the relationship between the (log) walking distance of a town from a former tax collector's residence in the 1814-1870 period (computed as explained in 3.1) and the share of draft evaders of the 1899 cohort born in the town. Data are from towns of the Turin sample, selected as explained in sections 4.2 and 4.3. The binscatter shows the association between the two variables after controlling for town-pair and province fixed effects.

**Figure 7: Distance from judicial district capital and share of draft evaders**



*Notes:* This figure presents graphical evidence on the relationship between the (log) walking distance of a town from a judicial district capital (computed as explained in 3.1) and the share of draft evaders of the 1899 cohort born in the town. Data are from towns of the Vicenza sample, selected as explained in sections 4.2, 4.3 and 6.3. The binscatter shows the association between the two variables after controlling for town-pair and province fixed effects.

## Tables

**Table 1: Distance from tax district capitals and share of draft evaders**

	Share Draft Evaders (1)	Share Draft Evaders (2)	Share Draft Evaders (3)	Share Draft Evaders (4)
(log) Walking Dist. from Tax Collector	0.015** (0.007)	0.029** (0.014)	0.040*** (0.015)	0.041** (0.016)
DV Mean	0.0468	0.0468	0.0468	0.0468
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Mean Individual Controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Towns in Sample	135	135	135	135
Observations	232	232	232	232
R-squared	0.583	0.680	0.707	0.781

*Notes:* The table reports  $\beta$  coefficients from Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the share of draft evaders born in a town in 1899 out of all the men born in 1899 in the town. The sample includes all the towns in Piedmont selected as explained in section 4.3. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 2: Distance from tax district capitals and likelihood to evade the draft**

					Residence FE
	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)	Draft Evader (5)
(log) Walking Dist. from Tax Collector	0.013** (0.006)	0.049*** (0.014)	0.064*** (0.013)	0.056*** (0.016)	0.051 (0.058)
DV Mean	0.0617	0.0617	0.0617	0.0617	0.0617
Couple-Pair FE	yes	yes	yes	yes	yes
Province FE	yes	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes	yes
Individual controls	no	no	yes	yes	yes
Town-level Controls	no	no	no	yes	yes
Observations	10,392	10,392	10,392	10,392	10,392
Individuals in Sample	2756	2756	2756	2756	2756
Towns in Sample	183	183	183	183	183
R-squared	0.072	0.078	0.079	0.082	0.115

*Notes:* The table reports  $\beta$  coefficients from Equation 4.2, which controls for town-pairs and province fixed effects. Units of observation are individuals  $\times$  town-pair. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes all the individuals born in towns in Piedmont selected as explained in section 4.3. The main explanatory variable is the logarithm of the walking distance between the town of birth of the citizen and the residence of the tax collector of the town in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Column (5) includes also fixed effects for the town of residence of the citizen. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 3: Distance from tax district capitals, distance from police and likelihood to evade the draft**

	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)	Draft Evader (5)	Draft Evader (6)
(log) Walking Dist. from Tax Collector	0.013** (0.006)		0.014** (0.006)	0.050*** (0.014)	0.068*** (0.015)	0.058*** (0.016)
Walking Dist. from Police Station, i.h.s. trans.		0.005*** (0.002)	0.005*** (0.002)	0.005** (0.002)	0.005** (0.002)	0.005** (0.002)
DV Mean	0.0617	0.0617	0.0617	0.0617	0.0617	0.0617
Town-Pair FE	yes	yes	yes	yes	yes	yes
Province FE	yes	yes	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes	yes	yes
Geographical controls	no	no	no	yes	yes	yes
Individual controls	no	no	no	no	yes	yes
Town-level Controls	no	no	no	no	no	yes
Observations	10,392	10,392	10,392	10,392	10,392	10,392
Individuals in Sample	2756	2756	2756	2756	2756	2756
Towns in Sample	183	183	183	183	183	183
R-squared	0.072	0.074	0.074	0.080	0.081	0.083

*Notes:* The table reports estimates from Equation 4.2 (which controls for town-pairs and province fixed effects), showing estimated coefficient  $\beta$  and the estimated effect of distance from the closest police station of the town of residence of the individual. Units of observation are individuals  $\times$  town-pair. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes all the individuals born in towns in Piedmont selected as explained in section 4.3. The first explanatory variable is the logarithm of the walking distance between the town of birth of the citizen and the residence of the tax collector of the town in the 1814-1870 period (or district capital), computed as explained in section 3.1. The second explanatory variable is the inverse hyperbolic sine transformation of the distance of the town of residence of the drafted citizen from the closest police station, computed in the same way as the first explanatory variable. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 4: Placebo test: Distance from district capitals, and share of draft evaders in Vicenza**

	Share Draft Evaders (1)	Share Draft Evaders (2)	Share Draft Evaders (3)	Share Draft Evaders (4)
(log) Walking Dist. from District Capital	-0.007 (0.026)	-0.023 (0.042)	-0.022 (0.044)	0.019 (0.079)
DV Mean	0.0405	0.0405	0.0405	0.0405
Town-Pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Mean Individual Controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Towns in Sample	55	55	55	55
Observations	100	100	100	100
R-squared	0.634	0.797	0.818	0.942

*Notes:* The table reports  $\beta$  coefficients from Equation 4.1 estimated on the Vicenza sample (men drafted in the province of Vicenza), which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the share of draft evaders born in a town in 1899 out of all the men born in 1899 in the town. The sample includes all the towns out of Piedmont selected as explained in sections 4.3 and 6.3. The main explanatory variable is the logarithm of the walking distance between a town and the minor court that had jurisdiction on the town (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Distretto*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, namely being resident abroad and having had an exemption for medical reasons. Town-level controls include population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .



**Table 5: Distance from tax district capitals and likelihood to evade the draft: sample of migrants**

	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)
(log) Walking Dist. from Tax Collector	0.076* (0.043)	0.238** (0.099)	0.137 (0.091)	0.114 (0.165)
DV Mean	0.0193	0.0193	0.0193	0.0193
Residence FE	yes	yes	yes	yes
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Individual controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Individuals in Sample	289	289	289	289
Towns in Sample	100	100	100	100
Observations	982	982	982	982
R-squared	0.642	0.689	0.692	0.699

*Notes:* The table reports  $\beta$  coefficients from Equation 4.2 (which controls for town-pairs and province fixed effects) estimated on the sample of internal migrants, and including town-of-residence fixed effects in each specification. Units of observation are individuals  $\times$  town-pair. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes all the individuals born in towns in Piedmont selected as explained in section 4.3. The main explanatory variable is the logarithm of the walking distance between the town of birth of the citizen and the residence of the tax collector of the town in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 6: Heterogeneous effects: distance from tax district capitals, culture of towns, and likelihood to evade the draft**

	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)
(log) Walking Distance from Tax Collector	0.025** (0.010)	0.062*** (0.016)	0.078*** (0.016)	0.066*** (0.016)
$\mathbb{1}(\text{High Names' Concentration of Fathers})$	-0.026** (0.010)	-0.031** (0.013)	-0.051*** (0.015)	-0.022 (0.015)
(log)Distance $\times$ $\mathbb{1}(\text{High Concentration})$	-0.019** (0.009)	-0.022* (0.012)	-0.023 (0.014)	-0.018* (0.009)
DV Mean	0.0617	0.0617	0.0617	0.0617
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Individual controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Individuals in Sample	2756	2756	2756	2756
Towns in Sample	183	183	183	183
Observations	10,392	10,392	10,392	10,392
R-squared	0.072	0.078	0.079	0.082

*Notes:* The table reports coefficients  $\beta_1, \beta_2$  and  $\beta_3$  from Equation 7.2, which controls for town-pairs and province fixed effects. Units of observation are individuals  $\times$  town-pair. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes all the individuals born in towns in Piedmont selected as explained in section 4.3. The first explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1, and demeaned. The second explanatory variable is a binary indicator for whether the town has a high or low concentration of fathers' first names. The third explanatory variable is the interaction between the previous two, representing the differential effect of (log) distance from a tax collector's office for towns where the concentration of fathers' first names is high. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 7: Heterogeneous effects: distance from tax district capitals, culture of towns and share of draft evaders**

	Share Draft Evaders (1)	Share Draft Evaders (2)	Share Draft Evaders (3)	Share Draft Evaders (4)
(log) Walking Distance from Tax Collector	0.029** (0.011)	0.051*** (0.018)	0.056*** (0.019)	0.056*** (0.018)
1(High Names' Concentration of Fathers)	-0.028** (0.014)	-0.024 (0.023)	-0.039* (0.023)	-0.024 (0.023)
(log)Distance $\times$ 1(High Concentration)	-0.020* (0.011)	-0.030* (0.017)	-0.021 (0.018)	-0.017 (0.016)
DV Mean	0.0468	0.0468	0.0468	0.0468
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Mean Individual Controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Towns in Sample	135	135	135	135
Observations	232	232	232	232
R-squared	0.600	0.693	0.722	0.784

*Notes:* The table reports coefficients  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  from Equation 7.3, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the share of draft evaders born in a town in 1899 out of all the men born in 1899 in the town. The sample includes all the towns in Piedmont selected as explained in section 4.3. The first explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1, and demeaned. The second explanatory variable is a binary indicator for whether the town has a high or low concentration of fathers' first names. The third explanatory variable is the interaction between the previous two, representing the differential effect of (log) distance from a tax collector's office for towns where the concentration of fathers' first names is high. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 8: Alternative Mechanisms**

	Medals of Honor	Medals of Honor	Govt. Expenditures on Charity and Hospitals	Govt. Expenditures on Charity and Hospitals	Exp. on Schools	Exp. on Schools
	(1)	(2)	(3)	(4)	(5)	(6)
(log) Walking Dist. from Tax Collector	-0.011* (0.006)	0.004 (0.009)	25.563 (144.368)	-445.471 (462.795)	53.431 (204.980)	130.151 (323.488)
DV Mean	1.004	1.004	723.5	723.5	1694	1694
Town-pair FE	yes	yes	yes	yes	yes	yes
Province FE	yes	yes	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes	yes	yes
Geographical controls	no	yes	no	yes	no	yes
Mean Individual Controls	no	no	no	no	no	no
Town-level Controls	no	no	no	no	no	no
Towns in Sample	134	134	135	135	135	135
Observations	224	224	232	232	232	232
R-squared	0.585	0.736	0.553	0.629	0.577	0.660

*Notes:* The table reports  $\beta$  coefficients from Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. The sample includes all the towns in Piedmont selected as explained in section 4.3. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. In columns (1) and (2) the dependent variable is share of soldiers born in the town who received a gold, silver or bronze Medal of Honor, computed on the sample of soldiers who died during World War I. In columns (3) and (4) the dependent variable is the total revenues (per town) of charity institutes funded by the Piedmontese government in 1840. In columns (5) and (6) the outcome variable is the the amount of public expenditure on primary schools in 1862-1863. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

# Appendix

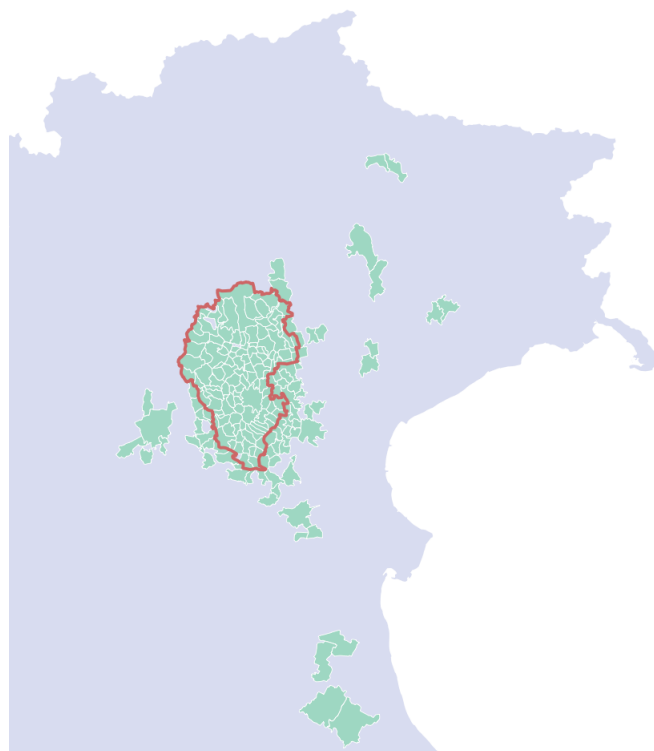
## A Additional Figures

**Figure A.1: Towns of birth of soldiers in Turin full sample and Turin regression sample**

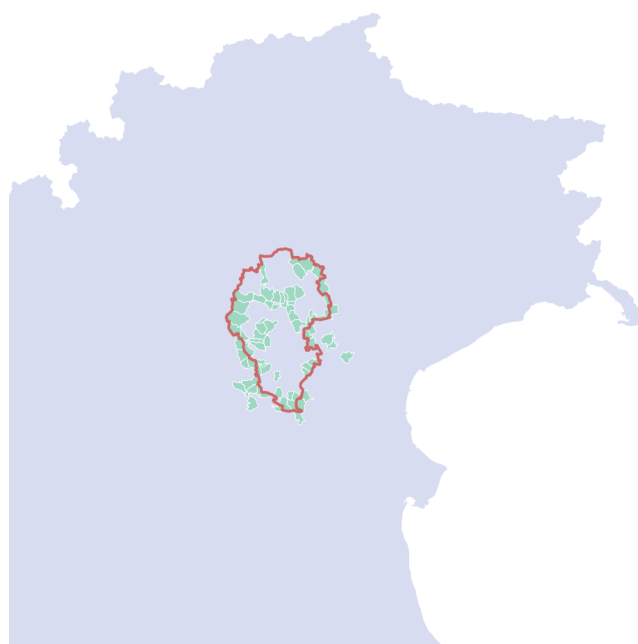


*Notes:* Panel (a) shows a map presenting in (in brown) all the towns in which at least one drafted citizen of the Turin sample was born. Panel (b) shows the towns of birth of citizens in the regression sample, selected as explained in sections 4.2 and 4.3. The shapefile of towns is constructed as explained in B.1, using data from ISTAT.

**Figure A.2: Towns of birth of soldiers in Vicenza full sample and Vicenza regression sample**



**(a)**



**(b)**

*Notes:* Panel (a) shows a map presenting in (in brown) all the towns in which at least one drafted citizen of the Vicenza sample was born. Panel (b) shows the towns of birth of citizens in the regression sample, selected as explained in sections 4.2 and 4.3. The shapefile of towns is constructed as explained in B.1, using data from ISTAT.

## B Data Appendix

### B.1 Map of towns in the Turin sample and in the Vicenza sample

I build the dataset for the main analysis starting from a map of Piedmont before the Italian unification in 1861. I create this map combining complete lists of towns<sup>50</sup> belonging to Piedmont<sup>51</sup> with a shapefile of Italian towns in 2011. I use towns' and provinces' names to link towns in Piedmont to Italian towns in 1861, and then track changes in administrative boundaries of Italian towns to link them to the 2011 shapefile.<sup>52</sup> I compute the distance from a tax collector's residence using centroids of Italian towns in 2011.

I follow the same procedure when building the database for the Vicenza sample, using all the Italian towns not belonging to Piedmont before 1861.<sup>53</sup>

### B.2 Military data

I use data on drafted Italian male citizens that were living in the province of Turin in 1917 and were called to serve in the Army in that year. This sample includes the overwhelming majority of men born in 1899 living in the province of Turin at the time of the war, and a limited number of older men who were exempted from the draft in previous years. I obtain my military data by collecting and digitising the lists of drafted men for all the towns belonging to the province of Turin in 1917 (around 5250 documents), publicly accessible at the Turin State Archive. For the city of Turin I collected information on all drafted citizens that were born in another town (i.e. internal migrants) and for a subsample of men born in Turin;<sup>54</sup> for all the other towns of the province (442 in 1917, 388 in 2011) I collected complete draft lists.

For the Vicenza sample, I collected data on all the men of the 1899 cohort living in the province of Vicenza by the time of the war; I obtain these data from ARSAS.<sup>55</sup>

### B.3 Variables' construction

**Measures of historical fiscal capacity: distance from tax collectors' residence** I compute the distance of a town from the residence of its tax collector using ArcGIS as the natural logarithm

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<sup>50</sup>Lists of towns in Piedmont are from 1821, 1848, 1901 and 2011.

<sup>51</sup>formally, the mainland of the Sardinia Kingdom

<sup>52</sup>I track changes from 1861 to 2011 using data from Elesh ([www.elesh.it](http://www.elesh.it)).

<sup>53</sup>In this case, I build the dataset using lists of Italian towns from 1871, 1901 and 2011.

<sup>54</sup>A limited number of drafted men were not included in the sample because of illegibility of the documents. Note that men born in Turin, a city that was hosting a tax collector's residence, would never enter the analysis sample as described in section 4.3.

<sup>55</sup>*Associazione Recupero Salvaguardia Archivi Storici*, (accessible at [www.arsas.org](http://www.arsas.org)).

of the optimal walking route in meters, computed using as impediment both elevation, weather patterns and soil conditions (using data from [Özak, 2010](#)). Distances are computed between centroids of towns using ArcGIS. For the Vicenza sample, I use the same measure computed between a town and a (judicial) district capitals.

As an alternative measure, I use the natural logarithm of the euclidean distance between a town and its tax collector's residence, and the (natural logarithm of) the cost distance in days using again data from the Human Mobility Index by [Özak \(2010\)](#).

**Draft evasion.** I build my measures of draft evasion in the following way: first, I detect whether the individual was ever classified as a draft evader; second, I inspect whether the sanction of draft evasion was revoked later,<sup>56</sup> and classify as draft evaders only individuals for which the sanction was never revoked.

When conducting the analysis at the town  $\times$  town-pair, I build my outcome variable as the share of draft evaders (classified as described above) in my lists born in the town over the total number of individuals in my lists born in the town. When conducting the analysis at the individual  $\times$  town-pair, my outcome variable is a binary indicator for whether the individual was classified as a draft evader or not. In the Vicenza sample, I use a binary indicator for whether a citizen is a draft evader according to the classification provided by ARSAS, for which being enlisted, exempted or evader are mutually exclusive categories.<sup>57</sup>

### *Geographical variables*

**Elevation.** I obtain elevation data of Italian towns in 2011 from ISTAT, and link them to the shapefile of Italian towns in 2011. I compute natural logarithm of elevation and the natural logarithm of the standard deviation of elevation within the town.

**Area.** I obtain data on the area of towns in 2011 (surface in squared meters) from ISTAT, link them to the shapefile of Italian towns in 2011, and compute the natural logarithm of the town area.

**Land suitability.** I obtain data on land suitability from [FAO \(2015\)](#). This data is defined on a 9.25 x 9.25 km grid covering the entire planet. I join the rasters to the 2011 shapefile of Italian towns and assign to each town the potential yields with low-level of inputs of the grid cells falling inside the town limits. I use land suitability for wheat, buckwheat, pasture grasses, barley, oat, potato, rye, rice, and maize.

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<sup>56</sup>For example, if the citizen showed up shortly later on, or was enlisted in another town, or joined the Navy.

<sup>57</sup>In the classification by ARSAS, drafted citizens can only be "Enlisted", "Evaders" or "Exempt", without any motivation for the assignment to a category.



**Coordinates.** I compute latitude and longitude of towns using the coordinates of their centroids, measured in degrees in the WGS84 UTM32N coordinate system.

**Distances from country's borders.** I compute the distances of a town's centroid from the French, the Swiss and the Austrian border using ArcGIS.

**Distance from Turin and Genoa.** I compute the distances of a town's centroid from the centroids of Turin and Genoa using ArcGIS.

**Distance from province capital.** I compute the walking distance of a town's centroid from the centroid of its province capital (with elevation as an impediment) using ArcGIS.

**Distance from division capital.** I compute the walking distance of a town's centroid from the centroid of its *Circondario* capital (with elevation as an impediment) using ArcGIS.

**Provinces and divisions: 1917.** I assign towns to their 1917 province.<sup>58</sup> For the Turin sample I assign towns to the division (*Circondario*) it belonged before the Italian unification, which remained mostly unchanged until 1917. As the province of Vicenza did not have divisions like in the rest of Italy, I assign it to its *Distretto* (an administration similar to the division).

**Tax and judicial districts.** I assign towns in the Turin sample to the tax districts it belonged to in 1848 (according to [Stefani, 1855](#)). Towns in the Vicenza sample are assigned according to the districts they belonged to in 1871, shortly after they got annexed to the Italian Kingdom.

### *Individual characteristics*

**Illiteracy.** I compute the share of illiterate male citizens in a town as the share of citizens in the 1917 military lists being unable or barely able to write (out of the total number of citizens in the 1917 lists born of the town).

**Height.** I compute the average height of male citizens as the average height for citizens present in the 1917 lists and born in the town who underwent the medical examination.

**International migrant.** I define the share of international migrants in a town as the share of citizens born in the town in the 1917 lists who were declared as being resident abroad in the military lists.

**Exempted.** I compute the share of citizens exempted for medical reasons in a town (out of the total number of citizens born in the town in the 1917 lists) looking at the share of citizens who got any type of medical exemption (even temporary ones), and that in the Turin sample is not mutually exclusive with enlistment or draft evasion. For the Vicenza sample, I use the classification by ARSAS, for which being enlisted, exempted or evader are mutually exclusive categories.

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<sup>58</sup>Provinces of the towns in my sample did not change from the Italian unification until 1917.

### *Town-level characteristics*

**Local taxes in Piedmont.** I obtain data on taxes raised by the tax collector on behalf of the municipality for the divisions (*circondari*) of Ivrea and Saluzzo. Data for the division of Ivrea are kept by the Turin State Archive and pertain from taxes collected in 1847; data from the division of Saluzzo come from Eandi (1835) and pertain average taxes collected between 1831 and 1834. The amount of taxes raised include both direct and indirect taxes. For each town, I compute the inverse hyperbolic sine transformation of taxes raised, in absolute numbers and per capita.

**Population in 1821.** I obtain the population for each town from the Turin sample in Piedmont in 1821 from Regno di Sardegna (1824), and link it to the 2011 shapefile as described in section ??.

**Population in 1901.** I obtain the population in 1901 for each town in the Turin and the Vicenza sample from Santi (1902), and link it to the 2011 shapefile as described in section ??.

**In migration.** I measure the share of internal migrants living in the town of birth of a drafted citizen as the share of residents in the town that I observe in the 1917 lists that were born in another town.

**Out migration.** I measure the share of internal migrants living who migrated from the town of birth of a drafted citizen as the share of citizens I observe in the 1917 lists that were born in the town but had its residence in another town in 1917.

**Presence of post office.** I obtain information for presence of a post office in a town from Santi (1902).

**Presence of train station.** I obtain information for presence of a train station in a town from Santi (1902).

**Distance to closest train station.** I obtain information for the distance of a town from the closest train station from Santi (1902).

**Presence of police station.** I obtain information for presence of a police station (more precisely, a *Carabinieri* station) in a town from Santi (1902).

**Walking distance to the closest police station.** I compute the walking distance to the closest police station as the inverse hyperbolic sine transformation of the optimal walking route in meters, computed using as impediment both elevation, weather patterns and soil conditions (using data from Özak, 2010). Distances are computed using ArcGIS between the centroid of the town of residence of the drafted citizen and the centroid of the town hosting the closest police station. I match towns to the closest police station using the centroids of all the police stations in Italy in 1901.

**Spending on schools.** I obtain data on town-level spending in 1862-1863 from [Statistica del Regno d'Italia \(1865\)](#). I use the total amount of public funds received by primary schools from both central, provincial and town government; in 1863, schools were almost exclusively funded by towns.

**Spending on charity institutions.** I obtain data on spending on charity institutions from [Regia Segreteria degli Affari Interni \(1841\)](#). The variable concerns the total revenues of the charity institutions (including hospitals and orphanages) that were funded by the central government in 1840.

**Medals of Honor.** I use data from ISTORECO<sup>59</sup> on the casualties of Italian soldiers during WWI, and whether they obtained a Medal of Honor (gold, silver or bronze ones). For each town in my sample, I compute the share of dead soldiers born in that town who obtained a Medal of Honor from the Italian Army during World War I. Given the low number of medals, I build this variable using men from all the birth cohorts who died during WWI.

**Town-level concentration of first names.** I use information on the first names of fathers of drafted citizens (observed in the draft lists) as a measure of conformity of communities in a town, and compute the Herfindahl–Hirschman Index of fathers' names for citizens born in a given town. Subsequently, I split towns in my sample on the median, and define two groups of highly-conformist and weakly-conformist towns. I use only the first of the potentially many components of a father's first name (excluding all the middle names).

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<sup>59</sup>Data are accessible at [www.cadutigrandeguerra.it](http://www.cadutigrandeguerra.it).

**Table B.1: Summary statistics**

	Regression sample			Full sample		
	(1) Obs.	(2) Mean	(3) Std. Dev.	(4) Obs.	(5) Mean	(6) Std. Dev.
<b><i>Panel A: town-level variables</i></b>						
Share of draft evaders	135	0.04	0.08	660	0.04	0.08
Walking dist. from tax collector's residence (km)	135	7.67	4.92	663	4.69	4.41
log Elevation	135	6.28	0.89	663	6.09	0.87
log Area	135	2.71	0.96	663	2.86	0.90
Latitude	135	45.27	0.32	663	45.14	0.38
Longitude	135	7.73	0.32	663	7.80	0.45
Dist. from Division Capital (km)	135	21.11	13.20	663	18.51	11.39
Dist. from Province Capital (km)	135	49.72	28.75	663	46.13	28.14
Dist. from Turin (km)	135	51.41	29.40	663	59.30	36.96
Dist. from Genoa (km)	135	166.17	39.39	663	156.13	44.65
Dist. from Austrian border (km)	135	227.59	23.72	663	228.61	32.67
Dist. from French border (km)	135	49.40	22.59	663	53.48	29.98
Dist. from Swiss border (km)	135	72.38	34.61	663	87.10	40.61
Town on country border	135	0.07	0.26	663	0.06	0.23
Population 1821	135	1406.34	1219.47	663	2389.42	4821.35
Population 1901	135	1774.22	1169.05	663	3848.82	13984.88
Presence of train station	135	0.20	0.40	663	0.30	0.46
Presence of post office	135	0.56	0.50	663	0.68	0.47
Presence of police station	135	0.14	0.35	663	0.31	0.46
Distance from train station (km)	135	7.49	5.90	663	6.60	5.97
Distance from police station (km)	135	4.92	3.82	663	3.59	3.26
Out migration	135	1.73	2.29	663	2.77	6.82
In migration	135	1.29	2.50	663	1.30	3.88
Observations per town (town-pairs)	135	2.334	1.34	663	4.95	2.35
Average height	135	164.05	3.44	656	163.79	4.17
Share illiterate	135	0.02	0.06	661	0.04	0.11
Share exempted citizens	135	0.08	0.12	661	0.08	0.16
Average share of migrants abroad	135	0.01	0.03	661	0.01	0.03
HHI of first names (1899 cohort)	135	0.30	0.32	661	0.38	0.37
HHI of first names of fathers (1899 cohort)	135	0.32	0.33	659	0.39	0.37
<b><i>Panel B: individual-level variables</i></b>						
Height	2525	163.32	7.35	11539	163.71	7.40
Illiterate	2525	0.04	0.19	11539	0.04	0.20
Exempted	2756	0.09	0.28	13004	0.07	0.26
Migrant abroad	2756	0.01	0.11	13004	0.01	0.10
<b><i>Panel C: tax district-level variables</i></b>						
Number of towns	77	5.30	2.46	211	4.87	2.53
Total population (1821)	77	8691.90	4004.89	211	9552.51	7886.61

*Notes:* The table presents summary statistics for variables used in the main analysis. Variables' construction is described in appendix B.3. Columns (1) to (3) present summary statistics from towns of the Turin regression sample, selected as explained in sections 4.3, and individuals living in these towns. Columns (4) to (6) present summary statistics from all the Piedmontese towns of birth of the drafted citizens in the Turin sample. Panel A presents statistics for town-level outcomes. Panel B presents statistics for individual-level outcomes: note that two variables (height and illiterate status) have missing observations, as they are missing for most draft evaders; for this reason, as explained in appendix B.3, in the analysis I use the town-level average of these variables based on non-missing observations. Panel C reports statistics on the average number of towns in a tax district, and its total population.

Figure B.1: Draft list of the Italian Army: Example

STORIA		NASCITA E RESIDENZA E PARROCCHIA, ALTA LECTA, ET LECTA		ESISTENZA PER IL SERVIZIO MILITARE	
N. 1. <i>17</i>	<i>Figlio di Sebastiano e della Siro Maria nato add 9 luglio 1899 nel Comune di Salto</i>	<i>Figlio di Sebastiano e della Siro Maria nato add 9 luglio 1899 nel Comune di Salto</i>	<i>Figlio di Sebastiano e della Siro Maria nato add 9 luglio 1899 nel Comune di Salto</i>	<i>Figlio di Sebastiano e della Siro Maria nato add 9 luglio 1899 nel Comune di Salto</i>	<i>Figlio di Sebastiano e della Siro Maria nato add 9 luglio 1899 nel Comune di Salto</i>
N. 2. <i>18</i>	<i>Figlio di Francesco e della Carochia Epitima nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Francesco e della Carochia Epitima nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Francesco e della Carochia Epitima nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Francesco e della Carochia Epitima nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Francesco e della Carochia Epitima nato add 9 gennaio 1899 nel Comune di Salto</i>
N. 3. <i>19</i>	<i>Figlio di Antonio e della Antonia Dominica nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Antonio e della Antonia Dominica nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Antonio e della Antonia Dominica nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Antonio e della Antonia Dominica nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Antonio e della Antonia Dominica nato add 9 gennaio 1899 nel Comune di Salto</i>
N. 4. <i>20</i>	<i>Figlio di Giuseppe e della Giuseppina nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Giuseppe e della Giuseppina nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Giuseppe e della Giuseppina nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Giuseppe e della Giuseppina nato add 9 gennaio 1899 nel Comune di Salto</i>	<i>Figlio di Giuseppe e della Giuseppina nato add 9 gennaio 1899 nel Comune di Salto</i>

CONTINENTI PERSONALI		DECRETI DEL COMANDO DI LECTA	
<i>Statura m. 1.65</i>	<i>Capelli neri</i>	<i>Statura m. 1.65</i>	<i>Capelli neri</i>
<i>Statura m. 1.65</i>	<i>Capelli neri</i>	<i>Statura m. 1.65</i>	<i>Capelli neri</i>
<i>Statura m. 1.65</i>	<i>Capelli neri</i>	<i>Statura m. 1.65</i>	<i>Capelli neri</i>
<i>Statura m. 1.65</i>	<i>Capelli neri</i>	<i>Statura m. 1.65</i>	<i>Capelli neri</i>

Notes: This figure presents an example of the original data collected in the Turin State Archive from the draft lists of the Italian Army. This example shows information for four drafted citizens born (and living in 1917) in the town of Salto. The first three columns contain: the name and surname of citizens; their town of birth, dates of birth, and names of their parents; personal information including height and literacy level. The box on the right contains accounts of the enlistment process of citizens.

## C Balancedness of observable characteristics

**Table C.1: Balance of observables, geographic and pre-determined characteristics**

	Pop. 1821 (1)	Elevation (2)	Distance Province Cap. (3)	Dist. Turin (4)	Distance Division Cap. (5)	Dist. France (6)	Dist. Switzerland (7)
(log) Walking Dist. from Tax Collector	0.065 (0.158)	0.024 (0.058)	0.030 (0.066)	0.018 (0.058)	0.372** (0.185)	-0.033 (0.047)	-0.018 (0.017)
DV Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Town-pair FE	yes	yes	yes	yes	yes	yes	yes
Province FE	yes	yes	yes	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes	yes	yes	yes
Towns in Sample	135	135	135	135	135	135	135
Observations	232	232	232	232	232	232	232
R-squared	0.548	0.953	0.973	0.978	0.854	0.989	0.996

*Notes:* The table reports  $\beta$  coefficients from Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. The sample includes all the towns in Piedmont selected as explained in section 4.3. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical and pre-determined characteristics are: population of the town in 1821, the logarithm of elevation of the town; distance from province capital, distance from division capital (*Circondario*), distance from Turin; distances from the Italian borders with France and Switzerland. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table C.2: Balance of observables, town-level characteristics**

	Pop. 1901 (1)	Out Migration (2)	In Migration (3)	Post Office (4)	Train Station (5)	Police Station (6)	Dist. Police Station (7)
(log) Walking Dist. from Tax Collector	0.083 (0.160)	-0.196 (0.139)	0.173 (0.118)	0.059 (0.122)	0.219 (0.211)	0.047 (0.186)	0.211 (0.182)
DV Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Town-pair FE	yes	yes	yes	yes	yes	yes	yes
Province FE	yes	yes	yes	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes	yes	yes	yes
Towns in Sample	135	135	135	135	135	135	135
Observations	232	232	232	232	232	232	232
R-squared	0.676	0.804	0.677	0.586	0.601	0.507	0.797

*Notes:* The table reports  $\beta$  coefficients from Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. The sample includes all the towns in Piedmont selected as explained in section 4.3. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Town-level characteristics are: population in 1901; share of internal immigrants living in the town; share of citizens born in the town living elsewhere; indicator variables for the presence in the town of a post office, a train station, or a police station; distance to the closer police stations. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table C.3: Balance of observables, military and means of individual-level characteristics**

	Avg. Illiterate (1)	Avg. Height (2)	Cohort size/Population (3)	Share Under 150 (4)
(log) Walking Dist. from Tax Collector	-0.110 (0.125)	-0.255 (0.261)	0.096 (0.227)	0.147 (0.152)
DV Mean	0.00	0.00	0.00	0.00
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Towns in Sample	131	131	131	131
Observations	228	228	228	228
R-squared	0.564	0.558	0.759	0.534

*Notes:* The table reports  $\beta$  coefficients from Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. The sample includes all the towns in Piedmont selected as explained in section 4.2. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Mean of individual characteristics are share of illiterate citizens born in the town and average height for citizens born in the town. The dependent variable in column (3) is the ratio between the number of citizens born in the town that appear in the 1917 lists and the population of the town in 1901; the dependent variable in column (4) is the share of citizens born in a town less than 150cm tall (the threshold for exemption for medical reasons). Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

## D Town-level taxation before 1870, Ivrea and Saluzzo

**Table D.1: Distance from tax collector's residences and local tax revenues, 1831/1847**

	Full Sample		Restricted Sample	
	Municipal Tax Rev.	Municipal Tax Rev.	Municipal Tax Rev.	Municipal Tax Rev.
	i.h.s. trans.	i.h.s. trans.	i.h.s. trans.	i.h.s. trans.
	(1)	(2)	(3)	(4)
(log) Walking Dist. from Tax Collector	-0.556*** (0.152)	-0.304** (0.117)	-0.059 (0.235)	-1.333* (0.759)
DV Mean	9.046	9.046	8.844	8.844
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	no	yes
Population	no	yes	no	yes
Towns in Sample	115	115	39	39
Observations	350	350	82	82
R-squared	0.738	0.836	0.705	0.952

*Notes:* The table reports  $\beta$  coefficients from Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the inverse hyperbolic sine transformation of total taxes raised in the town by the tax collector on behalf of the town government. The sample includes all the towns in Piedmont selected as explained in section 4.3. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls and pre-determined controls include population in 1821, the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

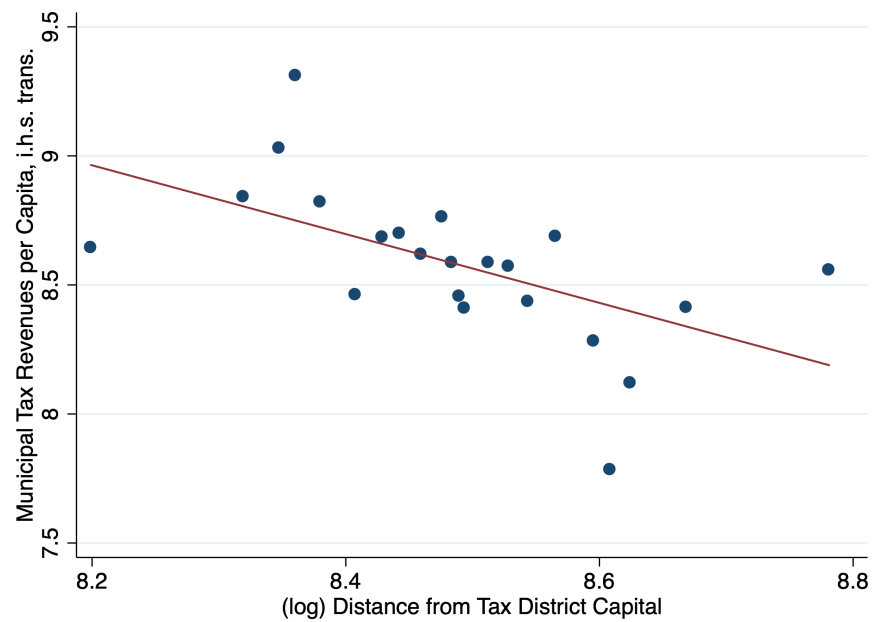
**Table D.2: Distance from tax collector's residences and per capita local tax revenues, 1831/1847**

	Full Sample		Restricted Sample	
	Municipal Tax Rev. per Capita	Municipal Tax Rev. per Capita	Municipal Tax Rev. per Capita	Municipal Tax Rev. per Capita
	i.h.s. trans.	i.h.s. trans.	i.h.s. trans.	i.h.s. trans.
	(1)	(2)	(3)	(4)
(log) Walking Dist. from Tax Collector	-0.171 (0.133)	-0.233* (0.115)	-0.046 (0.251)	-1.333* (0.733)
DV Mean	8.587	8.587	8.814	8.814
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	no	yes
Towns in Sample	115	115	39	39
Observations	350	350	82	82
R-squared	0.732	0.789	0.724	0.956

*Notes:* The table reports  $\beta$  coefficients from Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the inverse hyperbolic sine transformation of taxes per capita raised in the town by the tax collector on behalf of the town government. The sample includes all the towns in Piedmont selected as explained in section 4.3. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls and pre-determined controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .



**Figure D.1: Distance from tax collector and municipal tax revenues per capita, Ivrea-Saluzzo sample**



*Notes:* This figure presents graphical evidence on the relationship between the (log) walking distance of a town from a former tax collector's residence in the 1814-1870 period (computed as explained in 3.1) and the amount of taxes per capita raised on behalf of the town government before 1870, transformed using the inverse hyperbolic sine function. Tax data are from 1847 and 1831-1834, and come from towns of the divisions of Ivrea and Saluzzo, selected as explained in section 4.3. The binscatter shows the association between the two variables after controlling for town-pair fixed effects, province fixed effects, and geographical and pre-determined characteristics (see B.3 for their descriptions).

## E Additional results on Vicenza sample

**Table E.1: Distance from judicial district capitals and likelihood to evade the draft**

	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)
(log) Walking Dist. from District Capital	-0.000 (0.023)	0.002 (0.012)	0.003 (0.014)	0.030 (0.021)
DV Mean	0.0501	0.0501	0.0501	0.0501
Town-Pairs FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Town-level Controls	no	no	no	yes
Observations	7,424	7,424	7,424	7,424
Individuals in Sample	2290	2290	2290	2290
Towns in Sample	70	70	70	70
R-squared	0.029	0.033	0.033	0.033

*Notes:* The table reports  $\beta$  coefficients from Equation 4.2, which controls for town-pairs and province fixed effects. Units of observation are individuals  $\times$  town-pair. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes all the individuals born in towns out of Piedmont selected as explained in section 4.3 and 6.3. The main explanatory variable is the logarithm of the walking distance between a town and the minor court that had jurisdiction on the town (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Distretto*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, namely being resident abroad and having had an exemption for medical reasons. Town-level controls include population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table E.2: Summary statistics: Vicenza sample**

	Regression sample			Full sample		
	(1)	(2)	(3)	(4)	(5)	(6)
	Obs.	Mean	Std. Dev.	Obs.	Mean	Std. Dev.
Share of draft evaders	55	0.04	0.05	201	0.03	0.08
Walking dist. from tax collector's residence (km)	55	9.53	3.39	199	8.66	20.76
log Elevation	55	5.00	1.42	201	4.47	1.58
log Area	55	2.95	0.58	201	3.14	0.75
Latitude	55	45.59	0.18	201	45.54	0.31
Longitude	55	11.48	0.20	201	11.59	0.29
Dist. from Division Capital (km)	55	23.45	12.36	194	18.70	12.85
Dist. from Province Capital (km)	55	32.55	12.65	194	28.05	16.59
Dist. from Turin (km)	55	391.97	51.04	197	398.24	53.46
Dist. from Austrian Border (km)	55	27.69	15.43	201	38.92	28.17
Dist. from French Border (km)	55	334.27	16.24	201	340.94	23.92
Dist. from Swiss Border (km)	55	126.48	15.34	201	137.99	26.99
Town on country border	55	0.11	0.31	201	0.06	0.25
Population 1901	55	3428.20	1373.16	201	6447.45	14596.51
Presence of train station	55	0.15	0.36	201	0.23	0.42
Presence of post office	55	0.82	0.39	201	0.74	0.44
Presence of police station	55	0.29	0.46	201	0.32	0.47
Distance from police station (km)	55	3.77	2.76	199	3.72	2.89
Distance from train station (km)	55	10.33	6.82	201	8.07	6.27
Out migration	55	4.20	3.22	201	5.53	6.26
In migration	55	3.29	4.23	201	5.52	15.58
Observations per town (town-pairs)	55	1.82	1.04	201	4.63	2.32
Share exempted citizens	55	0.07	0.14	201	0.06	0.12
Average share of migrants abroad	55	0.01	0.02	201	0.01	0.02

*Notes:* The table presents summary statistics for town-level variables used in the placebo analysis. Variables' construction is described in appendix B.3. Columns (1) to (3) present summary statistics from towns of the Vicenza regression sample, selected as explained in sections 4.3 and 6.3, and individuals living in these towns. Columns (4) to (6) present summary statistics from all the non-Piedmontese towns of birth of the drafted citizens in the Vicenza sample.

## F Robustness checks

### F.1 Alternative measures of distances from tax collectors' residences

**Table F.1: Distance from tax district capitals and share of draft evaders: Euclidean distance**

	Share Draft Evaders (1)	Share Draft Evaders (2)	Share Draft Evaders (3)	Share Draft Evaders (4)
(log) Euclidean Dist. from Former Tax Collector	0.015** (0.007)	0.030** (0.014)	0.042*** (0.016)	0.043** (0.017)
DV Mean	0.0468	0.0468	0.0468	0.0468
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Mean Individual Controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Towns in Sample	135	135	135	135
Observations	232	232	232	232
R-squared	0.583	0.681	0.708	0.782

*Notes:* The table reports coefficients  $\beta$  from Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the share of draft evaders born in a town in 1899 out of all the men born in 1899 in the town. The sample includes all the towns in Piedmont selected as explained in section 4.3. The main explanatory variable is the logarithm of the euclidean distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital). Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table F.2: Distance from tax district capitals and share of draft evaders: Cost Distance**

	Share Draft Evaders (1)	Share Draft Evaders (2)	Share Draft Evaders (3)	Share Draft Evaders (4)
(log) Cost Distance from Tax Collector	0.013* (0.007)	0.027* (0.014)	0.041*** (0.015)	0.042** (0.017)
DV Mean	0.0468	0.0468	0.0468	0.0468
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Mean Individual Controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Towns in Sample	135	135	135	135
Observations	232	232	232	232
R-squared	0.583	0.679	0.707	0.781

*Notes:* The table reports coefficients  $\beta$  from Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the share of draft evaders born in a town in 1899 out of all the men born in 1899 in the town. The sample includes all the towns in Piedmont selected as explained in section 4.3. The main explanatory variable is the logarithm of the cost distance (in days) between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed using the Human Mobility Index by Özak (2010). Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table F.3: Longer/shorter distance from tax district capitals and share of draft evaders**

	Share Draft Evaders (1)	Share Draft Evaders (2)	Share Draft Evaders (3)	Share Draft Evaders (4)
Treatment (Farther from Tax Collector)	0.015 (0.011)	0.016 (0.014)	0.019 (0.013)	0.026* (0.013)
DV Mean	0.0468	0.0468	0.0468	0.0468
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Mean Individual Controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Towns in Sample	135	135	135	135
Observations	232	232	232	232
R-squared	0.587	0.677	0.700	0.782

*Notes:* The table reports coefficients  $\beta$  from Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the share of draft evaders born in a town in 1899 out of all the men born in 1899 in the town. The sample includes all the towns in Piedmont selected as explained in section 4.3. The main explanatory variable is a binary variable indicating whether the town, within the couple, is farther from the residence of its tax collector's residence, according to the walking distance computed as described in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table F.4: Longer/shorter distance from tax district capitals and likelihood to evade the draft**

	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)
Treatment (Farther from Tax Collector)	0.009 (0.011)	0.016* (0.008)	0.018** (0.008)	0.025*** (0.006)
DV Mean	0.0617	0.0617	0.0617	0.0617
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Individual controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Individuals in Sample	2756	2756	2756	2756
Towns in Sample	183	183	183	183
Observations	10,392	10,392	10,392	10,392
R-squared	0.072	0.078	0.078	0.082

*Notes:* The table reports coefficients  $\beta$  from Equation 4.2, which controls for town-pairs and province fixed effects. Units of observation are individuals  $\times$  town-pair. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes all the individuals born in towns in Piedmont selected as explained in section 4.3. The main explanatory variable is a binary variable indicating whether the town of birth of an individual, within the couple, is farther from the residence of its tax collector's residence, according to the walking distance computed as described in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

## F.2 Alternative sample restrictions

**Table F.5: Distance from tax district capitals and share of draft evaders, only closest matched town**

	Share Draft Evaders (1)	Share Draft Evaders (2)	Share Draft Evaders (3)	Share Draft Evaders (4)
(log) Walking Dist. from Tax Collector	0.020* (0.011)	0.026 (0.020)	0.031 (0.024)	0.036 (0.027)
DV Mean	0.0448	0.0448	0.0448	0.0448
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Mean Individual Controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Towns in Sample	135	135	135	135
Observations	180	180	180	180
R-squared	0.559	0.668	0.694	0.765

*Notes:* The table reports coefficients  $\beta$  from Equation 4.1, controlling for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the share of draft evaders born in a town in 1899 out of all the men born in 1899 in the town. The sample includes the towns in Piedmont selected as explained in section 4.3; however, instead of using all the pairs of neighbouring towns on tax district borders, for each town I keep only the pair with the geographically closest matched town. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .



**Table F.6: Distance from tax district capitals and likelihood to evade the draft, only closest matched town**

	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)
(log) Walking Dist. from Tax Collector	0.024** (0.011)	0.056** (0.023)	0.049* (0.028)	0.084** (0.035)
DV Mean	0.0581	0.0581	0.0581	0.0581
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Individual controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Individuals in Sample	2756	2756	2756	2756
Towns in Sample	183	183	183	183
Observations	3,528	3,528	3,528	3,528
R-squared	0.064	0.072	0.072	0.077

*Notes:* The table reports coefficients  $\beta$  from Equation 4.2, which controls for town-pairs and province fixed effects. Units of observation are individuals  $\times$  town-pair. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes individuals born in the towns in Piedmont selected as explained in section 4.3; however, instead of using all the pairs of neighbouring towns on tax district borders, for each town of birth of an individual I keep only the pair with the geographically closest matched town. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table F.7: Distance from tax district capitals and share of draft evaders, excluding province capital's district**

	Share Draft Evaders (1)	Share Draft Evaders (2)	Share Draft Evaders (3)	Share Draft Evaders (4)
(log) Walking Dist. from Former Tax Collector	0.011 (0.007)	0.026** (0.010)	0.037*** (0.011)	0.046*** (0.017)
DV Mean	0.0423	0.0423	0.0423	0.0423
Town-pair FE	yes	yes	yes	yes
Division FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Mean Individual Controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Towns in Sample	161	161	161	161
Observations	286	286	286	286
R-squared	0.588	0.681	0.703	0.751

*Notes:* The table reports coefficients  $\beta$  from Equation 4.1, controlling for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the share of draft evaders born in a town in 1899 out of all the men born in 1899 in the town. The sample includes all the towns in Piedmont selected as explained in section 4.3, but excluding towns for which the tax collector lived in the province capital, instead of the division capital. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table F.8: Distance from tax district capitals and share of draft evaders, Division fixed effects**

	Share Draft Evaders (1)	Share Draft Evaders (2)	Share Draft Evaders (3)	Share Draft Evaders (4)
(log) Walking Dist. from Former Tax Collector	0.016** (0.007)	0.035** (0.016)	0.046** (0.019)	0.059** (0.022)
DV Mean	0.0480	0.0480	0.0480	0.0480
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Mean Individual Controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Towns in Sample	130	130	130	130
Observations	226	226	226	226
R-squared	0.582	0.685	0.708	0.793

*Notes:* The table reports coefficients  $\beta$  from Equation 4.1, controlling for town-pairs and division (instead of province) fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the share of draft evaders born in a town in 1899 out of all the men born in 1899 in the town. The sample includes all the towns in Piedmont selected as explained in section 4.3. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table F.9: Distance from tax district capitals and share of draft evaders, including tax-district capitals**

	Share Draft Evaders (1)	Share Draft Evaders (2)	Share Draft Evaders (3)	Share Draft Evaders (4)
Walking Dist. from Tax Collector, i.h.s. trans.	0.001 (0.003)	0.004 (0.003)	0.002 (0.002)	0.005*** (0.002)
DV Mean	0.0468	0.0468	0.0468	0.0468
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	no	no	no	no
Geographical controls	no	yes	yes	yes
Mean Individual Controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Towns in Sample	144	144	144	144
Observations	270	270	270	270
R-squared	0.567	0.669	0.698	0.764

*Notes:* The table reports coefficients  $\beta$  from Equation 4.1, controlling for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. In every column the dependent variable is the share of draft evaders born in a town in 1899 out of all the men born in 1899 in the town. The sample includes all the towns in Piedmont selected as explained in section 4.3, keeping in the estimation sample also tax district capitals that respect the sample selection's criteria of section 4.3. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table F.10: Distance from tax district capitals and likelihood to evade the draft, including tax-district capitals**

	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)
Walking Dist. from Tax Collector, i.h.s. trans.	0.001 (0.002)	0.007*** (0.002)	0.005*** (0.002)	0.006*** (0.002)
DV Mean	0.0616	0.0616	0.0616	0.0616
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Individual controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Individuals in Sample	2889	2889	2889	2889
Towns in Sample	194	194	194	194
Observations	10,926	10,926	10,926	10,926
R-squared	0.070	0.076	0.077	0.080

*Notes:* The table reports coefficients  $\beta$  from Equation 4.2, which controls for town-pairs and province fixed effects. Units of observation are individuals  $\times$  town-pair. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes citizens born in all the towns in Piedmont selected as explained in section 4.3, keeping in the estimation sample also tax district capitals that respect the sample selection's criteria of section 4.3. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

### F.3 Interaction between historical fiscal capacity and culture of towns

**Table F.11: Names' commonness and likelihood to evade the draft**

	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)
HHI of Names, Fathers	-0.114** (0.046)	-0.093 (0.060)		
1(High Names' Concentration of Fathers)			-0.036*** (0.011)	-0.039** (0.018)
DV Mean	0.0613	0.0613	0.0613	0.0613
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	no	yes
Towns in Sample	183	183	183	183
Observations	2,756	2,756	2,756	2,756
R-squared	0.003	0.015	0.004	0.016

*Notes:* The table reports OLS estimates of the effect of fathers' name commonness in a town on the likelihood to evade the military draft. Units of observations are individuals. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes individuals born in all the towns in Piedmont selected as explained in section 4.3. In columns (1) and (2) the main explanatory variable is the Herfindahl-Hirschman Index as defined in ??, while in columns (3) and (4) the main explanatory variable is a binary indicator for whether the concentration of fathers' names in the town is above or below the median value across towns. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Standard errors in parentheses are clustered at the town level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table F.12: Distance from tax district capitals, culture of towns, and likelihood to evade the draft: HHI Index**

	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)
(log) Walking Distance from Tax Collector	0.024* (0.013)	0.067*** (0.021)	0.078*** (0.020)	0.073*** (0.019)
HHI of Names, Fathers	0.368 (0.412)	0.650 (0.638)	0.396 (0.606)	0.524 (0.567)
(log)Distance $\times$ HHI of Names	-0.056 (0.046)	-0.086 (0.075)	-0.066 (0.071)	-0.075 (0.066)
DV Mean	0.0617	0.0617	0.0617	0.0617
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Individual controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Individuals in Sample	2756	2756	2756	2756
Towns in Sample	183	183	183	183
Observations	10,392	10,392	10,392	10,392
R-squared	0.072	0.078	0.079	0.081

Notes: The table reports coefficients  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  from an equation similar to 7.2, but using ?? instead of a binary indicator. the estimating equation controls for town-pairs and province fixed effects. Units of observation are individuals  $\times$  town-pair. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes aall the individuals born in towns in Piedmont selected as explained in section 4.3. The first explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. The second explanatory variable is defined as in ???. The third explanatory variable is the interaction between the previous two. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table F.13: Distance from tax district capitals, culture of towns, and likelihood to evade the draft: full interaction**

	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)
(log) Walking Distance from Tax Collector	0.025** (0.010)	0.117*** (0.031)	0.151*** (0.023)	0.126*** (0.030)
1(High Names' Concentration of Fathers)	-0.026** (0.010)	-1.585 (43.631)	25.210 (55.320)	204.259*** (58.946)
(log)Distance $\times$ 1(High Concentration)	-0.019** (0.009)	-0.071** (0.036)	-0.033 (0.028)	-0.039 (0.038)
DV Mean	0.0617	0.0617	0.0617	0.0617
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Individual controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Individuals in Sample	2756	2756	2756	2756
Towns in Sample	183	183	183	183
Observations	10,392	10,392	10,392	10,392
R-squared	0.072	0.081	0.083	0.084

*Notes:* The table reports coefficients  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  from an equation similar to 7.2, but interacting every control variable with *High Names Concentration of Fathers*. The estimating equation controls for town-pairs and province fixed effects (not interacted). Units of observation are individuals  $\times$  town-pair. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes all the individuals born in towns in Piedmont selected as explained in section 4.3. The first explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1, and demeaned. The second explanatory variable is a binary indicator for whether the town has a high or low concentration of fathers' first names. The third explanatory variable is the interaction between the previous two, representing the differential effect of (log) distance from a tax collector's office for towns where the concentration of fathers' first names is high. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .



**Table F.14: Heterogeneous effects: distance from tax district capitals, culture of towns, and likelihood to evade the draft: name commonness' of drafted citizens**

	Draft Evader (1)	Draft Evader (2)	Draft Evader (3)	Draft Evader (4)
(log) Walking Distance from Tax Collector	0.018** (0.008)	0.057*** (0.017)	0.074*** (0.018)	0.053*** (0.016)
1(High Names Concentration of Citizens)	-0.031*** (0.010)	0.004 (0.008)	-0.001 (0.009)	-0.010 (0.011)
(log)Distance $\times$ 1(High Concentration)	-0.008 (0.008)	-0.010 (0.012)	-0.015 (0.013)	0.001 (0.014)
DV Mean	0.0617	0.0617	0.0617	0.0617
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical controls	no	yes	yes	yes
Individual controls	no	no	yes	yes
Town-level Controls	no	no	no	yes
Individuals in Sample	2756	2756	2756	2756
Towns in Sample	183	183	183	183
Observations	10,392	10,392	10,392	10,392
R-squared	0.072	0.078	0.079	0.081

*Notes:* The table reports coefficients  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  from Equation 7.2, using concentration of names of drafted citizens (instead of their fathers) as second explanatory variable. The equation controls for town-pairs and province fixed effects. Units of observation are individuals  $\times$  town-pair. In every column the dependent variable is a binary variable indicating whether the individual evaded the draft, or not. The sample includes all the individuals born in towns in Piedmont selected as explained in section 4.3. The first explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1, and demeaned. The second explanatory variable is a binary indicator for whether the town has a high or low concentration of drafted citizens' first names. The third explanatory variable is the interaction between the previous two, representing the differential effect of (log) distance from a tax collector's office for towns where the concentration of citizens' first names is high. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Mean of individual controls are town-level means of individual characteristics as measured by military data, including height, literacy, being resident abroad, and having had an exemption for medical reasons. Town-level controls include population in 1821, population in 1901, share of internal immigrants living in the town, share of citizens born in the town living elsewhere, distance from the closest train station, and indicator variables for the presence in the town of a post office, a police station, or a train station. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table F.15: Distance from tax district capitals and names' commonness**

	HHI of Names, Fathers (1)	HHI of Names, Fathers (2)	1(High Names' Concentration of Fathers) (3)	1(High Names' Concentration of Fathers) (4)
(log) Walking Distance from Tax Collector	0.017 (0.029)	0.086 (0.059)	0.005 (0.147)	0.045 (0.130)
DV Mean	0.265	0.265	0.470	0.470
Town-pair FE	yes	yes	yes	yes
Province FE	yes	yes	yes	yes
No district capitals	yes	yes	yes	yes
Geographical Controls	no	yes	no	yes
Towns in Sample	135	135	135	135
Observations	232	232	232	232
R-squared	0.868	0.918	0.616	0.782

*Notes:* The table reports coefficients  $\beta$  from Equation 4.1, which controls for town-pairs and province fixed effects. Units of observation are towns  $\times$  town-pair. The sample includes all the towns in Piedmont selected as explained in section 4.3. In columns (1) and (2) the dependent variable is the Herfindahl-Hirschman Index of concentration of fathers' names, while in columns (3) and (4) the dependent variable is a binary indicator for whether the concentration of fathers' names in the town is above or below the median value across towns. The main explanatory variable is the logarithm of the walking distance between a town and the residence of its tax collector in the 1814-1870 period (or district capital), computed as explained in section 3.1. Geographical controls include the logarithm of elevation of the town, standard deviation of elevation in the town, area of the town, measures of land suitability for several crops (as explained in Appendix B.3), latitude, longitude, distances from country borders, distance from province capital, distance from division capital (*Circondario*), distance from Turin, distance from Genoa. Standard errors in parentheses are clustered at the tax district and district-border level. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

**Table F.16: Fathers' name commonness and drafted citizens' name commonness**

	(1) HHI of Names, Citizens	(2) 1(High Names' Concentration of Citizens)
HHI of Names, Fathers	0.925*** (0.036)	
1(High Names' Concentration of Fathers)		0.862*** (0.049)
DV Mean	0.303	0.585
Observations	135	135
R-squared	0.941	0.763

*Notes:* The table reports the correlation between concentration of first names of the 1899 cohort, and concentration of first names among their fathers. Column (1) shows the correlation for the Herfindahl-Hirschman Index, while column (2) reports the correlation between binary variables indicating whether the town is above or below the median of first names' concentration in the two generations under analysis. The sample includes all the towns in Piedmont selected as explained in section 4.3. Robust Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.