

Drafting the Great Army: The Political Economy of Conscription in Napoleonic France

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Napoléon Bonaparte revolutionized the practice of war with his reliance on a mass national army and large-scale conscription. This system faced one major obstacle: draft evasion. This article discusses Napoléon's response to widespread draft evasion. First, we show that draft dodging rates across France varied with geographic characteristics. Second, we provide evidence that the regime adopted a strategy of discriminatory conscription enforcement by setting a lower (higher) conscription rate for those regions where the enforcement of conscription was more (less) costly. Finally, we show that this strategy resulted in a rapid fall in draft dodging rates across France.

“An army should be ready every day, every night, and at all times of the day and night.”

—Napoléon Bonaparte¹

Historians and social scientists now recognize the significant role military affairs have played in shaping the evolution of political institutions and, through the latter, their effect on long-run economic performance. The “military revolution” is the episode most often associated with this process of institutional change (Parker 1996; Downing 1992; Gennaioli and Voth 2015). Key to this “revolution” was a series of innovations in military technology that took place between the late Renaissance and the eve of the French Revolution.² Most important among them was an improvement in artillery, which had profound consequences for the practice of war. Tall, thin walls gave way to the short and thick ones of the *Trace Italienne*, giving defensive warfare the upper

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¹ Cited in Chandler (2016).

² Parker (1996) dates the origins of the military revolution to the early 1500s and its end to the last decades of the eighteenth century.

hand in the second half of the sixteenth century. New tactics that relied on the coordinated use of firearms were introduced, to the advantage of larger armies (Latzko 1993). Average army size went rapidly from a few thousand to tens and, on a few occasions, hundreds of thousands. For instance, the French army numbered 50,000 men in the 1550s. The same figure was 150,000 by the 1630s (Parker 1976, p. 206).³

The tactical and technological changes brought about by the military revolution proved rather expensive for European rulers. Larger armies meant more salaries, uniforms, weapons, and rations. The growing effectiveness of gunpowder artillery required the construction of more extensive fortifications (Batchelder and Freudenberger 1983). Burdened with these new financial requirements, sovereigns initiated a series of reforms of their public institutions. As one military historian put it, “the growth of an effective bureaucracy was an essential prerequisite for the creation, control, and supply of larger and better-equipped armies” (Parker 1996, p. 147). Of particular importance were public institutions dedicated to taxation. Following the onset of the military revolution, European states moved away from a “domain model” of public finance—which had dominated the continent throughout the Middle Ages and relied on the exploitation of the ruler’s private assets—to more direct taxation of national output (Bonney 1999).

During the Revolutionary and Napoleonic periods, France became the leader of a “new military revolution” (Parker 1996, p. 149). One consequential element of the latter was the decision to abandon traditional methods for military recruitment, which rested mostly on foreign mercenaries and, to a lesser extent, domestic volunteers. Instead, the French government started to rely heavily on military conscription, an uncommon practice throughout the *ancien régime*. While France already introduced the principle of the military draft in 1793 (a measure formalized in 1798), it was only under Napoléon that conscription became foundational to the country’s military system and a permanent feature of French society. Every year during Napoléon’s reign, tens of thousands of civilians were forced to abandon their homes and villages and join the army for the following several years.

Napoléon needed conscription to accomplish his military objective of a French-dominated continent. It did not take long for him to run into an obstacle to his vision of a French mass army: draft dodging.⁴ This

³ See also Onorato, Scheve, and Stasavage (2014).

⁴ Throughout the paper, we use the phrases draft dodging and draft desertion interchangeably. As we discuss, the French government distinguished between different types of desertion. For the purposes of our argument, we will focus mainly on what the French called *réfractaires*, or “draft dodgers,” that is, individuals who, once they had been drafted, failed to join the military unit to which they had been assigned.

was not a new phenomenon. Deserters have been, from the perspective of military leaders, a scourge as old as war itself. Whenever soldiers' conditions approximated the intolerable—due to weather, lack of rations, or officers' abuse—the option of abandoning camp became a palatable alternative. Often, this meant defeat for the few who had decided to stay. In some cases, whole armies had “vanished into thin air” due to desertion (Parker 1996, p. 57).

Desertion is even more of a threat to an army that relies chiefly on mandatory military service (Piano and Rouanet 2020). Less than fully compensated for their services, and the risk war poses to their lives, conscripts face a higher temptation to “dodge” than do volunteers, whether domestic professionals or foreign mercenaries. As soon as the French government adopted large-scale conscription, draft evasion numbers skyrocketed. Within just a few years, 200,000 draft dodgers and deserters were roaming France's countryside (Forrest 1989, p. 169). The inability to contain draft evasion threatened to put the country at a disadvantage against its many enemies. It also produced a wide array of social ills, including the rise of banditry and crime, as draft dodgers joined the French underworld to make a living while hiding from the authorities. If he wished to accomplish his plans for European dominance, Napoléon needed to find a solution to the problem of draft dodging first.

This article provides an economic analysis of the Napoleonic regime's efforts to mitigate the threat widespread draft evasion posed to its military objectives. These actions can be understood as rational responses to the phenomenon of draft dodging under the specific circumstances of early nineteenth-century France. Rates of draft dodging varied drastically across departments, a variation that contemporaneous and historical accounts attribute to a combination of geographic characteristics and cultural factors. Local geography could frustrate the government's efforts to administer conscription by providing draft dodgers with plenty of escape routes and hiding places. Cultural factors, such as a dislike for the revolutionary policies of the regime, could increase resistance to the draft, including among local officials.

In response to widespread draft evasion, the French regime adopted a policy of discriminatory conscription enforcement. The presence of draft dodgers within a region made it more likely for others to evade conscription, which generates a policy externality by congesting the government's efforts to police and enforce a given conscription rate. To mitigate this congestion problem and reduce the overall number of draft dodgers at no extra cost, the government started setting a department's conscription rate based on its marginal cost of enforcement. Departments where

conscription was easier (harder) to enforce were now asked to contribute more (fewer) men to the nation's armed forces.

To provide evidence of the determinants and consequences of France's discriminatory conscription policy, we introduce an original dataset that uses documents from the *Archives Nationales* in Paris. Our dataset contains yearly department-level data on draft dodging rates, conscription rates, enforcement efforts, and other military and administrative variables for the period between 1806 and 1810.⁵ We combine these with various measures of geographical characteristics, most prominently geocoded data on terrain ruggedness from Nunn and Puga (2012), distance from Paris, traveling costs from Paris, and whether a department shared a border with a foreign country.

We leverage these data in a series of empirical exercises. First, we show that the prevalence of draft dodging was a function of the government's enforcement costs by investigating the relationship between terrain ruggedness and the draft-dodging rate across departments. We find that a one standard deviation increase in the natural logarithm of terrain ruggedness raised a department's draft dodging rate by 2.9 to 6.3 percentage points. We then perform a case study of Haute-Vienne, a department from the Nouvelle-Aquitaine region of France, for which we are able to access data at a smaller administrative (i.e., cantonal) level. The results of this case study show that a canton's geographic characteristics predict draft-dodging rates at home but not desertion rates outside Haute-Vienne after soldiers have joined their unit. This is consistent with the view that geography affected the prevalence of draft dodging via its effect on the government's ability to enforce the draft rather than via more indirect socio-economic channels.

Second, we provide evidence for the Napoleonic regime's adoption of discriminatory conscription enforcement policy by showing a large, negative, and statistically significant relationship between a department's ruggedness and its conscription rate. We find that a one standard deviation increase in the natural logarithm of terrain ruggedness predicts a conscription rate between 0.8 and 2.4 percentage points lower. We corroborate these results by way of an event study. In 1808/09, Napoléon's minister of war, Jean-Gérard Lacuée, developed and then implemented a reform of France's draft system. Our event study of Lacuée's reform shows that it reduced the conscription rate in exactly those departments he had

⁵ Departments were Napoleonic France's fundamental administrative unit below the national government. For the period under consideration, the borders of France extended over regions of Switzerland, Italy, Germany, and Belgium, which had recently been annexed over the previous decade.

identified as especially impervious to the government's conscription efforts. Back-of-the-envelope calculations based on these results suggest that there would have been 27 percent more draft dodgers roaming France in 1810 had the regime refused to ramp up its use of discriminatory conscription in 1809.⁶

Finally, we discuss a series of reforms the Napoleonic regime introduced to address draft evasion in the medium and long run. These included the centralization of conscription enforcement, the use of draconian forms of punishment for draft dodgers (as well as their families and villages), and the involvement of the military in the fight against draft evasion.

This article contributes to the literature on administrative reform and nation-building in economic history. A growing body of research in the social sciences sees the modern nation-state as the result of a process of rationalization of public sector institutions (North, Wallis, and Weingast 2009; Dincecco 2015). This process involved the creation of professional bureaucratic bodies to allow governments to enforce policies and supply public goods more effectively (Balla and Johnson 2009; Johnson and Koyama 2014; Cox 2020; Hao and Liu 2020) and has been identified as key to economic development (Besley and Persson 2010; Johnson and Koyama 2017). Our argument is particularly relevant to existing work emphasizing the connection between warfare and state formation in Western Europe (Downing 1992; Gennaioli and Voth 2015). According to this literature, pressure from military competition contributed to the decision of many European states to reform their fiscal regimes and increase their ability to tax (Besley and Persson 2010; Dincecco and Prado 2012). Our paper distinguishes itself from existing work in this field by providing an economic and empirical analysis of a specific historical case of nation-building efforts driven by the regime's military needs. It shows that the latter prompted the Napoleonic regime to introduce an array of consequential domestic reforms, including the centralization of the administration of military conscription, the reliance on the national army for domestic policing, and the enforcement of the draft.

DRAFT EVASION IN POST-REVOLUTIONARY FRANCE

Conscription was the cornerstone of France's post-revolutionary military system. Between 1800 and 1813, the Napoleonic regime drafted

⁶ Confidence in our results is strengthened by qualitative evidence from primary sources. High-ranking officials of the Napoleonic government, like Lacuée, explicitly took the variation in the prevalence of draft evasion across French regions into consideration when designing recruitment policies.

more than 2.4 million Frenchmen to serve in either the army or the National Guard (Woloch 1986, p. 110). The foundations for the conscription system had been established with the *Loi Jourdan* of 1798.⁷ In principle, once the government had identified the army size necessary to meet the country's military needs, each of France's administrative units—or departments—was to contribute the same percentage of its able-bodied male population between the ages of 20 and 25 (Forrest 1989, p. 39).

Draftees were selected by a random lot administered by local authorities. It was a slow and cumbersome process fraught with obstacles. Lack of communication between Paris and the rest of the country would often lead to confusion over how the system was supposed to operate. Local governments lacked the administrative capacity and often the will to enforce the law against their constituencies. Potential conscripts took advantage of any loophole in the system to avoid military service: The law allowed exemptions for men in poor health, men below a certain height, and married men.

Predictably, fraud was widespread (Rouanet and Piano 2020). People would pretend to be afflicted by all sorts of disqualifying medical conditions, often with the complicit assistance of their doctors. The introduction of the draft resulted also in a boom in marriages, as bachelors and their families rushed to find single women, many of them widows, willing to get wed for money (Pigeard 2000, p. 236). Besides these instances of fraud, the most significant obstacle to the smooth operation of the draft was draft dodging. The Napoleonic regime, like the republican government before it, was aware of the danger it posed, and the “[administration of c]onscription overshadowed every problem of administration in Napoleonic France. In an immediate sense, given its imperial ambitions, the regime's survival depended on it” (Woloch 1986, p. 101). Enforcing conscription was no easy task. Already following the *levée en masse* of 1793, draftees had to be “literally dragged from their homes” (Nafziger 1988, p. 11):

The extensive documentary evidence in the administrative records, especially the prefects' reports, leaves no doubts that contemporaries regarded conscription as an unmitigated evil, to be resisted by all means (Woolf 2002, p. 159).

The inability of the regime to stop the hemorrhage of men from its ranks would end up contributing to the military defeats of 1812 and 1813—when eight out of every ten Frenchmen of age had been drafted into the

⁷ Online Appendix K provides a brief overview of the history of French military institutions between the revolution and the rise of Napoléon and a discussion of Napoléon's reform of the country's military system.

armed forces—and, ultimately, to the fall of Napoléon himself (Delbrück 1985, p. 414).

In post-revolutionary France, desertion took one of three forms. First, a man liable for military service may not show up altogether to his hometown's draft lottery. Second, once drafted, he may go into hiding and never join his battalion. Finally, he may leave his unit after having joined it. The French government distinguished between these categories as a matter of law. It referred to those falling within the former two as *réfractaires*, or “draft dodgers,” while the latter was known simply as *déserteur*.⁸ Draft dodgers accounted for the largest share of deserters; most conscripts “disappeared” before they had ever joined their battalions (Forrest 1989, p. 65). In the aftermath of the introduction of the *Loi Jourdan*, over 200,000 conscripts escaped their military obligations and never reported to their units (Forrest 1989, p. 169). By 1797, the country's armed forces had shrunk from a nominal 700,000 men to an effective figure of 400,000. Draft dodgers accounted for much of the difference (Best 1998, p. 89).

Resistance to conscription varied drastically from one region to another. In some areas, draft defiance became “so strong as to turn into rebellion” (Best 1998, p. 90), while others showed much greater compliance. Historians of post-revolutionary France have identified a wide array of factors to explain this variation. Forrest (1989) divides these into four categories: ideology, social forces, economic factors, and geography.

Regions that had been historically indifferent to the principles and policies of the revolution, like those of Southern and Western France, were less willing to supply men for military service (Elting 1997, p. 325). Similarly, communities in rural and more traditionally minded regions, like the Vendée, encouraged or failed to discourage draft evasion. Compliance with conscription was also associated with local economic circumstances. For instance, farmers seem to have been especially unwilling to abandon their fields for long stretches (Forrest 1989, p. 79). Finally, geography was an influence behind the relative prevalence of draft dodging:

Mountains, dispersed habitation, upland pasture, rocks and caves, treacherous marshlands familiar only to the local population, smugglers' hill tracks that were part of a very private village *connaissance* all offered escape and evasion [to draft dodgers] (Forrest 1989, p. 124).

Contemporaneous accounts blamed high draft evasion rates on a wide array of geographical characteristics. Rugged regions offered potential

⁸ The punishment for draft dodgers was generally less severe than for those who abandoned their units during active employment (Piano and Rouanet 2020).

draft dodgers plenty of hiding spots, such as caves and rocky coastlines. Departments further away from the nation's capital were also often seen as prone to draft dodging, especially those sharing a border with another country.

The French government was keenly aware of the variations in geographical characteristics and their effect on draft evasion. In a report to the minister of war from 1806, the prefect of the department of Lozère attributed "the little success of the levy" to his department's "mountains, its gorges, its woods and the toughness of the climate which ... offer conscripts almost certain means to escape the searches and pursuits of the gendarmerie."⁹ The administrative correspondence between local prefects and the central government offers more evidence that public officials perceived geography as a major constraint to conscription enforcement.¹⁰ A consistent theme of these reports is the difficulty of apprehending draft dodgers in "rugged" regions. In a letter to Paris from 1813, the prefect of the department of Lozère lamented that conscripts were escaping villages just minutes after the draft, but gendarmes could do little more than stand there as draftees climbed up the mountains near their villages and quickly disappeared into the woods (Waquet 1968, p. 199). Prefects and sub-prefects often complained about the difficulty of dispatching and receiving information about conscription enforcement from the more remote villages and towns in their district.¹¹ According to one prefect, "the extreme dissemination of [the administration's] constituents" was to blame for the failure to eradicate draft evasion from his department, in part due to the difficulty of "maintaining [communications] with the mayors of the jurisdiction" (Deferrière 1804, p. 380).

We find similar examples in the correspondence between Napoléon and his chief of police, Joseph Fouché.¹² In September 1804, the latter wrote to Napoléon that "[in the departments of] Loire, Lozère, and Tarn, mountains offer safe asylum [to draft dodgers] and make [their] prosecution almost impossible" (Fouché 1964, p. 285). In 1806, he reported that in the department of Pyrénées-Orientales, "the mountains and the vicinity of Spain make the efforts of the gendarmerie futile," while in

⁹ *Archives Nationales*, F/9/209 n.1317. See also the prefect of Lozère's (1806) comprehensive *Mémoire sur la conscription dans le département de la Lozère*, *Archives Nationales*, F/9/209, especially pp. 7–8, 13.

¹⁰ See Waquet (1968) and the correspondence in boxes F/9/150 to F/9/260 in the *Archives Nationales*.

¹¹ See Deferrière (1804) and *Mémoire sur la conscription dans le département de la Lozère*, *Archives Nationales*, F/9/209.

¹² Translations of Fouché's police reports mentioning problems concerning conscription in mountainous departments as well as conscripts fleeing abroad are available in Online Appendix E.

the Hautes-Loire, conscription efforts were being frustrated “because the mountains make it almost impossible to catch fugitives.” The same problem seemingly afflicted the Italian border: on 6 August 1806, Fouché warned that hundreds of soldiers dispatched to Italy were abandoning their posts every month to return home via the many mountain passes in the Alps (Fouché 1913, p. 453).

The efforts to curb draft dodging eventually culminated in a major reform of the conscription system. The reform was the brainchild of Jean-Gérard Lacuée, who, as Napoléon’s minister of war, had been in charge of enforcing the military draft. In 1808, Lacuée compiled a report on the status of conscription in France. In it, he classified departments on a scale of 1 to 5 according to their historical resistance to conscription efforts. He then advocated for the use of his classification in calculating each department’s contribution of men to the French military. The reform was implemented in 1809 as a short-term palliative to the country’s growing military needs.

Simultaneously, the government was experimenting with a series of policies to solve the problem of draft dodging in the long term. These included such innovations as the centralization of conscription administration away from local officials and the use of the military against the country’s own citizens. Newly created army units were tasked with deterring, preventing, and punishing draft dodging. One particularly controversial strategy was to force the families of draft dodgers to provide food and shelter to the very troops entrusted with catching them. Other coercive and discretionary strategies involved the disarmament of entire communities and collective fines against townships with high draft evasion rates, among others.

With its mix of administrative reforms and draconian policies, the Napoleonic regime successfully reduced draft dodging. According to French officials, draft dodging rates collapsed by over two-thirds in just five years (Woloch 1986). Figure 1 shows the pattern of draft dodging rates across France between 1806 and 1810 in the different groups of departments identified by Lacuée. The decline of draft evasion across France contributed to Napoléon’s and his army’s, the *Grande Armée*’s, decade-long strike of almost uninterrupted successes on the battlefield, at least until 1812.

DATA DESCRIPTION

To analyze the problem of draft dodging during the Napoleonic regime and the latter’s policy response, we leverage novel archival evidence from

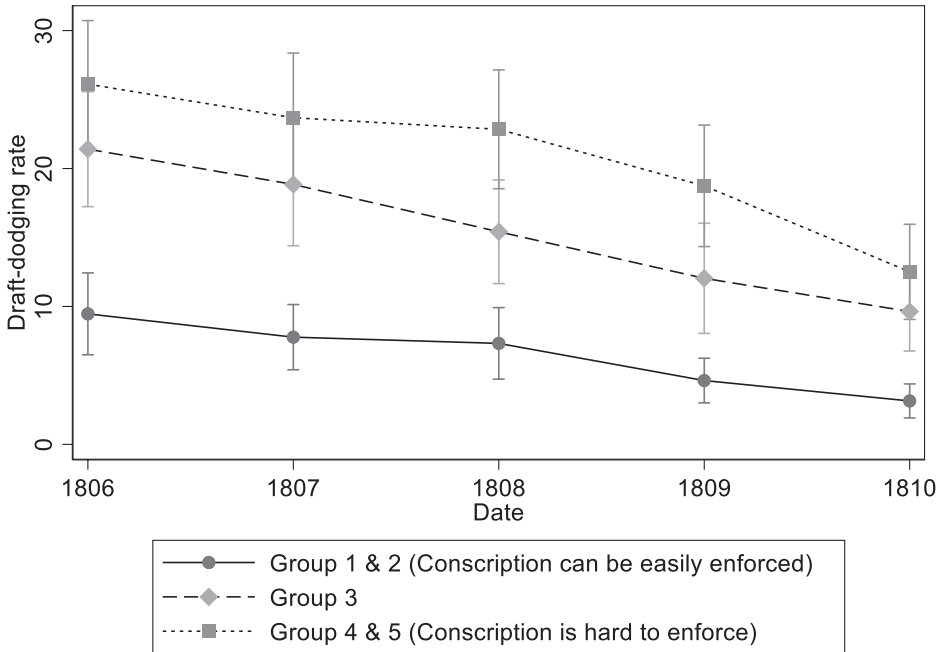


FIGURE 1
THE FALL OF DRAFT-DODGING RATES OVER TIME

Sources: Archives Nationales, AF/IV/1124, n. 1 and n. 9.

the *Archives Nationales* (hereafter AN) in Paris.¹³ The information was originally collected by Jean-Gérard Lacuée, Napoléon's minister of war. Part of Lacuée's responsibilities was to gather data on the administration of conscription across France. This novel dataset contains information about draft-dodging rates, conscription rates, and the number of draftees deemed unfit to serve. Measures for these variables refer to France's 110 departments (plus the island of Elba) for each year between 1806 and 1810.¹⁴ These include departments from territories France annexed from neighboring Italy, Switzerland, Germany, and Belgium.¹⁵

During the Napoleonic wars, the French government kept detailed records of each conscript's history in the *Registres Militaires*, which are still accessible in most departmental archives. If they joined the

¹³ AN, AF/IV/1124. See Rouanet and Piano (2022) to access the data and code in this paper.

¹⁴ The unit of observation, the departments, "were purely administrative divisions, determined for largely political reasons in 1790 by revolutionaries determined to break down the old provincial loyalties of the Ancien Régime. They did not represent any common tradition or political experience, nor did they necessarily present any geographical or economic coherence" (Forrest 1989, p. 72).

¹⁵ See Online Appendix D for a detailed discussion of all our variables.

army, the French government also kept track of each soldier's whereabouts.¹⁶ During the conscription season, Lacuée regularly reported to Napoléon how many conscripts left their departments and arrived in their units.¹⁷ The abundant correspondence between Lacuée and each prefect testifies to his administration's care in collecting statistics about the draft.¹⁸

Recall that during Napoléon's rule, the French legal code distinguished between two categories of desertion. The first category included individuals who failed to show up at the assigned battalion before the deadline once they were drafted. The second category regarded individuals who abandoned their fellow soldiers after joining the assigned battalion. Lacuée's data provides figures only for individuals from the former category, which were often referred to as draft dodgers. We define the draft dodging rate as the proportion of people effectively drafted who dodged the draft.

Lacuée's data was the source for several other variables we employ in our econometric exercise: the conscription, exemption, and replacement rates. The conscription rate is the percentage of the age cohort eligible for conscription that is drafted. The exemption rate measures the portion of young men in each cohort declared unfit for military service by the French government.¹⁹ The replacement rate refers to the share of draftees who hired a substitute to serve in the country's armed forces in their stead.²⁰ Data on military replacement is available only for the years 1806 through 1809.

We complement Lacuée's data with data from other sources. For tax revenue per capita, we use data published by Peuchet (1805) for the years 1802/03. To account for variation in human capital accumulation, we collect data about literacy rates between 1816 and 1820.²¹ Urbanization rates for each department are from Bairoch, Batou, and Chevre (1988). We define urban population as the number of people living in a city of 5,000 inhabitants or more. Finally, we created a variable measuring the number of military relays per 10 km² in 1795. As Arbello, Lepetit, and

¹⁶ See, for instance, the archives of the Ministry of Armed Forces (hereafter MAF), GR/21/YC/1-963. *Registres matricules des sous-officiers et hommes de troupe de l'infanterie de ligne (1802–1815)*.

¹⁷ See the documents in AN, AF/IV/1122.

¹⁸ This correspondence is available at the AN, boxes F/9/150 to 261.

¹⁹ More specifically, the body in charge of exempting citizens was called the "Council of recruitment."

²⁰ See Rouanet and Piano (2020) for an economic analysis of this peculiar feat of France's military system.

²¹ We also collected two alternative measures of literacy. One in 1790 and one more directly related to men eligible for conscription in 1831. See Online Appendix D.

Bertrand (1985, p. 17) explain, these relays were used “by young recruits to join their units” and ensured that troops traveling by foot could find “shelter for the night and a daily ration of bread.” While potentially endogenous to desertion rates, these relays were built before the formal adoption of large-scale conscription in 1798 and can thus be interpreted as having affected the central government’s enforcement costs.

Unfortunately, Lacuée’s data did not include the height of soldiers or their socio-economic background. We obviate this limitation by collecting data about the 1820 draft cohort in the *Archives Nationales*.²² These include information about the average height of young men eligible for the draft and the structure of the local economy. We rely on the latter to construct an “agricultural sector” variable measuring the percentage of men eligible for the draft working on farms.

We employ these data to explore: (1) the sources of variation in the rate of draft dodging across France; (2) how the imperial government responded to this variation rationally by implementing a system of discriminatory conscription; and (3) how the system of discriminatory conscription enforcement affected France’s fight against draft evasion.

Key to our analysis is the claim that geographical characteristics systematically influence the ruler’s calculus via their effect on the cost of enforcing conscription and preventing draft dodging.²³ Our main geographic variable of interest is terrain ruggedness as defined by Riley, DeGloria, and Elliot (1999). We also generated other geographic variables measuring the distance from Paris, whether a department is adjacent to the border, the year a department was created/annexed, wheat suitability, proximity to the sea, township density, and elevation.

Terrain ruggedness measures “topographic heterogeneity in wildlife habitats providing concealment for preys and lookout posts” (Nunn and Puga 2012, p. 21). Terrain ruggedness is measured by first dividing a territory into (926x929 ms) squares. Ruggedness is then calculated by taking the square root of the sum of the squared difference in elevation between the center of our original square and the elevation of each of the eight neighboring squares.²⁴ Akin to Nunn and Puga’s (2012) argument that ruggedness affected the ability of European colonists to capture slaves in West Africa, we take ruggedness to proxy the exogenous constraint

²² AN, see boxes F/9/150 through 259.

²³ In Online Appendix F.4, we also show that geography influenced the choice of conscription enforcement technology. The gendarmerie employed fewer mounted—as opposed to on foot—brigades in more rugged departments, even though they were more effective at fighting desertion on average. Horses could not operate easily in rugged terrain and therefore lost much of their advantage for enforcing conscription in mountainous regions.

²⁴ This method is described in more detail in Nunn and Puga (2012, pp. 21–22).

that geographic conditions forced on the French government's efforts to eradicate draft evasion.²⁵

Figure 2 shows the variation in draft dodging rates (top) and the log of ruggedness (bottom) across France's departments between 1806 and 1810. The black and red borders are for departments—the country's main administrative units—and military divisions, respectively.

A military division was an administrative unit encompassing an average of five departments. Military divisions were created in 1793 to contribute to the administration of the draft (de Halle 1803). From year XI (1802/03) onward, police control was vested in the *généraux de division* (Forrest 1989, p. 221). Those generals were “charged with supervising military service, gave the impetus to the sedentary troops, to the depots, to the garrison regiments,” and were “natural chiefs of the forces of the interior” (Capefigue 1842, pp. 37–38). Napoléon saw military divisions “as an important check, and sometimes counterbalance, to the civil authority of the prefects” (Woolf 2002, pp. 81–82).

To bolster our case about the relationship between geography and conscription, we also consider alternative variables that potentially influenced draft dodging and may bias our results if omitted. First, we create a measure of national identity following Johnson (2015), who draws on data from Hyslop (1934).²⁶ Second, we measure the local popularity of revolutionary ideology using data from Tackett (1986) on the percentage of French clergy who swore an oath to the Constitution in 1790 (Online Appendix G.3). Third, we use Le Bris' (2019) data on local legal systems across France to account for institutional differences between the north and the south of France before the revolution (Online Appendix G.4). Until the revolution, France did not have a national legal system. Rather, some regions (mostly in the north) were governed by customary law, while others (mostly in the south) had written legal codes. Finally, we account for the effect of the allocation of soldiers to different theaters of war on draft dodging (Online Appendix G.1). Fighting on different fronts may have entailed substantially different risks for soldiers, influencing the conscript's decision to dodge the draft.

To further explore the relationship between ruggedness and draft evasion, we reproduce an econometric exercise with data from the

²⁵ In a similar application, Carter, Shaver, and Wright (2019) find that terrain ruggedness has large direct and indirect effects on a state's ability to enforce a monopoly of violence over its territory.

²⁶ Hyslop created an index for national identity using the grievances from the local population compiled in preparation for the Estates Generals in 1789. Our national identity variable is described in detail in Online Appendix G.2.

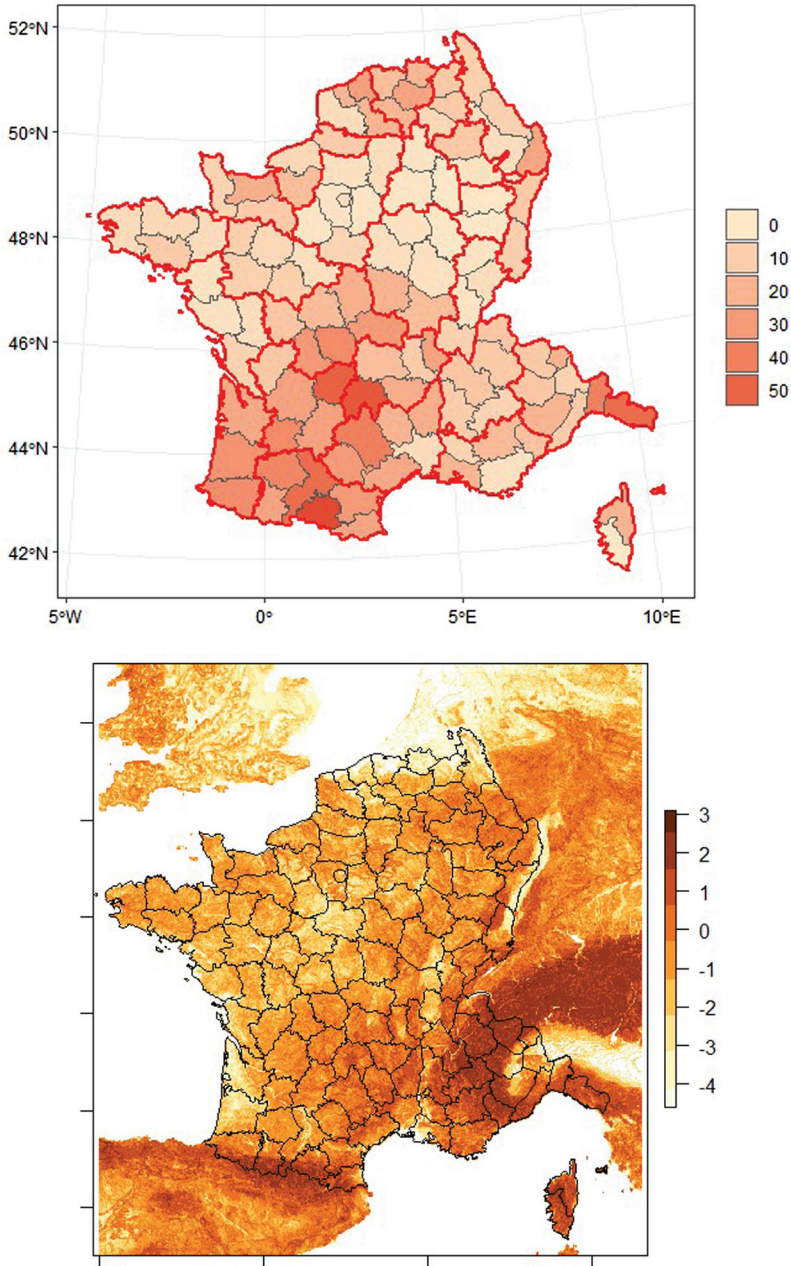


FIGURE 2
DRAFT DODGING RATE FROM 1806 TO 1810 BY DEPARTMENT
AND THE LOG OF RUGGEDNESS

Notes: Terrain Ruggedness Index is in hundreds of meters for grid points 30 arc-seconds (926 meters on a meridian) apart (Nunn and Puga 2012). The draft dodging rate in the map on the top is in percentage points.

Sources: Nunn and Puga (2012) (bottom) and Archives Nationales, AF/IV/1124, n. 1 and n. 9, (top).

department of Haute-Vienne.²⁷ The departmental archives of Haute-Vienne give access to the registers recording background information on each conscript for the year 1807.²⁸ Since these are individual-level data, we know height, place of origin, occupation, and desertion status for each cohort member, including whether they deserted before joining their units (“draft-dodgers”) or after (“deserters”). This makes the data collected for the Haute-Vienne much more detailed—but less comprehensive—than Lacuée’s data. The department of Haute-Vienne is an ideal candidate for a case study on the effect of geography as it contains both mountainous and non-mountainous regions (Texier-Olivier 1808, pp. 11–14). We organize the individual-level data at the cantonal level, with cantons (or *justices de paix*) being the second-smallest French administrative division after municipalities.²⁹ Figure 3 shows a map of terrain ruggedness across Haute-Vienne’s 26 cantons.

After analyzing variation in the capacity to enforce conscription and how Napoleon’s administration reacted by drafting less in regions where enforcement costs were highest, we provide evidence that discriminatory conscription worked. It reduced the draft evasion rate in regions most prone to draft dodging relative to regions with low draft dodging rates.

ECONOMETRIC ANALYSIS

Geography and Draft Evasion

The relationship between geographical characteristics and the prevalence of draft evasion is confirmed by the results of a formal empirical test. Specifically, we estimate a baseline OLS specification of the form:

$$D_{i,t} = \beta \log(\text{Ruggedness}) + X'_i + \delta_t + \zeta_i + \epsilon_{i,t}, \quad (1)$$

where $D_{i,t}$ is the draft dodging rate for department i at time t . Our main independent variable is the natural logarithm of *Ruggedness*; X'_i is a vector for department-level geographic and economic variables we describe in the previous section. Finally, δ_t and ζ_i are year and military division fixed effects, respectively. Given their centrality to conscription enforcement,

²⁷ Haute-Vienne lies within the Nouvelle-Aquitaine region of France. Its southwestern territories are occupied by the Massif Central, a mountain range covering a large section of southern France.

²⁸ The archival data are from the *Archives de Haute-Vienne* (hereafter AHV), 1/R/50. They can be found online at <https://archives.haute-vienne.fr/rechercher/archives-en-ligne/registres-militaires/registres-militaires-recherche-par-registres> (accessed on 1 November 11 2021).

²⁹ To construct each canton’s boundary, we identified each municipality and to which canton it belongs (Texier-Olivier 1808). We then construct polygons around each municipality whose interior consists of all points closer to any given municipality than any other. Finally, we merged the polygons into cantons.

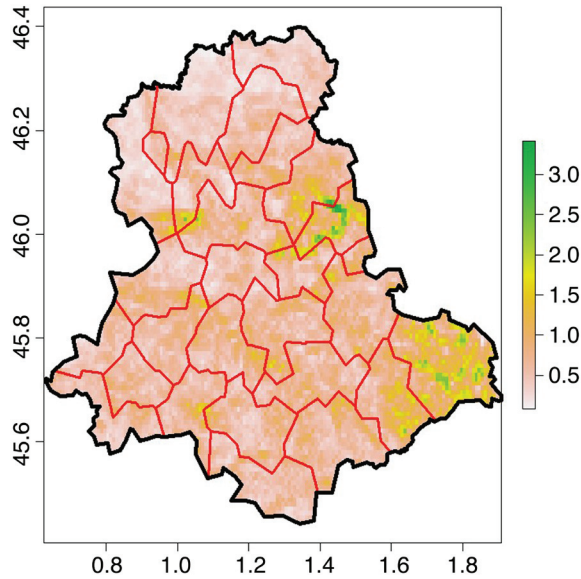


FIGURE 3
RUGGEDNESS IN HAUTE-VIENNE

Source: Nunn and Puga (2012).

we include military division fixed effects to mitigate any potential bias due to division-specific characteristics.

The use of ruggedness in this context comes with a significant drawback. Specifically, the Alpine departments of France have high ruggedness values due to the presence of tall mountains with large glaciers. Yet, they are unlikely to provide good shelter for fugitives like draft dodgers. Above a certain altitude, fugitives' survival is compromised by the very low temperatures and the lack of sources of nourishment. The bottom panel in Figure 4 shows how a handful of observations introduce skewness in the data. The top panel shows that the use of the natural logarithm of *Ruggedness* mitigates the potential bias introduced by the inclusion of the Alpine departments.³⁰

Table 1 reports the results of six OLS specifications on the effect of geographical characteristics on draft dodging rates across French departments. The coefficients of our main explanatory variable ("Log of ruggedness") are large, positive, statistically significant across all specifications,

³⁰ In Online Appendix F.1.2, we adopt two strategies to deal with rugged areas that are unlikely to be relevant to a conscript's draft evasion choice. First, we recalculate the mean of terrain ruggedness for each department while excluding all land more than 2 km above sea level. Second, we exclude land covered by glaciers and mountainous rocks without any vegetation. We then reproduce the results in Table 1. The results are consistent with those using the natural logarithm of ruggedness and confirm that the inclusion of observations with very high altitudes introduces bias in the analysis, thus further justifying our choice to use the natural log of ruggedness as our main independent variable.

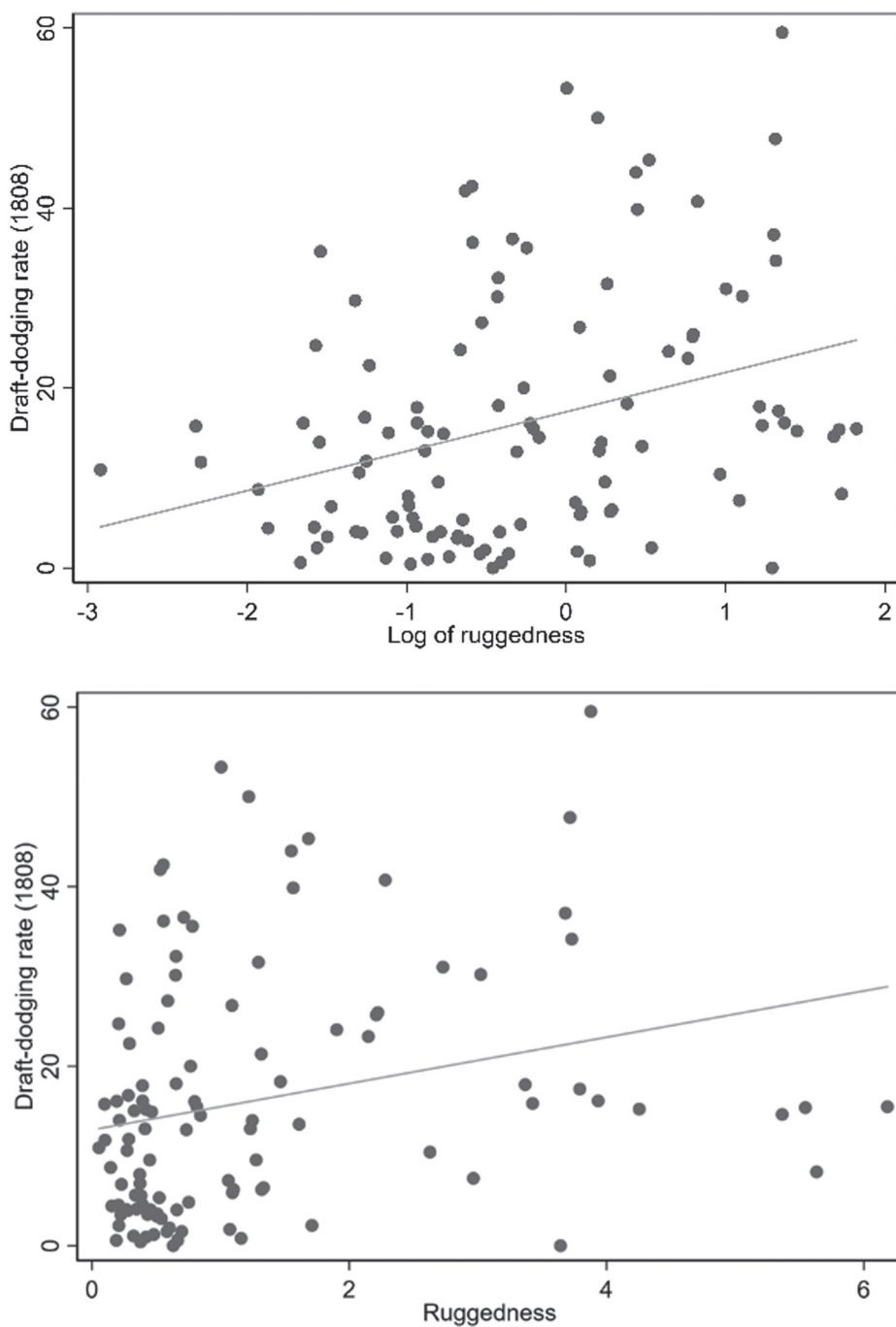


FIGURE 4
SCATTERPLOTS OF DRAFT EVASION AND RUGGEDNESS (LOWER PANEL)
OR LOG OF RUGGEDNESS (UPPER PANEL) FOR 1808

Sources: Nunn and Puga (2012) and Archives Nationales, AF/IV/1124, n. 1 and n. 9.

TABLE 1
GEOGRAPHY AND DRAFT EVASION

	(1)	(2)	(3)	(4)	(5)	(6)
Draft-Dodging Rate	3.16375 (0.57352)*** [1.32991]**	2.82657 (0.92777)*** [1.34681]**	3.86229 (1.06111)*** [1.35414]***	4.65358 (1.62817)*** [1.94372]**	6.20847 (1.66293)*** [2.20756]***	5.76847 (1.72604)*** [2.19902]***
Log of ruggedness						
Townships density		-78.27659 (19.64506)*** [36.63227]**	-90.56160 (20.59373)*** [37.09279]**	-62.71338 (44.89035) [80.14154]	-23.84859 (46.76072) [75.13021]	-13.99420 (45.92597) [72.35154]
Distance from Paris		3.40581 (0.88601)*** [1.44174]**	3.31115 (0.88206)*** [1.43014]**	2.16670 (1.06161)** [1.63886]	3.05406 (1.21080)** [1.90045]	2.99532 (1.22883)** [1.92517]
Border		2.19669 (1.27691)* [1.72143]	2.66730 (1.30976)** [1.74814]	4.65163 (2.34167)** [3.57922]	4.66339 (2.52049)* [3.63635]	4.44323 (2.54322)* [3.74240]
Military relays				-26.35774 (9.87579)*** [15.93356]*	-39.18313 (11.30203)*** [17.04551]**	-39.84285 (11.30502)*** [16.99570]**
Replacement rate				-1.08854 (0.33693)*** [0.48503]**		-1.08684 (0.33660)*** [0.48199]**

TABLE 1 (CONTINUED)
GEOGRAPHY AND DRAFT EVASION

	(1)	(2)	(3)	(4)	(5)	(6)
Draft-Dodging Rate						
Maritime		✓	✓	✓	✓	✓
Wheat suitability		✓	✓	✓	✓	✓
Urbanization rate			✓	✓	✓	✓
Tax revenues per capita			✓	✓	✓	✓
Literacy				✓	✓	✓
Height				✓	✓	✓
Agricultural sector				✓	✓	✓
Year created				✓	✓	✓
Elevation						✓
Military division fixed effects		✓	✓	✓	✓	✓
Year fixed effects	✓	✓	✓	✓	✓	✓
Observations	554	534	534	365	292	292
R-squared	0.12556	0.64026	0.64373	0.75273	0.78830	0.78860

***p < 0.01, **p < 0.05, *p < 0.1

Notes: This table displays the results of regressing draft dodging rates on geographical characteristics as well as other controls. We report robust standard errors in parentheses and Conley standard errors correcting for spatial autocorrelation in brackets. Conley standard errors are computed using the Stata code provided by Hsiang (2010), assuming a correlation range of 100 kilometers and a linearly declining spatial weighing kernel. Different thresholds are used in Online Appendix I.

Sources: Draft-dodging rates are from the *Archives Nationales* AF/IV/1124, n. 1 and n. 9. Ruggedness is from Nunn and Puga (2012). Township density is from Prudhomme (1804). Distance from Paris was calculated using longitude and latitude data from Wikipedia. Data on “Border” status are from Nussli (2012). Military relays are from Arbellot, Lepetit, and Bertrand (1985). Replacement rate is from the *Archives Nationales*, AF/IV/1124, pp. 198–215. Maritime is calculated from Poisson (1808). Tax revenues per capita are from Peuchet (1805). Urbanization rates are calculated using data from Bairoch, Batou, and Chevre (1988). Wheat suitability is from the FAO, *GAEZ v3.0*. Literacy data is from the *Ministère de l’Instruction Publique* (1880). Height and agricultural sector data are both from the *Archives Nationales*, series F/9, boxes I50 to 259. Year created was calculated with information from Wikipedia. Elevation data are from the U.S. Geological Survey. Information on military divisions is from the *Almanach Impérial pur l’An MDCCCVI*.

and stable when we use comparable samples.³¹ A one standard deviation increase in our measure of terrain ruggedness predicts an increase in the draft dodging rate of 2.9 to 6.3 percentage points. An increase in the log of ruggedness from the 25th to the 75th percentile of the distribution predicts a 4 to 8.8 percentage point increase in the draft dodging rate. This effect is large and economically significant, as the average draft dodging rate over our entire period (1806 to 1810) was 14.9 percent.

Other geographic characteristics do not appear to have as strong an effect. In the case of distance from Paris, the coefficient is positive across specifications but only marginally significant. Proximity to the border also positively affects the draft dodging rate throughout, consistent with the idea that border departments offer avenues for conscripts to evade their military obligations. Being a bordering department increases the draft dodging rate by 2.2 to 4.7 percentage points on average. However, this effect is not statistically significant at conventional levels when we employ Conley standard errors to correct for spatial autocorrelation.

Our specifications also include the “Township density” variable, equal to the number of townships (the smallest administrative unit) per km². The coefficient of this variable is expected to be negative: the more distant and thinly connected the townships are to each other, the more difficult it is to enforce conscription. The results in Table 1 are consistent with this expectation. Across all specifications, the “Township density” coefficient is negative. However, its magnitude is largely reduced when we include additional controls, as in Columns (4) and (5), and the coefficients become statistically insignificant. This may be due to the inclusion of the number of military relays per 10 km² in 1795 as a control. This variable allows us to control for previous investment in military infrastructure—especially as the ease with which the movement of troops occurs is likely to be a determinant of draft evasion. However, township density and the number of military relays appear to be highly correlated, and our data may not be comprehensive enough to identify the independent effect of each variable.³² Nevertheless, more military relays

³¹ Changes in the magnitude of the “Log of ruggedness” coefficients are mostly due to changes in the number of observations, as some departments lack data for some of the controls. For instance, when, as in Column (5), we must rely on just 292 observations, ruggedness coefficients for the other specifications approximate more closely that from Column (5) and are respectively equal to 6.33, 4.80, 4.84, and 5.74.

³² The correlation coefficient between “Military relays” and “Township density” is 0.53. One potential issue is that military infrastructure is endogenous to draft evasion. To address this issue, we run the regression in Column (5) using the average number of postal offices per 10 km² or the prevalence of the road network instead of military relays. The establishment of postal offices or roads is unlikely to be caused by conscription, but it may face similar geographical constraints. The results, included in Online Appendix F.3.4, are virtually the same as in Table 1, except that it makes the coefficient of “Township density” statistically significant.

per 10 km² within a department significantly predict lower draft dodging rates.

One potential concern concerning the validity of our results is that ruggedness may affect draft evasion indirectly through its effect on other, omitted variables. To address this issue, we use a wide range of controls collected from archival documents and primary sources. Hence Column (2) in Table 1 includes controls for a department's wheat suitability and whether a department is adjacent to the seashore. Column (3) adds controls for economic outcomes, specifically a department's urbanization rate and tax revenues per capita. In Column (4), we further include measures for a department's literacy rate, the percentage of conscripts working in the agricultural sector, and the average height of able-bodied men of conscription age.³³ Including these variables addresses the possibility that ruggedness affects draft dodging rates via its effect on a department's overall productivity.³⁴ Less productive departments may have lower educational attainment and nutrition levels, which may affect young men's willingness to join the army or ability to pay for a replacement.³⁵ Similarly, poorer departments may have lower levels of nutritional investment, which may affect the average height of their populations. Since Napoléonic France had a minimum height requirement for its conscripts, lower average heights may reduce the need to evade the draft in the first place. Finally, Column (4) controls for the year a department was created, as this may proxy local administrative capacity.

In Column (5), we include one additional control: the number of military replacements hired within a department. The system of military replacement gave conscripts the ability to hire another man to serve in the army in their stead. This institution was made legal *de facto* on 16 April 1799, and formalized in 1800 and 1802. It was, however, heavily regulated by the Napoleonic regime, especially from 1806 onward. For instance, conscripts could only be replaced by men from the same department; replacements had to meet stricter physical and moral requirements,

³³ Note that the inclusion of these variables significantly reduces the number of observations available since these data were not available for the Belgian, German, and Italian departments.

³⁴ For instance, collecting the 1,500 francs fine for draft dodging was virtually impossible in poor regions.

³⁵ The prefect of Lozère notices that draft dodging is highest in mountainous parts of his department and parts "where the lights of education are the rarest" and mentions the difficulty of finding "intelligent" local officials (*Mémoire sur la conscription dans le département de la Lozère*, AN, F/9/209). In Online Appendix F.3.3, we use different literacy measures with no substantial effects on our results. For a broader discussion of the relationship between education and military recruitment, see Aghion et al. (2019).

and so forth (Rouanet and Piano 2020).³⁶ As a result, the ease with which replacements could be found varied substantially across departments. The results from Column (5) show that the portion of replacements is negatively related to a department's draft dodging rate.³⁷ Including this variable only strengthens the coefficient for our main independent variable. Finally, Column (6) shows that our results are robust to including elevation as a control.

Robustness Checks

A series of robustness checks further corroborates the validity of our results. First, we investigate whether our results are robust to the substitution of ruggedness for an alternative measure of geographical characteristics (Online Appendix F.1.1)³⁸: a department's average slope (and its natural log). The results are entirely consistent with those of our baseline specification. We also perform a zero-skewness Box-Cox power transformation on our ruggedness variable. This is an alternative method to taking the natural logarithm to mitigate the skewness in our measure of terrain ruggedness. We find that the estimated positive effect of geographical characteristics on draft evasion is robust across all these strategies.³⁹

A department's draft dodging rate may be affected by its neighbors' geographical and environmental characteristics. We generate buffers 30 km deep around each department and then calculate the average terrain ruggedness for these modified polygons to account for this possibility. The results (Table 14 in Online Appendix F.1.3) are consistent with those of our baseline specification and significant at the same thresholds. In fact, they are larger than those in Table 1.

We also investigate whether our results are robust to excluding influential observations (Online Appendix F.2). We run the same regressions

³⁶ Buying a replacement in 1810 in Avignon cost almost 6,000 francs, which represented from two to ten years of income for a peasant (Pigeard 2000, p. 237). For comparison, four or five horses in the Napoleonic period cost around 2,000 francs. Military replacement was therefore quite expensive. From 1806 to 1809, between 4.3 and 5.3 percent of conscripts hired a replacement.

³⁷ Napoleonic officials seem to have been aware of this fact. See the report to Napoleon dated 5 April 1806, by the prefect of the Department of Lozère, who proposed deregulating the replacement market to fight draft dodging in "the departments where the success of conscription meets obstacles" (*Archives Nationales*, F/9/209).

³⁸ We also reproduce the specifications from Table 1 using terrain ruggedness instead of its natural log.

³⁹ The only specifications producing statistically weaker results are the ones that do not account for rightward skewness, as when we rely on unadjusted values for ruggedness and slope. This is due to very high but practically irrelevant values of ruggedness within France's Alpine departments. Once areas with such values are excluded, "Ruggedness" and "Slope" become positive and statistically significant. See Online Appendix F.1.2. Excluding "Distance from Paris," which is highly correlated (0.64) with ruggedness, also leads both "Ruggedness" and "Slope" to become statistically significant.

as in Table 1 while removing the ten most and least rugged departments. Finally, we follow Belsley, Kuh, and Welsch (2005) by omitting all observations for which $|DFBETA| > \sqrt{2}/N$, where N is the number of observations and where $DFBETA$ is a measure of the difference in the estimated coefficient for the ruggedness coefficient (scaled by the standard error) when including and excluding from the sample. When we replicate our baseline specifications using this method, the resulting coefficients remain positive and statistically significant.

Finally, we investigate whether the relationship between draft evasion and our geographic characteristics is robust to the control of variables such as national identity, adherence to the revolutionary ideology, legal origins,⁴⁰ and the allocation of soldiers to different theaters of war (Online Appendix G). The results of these robustness tests, all of which support our findings, are discussed in the Online Appendix.

Case Study: Haute-Vienne

One potential criticism of our approach is that geographical features like terrain ruggedness may affect a department's draft dodging rate indirectly, for instance, via its effect on unobserved social, economic, and cultural characteristics. To mitigate such concerns, we replicate our empirical strategy as expressed in Equation (1) but for just one region of France—the department of Haute-Vienne.

Unlike our cross-departmental data, the Haute-Vienne data includes measures both for domestic draft dodging and for desertion while serving on the front-line outside of France in 1807. Suppose our hypothesis is correct and ruggedness affects draft dodging chiefly via its effect on the ability of the government to enforce conscription. In that case, a canton's average terrain ruggedness should be positively correlated with draft dodging rates within the canton but not with the desertion rate among people from the same canton after they have joined their military units.⁴¹

⁴⁰ Until the revolution, France did not have a common national legal system. Rather, some regions (in the northern part of the country) were governed by customary law akin to English common law, while others (in the south) had written legal codes.

⁴¹ If conscripts who have deserted away from home do so to make their way to their hometown, then canton-level ruggedness could be positively related to desertion away from home as well. Similarly, high desertion rates occurring before leaving for the army may make it harder for authorities to find other kinds of deserters as their resources are stretched thin. In that case, too, the relationship between desertion and the ruggedness of conscripts' home regions may be positive. On the other hand, a higher level of ruggedness may lead conscripts to substitute desertion in other regions with desertion in their home region, where it is easier to hide and escape the authorities. By changing the relative cost of different kinds of desertion that way, it is possible for desertion outside of the department of Haute-Vienne to be negatively related to the ruggedness of home counties.

Figure 5 plots the cantons' terrain ruggedness and draft dodging/desertion rates before and after a draftee has left the Haute-Vienne department. Table 2 reports the results once we replicate our econometric tests using canton-level data from the Haute-Vienne department.⁴² These results give further credence to the validity of our previous findings.

As shown in Columns (1) through (4), a canton's average terrain ruggedness is positively correlated with higher draft dodging rates. This relationship is statistically significant whenever our specifications include canton-specific controls. Also consistent with our hypothesis, the results in Columns (5) to (8) show that a canton's terrain ruggedness does not predict desertion away from home. The coefficients on Ruggedness are always statistically indistinguishable from zero, and their magnitude and sign are inconsistent across specifications.⁴³

NAPOLÉON'S RESPONSE

Discriminatory Conscription Enforcement

The Napoleonic regime's response to these circumstances was twofold. In the short run, hard-pressed by the immediate need for soldiers, it adopted a strategy of "discriminatory conscription enforcement." Theoretically, the burden of military conscription was to be proportional to a department's population. However, "as the government became more and more desperate in its quest for able-bodied men for the battalions, it showed less concern for equity and geographical spread" (Forrest 1989, p. 40). In Eventually, some departments came to bear a much larger share of the burden, relative to their population, than others (Woolf 2002, p. 160). For example, in 1808, when the country drafted close to one percent of its population, departments like Yonne, only one hundred miles from Paris, were supplying twice as many soldiers per capita than other departments like the Rhône in Eastern France and the Hautes-Pyrénées in the south.

These short-run efforts were accompanied by a long-term strategy aimed at reducing draft evasion rates throughout the country and occupied territories. In pursuit of this goal, the Napoleonic regime introduced a series of reforms to the administration of military conscription. Over the

⁴² Since there are no extreme values of ruggedness in Haute-Vienne, we preferred using ruggedness instead of the log of ruggedness as our independent variable. Using the log of ruggedness changes neither the sign nor the significance of our results, except for the first specification in Table 2, where the log of ruggedness is statistically insignificant.

⁴³ Since these results rely on a small number of observations, we performed a sensitivity analysis using a "leave one observation out" routine for the specification in Table 2, Column (3). All coefficients produced with this method are positive and significant at the 1 percent threshold.

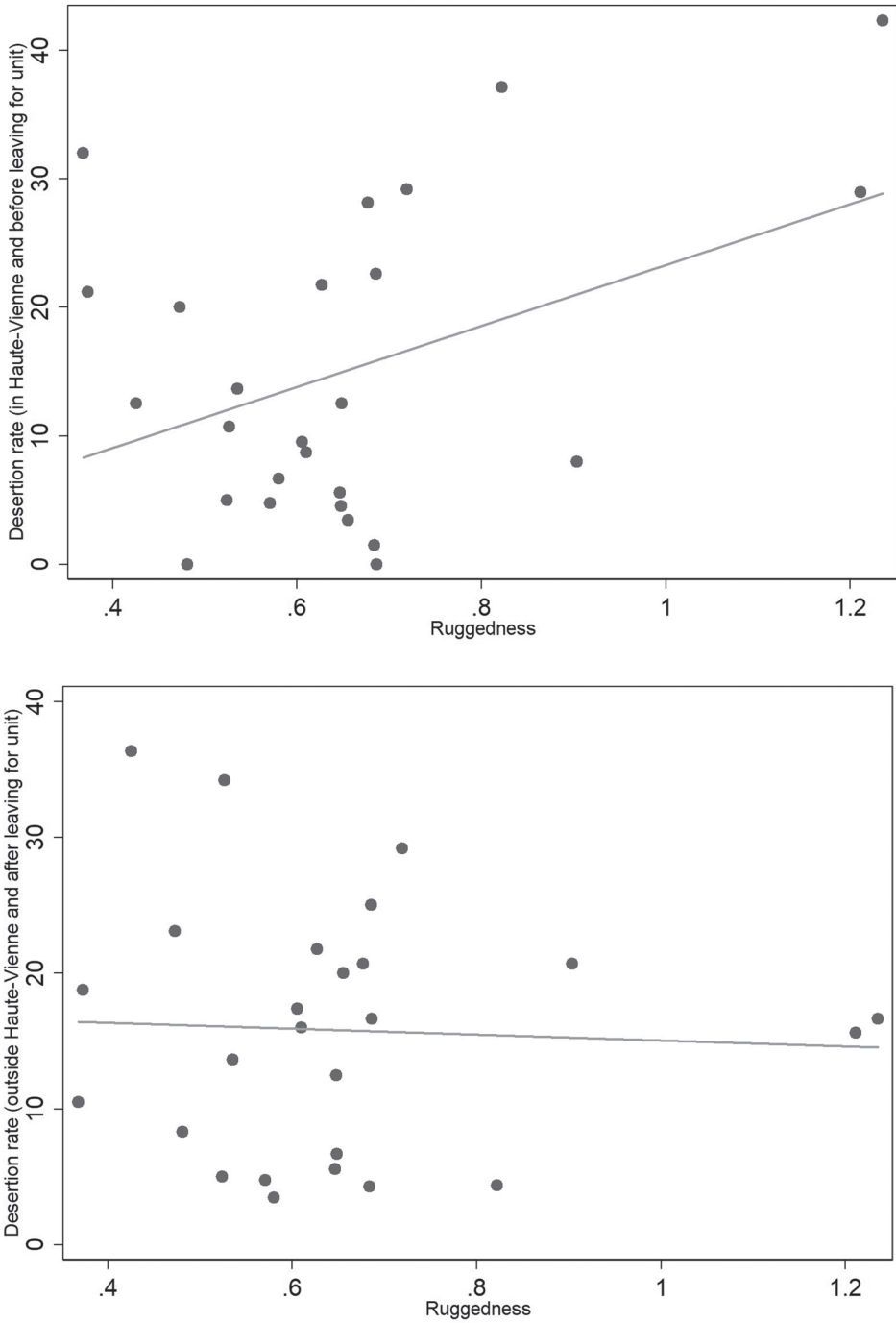


FIGURE 5
RUGGEDNESS AND DESERTION IN THE CANTON (UPPER PANEL) AND
AWAY FROM HOME (LOWER PANEL) IN HAUTE-VIENNE

Sources: Nunn and Puga (2012) and Archives de Haute-Vienne, 1/R/50.

TABLE 2
GEOGRAPHY AND DESERTION IN HAUTE-VIENNE

Dependent Variable	Desertion Rate (before Leaving for Unit)				Desertion Rate (after Leaving for Unit)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Ruggedness	23.75433 (11.69744)* [10.31959]**	26.39871 (9.75387)** [7.41947]**	32.01622 (6.39163)*** [5.45677]**	57.29485 (12.54240)*** [9.46596]**	-2.16073 (6.36336) [5.19933]	-1.55019 (6.48357) [5.04240]	3.39306 (7.10792) [5.10103]	10.70835 (11.30334) [7.18600]
Wheat suitability		✓	✓	✓		✓	✓	✓
Height		✓	✓	✓		✓	✓	✓
Agricultural sector			✓	✓			✓	✓
Construction workers			✓	✓			✓	✓
Owner share			✓	✓			✓	✓
Wood workers			✓	✓			✓	✓
Leather and textile workers			✓	✓			✓	✓
Glass and metal workers			✓	✓			✓	✓
Elevation			✓	✓			✓	✓
Observations	26	26	26	26	26	26	26	26
R-squared	0.168	0.302	0.674	0.719	0.002	0.016	0.567	0.573

***p < 0.01, **p < 0.05, *p < 0.1

Notes: Controls are described in Online Appendix D. We report robust standard errors in parentheses and Conley standard errors (50 km) in brackets.

Sources: Draft-dodging rates are from the *Archives Nationales AF/IV/1124*, n. 1 and n. 9. Wheat suitability is from the FAO, *GAEZ v3.0*. Elevation data are from the U.S. Geological Survey. All remaining controls are from the *Archives de Haute-Vienne*, 1/R/50.

years, the reforms produced the desired effect. By 1812, Napoléon had reduced draft dodging rates throughout France drastically. The effects of reforms were not limited to draft evasion figures. They left the French state stronger and in better control of its territory (Grab 2003, p. 52).

Napoléon's short-run response to the problem of draft evasion has a straightforward economic logic.⁴⁴ A rational response to varying draft enforcement costs is to set local conscription rates higher for those departments with lower enforcement costs and lower for those with higher costs. This strategy has the advantage of reducing the number of draft dodgers at the national level (thus raising the effective size of the armed forces) at no additional cost. Thus, though the regime may have started with the presumption of an equitable administration of the draft, it was forced to abandon its principles and practice geographic discrimination by the reality of a country as large and diverse as France.

Econometric Analysis

We now provide empirical evidence for the claim that the Napoleonic regime's *de facto* draft policy was discriminatory against departments with lower conscription enforcement costs. We begin by investigating the relationship between a department's geographic characteristics and its nominal conscription rate. We do so by testing the following specification:

$$C_{i,t} = \beta \log(\text{Ruggedness}) + X_i' + \delta_t + \zeta_i + \epsilon_{i,t}, \quad (2)$$

where $C_{i,t}$ is the conscription rate for department i at time t . The conscription rate is defined as the number of men a department is required to draft divided by that department's population of male citizens of conscription age. All variables on the right-hand side are defined as in Equation (1).

Table 3 reports the results of five OLS specifications. Columns (1) through (4) have the same independent variables as in Table 1, except for the variable "Exemption rate," which measures the percentage of men considered unfit for military service. Men shorter than 1.48 meters (or 4.85 feet), the hearing-impaired, and men afflicted by a wide array of diseases were exempted from military service. The local population's health was thus a major constraint on conscription efforts. Naturally, we should expect the government to draft fewer men in regions with poorer overall health conditions.

⁴⁴ Online Appendix J develops a simple formal model of discriminatory conscription enforcement.

TABLE 3
GEOGRAPHY AND CONSCRIPTION

	(1)	(2)	(3)	(4)	(5)
Conscription Rate					
Log of ruggedness	-0.81793 0.14110*** [0.25757]***	-1.42835 (0.27957)*** [0.39674]***	-0.87341 (0.30084)*** [0.36983]**	-2.33772 (0.47519)*** [0.45585]***	-2.36288 (0.50705)*** [0.49261]***
Exemption rate					
		-0.31979 (0.01704)*** [0.02249]***	-0.31762 (0.01663)*** [0.02122]***	-0.33988 (0.01977)*** [0.02102]***	-0.34006 (0.01986)*** [0.02094]***
Border					
		-1.64795 (0.44364)*** [0.55819]***	-1.42371 (0.44435)*** [0.56367]**	-1.69050 (0.69502)** [0.69252]**	-1.70505 (0.70097)** [0.70152]**
Maritime					
		-1.93059 (0.46906)*** [0.81772]**	-2.29568 (0.47411)*** [0.80409]***	-2.82527 (0.60100)*** [0.95523]***	-2.79794 (0.61176)*** [0.94170]***
Townships density					
		4.02295 (6.18249) [8.66705]	-1.10258 (6.02169) [8.19166]	-6.78714 (10.36324) [11.93277]	-6.21327 (11.22540) [14.06405]
Distance from Paris					
		-0.30335 (0.28239) [0.40847]	-0.33443 (0.28463) [0.41338]	0.54143 (0.38626) [0.48476]	0.53794 (0.39081) [0.48980]
Urbanization rate					
			4.64265 (1.45238)*** [1.94121]**	-3.16790 (2.83796) [2.98228]	-3.07942 (2.90612) [3.12746]
Military relays					
				6.43879 (2.99431)** [3.58888]*	6.40263 (3.00406)** [3.67006]*

TABLE 3 (CONTINUED)
GEOGRAPHY AND CONSCRIPTION

	(1)	(2)	(3)	(4)	(5)
Conscription Rate					
Wheat suitability		✓	✓	✓	✓
Tax revenues per capita				✓	✓
Literacy				✓	✓
Height				✓	✓
Agricultural sector				✓	✓
Year created				✓	✓
Elevation					✓
Military division fixed effects		✓	✓	✓	✓
Year fixed effects	✓	✓	✓	✓	✓
Observations	555	535	535	365	365
R-squared	0.13954	0.68197	0.69429	0.74391	0.74392

***p < 0.01, **p < 0.05, *p < 0.1

Notes: This table displays the results of regressing the portion of young men eligible who were drafted, for each year from 1806 to 1810, on geographical characteristics. We report robust standard errors in parenthesis and Conley standard errors (100 km) in brackets. Sources: Draft-dodging rates are from the *Archives Nationales* AF/IV/1124, n. 1 and n. 9. Ruggedness is from Nunn and Puga (2012). Township density is from Prudhomme (1804). Distance from Paris was calculated using longitude and latitude data from Wikipedia. Data on “Border” status are from Nussli (2012). Military relays are from Arbellot, Lepetit, and Bertrand (1985). Replacement rate is from the *Archives Nationales*, AF/IV/1124, pp.198-215. Maritime is calculated from Poirson (1808). Tax revenues per capita are from Peuchet (1805). Urbanization rates are calculated using data from Bairoch, Batou, and Chevre (1988). Wheat suitability is from the FAO, *GAEZ v3.0*. Literacy data is from the *Ministère de l’Instruction Publique* (1880). Height and agricultural sector data are both from the *Archives Nationales*, series F/9, boxes 150 to 259. Year created was calculated with information from Wikipedia. Elevation data are from the U.S. Geological Survey. Information on military divisions is from the *Almanach Impérial pur l’An MDCCCVI*.

We find a large and statistically significant effect of ruggedness on a department's conscription rate. A one standard deviation increase in the natural logarithm of ruggedness predicts a fall in the conscription rate of between 0.8 and 2.4 percentage points.⁴⁵ An increase in the log of ruggedness from the 25th to the 75th percentile of the distribution predicts a decrease in the conscription rate by 1.2 to 3.3 percentage points. To put these results into perspective, the conscription rate across departments between 1806 and 1810 was around 29.6 percent. In other words, the probability of getting drafted fell by about 5–10 percent when living in one of the more rugged departments. Table 3 also shows that the coefficient on the natural log of ruggedness becomes much larger in Column (4). This result is not driven by the inclusion of military relays but rather by the fact that, in order to include the controls in Column (4), we must sacrifice over one-third of our observations.⁴⁶

The regressions in Table 3 also find that a one percentage point increase in the exemption rate led to a 0.3 percentage point decrease in the rate of conscription. A one standard deviation increase in the same variable predicts a 3 percentage point fall in the conscription rate. Moreover, living in departments adjacent to the border lowered the probability of being drafted by around 1.5 percentage points, and this effect is statistically significant throughout. Finally, we find that living in a maritime department lowers the probability of being drafted.⁴⁷ In the Online Appendix, we provide the results of robustness checks akin to those for Table 1. None affect the overall pattern of these results.

The Lacuée Plan: An Event Study

This section complements the results of our formal econometric exercise with an event study. Conscripts evading their military obligations generate a policy externality. Draft dodgers make draft evasion more appealing to nearby conscripts by congesting the law enforcement system, thus lowering the probability of punishment.⁴⁸ Recall that one simple solution to this problem, from the point of view of the rational ruler, is to draft less in regions where it is the largest. By reducing the conscription rate in departments with a high draft dodging rate, the ruler

⁴⁵ The variation in the magnitude of the log of the ruggedness coefficient is almost entirely due to variations in the size of the sample due to missing observations when including additional controls.

⁴⁶ When we replicate the results in Table 3, keeping sample size constant across specifications, the gap between the coefficients on the log of ruggedness in Columns (3) and (4) largely disappears.

⁴⁷ This is consistent with Forrest's (1989) claim that shipowners lobbied the central government relentlessly to reduce the burden of conscription on their industry.

⁴⁸ See Gaviria (2000) for an application of this idea to violent crime in Columbia.

can mechanically reduce the overall number of draft dodgers in those regions. This fall in the number of draft dodgers leads to less congestion in the law enforcement system, thus increasing its effectiveness and reducing the national draft evasion rate.

In 1808/09, Lacuée, as minister of war, developed and implemented a plan to address the draft-dodging problem that embodied this very logic. Lacuée divided France's departments into five categories. This classification was based on his experience with conscription enforcement in the years prior. Departments in category 1 had proven less averse to conscription than those in category 2, and so on, with category 5 departments being perceived as the most likely to defy the government's conscription efforts. Lacuée suggested the use of the national conscription rate in combination with his new classification to calculate each department's specific conscription rate. Category 1 departments were to contribute one-third more men per capita than the national rate. Category 2 ones were to contribute one-fourth more. Category 3 departments were assigned exactly the national rate, while departments in categories 4 and 5 had to contribute one-fourth and one-third fewer men per capita than the national rate, respectively. Although Lacuée explicitly allocated the burden of conscription for 1809 on a discriminatory basis, discrimination for that year remained relatively mild.⁴⁹ Conscription efforts in 1810, on the other hand, were characterized by a massive ramp-up of discriminatory conscription.⁵⁰

The adoption of Lacuée's reform constituted an explicit embrace of the principle of discriminatory conscription. The minister himself had argued that the practice of setting departmental conscription rates equal to the national rate had proven a failure. According to his reasoning, attempting to draft more men in departments with high draft-dodging rates would only lead to more of the same. By refusing to use discriminatory conscription, Lacuée (1808) told Napoléon, "we would multiply the number of [draft-dodgers], and we would thus come to ensure their impunity." If our previous results on the relationship between geography and conscription are correct and if the Lacuée plan was effectively implemented, we expect the (negative) effect of ruggedness on a department's conscription rate to have increased in its aftermath. To test this hypothesis, we estimate the following specification:

$$C_{i,t} = \delta_i + d_i + \sum_{\tau \in \tau^{pre}} \beta_{\tau} \times \delta_{\tau} \times T_i + \sum_{\tau \in \tau^{post}} \beta_{\tau} \times \delta_{\tau} \times T_i + \mathbf{X}'_{i,t} + \epsilon_{i,t}, \quad (3)$$

⁴⁹ The "best" departments saw an increase in their contingent size of 9 percent relative to their population, while the "worst" departments experienced a 9 percent decrease.

⁵⁰ Lacuée's report to Napoléon, 6 April 1809, *Archives Nationales*, AF/IV/1124.

where $C_{i,t}$ is the share of the population conscripted in department i at time t . Since our goal here is to assess the impact of Lacuée's plan instead of the cross-departmental variation—as was the case in previous sections—we include both δ_t and d_i , which are the full set of time and department fixed-effects⁵¹; X_{it} is a vector of additional time-varying controls and ϵ_{it} is the error term⁵²; τ^{pre} and τ^{post} are the sets of years prior and after the treatment, respectively—1809 serves as the base year since it is only after that date that Lacuée massively increased the use of discriminatory conscription.

Our variable of interest is T_i . In one set of specifications (Table 4, Columns (5)–(8)), T_i is an indicator variable set to 1 if department i is classified by Lacuée as belonging to categories 4 or 5, and zero otherwise.⁵³ In another set of specifications (Table 5, Columns (5)–(8)), T_i is the natural logarithm of department i 's average terrain ruggedness. Both strategies yield similar results. Conscription rates for some departments fell dramatically following Lacuée's reform. The coefficients on the interaction term between T_i and 1810 are negative and statistically significant across all specifications—consistently meeting the 1 percent threshold when we employ the indicator variable approach and the 10 and 5 percent thresholds when we use the log of ruggedness.⁵⁴

Figure 6 provides a graphical representation of our results. The top panel suggests that the French government may have begun discriminating in favor of departments in categories 4 and 5 already in 1809. However, the largest drop in their conscription rate came the following year. We do not find evidence of any such pre-trend in the bottom panel. Overall, the two figures suggest that the variation in nominal conscription rates across French departments was indeed a conscious policy response by Paris to the threat that draft dodging posed to its short-term military objectives.

Was Lacuée's reform effective at reducing draft evasion rates? We attempt to answer this question in Tables 4 and 5 (Columns (1)–(4)). Across all eight specifications, we find a large, consistent, and statistically significant effect of belonging to categories 4 or 5 and having higher terrain ruggedness on the draft dodging rate for year 1810, that

⁵¹ Including department fixed effects when estimating equations (1) and (2) would have prevented us from including ruggedness, which is a time-invariant variable, as a covariate. Estimating equation (3) does not pose the same problem because we are interested in changes in the effect of ruggedness on conscription rates. Including departments fixed effects as controls simply allows us to account for potential department-specific, time-invariant factors.

⁵² We include control for changes in conscription rates for departments at the border and maritime departments as changes in the demand for sailors and soldiers may have been stronger closer to theaters of war.

⁵³ Fifty out of 111 departments were either category 4 or 5.

⁵⁴ As in the other tables, we report Conley standard errors with a 100 km threshold.

TABLE 4
DISCRIMINATORY CONSCRIPTION, DRAFT EVASION, AND CONSCRIPTION RATES

Dependent Variable	Draft-Dodging Rate			Share of the Population Conscripted				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Groups 4 & 5 × 1806	0.68228 (2.00993)	1.05742 (1.89657)	-0.10937 (1.96222)	0.25495 (1.86357)	0.00016** (0.00007)	0.00015** (0.00007)	0.00013 (0.00008)	0.00011 (0.00008)
Groups 4 & 5 × 1807	0.29009 (1.77933)	0.60462 (1.65561)	-0.39263 (1.81940)	-0.08711 (1.71258)	0.00011** (0.00005)	0.00010** (0.00005)	0.00011** (0.00006)	0.00010* (0.00005)
Groups 4 & 5 × 1808	1.12370 (1.12770)	1.36358 (1.05878)	0.86775 (1.11473)	1.09977 (1.06415)	0.00018*** (0.00006)	0.00017*** (0.00005)	0.00017*** (0.00006)	0.00016*** (0.00006)
Groups 4 & 5 × 1810	-4.40618*** (1.68210)	-4.36188** (1.74115)	-5.04431*** (1.68585)	-4.99631*** (1.73068)	-0.00025*** (0.00006)	-0.00025*** (0.00006)	-0.00023*** (0.00006)	-0.00024*** (0.00006)
Border × Date dummies		✓		✓		✓		✓
Maritime × Date dummies			✓	✓			✓	✓
Year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Department fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Observations	554	554	554	554	555	555	555	555
R-squared	0.86439	0.87064	0.86697	0.87327	0.67290	0.68351	0.68334	0.69377

***p < 0.01, **p < 0.05, *p < 0.1

Sources: Draft-dodging rates are from the *Archives Nationales AF/IV/1124*, n. 1 and n. 9. The share of conscripts is from the *Archives Nationales*, AF/IV/1124, n. 1 and n. 9 and the *Rapport a sa Majesté Impériale et Royale* from 6 April 1809. Ruggedness is from Nunn and Puga (2012). Data on “Border” status is from Nussli (2012). Military relays are from Arbellot, Lepetit, and Bertrand (1985). Replacement rate is from the *Archives Nationales*, AF/IV/1124, pp. 198–215. Maritime status is calculated using information from Poirson (1808).

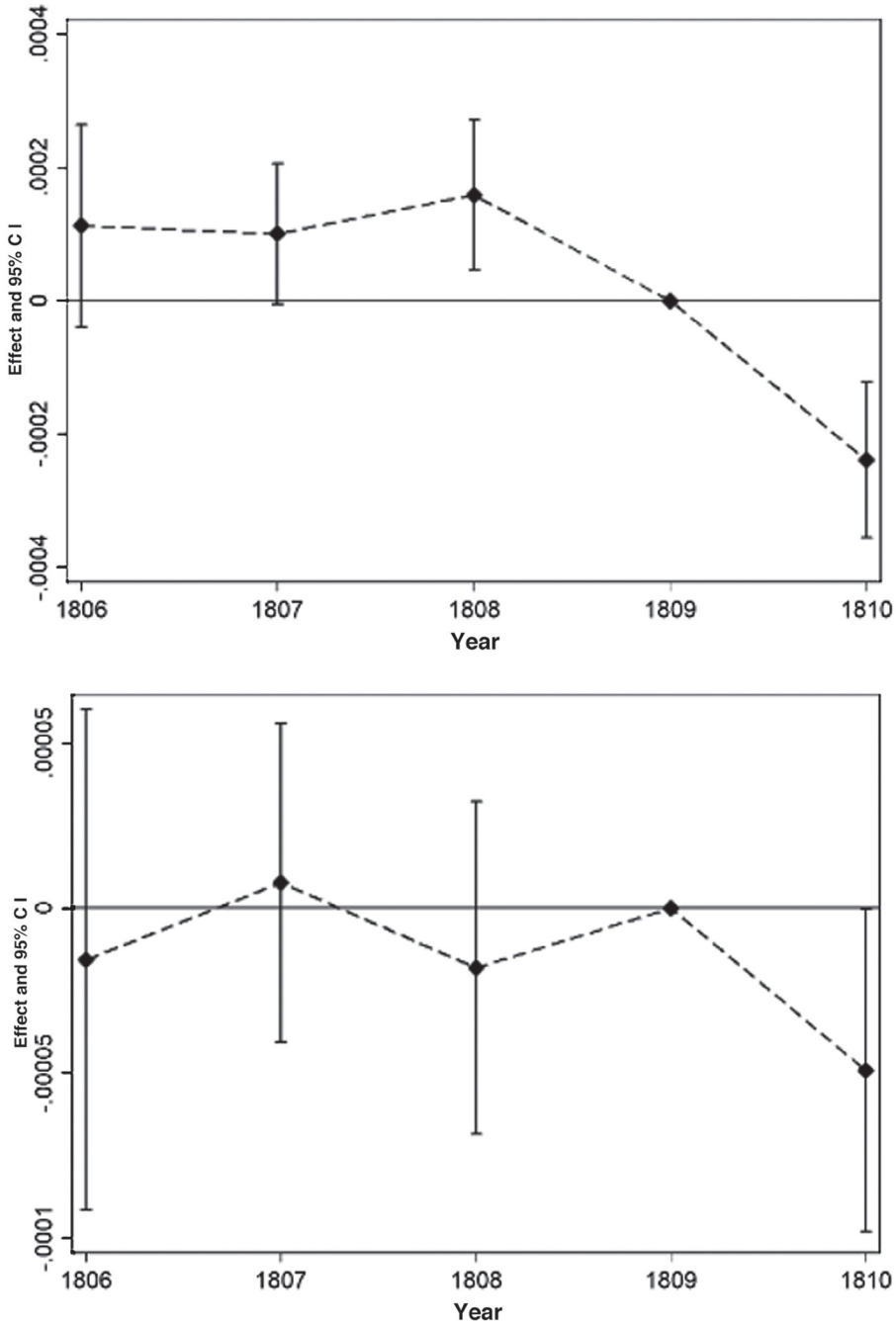


FIGURE 6
THE LACUÉE' PLAN AND CONSCRIPTION OVER TIME

Notes: These two graphs report the coefficients from Table 4, Column (8)—upper panel—and Table 5, Column (8)—lower panel.

Sources: Authors' computations, Table 4.

TABLE 5
DISCRIMINATORY CONSCRIPTION, DRAFT EVASION, AND RUGGEDNESS

Dependent Variable	Draft-Dodging Rate				Share of the Population Conscripted			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Log of Ruggedness × 1806	-0.55003 (1.24696)	-1.04507 (1.09420)	-0.38133 (1.19166)	-0.87709 (1.03545)	-0.00004 (0.00004)	-0.00002 (0.00004)	-0.00003 (0.00004)	-0.00002 (0.00004)
Log of Ruggedness × 1807	-1.12784 (1.22856)	-1.56472 (1.07592)	-0.99040 (1.18230)	-1.42770 (1.02307)	-0.00001 (0.00003)	0.00001 (0.00002)	-0.00001 (0.00003)	0.00001 (0.00002)
Log of Ruggedness × 1808	0.58026 (0.60344)	0.29599 (0.51282)	0.64923 (0.59944)	0.36508 (0.50633)	-0.00004 (0.00003)	-0.00002 (0.00003)	-0.00003 (0.00003)	-0.00002 (0.00003)
Log of Ruggedness × 1810	-2.11867** (0.87421)	-2.23841*** (0.79373)	-2.04206** (0.87765)	-2.16263*** (0.79229)	-0.00005* (0.00003)	-0.00004* (0.00003)	-0.00005** (0.00003)	-0.00005** (0.00002)
Border × Date dummies		✓		✓		✓		✓
Maritime × Date dummies			✓	✓			✓	✓
Year fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Department fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Observations	555	555	555	555	554	554	554	554
R-squared	0.86378	0.86963	0.86597	0.87188	0.62908	0.64118	0.64789	0.65975

***p < 0.01, **p < 0.05, *p < 0.1

Sources: Draft-dodging rates are from the *Archives Nationales AF/IV/1124*, n. 1 and n. 9. The share of conscripts is from the *Archives Nationales*, AF/IV/1124, n. 1 and n. 9 and the *Rapport a sa Majesté Impériale et Royale* from 6 April 1809. Ruggedness is from Nunn and Puga (2012). Data on “Border” status is from Nussli (2012). Military relays are from Arbellot, Lepetit, and Bertrand (1985). Replacement rate is from the *Archives Nationales*, AF/IV/1124, pp. 198–215. Maritime status is calculated using information from Poirson (1808).

is, following the implementation of Lacuée's plan. The coefficient on the interaction term between log or ruggedness and the 1810 dummy is large and always statistically significant, at least at the 5 percent level (and mostly at the 1 percent level). Figure 7, which provides a graphical representation of these results, suggests no noticeable pre-trend in draft-dodging rates prior to 1810.

Between 1809 and 1810, the gap in the draft dodging rate between Lacuée's groups 4 and 5 and the rest of the French Empire decreased by 4.38 points while our preferred estimate (Table 4, Column (4)) suggests that discriminatory conscription reduced this gap by 4.99 points. In other words, if departments in which the central government had trouble imposing conscription had increased the burden of conscription to the same extent as in the rest of France, the "draft dodging gap" may have increased. Our results testify to the effectiveness of Lacuée's reform.

Building on our econometric estimates, a back-of-the-envelope calculation suggests that there would have been 3,256 more draft dodgers in 1810 if departments included in categories 4 and 5 by Lacuée had experienced the same conscription burden as the rest of the country.⁵⁵ In 1810, the number of people who dodged the draft in French-controlled territories was 10,499, meaning that the figure would have been 27 percent higher absent Lacuée's reform.⁵⁶ On the other hand, the additional number of men who would have been sent to the army in 1810 if conscription had been the same in category 4 and 5 departments as in the rest of France would have been 3,256. Thus, raising the share of men drafted in category 4 and 5 departments would have increased the number of draft dodgers by almost as much as the number of men joining the army. The net gain in terms of the increased size of the armed forces would have been close to zero.⁵⁷

Reforming Conscription

While the discriminatory enforcement of conscription was necessary to meet the regime's pressing military needs, it came with serious drawbacks. For one, departments did not fail to notice the disparate treatment, and local populations were not happy with what they perceived as a violation of the most basic principles of equity. Another drawback was that

⁵⁵ We describe the method by which we calculated these numbers in Online Appendix J.

⁵⁶ The number of draft dodgers in group 4 and 5 departments was 5,733 in 1810, which means that the number of draft dodgers would have been 49 percent higher in category 4 and 5 departments.

⁵⁷ In addition, men drafted from these regions tended to be shorter, sicker, and of lower quality.

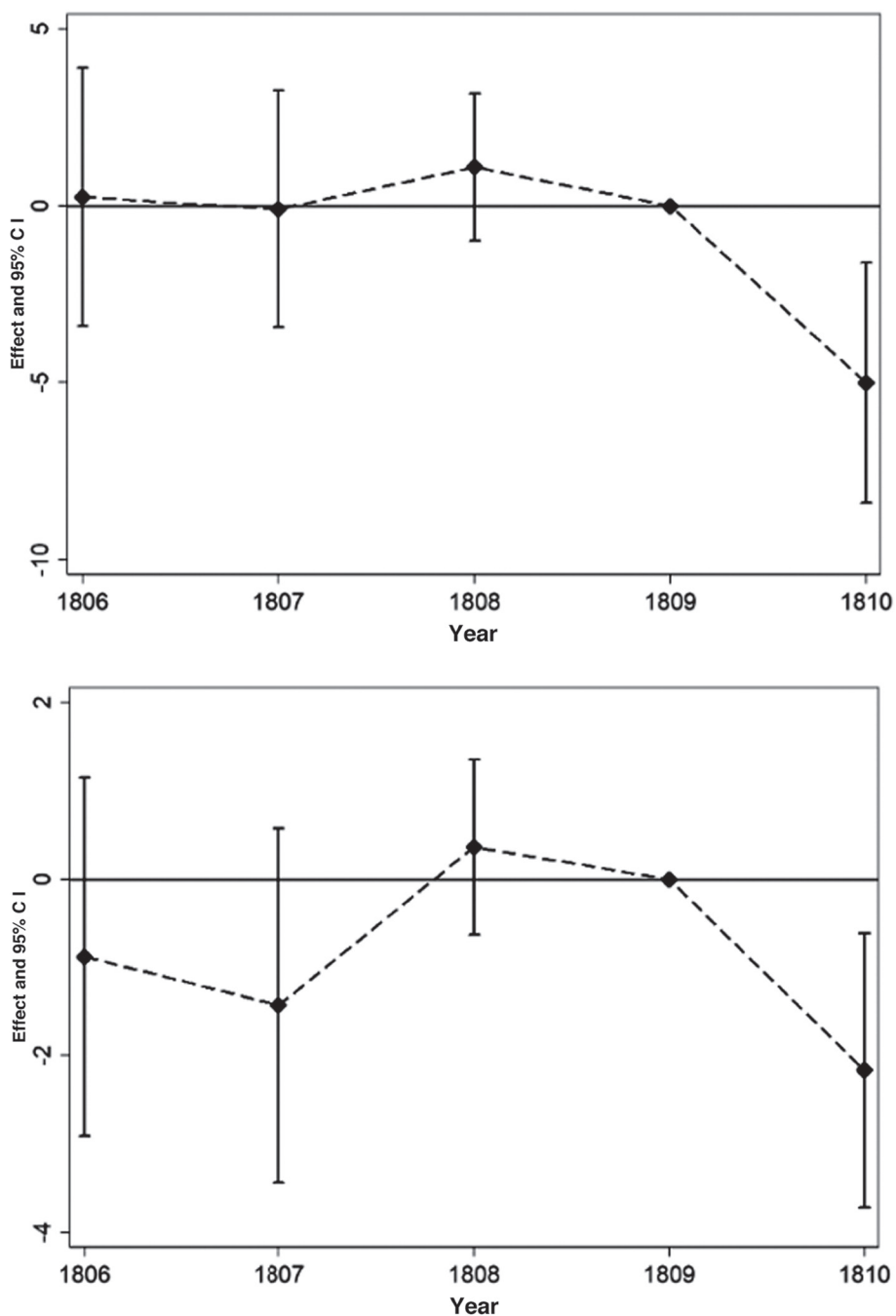


FIGURE 7
THE LACUÉE PLAN AND DRAFT DODGING RATES OVER TIME

Notes: These two graphs report the coefficients from Table 4, Column (4)—upper panel—and Table 5, Column (4)—lower panel.

Sources: Authors' computations, Table 4.

there were only so many able-bodied men of age that could be drafted from a department before it would have negative social and economic consequences. The more young men joined the army, the fewer of them were left to work the fields or in factories. To mitigate these adverse effects, the regime took a series of innovative actions aimed at reducing draft dodging rates throughout the country once and for all.

Napoléon's first innovation was to centralize the administration of the country's conscription system. Traditionally, this task had been within the purview of local officials. However, influenced by their constituencies' sensibilities, they had proven unreliable agents of the state. As early as 1799, Napoléon had to grapple with local authorities' insubordination in matters of conscription. When he tried to draft 33,000 new men, only one-third of them actually joined their units. Moreover, many of the ones who did were unfit for service. Overall, mayors were complicit in the locals' fraudulent attempts to avoid military service: "Especially in southern France, mayors issued false certificates of marriage or physical disability to men called up" (Elting 1997, p. 322). Still, by 1806, France's Chief of Police was writing to Napoléon to inform him that the mayors of several localities near Toulouse were refusing to enforce the draft (Fouché 1964, p. 823). In at least one instance, the mayor of a town in the department of Ariège was accused of burning the identification documents of the local youth (Fouché 1922, p. 231). Fouché himself later recommended that "energetic, impartial commissioner[s]" be sent by the central government to oversee the administration of conscription in rural departments (Fouché 1964, p. 252). Eventually, the regime reorganized the entire system by entrusting its administration to prefects and sub-prefects, who were selected by and worked directly for Paris. Starting in 1806, prefects and sub-prefects were to oversee recruitment and the physical examination of all potential draftees (Woloch 1986, p. 106). The government also regrouped towns and villages into larger administrative districts called cantons to administer the draft. This change was made with the explicit goal of "[weakening] personal favoritism" in the conscription process and increasing its efficiency (Woolf 2002, pp. 158, 161).

Punishment for draft dodgers became more severe and its enforcement stricter (Forrest 1989, p. 105). Their families were turned into targets of government action as well. For instance, "the seizure of hostages from uncooperative families or the billeting of troops on them until they produced their boy" became one of the government's "most effective" tools to deter draft evasion (Best 1998, p. 91). The regime even introduced a bounty of 12 francs to be paid out to anyone who captured a draft dodger (Elting 1997, p. 322). In some departments, especially those

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where draft evasion had become endemic, prefects went beyond threatening the families of draft dodgers and instituted a kind of community responsibility system. Villagers of means, including those unrelated to the draft dodgers, were forced to pay steep fees until the young men had joined their units (Woloch 1986, p. 120). Entire villages lost their right to bear arms so long as draft dodgers took refuge in them.

Finally, the regime recruited the army and gendarmerie in its fight against draft dodgers. In 1807, the *Grand Armée* became directly involved in conscription enforcement, with a whole two companies diverted from the front and “assigned to escort new recruits to the field battalions” (Nafziger 1987, p. 54). One innovation had proven remarkably effective: the creation of new military units known as *colonnes mobiles* (mobile columns) and their “concerted use” starting in 1811 (Woloch 1986, p. 122). These began marching through France, town by town, village by village, “closing escape routes and combing forests” looking for draft dodgers (Best 1998, p. 91). These columns “broke the back of [draft evasion]” by capturing over 60,000 draft dodgers in just three years (Woolf 2002, p. 162).

Consequences of Reform

The regime’s efforts to limit draft dodging were ultimately successful. The decline had begun in 1806, following Napoléon’s reform of the administration of conscription (Woolf 2002, p. 161). Within a few years, the phenomenon of draft dodging had been all but extirpated. According to the minister of war, Lacuée, draft dodging had collapsed by over two-thirds in the four years between 1806 and 1810 (Woloch 1986, p. 123). These figures improved even further with the concerted mobilization of these columns in 1811:

The year 1811 was the *annus mirabilis* of conscription. ... It reflected the cumulative impact of prior efforts and it continued after the mobile columns were disbanded (Woloch 1986, p. 123).

These results are even more impressive once one considers that, at the same time, conscription rates were rising with the opening of new war fronts in Spain, Germany, and Eastern Europe (Woolf 2002, p. 161). Conscription had finally become “an annual routine that most French learned to accept” (Grab 2003, p. 52).

Unfortunately for Napoléon, this success was not meant to be long lasting. Draft dodging rates skyrocketed in the aftermath of the disastrous

Russian campaign of 1812 (Grab 2003, p. 161). A combination of two factors changed the new conscripts' calculus (Woloch 1986, p. 127). First, the news from Russia caused domestic turmoil and affected the regime's ability to enforce conscription effectively. Second, the Russian campaign and the subsequent retreat through Central Europe had come at an enormous human cost. Not one-third of the men who had left France in the summer of 1812 would make it back home by the following winter (Furet 1996, p. 264): "The misery and abandoned of retreating columns of wounded soldiers further blackened the atmosphere" (Woloch 1986, p. 127).

Though defeat put an end to his regime, it did not stop Napoléon's reform from having long-lasting consequences. This was especially true for France. Napoléon left the country "a society organized through war and dependent on war" (Best 1998, p. 92). His belief that the army's hierarchical structure was the superior form of organization led him to extend it to all aspects of public administration and social life, from the central bureaucracy and public education to family law (Best 1998, p. 118).

If the principles of military organizations were becoming universal, the place of the army in society was also changing. Napoléon understood that the potential of the new military organization was not limited to the pursuit of foreign policy. Armies could be employed to ensure compliance with the regime's goals domestically as well (Best 1998, p. 205). No single policy contributed more to the process of centralizing state power and to the increasing involvement of the armed forces in domestic policy than Napoléon's fight against draft evasion:

Enforcing conscription and strengthening its machinery contributed to the build-up of the State's power. ... [T]hrough the draft, more than any other policy, the central state increasingly became a reality the governed were unable to ignore (Grab 2003, p. 52).

The appeal of the new system was so strong that just a few years after the Bourbon Monarchy had been restored, Louis XVIII, who had dismantled the *Grande Armée* upon ascending to the throne (Nafziger 1988, p. 26). The King quickly made Napoléon's reforms his own, re-established the national army, and re-introduced mandatory military service and promotion by merit (Best 1998, pp. 217–18). This legacy was not limited to France. Napoléon's military innovations and reforms were adopted by his former enemies and allies alike. Austria, Prussia, Spain, and even Britain had to recognize their superiority and made Napoléon's model of the national army their own in their march toward the nation-state (Delbrück 1985, pp. 450–51).

CONCLUSIONS

Political economists and economic historians have recently started paying attention to the relationship between military technology and practices on the one hand and institutional change and long-run economic performance on the other. Most such work has focused, in the European context, on the military revolution and political transformation in the Early Modern Era. In this paper, we explore a new and just as consequential episode in European history and the development of modern political institutions: the Napoleonic regime in France. Under Napoléon's leadership, France perfected a new way of war that relied on a national army. At its helm, Napoléon would (briefly) achieve his vision of French military hegemony over the European continent. However, to realize this vision, he had to overcome one fundamental obstacle: draft evasion. The new military system relied on the forcible conscription of young men for its recruitment. These young men were not always willing to comply and often opted to escape their military obligations instead.

Napoléon's response to the problem of draft evasion was twofold. In the short run, the regime opted for the discriminatory enforcement of conscription across its regions. Using an original dataset based on archival evidence on draft dodging and conscription over this period, we show that a region's geographical characteristics (a major determinant of conscription enforcement costs) predict its conscription rates as well as its draft dodging rates. We also provide qualitative evidence from historical sources that members of the Napoleonic regime were aware of the varying propensity of local populations to evade their military obligations. The sources confirm that this information influenced the decision-making process behind the administration of conscription in France.

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