Warfare, Fiscal Gridlock, and State Formation during Europe’s Military Revolution

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Short Title: Warfare, Fiscal Gridlock, and State Formation

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Abstract: We introduce a political scope condition for the classic argument that war motivates expansions in the state's fiscal capacity. All major medieval European monarchies separated the power to tax from the power to spend. We argue that this fiscal separation of powers engendered gridlock, which became increasingly intolerable after 1500 due to the military revolution and the greater role of money in battlefield victory. European states thus reformed toward one of two stable equilibria – fiscal absolutism or parliamentarism. Elsewhere in Eurasia, states were already fiscally absolutist, and thus war pressures did not provoke similar reform efforts. Exploiting new panel data on 101 European territorial units, we document how external war pressures promoted reforms in a majority of units toward fiscal absolutism (which took a distinctive decentralized form), with a minority of units adopting fiscal parliamentarism (either centralized or decentralized), and peripheral units retaining fiscal separations of power (and hence gridlock).

Keywords: State Capacity; Credible Commitment; War; Taxation; Absolutism; Parliament

Supplementary material for this article is available in the Appendix of the online edition.

Replication files are available at the *JOP* Dataverse (https://dataverse.harvard.edu/dataverse/jop). The empirical analysis has been successfully replicated by the *JOP* replication analyst.

Ever since Tilly's (1990) seminal work, the idea that warfare motivated rulers to invest in the state's fiscal capacity has been widely accepted among scholars of European state formation. However, the subsequent literature has identified several features of European warfare that mediated rulers' state-building incentives: conflict was capital-intensive (Hoffman 2015; Mangini and Petroff 2022); state spending was crucial to victory (Gennaioli and Voth 2015); and rulers could not rely on external loans to finance the military (Queralt 2019).

In this paper, we argue that a characteristic of European *polities*, as opposed to European *wars*, also mediated the extent to which warfare motivated rulers to expand the state's fiscal capacity. Starting in the high medieval period (1000-1250), all major European states separated the power to tax from the power to spend. Parliaments controlled the "extraordinary" taxation needed to finance wars, but monarchs had complete discretion over how to spend the revenues they received. These "crown-and-parliament states," as we label them, thus entrenched a commitment problem at the heart of their financial affairs. Absent special circumstances, parliamentary elites were reluctant to grant taxes to their monarchs because the latter could unilaterally pursue aims contrary to their interests. When spending became more crucial to battlefield victory following the military revolution of the 1500s (Gennaioli and Voth 2015; Hoffman 2015; Mangini and Petroff 2022), wartime gridlock over taxes became increasingly intolerable. Thus, the initial structure of European polities interacted with the nature of early modern warfare to produce particularly intense incentives for rulers to reduce fiscal gridlock.

Logically, there were only two ways to address this dilemma. One way, favored by monarchs, was to abolish parliament's right to block taxes. The other way, favored by parliamentary elites, was to abolish the crown's right to control expenditures. We argue that, as the role of money in European warfare grew, crown-and-parliament states should increasingly have either reduced parliament's control over taxation, thereby unifying fiscal power in the crown's hands, or reduced the crown's control over expenditure, thereby unifying fiscal power in parliament's hands. We call this the "two paths of fiscal development" hypothesis.

To evaluate the extent to which European states followed these two fiscal developmental paths, one might examine state revenues, reasoning that gridlock-reducing reforms would increase them. However, revenues could have increased sans reform – for example, because crown and parliament agreed to raise tax rates when confronted with dire external threats. Furthermore, knowing that a state's revenues increased in response to warfare tells one nothing about the type of reform (i.e.

tax reform or expenditure reform) undertaken. We thus focus here on directly analyzing major fiscal reforms, rather than indirectly inferring them from revenue patterns.

We identify all major territorial units – 101 in total – within nine major composite monarchies in Western Europe between 1500 and 1800. Using various secondary sources, we document 193 major reforms that sought to reduce parliament's tax authority and 76 that sought to reduce the crown's expenditure authority. While multiple territories were sometimes simultaneously impacted, reforms often occurred at different times in different territories. To our knowledge, this is the most comprehensive database available on tax and expenditure reform efforts within early modern monarchies.

We also code new yearly data on each composite monarchy's participation in all major interstate (external) and intrastate (internal) wars during the early modern period (per Clodfelter 2002). Since monarchs themselves made the decision to wage war, we code war participation at the level of the composite monarchy. These are among the most systematic data on early modern war participation available.

With these new data in hand, we document how many European territories unified fiscal power in response to the military revolution. By the end of the Ancien Régime (1789), we show that more than 50 percent of territorial units had eliminated the institutional separation of fiscal powers by expanding royal tax authority, while 10 percent transferred the crown's control of expenditure to parliament. We argue that absolutism was the more common choice because monarchs were unitary actors with substantial resources who could divide and conquer those seeking to preserve parliament's tax power.

We next provide evidence that external war pressures drove reforms toward fiscal absolutism. Our panel regressions show that a territorial unit's per-year probability of reducing parliament's tax authority was 3.6 percentage points higher if its monarch had fought continuously over the previous decade (relative to a territorial unit whose monarch had never fought).

Since we include all major territorial units at the start of the early modern period, it is unlikely that survivor bias affects our results. Regarding omitted variable bias, our analysis includes territorial unit fixed effects to control for time-invariant features of each territorial unit such as initial economic, institutional, and socio-cultural conditions (e.g. degree of centralization), as well as geographic characteristics; and year fixed effects to control for common time shocks across Europe such as technological innovations. Furthermore, we control for time-varying observable features including war intensity, loss in battle, economic development, the Protestant ethic, and the printing press. To control for time-varying unobservable features, we include polity trends. For additional robustness, we include dynasty fixed effects, allowing us to control for unobserved differences in the quality of dynastic leadership within each composite monarchy. Taking this even further, we control for the ability of each individual ruler within each dynasty. As an additional way to show that the "two paths" mechanism explains our results, we provide within-case qualitative evidence, reviewing contemporary political theories and applying a random narratives analysis.

We argue that early modern European states' initial conditions strongly influenced not just their incentives to make fiscal reforms, but also how they did so. As we explain below, all but one of the absolutist monarchies that emerged in our sample decentralized expenditure control to regional parliaments or towns during the early modern period as part of the price they paid for securing war funds. While the central state operated on absolutist principles, the authority to spend substantial portions of state revenue was alienated to local units of government. European absolutist states were thus relatively decentralized.

Contribution

This paper shows that, and explains why, the pressures of war forced fiscal institutions in early modern Europe to evolve along two divergent developmental paths – one leading to absolutism, one to parliamentarism. In addition, we explain why the absolutist path entailed decentralization and was more often taken than the parliamentary path. Finally, we propose a *political* scope condition for the classic claim that war motivates fiscal reforms. We argue that medieval Europe's characteristic separation of fiscal powers, and the gridlock it engendered, became increasingly intolerable during the early modern military revolution. Eventually, the pressures of external war forced the emergence of two new types of fiscal format that mitigated gridlock: decentralized absolutism and parliamentarism (which could be either centralized, as in England, or decentralized, as in the Northern provinces of the Netherlands). In this manner, we provide new insight into how, given Europe's unusual initial conditions, external war pressures propelled states down two different paths of fiscal development.

Our analysis complements Gennaioli and Voth (2015). We argue that European states' initial propensity toward fiscal gridlock – our focus – *interacted* with the increasing importance of military spending – their focus – to motivate structural reforms. While Gennaioli and Voth concentrate on the factors that drove some states out of military competition, we investigate the available paths of fiscal development for those states that chose to continue to compete.

Our analysis also complements Karaman and Pamuk (2013). They find that the most successful early modern states in terms of revenue-raising capacity were either rural-authoritarian (eventually unifying fiscal power in the crown) or urban-parliamentary (eventually unifying fiscal power in parliament). We directly investigate the emergence of the two fiscal formats underpinning the revenue outcomes that Karaman and Pamuk highlight.

Roadmap

This paper proceeds as follows. The next section explains our argument. The ensuing section documents how most component territories of Western Europe's composite monarchies reformed in order to unify the powers to tax and spend in the hands of a single constitutional actor (either the crown or parliament). The subsequent two sections provide evidence that this trend toward fiscal unification was driven by the need to finance interstate war. The penultimate section analyzes how decentralized expenditure control became a characteristic feature of Europe's absolutist regimes. The final section concludes.

FISCAL DEVELOPMENT TRAJECTORIES IN EUROPE

Crown-and-Parliament States

After the collapse of the Carolingian Empire, Europe fragmented into hundreds of principalities (Tilly 1990). The rulers of these polities lacked even the most rudimentary central bureaucracies (Stasavage 2020). Since rulers could not collect any taxes on their own outside the royal domain, their only viable option to finance war involved negotiation and power-sharing with domestic elites who could assist them (Blaydes and Chaney 2013; Stasavage 2020).[1]

In the earliest parliaments, the monarch's main tax farmers either attended in person (if noble) or sent representatives (in the case of self-governing towns).[2] Thus, any monarch decreeing a tax against parliament's wishes would have had to rely on the very same actors who had just refused to authorize the tax to nonetheless collect it. As these actors were scattered across the monarch's

[1] We use the term "tax" here to mean all monetary contributions of subjects to their sovereigns.

[2] See Blickle (1998), Mitterauer (2005), and Cox, Dincecco, and Onorato (2024). We use the term "parliament" here to refer to what historians often call "assemblies of estates" (or "estates" for short) including the "third estate" (i.e. urban merchants).

territory, and had castle or town walls to protect themselves, the monarch could expect foot-dragging, open refusal to collect taxes, or even a tax rebellion. In other words, the lack of royal bureaucracies gave the monarch's autonomous tax farmers an "administrative veto" over tax collection, which in turn underpinned parliament's right to block tax legislation (Cox 2023).

Fiscal Commitment Problem

As historians such as Blickle (1998) and Mitterauer (2005) have described, the internal politics of post-Carolingian European monarchies featured a continual tension between crown and parliament over state finances. Crown-and-parliament states enabled parliament to control tax revenues but gave the monarch complete discretion in spending any revenues received. They thus set up a classic commitment problem. Parliaments had to decide how much tax revenue to grant their monarchs without receiving any binding assurances about how the latter would spend the money. This led to parliamentary reluctance to authorize taxes in the first place.

Although the gap in time between raising revenues and spending them on warfare could be short, this did little to mitigate the commitment problem, because no parliament had the right to audit how monies were spent. Thus, parliamentarians could never observe expenditures at the level of detail necessary to assure themselves that revenues were expended as they wished. Common interests – say if the monarch sought revenue to repel invaders who would otherwise wreak devastation (Kiser and Linton 2001) – could temporarily alleviate the commitment problem. However, whenever royal and elite interests diverged, all tax revenues that the crown could spend unilaterally and that parliament did not have the right to audit created a commitment problem, regardless of the details of the tax base or collection method. States that separated the powers to tax and spend were thus prone to bargaining failures between crown and parliament, making it difficult for them to raise and spend money.

Incentives for Fiscal Reform

As warfare monetized, the "paralyzing conflicts between [parliaments] and princes" (Glete 2002: 193) became more problematic. When decentralized feudal contributions constituted the vast bulk of resources raised for war, extraordinary taxes were not as important to defeat foes. Across the medieval period (1000-1500), however, more and more feudal obligations were monetized (Stasavage 2011; Gennaioli and Voth 2015), and war entailed larger and larger capital investments (Hoffman 2015; Mangini and Petroff 2022). After 1500, early modern Europe experienced a revolution in military tactics, strategy, army size, technology, and impact (Parker

1996; Gennaioli and Voth 2015), making military success far more dependent on high revenue (Blockmans 1989: 751-2; Gennaioli and Voth 2015). This increased the threat that fiscal gridlock between crown and parliament posed to a state's fighting ability. In other words, the high risk of bargaining failure interacted with the high expenditure elasticity of military victory to make fiscal reform imperative.

The Ottoman Empire helps illustrate the importance of having both these features – high gridlock risks and high expenditure elasticities – working in tandem to induce structural reforms. The Ottomans frequently waged costly, capital-intensive warfare against European foes in the early modern period (Clodfelter 2002). This built the Ottoman state in several senses. The empire expanded its boundaries; increased its investments in military infrastructure (Agoston 2014); and extracted more resources from its subjects. For example, after the conquest of Cyprus (1573), the sultan conscripted one-tenth of the populations from several provinces and commanded them to settle there (Şeker 2013: 4).

However, war did not build the Ottoman state in terms of altering its fiscal constitution. The reason is that the sultan never faced a fiscal separation of powers (Karaman and Pamuk 2010: 598; 2013: 611). In other words, the Ottoman Empire was not a crown-and-parliament state (which is why it is not part of our sample – see below). Given that the powers of taxing and spending were already unified in the sultan's hands, there was no need to debate solutions to fiscal gridlock in the central state. Thus, war did not force structural reforms in the Ottoman state in the way that it did in early modern Europe.

More generally, wherever fiscal absolutism had already been established – as it had been throughout much of Eurasia – elites never really faced a choice between the two paths of fiscal development that confronted early modern Europeans. In particular, they could not choose to give parliament full fiscal control, since no parliaments existed to begin with.[3]

[3] Moving beyond the early modern context, the scope limits of the European pattern of war and state formation have been widely documented. See, e.g. Dincecco and Wang (2018) for China; Dincecco, Fenske, Menon, and Mukherjee (2022) for India; Centeno (2002), Thies (2005), and Schenoni (2021) for Latin America; and Osafo-Kwaako and Robinson (2013) and Dincecco, Fenske, and Onorato (2019) for Sub-Saharan Africa.

Which Fiscal Path?

Which fiscal developmental path did Europe's warring states take? Powerful forces opposed both types of reform – absolutist and parliamentarizing. While monarchs could resist parliamentarizing reforms on their own accord, however, resistance to absolutist reforms faced formidable collective action problems. Thus, absolutist reforms should have been easier to accomplish than parliamentary reforms.

To elaborate on this point, consider proposals to curb the monarch's expenditure authority first. Monarchs stoutly resisted such proposals. After all, their control of state expenditure constituted the "fountain from which all blessings flowed" (Reitan 1966: 323) and was one of the main sources of their power.

Monarchs may have appreciated that limiting their own absolute power would improve the state's credibility and thus increase its revenues (North and Weingast 1989). Under duress, they were willing to *temporarily* alienate their expenditure authority in exchange for loans – a common practice that we describe in the penultimate section below. But monarchs adamantly opposed *permanently* empowering parliament to control expenditure. Monarchs correctly viewed this reform as a fatal blow from which they could not plausibly recover, and one that would put their polity on a path toward parliamentary supremacy (Kenkel and Paine 2023).[4] Monarchs resolutely opposed it as such – and they could use their unilateral control of patronage and expenditure to protect such prerogatives.

The costs of absolutist reform should have been lower due to the collective action problem in defending parliament's rights. To be sure, absolutist reforms often sparked violent opposition (Burg 2014). But monarchs could pick and choose which of their territories and when to reform, and employ divide-and-conquer tactics.[5] In practice, the amount of force used to implement absolutist reforms ranged widely. Thus, unlike parliamentary reformers, monarchs did not always have to pay the high cost of internal war to secure the reforms that they sought.

[4] Permanently empowering parliament to control expenditures increased the state's credibility and thus its revenues (e.g. Cox and Dincecco 2021). However, the monarch valued the new revenues less, since they no longer unilaterally controlled how they would be spent.

[5] Rosenthal's (1998) analysis of an early French absolutist reform provides an example of this.

Fiscal Path Dependence

Once a polity took a significant step toward absolutism, the next step became easier, because the monarch was now more powerful. Similarly, once a polity took a significant step toward parliamentarism, the next step became easier, because parliament was now more powerful. We thus expect path dependence, regardless of which path a polity chose.

On the absolutist path, we know of only one reversal prior to the French Revolution. After becoming absolutist in 1680, Sweden restored a crown-and-parliament format upon the death of Karl XII (Upton 1998: 282), before re-entering absolutism via a royal auto-coup in 1772 (Winton 2012).

On the parliamentary path, we again know of only one reversal during our period of study. This occurred in England when the Rump Parliament surrendered its precocious (and brief) fiscal control to the Cromwellian dictatorship in 1653.

DOCUMENTING EUROPEAN FISCAL DEVELOPMENT: TWO PATHS

In addition to facing parliaments that could veto taxes, almost all European monarchs in the early modern period governed over what historians call “composite” states (Elliott 1992). For example, the Spanish monarch Philip II (reign 1556-98) ruled over the following major territories: (1) the Crown of Aragon (including the Kingdoms of Aragon and Valencia, respectively, and the Principality of Catalonia, among other units); (2) the Crown of Castile (including the Kingdoms of Castile, Córdoba, Galicia, Granada, Jaén, Leon, Murcia, Navarre, Sevilla, and Toledo, respectively, among other units); and (3) the (Northern and Southern) Netherlands (including the County of Holland and the County of Flanders, among other units).[6] When Philip II wanted taxes to finance war, he needed to secure separate approval from a variety of parliaments. In the Crown of Aragon, for example, he might summon a general Cortes of Aragon, Valencia, and Catalonia, or deal separately with the parliaments of each.

If a monarch wished to reform fiscal procedures in a particular territory, he generally dealt with that territory’s parliament and elites. Likewise, if a provincial parliament sought reforms, it would do so in its own territory. One consequence of this decentralized fiscal landscape was that, at any given time, a monarch might have absolute fiscal power in some of his territories while facing parliamentary checks in others.

[6] For a complete list of major Spanish territories (including sources), see Appendix B.

Sample of Territorial Units

Our goal is to identify a comprehensive set of major territorial units in early modern Europe that were "at risk" of fiscal reform in the sense that, at the start of our sample period in 1500, they retained a crown-and-parliament structure. More specifically, our sample is restricted to units where a majority-rule parliament wielded a tax veto, while a hereditary monarch was in charge of state expenditures.

These criteria exclude some well-known states. We do not include Poland because it was an elective, rather than hereditary, monarchy. Elective monarchs were typically in much weaker bargaining positions to push for absolutist fiscal reforms, and also had weaker incentives to do so, as they could not pass on new fiscal powers to their heirs. We do not include Venice because the Doge lacked unilateral control over the expenditure of public revenues as of 1500.[7] We do not include the Ottoman Empire because the sultan was absolutist and never faced a fiscal separation of powers (for additional details, see the previous section). We exclude the Tsardom of Russia (later, the Russian Empire) because the tsar was similarly absolutist (Karaman and Pamuk 2013: 611).[8]

We focus on the following nine major European composite monarchies in possession of (at least some) territories that do in fact satisfy our criteria. We include all major territorial units that became part of one of these composite monarchies by at least 1650 (i.e. the halfway point of our period of study) and then survived as such until 1789.[9] The numbers in parentheses indicate how many major component territories each sample monarchy had in 1500 that qualify for inclusion: Austria (8), Brandenburg-Prussia (5), Denmark (4), England (3), France (45), Portugal (1), Scotland (1), Spain (37), and Sweden (1).[10]

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[7] https://www.britannica.com/topic/doge (Access date: August 17, 2022).

[8] While it is true that our sample boils down to Western Europe, had there been a major hereditary monarchy with a tax-vetoing parliament somewhere else in Eurasia at the start of our sample period in 1500, we would have included it.

[9] We do not include overseas colonial territories since none of these units were established with crown-and-parliament structures (and none had attained such status before 1650).

[10] We count Alsace, Artois, Franche-Comté, and the Kingdom of Scotland twice here, as they made a switch between Austria and France (Alsace), Spain and France (Artois, Franche-Comté),

There was one case in which two composite monarchies permanently merged during our sample period: England, composed of the Kingdom of England as well as the Lordship (later, the Kingdom) of Ireland, merged with the Kingdom of Scotland in the Act of Union of 1707. In our regression analysis below, we thus treat Scotland as a distinct monarchy until 1707. From this year onward, we treat it as part of the composite monarchy of England (which consisted of the Kingdom of Great Britain and the Kingdom of Ireland until the latter's absorption in 1800).[11]

Appendix B lists the specific sample territories in each composite monarchy and documents the years in which fiscal reforms were attempted within each. All told, we identify 101 major territorial units.[12]

Identifying Reform Efforts

Path 1: Reducing Parliament's Tax Authority

There is a large historical literature that examines the onset of absolutism in specific polities. However, the only effort of which we are aware that performs a systematic analysis of reforms toward absolutism is Cantoni, Mohr, and Weigand (2024), which documents the introduction of "fiscal chambers" in 39 territories of the Holy Roman Empire from 1400 to 1789.

Here, we identify all major efforts to expand royal control of taxes in one or more territories in our sample of nine major European composite monarchies from 1500 to 1800. We define a major effort as one that either succeeded in expanding the crown's fiscal rights or provoked a major tax rebellion. The creation of *pays d'election* by French monarchs, which extended the legal

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or Scotland and England (Kingdom of Scotland) at different points during our sample period. In addition, Armagnac, Béarn, Bresse, Bretagne, Bugey, Franche-Comté (France) and the County of Cleves, the County of Mark, the County of Ravensberg, and the Duchy of Prussia (Prussia) were late entrants, entering our sample in various years after 1500. Appendix B provides additional details, including how we handle these cases in our regression analysis.

[11] Accordingly, our regression analysis turns to missing all observations for Scotland (Great Britain) before 1707, while turning to missing all observations for the (independent) Kingdom of Scotland from 1707 onward. For additional details, see Appendix B.

[12] For robustness, our regression analysis includes fiscal reform data for a handful of additional territorial units that were briefly affiliated with Denmark, Prussia, or Sweden (to be reported below). Appendix B provides further details.

and administrative reach of royal tax collectors at the expense of regional parliaments (Augé 2015: 8-10), is an example of the former. Other examples of successful reforms include the establishment of fiscal chambers (Cantoni, Mohr, and Weigand 2024) and the Danish constitution (*Lex Regia*) of 1665 (Bonney 1991: 358-9). An example of a rebellion-provoking reform is the Austrian Habsburg effort to decree taxes on Hungary during the War of the Spanish Succession (1701-14) – inducing the Hungarians to fight a civil war to protect their traditional privilege to approve or deny taxes (Hochedlinger 2009: 72).[13]

We rely on specialist histories to code successful fiscal reforms, and on *A World History of Tax Rebellions* by Burg (2014) to code rebellion-provoking efforts. All together, we document 192 major tax reforms or reform efforts. Appendix B provides further details about the construction of the fiscal reform data including sources.

We stop coding a given territory as soon as it transitioned either to fiscal absolutism (with the crown controlling both taxes and expenditures) or fiscal parliamentarism (with parliament controlling both – see below). Our analysis thus focuses on the first point in time at which each territorial unit ceased to divide the powers to tax and spend.[14]

Path 2: Reducing the Crown's Expenditure Authority

While a large historical literature investigates reforms that limited royal expenditure authority in specific cases, relatively few works attempt to document these reforms across a range of polities. The most extensive effort of which we are aware is Stasavage (2011), which analyzes the presence

[13] There may have been "minor" efforts to expand royal tax authority that did not meet either of these criteria. Such efforts are outside our purview. Ideally, we would also code major efforts by monarchs to undermine parliament's independence. We were, however, unable to identify a systematic way to do so. To the extent that monarchs combined direct power grabs with manipulations of parliament's membership, the main regression results described below should not change much. If, however, efforts to undermine parliament's independence were substitutes for efforts to remove their powers, then one might expect the relationship between external war and tax reform to be even stronger than what we document.

[14] For example, our coding of early modern Sweden stops with its transition to fiscal absolutism in 1680, even though it later briefly returned to separating fiscal powers.

of parliaments with direct control over state spending in 19 city-states and 12 territorial states in Europe between 1250 and 1750.

Focusing on our sample of European composite monarchies, we identify all major sustained increases in revenues subject to permanent parliamentary appropriation. Revenues were appropriated when parliament enacted a statute specifying the purpose to which they should be put. As long as the crown could not unilaterally overturn, amend, or ignore statutory provisions, appropriations limited royal discretion over state expenditures.

We identity four major sustained increases in parliamentary appropriation in our sample. The first case took place in the Northern provinces of the Netherlands (which included Holland) while they were still under Spanish control. With a precedent as early as 1515, the practice of appropriation was institutionalized after the Northern provinces declared their independence from Spain in 1581 (Tracy 1985). The second case occurred in England following the Glorious Revolution of 1689, when parliament established control over state expenditures (Cox 2016).[15] The third case took place in Ireland, then a territory in the composite monarchy of England, when the provincial parliament gained control over public spending in 1695 (McGrath 1997: 283). The fourth case occurred in Scotland in 1707, pursuant to the Act of Union (1707), when the British parliament gained spending control over Scottish revenues (Cox 2016). Appendix B provides additional details about each of these increases in parliamentary appropriation.[16]

Because parliamentarizing reforms were adamantly opposed by monarchs who wielded considerable clout, they could succeed only by substantial force. This was true not only in the four pre-1800 cases documented just above (which followed the Dutch Revolt and the Glorious Revolution, respectively), but also in all major polities that empowered their national parliaments to control state expenditures in the half century after 1800: Sweden (where budgetary reforms

[15] We do not count the Rump Parliament in England (1648-53) as a major sustained increase in parliamentary appropriation since parliament’s control over expenditure ended during the Protectorate (1653-60).

[16] We do not include failed parliamentary efforts. The most obvious way to uncover failed efforts would be to identify all parliamentary bills or town petitions to European monarchs that sought restrictions on the crown’s expenditure authority. However, the required documents vary widely in preservation and accessibility, making the task too difficult an undertaking at present.

followed the Revolution of 1809), Belgium (Revolution of 1830), France (July Revolution of 1830), and Denmark (Revolution of 1848).[17]

Descriptive Evidence

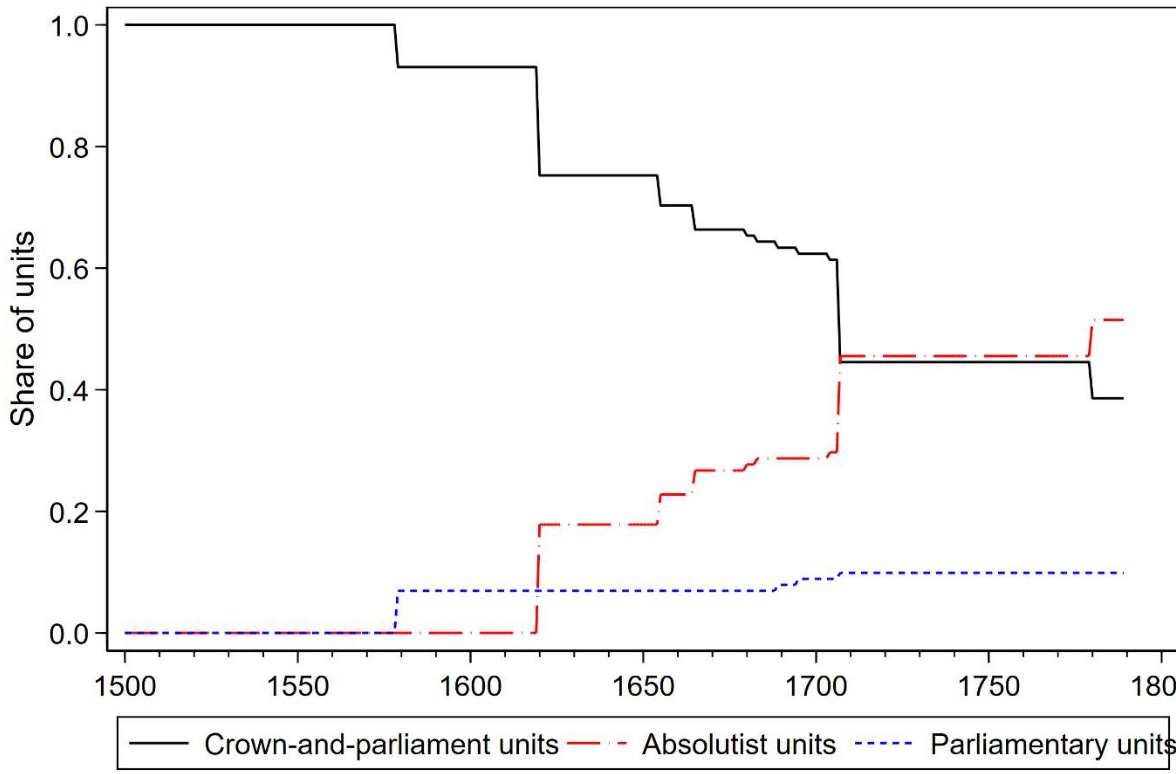
Figure 1 illustrates how the fiscal status of the 101 territorial units in our sample evolved. At the start of our sample period in 1500, all territorial units were fiscally divided. The solid line indicates how many crown-and-parliament units remained in each year. By the end of the Ancien Régime in 1789, less than 40 percent of territorial units continued to separate the power of taxing from that of spending.

Most territorial units that eliminated the institutional separation of fiscal powers did so by expanding royal tax authority. By the French Revolution, more than 50 percent of crown-and-parliament units had adopted fiscal absolutism, in which the crown controlled both taxes and expenditures (long-dashed line). Over the same period, 10 percent converted toward fiscal parliamentarism, in which parliament controlled both (short-dashed line). We have argued in a previous section that the difficulty of coordinating elites in defense of a collective right explains the preponderance of absolutist reforms.

The territorial units that retained the institutional separation of fiscal powers at the end of the early modern period were generally on the territorial periphery of the composite monarchy to which they belonged. Peripheral elites likely anticipated neither much profit from contributing to their monarchs' wars, nor any grave threat to their own positions should their monarch lose. Thus, warfare might not have motivated elites in the periphery to mitigate fiscal stalemate to the same extent that it motivated elites in the core, whose fortunes were more closely tied to the monarch's fiscal-military enterprise.

[17] Parliamentarizing reforms in England's New World colonies followed a somewhat different logic, as they were linked to the difficulties that monarchs faced in monitoring their viceroys (see Gailmard 2024).

Figure 1: Two Paths of Fiscal Development in Early Modern Europe



Notes: This figure depicts the evolution of the fiscal status of 101 territorial units within nine major European composite monarchies from 1500 to 1789.

Implications for Fiscal Capacity

While both absolutism and parliamentarism mitigated the fiscal gridlock hindering crown-and-parliament states, they should have affected fiscal capacity to different extents.

If a state relieved gridlock by removing parliament's power to veto taxes, then economic activity might still flow away from taxable activities into the informal economy, individuals might still evade taxes, and new taxes might still spark tax rebellions. Thus, while curbing parliament's tax rights resolved the narrow fiscal commitment problem between crown and parliament, it did not address the broader commitment problem between the crown and taxpayers.

In contrast, transferring expenditure authority from the crown to parliaments or towns could offer a deeper solution. As long as they represented taxpayer interests, empowering parliaments or towns to stipulate how revenues would be spent could alleviate both crown-parliament and crown-taxpayer commitment problems. Our argument about credible fiscal commitments thus sheds new light on Thomas Paine's (1792 [2010]) famous observation that parliamentary government was "the most productive machine for taxation ever invented."[18]

MAIN ANALYSIS

Model Specification

We employ linear probability models to evaluate our empirical prediction linking interstate war to efforts to expand royal control over taxation (Angrist and Pischke 2009). This allows us to tackle unobserved heterogeneity by way of fixed effects, which are more difficult to implement in non-linear models (Farbmacher and Tauchmann 2021).

We estimate the following OLS model:

$$TaxReform_{i,t} = \beta_1 ExternalWar_{m(i),(t-10,t-1)} + \alpha_i + \lambda_t + \varepsilon_{i,t} \qquad (1)$$

The dependent variable $TaxReform_{i,t}$ is a binary indicator that takes the value 1 for each year t in which territorial unit i made a reform effort to reduce parliament's tax authority. To reflect the absorbing nature of this variable, we omit each territorial unit once it experienced its final reform effort.

The independent variable of primary interest, $ExternalWar_{m(i),(t-10,t-1)}$, is the share of years over the previous decade in which the composite monarchy $m(i)$ containing territorial unit i participated in a major interstate war. We code war participation at the composite monarchy level in order to measure the demand by monarchs to reduce fiscal gridlock via absolutist reforms. For robustness, we also employ half-decade and one-year periodizations (Appendix Table A.1). In addition, we employ an alternative variable of interest which computes the average number of major interstate wars per year in which a composite monarchy participated over the previous decade.

Territorial unit fixed effects α_i control for time-invariant features of each territorial unit, including initial economic, institutional, and socio-cultural conditions (e.g. degree of centralization), as well as geographic characteristics. Since linear probability models with fixed effects for each observational unit may suffer bias (Farbmacher and Tauchmann 2021), we show

[18] While we expect different revenue responses to the two fiscal reform paths that we identify, it is beyond the scope of this paper to document them. For recent analyses of this sort, see Karaman and Pamuk (2013) and Cox and Dincecco (2021).

that our main results continue to hold if we replace the territorial unit fixed effects with fixed effects at the composite monarchy level, a higher level of aggregation (Appendix Table A.2).

Year fixed effects λ_t control for common time shocks, including economic trends, population dynamics, and technological innovations.

The standard errors are robust and clustered at the territorial unit level (i.e. the basic observational unit of analysis). However, the main results remain robust if we instead cluster the standard errors at the composite monarchy level (Appendix Tables A.2 and A.3). In addition, we address potential spatial correlation by employing Conley standard errors (Appendix Table A.4).

War Participation Data

Leveraging Clodfelter's (2002) comprehensive compilation, we construct new data that document all major wars from 1500 to 1800 that each composite monarchy participated in. We focus on major wars to help ensure that all sample conflicts were above a common threshold of importance. We include conflicts regardless of their geographic location (European or non-European) or type (land or sea), since all should have increased the ruler's demand for funds and thus fiscal reforms.

To construct the war participation data, we proceeded as follows. First, we read through Clodfelter's account of each major external war that took place in early modern Europe.[19] Whenever a sample monarchy was listed as an active combatant, we added this to its list of war participation. We then repeated this process for major external wars that took place in Asia (including the Middle East), Central and South America, India, North America, and the Ottoman Empire. Finally, we repeated this process for major internal wars that took place in Europe.[20]

While our focus on major wars helps ensure that sample conflicts were relatively similar in size, there may still have been differences in war intensity. To address this, we coded the number

[19] We define major wars as those that Clodfelter characterizes as having major battles, sieges, or naval battles.

[20] These data extend Cox and Dincecco (2021) both in temporal coverage (beginning in 1500 rather than 1650) and substantive coverage (including internal in addition to external wars).

of total casualties in major interstate and intrastate wars in which a composite monarchy participated in each year according to Clodfelter (2002).[21]

Defeat in battle may have provided an additional incentive to undertake fiscal reforms. We thus coded each war outcome as a win, defeat, or draw. For a participant to be coded as victorious, we required a clear statement from Clodfelter (2002) to this effect.[22]

We treat Ireland as part of the composite monarchy of England over the entire early modern period, and Scotland as part of it following the Act of Union (1707) (see the previous section). Thus, Ireland takes the same war participation codings as England in all sample years, while Scotland takes England's codings from 1707 onward. Similarly, the (Northern and Southern) Netherlands was part of the composite monarchy of Spain at the start of the early modern period (see Appendix B). These territorial units thus take the same war participation codes as Spain.[23] Due to the Iberian Union, Portugal also takes the same war participation codings as Spain from 1580 to 1640.

In our view, Clodfelter (2002) is the most sensible historical source from which to construct the war participation data here. Jaques (2007) is one potential alternative. However, the basic unit of analysis in Jaques is individual battles rather than (major) wars, which is our focus. Kokkonen and Sundell (2020) is another potential alternative. However, Kokkonen and Sundell concentrate on civil wars fought within Europe only, while we include both interstate and intrastate wars worldwide.

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[21] Here, "casualties" means all persons lost to active military service, including those killed in action or by disease, disabled by physical or mental injuries, captured, deserted, or missing. Due to data limitations, our numbers sometimes refer to soldiers killed or wounded in battle and/or deaths by disease only.

[22] For example, the First Anglo-Dutch War (1652-54) pitted England against France and the Netherlands. Regarding this war, Clodfelter (2002: 42) writes: "Round 1 had gone to Cromwellian England." We thus coded England as the winner and the coalition of France and the Netherlands as the loser. We coded war outcomes as draws whenever Clodfelter made statements that included the use of terms such as "draw," "inconclusive," "stalemate," and "status quo."

[23] Upon declaring its independence in 1581, the Northern Netherlands (which was to become the Dutch Republic) exits our sample.

Appendix C provides additional details about the construction of the war participation data. Appendix Table C.1 lists all the major wars and war outcomes in our sample.

Main Results

Table 1 displays the main regression results.[24] Columns 1 to 6 account for a wide variety of time-invariant and time-varying unobservable and observable characteristics that might otherwise confound our analysis. In *column 1*, we include fixed effects to control for time-invariant features specific to each territorial unit and common time shocks. In *column 2*, we add polity-specific linear trends to account for time-varying unobservables such as population dynamics, technological developments, and "steps to war" (Senese and Vasquez 2008) specific to each composite monarchy. In *column 3*, we add a control for war intensity, proxied by the average number of casualties (in millions) in major interstate wars per year in which each composite monarchy participated over the previous decade. In *column 4*, we add a control for the average number of losses in major interstate wars per year over the previous decade, as defeat in battle may have provided an additional incentive for monarchs to make tax reforms. In *column 5*, we add a control for the (lagged) urbanization rate in each composite monarchy to (imperfectly) proxy for economic development. In *column 6*, we instead use (lagged) log GDP per capita to proxy for this.[25]

[24] In the regression analysis, we treat four territorial units that switched polities during our sample period (viz. Alsace, Artois, Franche-Comté, Kingdom of Scotland) as distinct units before and after they switched. For example, we treat Alsace (Austria) and Alsace (France) separately, turning to missing all observations for Alsace (France) before 1633, and all observations for Alsace (Austria) from 1633 onward. For additional details, see Appendix B. This means that we have $101 + 4 = 105$ potential territorial units for analysis here. However, we excluded 5 territorial units (Berry, Maine, Orléanais, Périgord, Orleanais, Touraine) since we were unable to identify the specific year of absolutism reform. In addition, 20 territorial units never underwent any absolutist reforms, meaning that the fixed effects analysis omits them. Thus, in practice, the regression analysis exploits $105 - 20 - 5 = 80$ territorial units.

[25] Appendix Table 2 of Acemoglu, Johnson, and Robinson (2002) provides data on urbanization rates and GDP per capita. To compute these, Acemoglu et al. rely on classic works by Bairoch, Batou, and Chèvre (1988) and Maddison (2001), respectively. We linearly interpolate the Acemolgu et al. data between given years. For Prussia, we use the data for Germany. For Scotland,

Across all six specifications, there is a positive and highly significant relationship between interstate war participation and reforms that reduced parliament's control over taxation. The coefficient estimate for $ExternalWar_{m(i),(t-10,t-1)}$ in the specification in column 5 indicates that a territorial unit that participated in an average of one major interstate war per year over the previous decade had a per-year probability of undergoing a reform toward fiscal absolutism that was 3.6 percentage points higher than a territorial unit that never fought. To get a sense of what this means, suppose that a peaceful territorial unit's probability of absolutist reform was zero. In this case, an always-fighting territorial unit's probability of experiencing an absolutist reform at some point during its decade of warfare would be 31 percent.[26]

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we take the urbanization rate data from de Vries (1984: 39), and use England's GDP per capita data.

[26] The per-year probability of an absolutist reform was 0.036, so the probability that the belligerent territorial unit would go a decade without experiencing any such reform would have been $(1-0.036)^{10} = 0.693$.

Table 1: External War and Tax Reform in Early Modern Europe

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	Reform effort to reduce parliament's tax authority					
External war	0.026***	0.033***	0.034***	0.035***	0.036***	0.037***
	(0.008)	(0.009)	(0.009)	(0.009)	(0.010)	(0.010)
Casualties			-0.003	-0.002	-0.005	-0.006
			(0.023)	(0.023)	(0.023)	(0.023)
War defeats				-0.063	-0.056	-0.053
				(0.046)	(0.047)	(0.047)
Urbanization rate					0.153	
					(0.161)	
Log GDP per capita						0.092
						(0.084)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Territorial unit FE	Yes	Yes	Yes	Yes	Yes	Yes
Polity trends	No	Yes	Yes	Yes	Yes	Yes
R-squared	0.235	0.239	0.239	0.239	0.239	0.239
Observations	10,841	10,841	10,841	10,841	10,841	10,841
Number of units	80	80	80	80	80	80

Notes: Estimation method is OLS. Unit of analysis is territorial unit-year. Sample period is 1500-1800. Robust standard errors clustered at territorial unit level in parentheses. *** p<0.01, ** p<0.05, * p<0.10

ROBUSTNESS

Survival Bias

Our main analysis includes all major crown-and-parliament territories across nine major European composite monarchies at the start of the early modern period in 1500. Thus, a biased selection of the most prominent surviving territorial units toward the end of the early modern period does not confound the main results.[27]

[27] To our knowledge, the only polities that ever separated the power to tax from the power to spend were European polities after the collapse of the Carolingian Empire. We do not think our empirical

Omitted Variable Bias

Regarding omitted variables, the threat to inference is that unobservable or observable features affected both war participation and fiscal reforms, thereby biasing our analysis. For example, more aggressive monarchies might have simultaneously fought more interstate wars and undertaken more reforms. To help address such possibilities, in the main analysis we have controlled for time-invariant local unobservables via territorial unit fixed effects; controlled for common time shocks via year fixed effects; controlled for time-varying unobservables via polity trends; and controlled for time-varying observables for war intensity, war outcomes, and economic performance. For further robustness, we now perform several additional tests.

Intensive Margin

Even subject to the battery of controls described above, it remains possible that territorial units that underwent fiscal reforms during this period may have differed in unobserved ways from those that never experienced reforms. To address this possibility, in Appendix Table A.5 we restrict the sample to the "intensive margin" of fiscal reforms. Rather than include all territorial units, we now exclude those territories whose traditional tax rights remained intact through the end of our period of study. The coefficient estimates for $ExternalWar_{m(i),(t-10,t-1)}$ remain positive and statistically significant, with magnitudes relatively similar in size to the baseline.

Dynastic Fixed Effects

In Appendix Table A.6, we replace the polity fixed effects with dynasty fixed effects. We identify each dynasty that ruled each composite monarchy between 1500 and 1800 (of which there were 20, including England's interregnum period) according to Hansen (2005). Dynasty fixed effects allow us to control for unobserved differences in the (time-invariant) quality of dynastic leadership within each composite monarchy over time. For additional robustness, we control for time-varying unobservables via dynasty-specific linear trends in column 2. The main results continue to hold.

results would generalize beyond this sample. That said, had central authority collapsed in the Ottoman territories, and many small polities emerged with separations of fiscal power, then we would expect that the Ottoman response to the military revolution would have been similar to that in Europe.

Control for Ability of Individual Rulers

In columns 3 to 5 of Appendix Table A.6, we go beyond even dynasty fixed effects and control for the ability of each individual ruler in our sample, relying on the measure of ruler ability in Ottinger and Voigtländer (2020).[28] In column 3 of Table A.6, we include territorial unit fixed effects along with the measure of ruler ability, meaning that we control for the ability of individual rulers within each territorial unit over time. In columns 4 and 5, we include dynasty fixed effects, meaning that we control for ruler ability within each dynasty within each composite monarchy. In column 5, we replace the polity trends with dynasty trends, meaning that we control for time-varying unobservables specific to each dynasty. In each case, the coefficient values for $ExternalWar_{m(i),(t-10,t-1)}$ remain positive and statistically significant, with magnitudes similar in size to the baseline.

Additional Controls

In Appendix Table A.7, we control for two notable time-varying local observable cultural and technological features – the Protestant ethic and the printing press – that may impact our analysis.

With its focus on worldly obligations, the Protestant ethic may have inspired public officials to make bureaucratic improvements including fiscal reforms. To account for this possibility, we adapt the approach in Becker and Woessmann (2009) and use distance to Wittenberg, the birthplace of the Reformation, to proxy for exposure to the Protestant ethic.[29] The main results remain robust (column 1).

The adoption of the printing press may have also facilitated bureaucratic improvements. In addition, it may have improved the ability of internal dissidents to organize against the incumbent monarchy, fomenting civil conflict. To address these possibilities, we adapt the approach in Dittmar (2011) and interact the distance from each composite monarchy's capital to Mainz, where

[28] Adopting Ottinger and Voigtländer's approach, we assign values of 1 for "capable," -1 for "incapable," and 0 to "not clearly capable or incapable." In a few cases, there are evaluations ranging from "incapable to not clearly capable or incapable" and from "not clearly capable or incapable to capable", which following Ottinger and Voigtländer, we code as -0.50 and 0.50, respectively.

[29] Specifically, we interact the distance from the capital of each composite monarchy to Wittenberg with century fixed effects.

the printing press was invented, with century fixed effects. The coefficient estimates for $ExternalWar_{m(i),(t-10,t-1)}$ remain positive and highly significant (column 2).

Data Averages

A virtue of our database is that we can identify the specific year of fiscal reforms for each territorial unit in our sample. For this reason, the main analysis takes the year as the unit of time. However, it is possible that the relatively large number of annual observations in our data biases our main analysis in favor of finding statistically significant coefficients. To address this concern, in Appendix Table A.8 we repeat the main analysis after taking 10-year data averages. The main results continue to hold.

Other Robustness

As described above, we show that the main results remain robust if we employ half-decade or one-year periodizations for participation in major interstate wars, or if we employ an alternative variable of interest which takes the average number of major interstate wars per year in which a composite monarchy participated over the previous decade (Appendix Table A.1).

Similarly, we show robustness if include fixed effects at the composite monarchy level, a higher level of aggregation (Appendix Table A.2), and/or if we cluster the standard errors at this higher level (Appendix Tables A.2 and A.3).

To address potential spatial correlation, we employ Conley standard errors for cutoffs between 100km and 500km (Appendix Table A.4). The main results remain statistically significant across all cutoff values.

Following the description in Clodfelter (2002), our main analysis codes the War of the American Revolution (1775-83) as an interstate war between England and its allies against France, Spain, the United States, and their allies. The main results remain robust if we exclude participation in this war (Appendix Table A.9).

Finally, we include fiscal reform data for six additional territorial units that were briefly affiliated with Denmark, Prussia, or Sweden, respectively.[30] The main results continue to hold (Appendix Table A.10).

[30] These are the County of Oldenburg (Denmark, 1667-1773), the Principality of Neuchâtel (Prussia, 1708-1806), the County Palatine of Zweibrücken (Sweden, 1654-1720), the Duchy of

Within-Case Qualitative Evidence

We now provide two kinds of within-case qualitative evidence – drawing on contemporary political theories and a random narratives approach – which further show that absolutist tax reforms following warfare were in fact mediated by royal desires to remove parliamentary tax vetoes.

Political Theories

One kind of evidence concerns the wave of absolutist political theory (or propaganda) that swept over early modern Europe. In most cases, absolutist theorists were well-known servants or supporters of their monarchs. In other cases, monarchs themselves tried their hand at political philosophy.

In either case, those favoring absolutism put forth various concrete proposals to increase royal control of taxation. The political theorist Jean Bodin advocated a relatively small step – granting the monarch a permanent tax (Chantrel 2004: 334).[31] More radically, James I of England claimed powers during parliamentary recesses that would have given him complete fiscal control (Hume 1983 [1778]: 42-3). Other absolutist authors offered a range of intermediate ideas (see e.g. Cuttica and Burgess 201: 50, 127).

Random Narratives

As another way to shed light on the reform efforts under study, we take a random narratives approach (Fearon and Laitin 2008). We chose at random three interstate wars from the period in which the polity under study still retained a crown-and-parliament structure: the Hapsburg-Ottoman War (1683-99; Austria); the First Italian War between Charles V and Francis I (1521-6; France); and the Habsburg-Valois War (1547-59; France). For each war, we evaluated (1) whether the crown made efforts to expand royal tax authority in anticipation of (or during) the war in question; (2) whether the crown sought such reforms to empower it to take decisive action and/or to avoid fiscal gridlock; and (3) whether any other reasons were given for the crown's efforts to reduce parliament's tax authority besides war pressures. The historical accounts suggest that, in

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Hesse-Kassel(Sweden, 1730-1751), the Grand Duchy of Lithuania (Sweden, 1594-1599), and the Kingdom of Poland (Sweden, 1588-1599). Appendix B provides additional details.

[31] In practice, the French monarch had already secured a permanent right to levy the *taille* during the Hundred Years' War (1337-1453).

each case, the monarch sought both higher revenues and better control over taxation in order to better finance war. For example, during the First Italian War (1521-6), Francis I of France sought new revenues by dispossessing the Duke of Bourbon, while also pursuing structural reforms such as purging the *receveurs* (tax farmers) and creating a central treasury to control the disbursement of funds. The rationale behind these reforms was to improve war finance (White 2001: 85). Appendix D provides additional details.

DECENTRALIZED EXPENDITURE CONTROL

As described in a previous section, composite monarchies in Europe at the start of the early modern period in 1500 consisted of an amalgam of territorial units, each potentially with its own regional parliament and self-governing towns. Except for areas that had already been incorporated into the royal domain, these territories claimed the right of denying extraordinary taxes within their own boundaries.

Given these initial conditions, early modern monarchs had three basic fiscal goals (besides building tax-collecting bureaucracies). One goal was to centralize their realms, allowing them to levy uniform taxes across their territories without separate negotiations with each regional parliament. Another goal was to remove tax vetoes, allowing them to levy taxes unilaterally. A third goal was to preserve their unilateral control over expenditure. Some of the reforms that we have documented above achieved all these goals at once. For example, the conversion of a French territory from *pays d'état* to *pays d'élection* typically resulted in its legal and administrative incorporation into the royal domain; the end of its regional parliament's tax veto (though a form of suspensory tax veto persisted via the registration process); and all this without any change in the crown's expenditure authority.

Early modern monarchs, however, faced fierce resistance to their efforts to centralize their realms, abolish vetoes on their tax proposals, and preserve their expenditure authority. Burg (2014) documents more than 80 major European tax revolts during the early modern period. Rebels sometimes demanded fiscal reforms that ran counter to royal aims. For example, the leaders of the *Millones* Protests of 1589 in the Crown of Castile pushed successfully for parliamentary appropriation of some funds; while the leaders of the *Comuneros* Revolt in Castile (1520-1), the Revolt of the Netherlands (1567), and the Castilian Tax Resistance (1573-77) all pushed successfully for decentralization of expenditure authority.

Because they sought multiple goals, and faced resistance, early modern monarchs inevitably faced tradeoffs. Should they sacrifice one goal to better achieve others? In what follows, we describe a deal that monarchs agreed to in order to secure greater access to credit during wartime. The gist was that monarchs accepted a permanent deepening of fiscal decentralization in their realm in exchange for temporary war loans. We label this type of deal "indirect royal borrowing."

Indirect Royal Borrowing

As warfare monetized, monarchs increasingly needed to raise large amounts of money quickly when conflicts erupted. To do so, they sought to borrow on the security of their future tax revenues, as most did not have domain revenues sufficient to provide collateral for war financing.[32] Yet the inability of medieval monarchs to commit themselves to repay borrowed money meant that they had substantial difficulty in procuring loans and paid much higher interest rates than did city republics (Stasavage 2011).

A watershed invention in royal borrowing occurred as part of the efforts of Charles V (reign 1519-56) to establish a pan-European empire. After an initial experiment in issuing annuities funded by future taxes in 1515, Charles authorized the parliaments of the provinces of the (Northern and Southern) Netherlands to collect a new excise tax in 1542. Each provincial parliament then sold annuities secured on their future tax collections. Most of the sale revenues went to Charles, while provincial officials earned management fees (Gelderblom and Jonker 2013: 177). This indirect royal borrowing – royals selling the joint right to farm taxes and sell annuities, tax farmers then borrowing on the security of their future collections – was imitated widely, becoming "the model for public debt in Europe" (Stasavage 2011: 10) during the early modern period. We code the year in which each composite monarchy first instituted some form of indirect royal borrowing (for additional details, see Appendix B).

The popularity of indirect royal borrowing stemmed from the fact that, if the monarch's own bureaucrats collected the taxes earmarked to repay a particular loan, then the monarch might decide that he had better use for the money than repaying debts. When the monarch's agents never got their hands on the money, repayment was much more secure – since the tax farmers, unlike the monarch, could be bound by legal contracts (Álavarez-Nogal and Chamley 2013).

[32] The main exceptions were the Iberian monarchs' revenue from New World mines and the Danish monarchs' revenues from the Sound Tolls.

Indirect royal borrowing deals left the fiscal status quo within the central state otherwise intact. In absolutist regimes, the monarch continued to levy taxes by decree and to exercise full discretion over how centrally received revenues were spent. However, these deals encroached in an essential way on royal expenditure authority, in that they earmarked certain public revenues for payment of interest on perpetual annuities and could not be unilaterally revoked by the crown. Fryde and Fryde (1963) and Ormrod (1995) have argued that monarchs disliked the long-term constraint on their power over spending that such deals exhibited.

Analysis

We have argued that indirect royal borrowing deals represented a decision by early modern monarchs to sacrifice their goal of centralization in order to secure war funding while retaining fiscal absolutism in the central state. We have also suggested that a combination of royal desperation for war funds and local resistance to centralizing reforms forced monarchs into making this tradeoff.

Since opponents of absolutism might have pushed either for parliamentarism in the central state or the decentralization of expenditure authority, both kinds of reform should have been more common in the aftermath of internal conflicts over fiscal control. In Appendix Table A.11, we show that there was a positive and highly significant relationship between participation in major intrastate wars and reforms that reduced the monarch's expenditure authority.[33] Our results suggest that a belligerent territorial unit's probability of undergoing a parliamentary reform at some point during its decade of participation in major intrastate wars was 9 percent (relative to the zero chance

[33] Here, the model specification resembles Equation 1. The dependent variable $ExpenditureReform_{i,t}$ is a binary indicator that takes the value 1 for each year in which a territorial unit made a reform effort to reduce the crown's expenditure authority, including both transfers of fiscal authority to (national) parliaments as well as to towns or regional parliaments via indirect royal borrowing. The independent variable of primary interest $InternalWar_{m(i),(t-10,t-1)}$ computes the share of years of participation in a major intrastate war by the composite monarchy to which a territorial unit belonged over the previous decade.

that a peaceful territorial unit would experience such a reform).[34] This relationship reflects both the stout resistance of monarchs to empowering parliament and monarchs' willingness to temporarily decentralize expenditure authority in order to secure wartime loans.

CONCLUSION

Parliaments emerged throughout Europe during the high medieval period (1000-1250) (Marongiu 1968; Graves 2001; van Zanden, Buringh, and Bosker 2012; Cox, Dincecco, and Onorato 2024). The resulting crown-and-parliament states gave the power to spend solely to the crown and the power to refuse taxes to parliament, thereby creating a fiscal commitment problem. In this paper, we have analyzed how and when European states resolved the fiscal gridlock inherent in their early crown-and-parliament structures.

In principle, there were two polar-opposite solutions to fiscal gridlock, which involved removing the ability of either the crown or parliament to veto the other's fiscal actions. Breaking parliament's veto over taxes would create a monarch who controlled both taxing and spending. Removing the crown's control over expenditure would create a parliament that controlled both. Once the same actor controlled taxing and spending alike, fiscal gridlock would be reduced (to the extent that internal court politics or internal parliamentary politics did not create a new set of veto players).

We have argued that, under the pressures of Europe's increasingly capital-intensive and costly wars, crown-and-parliament states should have followed one of the two paths toward unifying fiscal powers – either expanding royal tax powers or reducing royal expenditure authority. Exploiting a comprehensive sample of 101 territorial units in nine composite monarchies, we document a strong trend toward the unification of fiscal powers during Europe's military revolution after 1500. The plurality of territories increased royal tax control and a few reduced royal expenditure control, while a (sizeable) minority retained their original separations of fiscal power.

In addition to showing that most early modern European territories undertook fiscal reforms, we provide novel evidence that these reforms were driven by the pressures of financing external

[34] The per-year probability of a parliamentary reform was 0.009, so the probability that the belligerent territorial unit would go a decade without experiencing any such reform would have been $(1 - 0.009)^{10} = 0.914$.

war. Territories were significantly more likely to surrender their tax vetoes after their monarch had engaged in major interstate wars.

Although most of our reforming cases converted to fiscal absolutism, European absolutism differed crucially from its counterparts elsewhere. Would-be absolutist monarchs in early modern Europe needed to accomplish three goals: to preserve their existing control of expenditure; to remove parliament's ability to veto their tax proposals; and to centralize their realms. While many achieved the first two goals, all but one in our comprehensive sample did so at the cost of delegating some of their rights over state expenditure to local units of government, thereby deepening fiscal decentralization in their realms. More specifically, they agreed to allow some provincial parliaments or town corporations to collect and spend a substantial portion of the taxes that they decreed in exchange for upfront payments (a transaction we have called "indirect royal borrowing").

European absolutist regimes thus differed significantly from absolutist regimes elsewhere in Eurasia, where no parliaments or councils existed. One consequence was that, although absolutist regimes in Europe raised less in per capita revenues than their parliamentary competitors, they raised considerably more than absolutist regimes outside Europe (Hoffman 2015: 67-94; Dincecco 2017: 68-71).

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Online Appendix

Warfare, Fiscal Gridlock, and State Formation during Europe's Military Revolution

Contents

Appendix A: Additional Figures and Tables

Table A.1: Alternative War Participation Variables

	(1)	(2)	(3)
Dependent variable	Reform effort to reduce parliament's tax authority		
External war	0.017**		
(Share over previous 5 years)	(0.007)		
External war		0.012*	
(1 year lag)		(0.006)	
External war			0.034***
(Average # per year over previous 10 years)			(0.008)
Year FE	Yes	Yes	Yes
Territorial unit FE	Yes	Yes	Yes
Polity trends	Yes	Yes	Yes
R-squared	0.238	0.238	0.239
Observations	11,201	11,489	10,841
Number of units	80	80	80

Notes: Estimation method is OLS. Unit of analysis is territorial unit-year. Sample period is 1500-1800. Robust standard errors clustered at territorial unit level in parentheses. *** p<0.01, ** p<0.05, * p<0.10

Table A.2: Composite Monarchy ("Polity") Fixed Effects

	(1)	(2)
Dependent variable	Reform effort to reduce parliament's tax authority	
External war	0.024*	0.030**
	(0.012)	(0.012)
Year FE	Yes	Yes
Polity FE	Yes	Yes
Polity trends	No	Yes
R-squared	0.233	0.236
Observations	10,841	10,841

Notes: Estimation method is OLS. Unit of analysis is territorial unit-year. Sample period is 1500-1800. Robust standard errors clustered at composite monarchy level in parentheses. *** p<0.01, ** p<0.05, * p<0.10

Table A.3: Cluster Standard Errors at Composite Monarchy ("Polity") Level

	(1)	(2)
Dependent variable	Reform effort to reduce parliament's tax authority	
External war	0.026*	0.033**
	(0.013)	(0.012)
Year FE	Yes	Yes
Territorial unit FE	Yes	Yes
Polity trends	No	Yes
R-squared	0.235	0.239
Observations	10,841	10,841
Number of units	80	80

Notes: Estimation method is OLS. Unit of analysis is territorial unit-year. Sample period is 1500-1800. Robust standard errors clustered at composite monarchy level in parentheses. *** p<0.01, ** p<0.05, * p<0.10

Table A.4: Conley Standard Errors

	(1)
Dependent variable	Reform effort to reduce parliament's tax authority
External war	0.033**
100 km cutoff	(0.015)
200 km cutoff	(0.015)
300 km cutoff	(0.015)
400 km cutoff	(0.015)
500 km cutoff	(0.014)
Year FE	Yes
Territorial unit FE	Yes
Polity trends	Yes
Observations	10,841

Notes: Estimation method is OLS. Unit of analysis is territorial unit-year. Sample period is 1500-1800. Spatial standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.10

Table A.5: Intensive Margin of Reform

	(1)	(2)
Dependent variable	Reform effort to reduce parliament's tax authority	
External war	0.021**	0.029***
	(0.009)	(0.010)
Year FE	Yes	Yes
Territorial unit FE	Yes	Yes
Polity trends	No	Yes
R-squared	0.246	0.250
Observations	8,040	8,040
Number of units	55	55

Notes: Estimation method is OLS. Unit of analysis is territorial unit-year. Sample period is 1500-1800. Robust standard errors clustered at territorial unit level in parentheses. *** p<0.01, ** p<0.05, * p<0.10

Table A.6: Dynasty Fixed Effects and Ability of Individual Rulers

	(1)	(2)	(3)	(4)	(5)
Dependent variable	Reform effort to reduce parliament's tax authority				
External war	0.030***	0.034***	0.037***	0.034***	0.039***
	(0.009)	(0.008)	(0.009)	(0.009)	(0.009)
Ruler ability			0.003	-0.001	-0.001
			(0.002)	(0.003)	(0.003)
Year FE	Yes	Yes	Yes	Yes	Yes
Dynasty FE	Yes	Yes	No	Yes	Yes
Territorial unit FE	No	No	Yes	No	No
Polity trends	Yes	No	Yes	Yes	No
Dynasty trends	No	Yes	No	No	Yes
R-squared	0.241	0.243	0.247	0.248	0.251
Observations	10,781	10,781	10,498	10,438	10,438

Notes: Estimation method is OLS. Unit of analysis is territorial unit-year. Sample period is 1500-1800. Robust standard errors clustered at territorial unit level in parentheses. *** p<0.01, ** p<0.05, * p<0.10

Table A.7: Additional Controls

	(1)	(2)
Dependent variable	Reform effort to reduce parliament's tax authority	
External war	0.033***	0.033***
	(0.009)	(0.009)
Distance to Wittenberg x century FE	Yes	No
Distance to Mainz x century FE	No	Yes
Year FE	Yes	Yes
Territorial unit FE	Yes	Yes
Polity trends	Yes	Yes
R-squared	0.240	0.241
Observations	10,841	10,841
Number of units	80	80

Notes: Estimation method is OLS. Unit of analysis is territorial unit-year. Sample period is 1500-1800. Robust standard errors clustered at territorial unit level in parentheses. *** p<0.01, ** p<0.05, * p<0.10

Table A.8: 10-Year Data Averages

	(1)	(2)
Dependent variable	Reform effort to reduce parliament's tax authority	
External war	0.235***	0.302***
	(0.063)	(0.069)
Decade FE	Yes	Yes
Territorial unit FE	Yes	Yes
Polity trends	No	Yes
R-squared	0.286	0.310
Observations	1,189	1,189
Number of units	80	80

Notes: Estimation method is OLS. Unit of analysis is territorial unit-decade. Sample period is 1500-1800. Robust standard errors clustered at territorial unit level in parentheses. *** p<0.01, ** p<0.05, * p<0.10

Table A.9: Exclude Participation in War of American Revolution

	(1)	(2)
Dependent variable	Reform effort to reduce parliament's tax authority	
External war	0.026***	0.033***
	(0.008)	(0.009)
Year FE	Yes	Yes
Territorial unit FE	Yes	Yes
Polity trends	No	Yes
R-squared	0.235	0.239
Observations	10,841	10,841
Number of units	80	80

Notes: Estimation method is OLS. Unit of analysis is territorial unit-year. Sample period is 1500-1800. Robust standard errors clustered at territorial unit level in parentheses. *** p<0.01, ** p<0.05, * p<0.10

Table A.10: Include Territorial Units Briefly Affiliated with Denmark, Prussia, or Sweden

	(1)	(2)
Dependent variable	Reform effort to reduce parliament's tax authority	
External war	0.026***	0.033***
	(0.008)	(0.009)
Year FE	Yes	Yes
Territorial unit FE	Yes	Yes
Polity trends	No	Yes
R-squared	0.235	0.238
Observations	10,874	10,874
Number of units	82	82

Notes: Estimation method is OLS. Unit of analysis is territorial unit-year. Sample period is 1500-1800. Robust standard errors clustered at territorial unit level in parentheses. *** p<0.01, ** p<0.05, * p<0.10

Table A.11: Internal War and Expenditure Reform in Early Modern Europe

	(1)	(2)
Dependent variable	Reform effort to reduce the crown's expenditure authority	
Internal war	0.010***	0.009***
	(0.003)	(0.003)
Year FE	Yes	Yes
Territorial unit FE	Yes	Yes
Polity trends	No	Yes
R-squared	0.168	0.173
Observations	12,087	12,087
Number of units	82	82

Notes: Estimation method is OLS. Unit of analysis is territorial unit-year. Sample period is 1500-1800. Robust standard errors clustered at territorial unit level in parentheses. *** p<0.01, ** p<0.05, * p<0.10

Appendix B: Coding Scheme for Fiscal Reform Efforts

This appendix provides additional details about the fiscal reform data. For general information, see Section 3 of the main text.

Drawing on historical works, we code the following types of efforts as major reforms to reduce parliament's tax authority within each composite monarchy in our sample:

(1) A major effort to centralize the tax administration (that does not succeed permanently);
(2) The permanent centralization of the tax administration;
(3) A decree levying taxes without parliamentary approval (no rebellion, no precedent);
(4) A decree levying taxes without parliamentary approval (rebellion, no precedent);
(5) A decree levying taxes without parliamentary approval (no rebellion, precedent);
(6) A decree levying taxes without parliamentary approval (rebellion, precedent);
(7) The final meeting of a territorial unit's parliament before its formal abolition;
(8) The abolition of the territorial unit's parliament.

Similarly, we code the following efforts as major reforms to reduce the crown's expenditure authority:

(1) A reform in which parliament permanently gains control over a significant portion of public spending through appropriation;
(2) A reform in which provincial parliaments or towns gain control over a significant portion of public spending as part of a system of indirect royal borrowing.

In the tables that follow below, we provide the historical details of our codings of fiscal reforms for each composite monarchy. The table notes identify the data sources and construction methods.

B.1 Austria

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
Austria	Alsace	Part of Austria until 1633
	Archduchy of Austria	1560s First instance of indirect royal borrowing 1682 decreed tax (extraordinary property tax) Haugwitz Revolution of 1748-49 weakens Estates of Lower Austria Joseph II (1780-90) is "absolutist"
	Bohemian Crown	1560s First instance of indirect royal borrowing 1627 decree strips Estates of power 1682 decreed tax (extraordinary property tax)
	Duchy of Carinthia	1560s First instance of indirect royal borrowing 1682 decreed tax (extraordinary property tax) Haugwitz Revolution of 1748-49 weakens Estates of Carinthia Joseph II (1780-90) is "absolutist"
	Duchy of Carniola	1560s First instance of indirect royal borrowing 1682 decreed tax (extraordinary property tax) Haugwitz Revolution of 1748-49 weakens Estates of Carniola Joseph II (1780-90) is "absolutist"
	Duchy of Styria	1560s First instance of indirect royal borrowing 1682 decreed tax (extraordinary property tax) Haugwitz Revolution of 1748-49 weakens Estates of Styria Joseph II (1780-90) is "absolutist"
	Kingdom of Croatia	By royal orders in 1553 and 1578, large parts of Croatia and Slavonia adjacent to the Ottoman Empire were carved out into the military frontier and ruled directly from Vienna's military headquarters
	Kingdom of Hungary	Decreed tax in 1697 rebuffed via Rakoczi's Insurrection of 1700-11 Survives with tax rights intact

Notes:

(1) Austrian territories are coded based on Agnew (2004), Burg (2014), and Godsey (2018). Godsey (2018: 24, 29) notes that tax powers remained throughout the Austrian territories until Joseph II. Agnew (2004: 69-70) describes the Renewed Land Ordinance of 1627, which stripped the Bohemian Estates of their legislative, judicial, and executive authority. Indirect royal borrowing is coded based on Godsey (2018: 120). In the regression analysis, we code "1560s" as equal to 1560.

(2) We count Alsace as part of Austria until 1633, when it became part of France. We do not find evidence that Alsace participated in the first instance of indirect royal borrowing in Austria in the 1560s. See https://es.wikipedia.org/wiki/Landgraviato_de_la_Alta_Alsacia (Access date: April 25, 2023). In the regression analysis, we treat Alsace (Austria) and Alsace (France) as distinct territorial units, turning to missing all observations for Alsace (France) before 1633, and turning to missing those for Alsace (Austria) from 1633 onward.

(3) For Croatia, also see: en.wikipedia.org/wiki/Kingdom_of_Croatia_(Habsburg)#Ottoman_incursion (Access date: March 18, 2021).

(4) Neither the Bishopric of Trent nor the Bishopric of Brixen had provincial parliaments and so are not included here as among the Austrian Habsburgs' crown-and-parliament territories.

(5) The Margraviate of Istria is not included: "The [Habsburgs] only held a small territory in the interior of the [Istrian] peninsula around Pazin (Mitterburg), which it administered from its Carniolan duchy." See https://en.wikipedia.org/wiki/March_of_Istria#Habsburg_Margraviate (Access date: March 18, 2021).

(6) We do not include the County of Gorizia: "the 'inner county' of Gorizia remained an Imperial State of the Holy Roman Empire ruled by the…Archdukes [and] governed by a capitano." See en.wikipedia.org/wiki/County_of_Gorizia (Access date: March 18, 2021).

(7) We do not include Trieste as it was administered from Vienna.

B.2 British Isles

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
England	Kingdom of England	1525 Amicable Grant resistance 1628 Petition of Right in response to decreed taxes levied for expeditions in France and Spain 1634-9 ship money resistance 1689 parliament establishes control over expenditure (Cox 2016: ch. 2) 1693 first statutorily funded debt (via Bank of England) (Stasavage 2011: 31)
	Lordship of Ireland (later, Kingdom of Ireland)	Act of Union with Great Britain in 1800; tax veto preserved 1695 parliament establishes control over expenditure and establishes first statutorily funded debt (McGrath 1997, 2001)
Scotland (pre-1707)	Kingdom of Scotland (pre-1707) Scotland (1707 onward)	Act of Union with England in 1707; tax veto preserved 1707 parliamentary control over expenditure of Scottish revenues (via British parliament) (Cox 2016: ch. 2) 1707 first Scots participation in statutorily funded debt (via Bank of England)

Notes:

(1) Codings based on Burg (2014) and Cox (2016) and Stasavage (2011) for England; McGrath (1997, 2001) for Ireland; and Goodare (2004) and Cox (2016) for Scotland.

(2) In England, the County of Chester had its own *Parliamentum* until 1543; and the Principality of Wales remained a legally defined entity until the Laws in Wales Acts of 1535-42. We treat the Kingdom of England as incorporating both Chester and Wales throughout the period of study. Thus, we treat the English monarch as of 1500 as governing only two units: the Kingdom of England and the Lordship of Ireland.

(3) Scotland is coded as an independent monarchy until the Act of Union with England in 1707. In the regression analysis, we treat the (independent) Kingdom of Scotland and Scotland (Great Britain) as distinct territorial units, turning to missing all observations for Scotland (Great Britain) before 1707, and turning to missing those for the (independent) Kingdom of Scotland from 1707 onward.

B.3 Denmark

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
Denmark	Duchy of Holstein	1550s Formation of fiscal chamber (*rentekammeret*) 1665 constitution (*Lex Regia*) establishes absolutism 1725 First instance of indirect royal borrowing
	Duchy of Schleswig	1550s Formation of fiscal chamber (*rentekammeret*) 1665 constitution (*Lex Regia*) establishes absolutism 1725 First instance of indirect royal borrowing
	Kingdom of Denmark	1550s Formation of fiscal chamber (*rentekammeret*) 1665 constitution (*Lex Regia*) establishes absolutism 1725 First instance of indirect royal borrowing
	Kingdom of Norway	1550s Formation of fiscal chamber (*rentekammeret*) 1665 constitution (*Lex Regia*) establishes absolutism 1725 First instance of indirect royal borrowing

Notes:

(1) Danish territories are coded based on Bonney (1991: 358-9) and Burg (2014). Indirect royal borrowing is coded based on Stasavage (2011: 31). For the coding of the fiscal chamber, see https://danmarkshistorien.dk/vis/materiale/rentekammeret (Access date: April 25, 2023). In the regression analysis, we code "1550s" as equal to 1550.
(2) We do not include the Faroe Islands, Greenland, or Iceland, as they were part of the Kingdom of Norway.
(3) We do not include the County of Oldenburg in the baseline regression analysis, as it was only ruled by Denmark between 1667 and 1773. See https://en.wikipedia.org/wiki/Counts,_dukes_and_grand_dukes_of_Oldenburg (Access date: October 17, 2023). For robustness, however, we add the fiscal reform data for this territorial unit. The main results continue to hold (Appendix Table A.10).
(4) The *Lex Regia* was separately approved in Denmark and Norway. We have found no evidence regarding whether it was separately approved in Holstein and Schleswig.

B.4 France

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
France	Agenais	1519 edict creates Pays d'élection; repealed 1522 First instance of indirect royal borrowing 1544 edict creates Pays d'élection; repealed 1581 edict creates Pays d'élection; repealed 1603 edict creates Pays d'élection; repealed in 1611 1621 edict creates Pays d'élection
	Alsace	Did not become part of France until 1633 (previously, part of Austria) 1683 edict creates Pays d'election
	Armagnac	Did not become part of France until 1589 1597 Pancarte resistance 1603 edict creates Pays d'élection; repealed in 1611 1621 edict creates Pays d'élection
	Artois	Did not become part of France until 1659 (previously, part of Spain) 1522 First instance of indirect royal borrowing Province survived as Pays d'état through 1789
	Auvergne	1522 First instance of indirect royal borrowing 1616 edict creates Pays d'élection
	Basse-Navarre	1522 First instance of indirect royal borrowing Province survived as Pays d'état through 1789
	Bazadais	1522 First instance of indirect royal borrowing 1603 edict creates Pays d'élection; repealed in 1611 1621 edict creates Pays d'élection
	Béarn	Did not become part of France until 1589 1628 edict to suppress Estates; repealed in 1634 Province survived as Pays d'état through 1789
	Berry	1522 First instance of indirect royal borrowing By 1600 Pays d'election (unable to identify specific year)
	Bigorre	1522 First instance of indirect royal borrowing 1597 Pancarte resistance 1628 edict to suppress Estates; repealed in 1634 Province survived as Pays d'état through 1789
	Bresse	Did not become part of France until 1601 Province survived as Pays d'état through 1789
	Brittany	Did not become part of France until 1532 1597 Pancarte resistance 1675 Bonnets Rouges tax revolt Province survived as Pays d'état through 1789
	Bugey	Did not become part of France until 1601 Province survived as Pays d'état through 1789
	Burgundy	1522 First instance of indirect royal borrowing 1630 Dijon anti-tax uprising Province survived as Pays d'état through 1789
	Cambrésis	1522 First instance of indirect royal borrowing Province survived as Pays d'état through 1789
	Charolais	1522 First instance of indirect royal borrowing Province survived as Pays d'état through 1789
	Comminges	1519 edict creates Pays d'election; repealed 1522 First instance of indirect royal borrowing 1597 Pancarte resistance 1603 edict creates Pays d'election; repealed in 1611 1621 edict creates Pays d'election 1655 Estates disappear

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
	Condomois	1519 edict creates Pays d'election; repealed 1522 First instance of indirect royal borrowing 1581 edict creates Pays d'election; repealed 1603 edict creates Pays d'election; repealed in 1611 1621 edict creates Pays d'election
	Corse	Province survived as Pays d'état through 1789
	Dauphiné	1522 First instance of indirect royal borrowing 1539 Edict of Abbeville (Hickey 1986: 15-7) 1579 tax revolt (Hickey 1986: 33) 1622 salt tax revolt (Hickey 1986: 145) 1628 edict to suppress Estates
	Flanders (French)	1522 First instance of indirect royal borrowing Province survived as Pays d'état through 1789
	Foix	1522 First instance of indirect royal borrowing 1628 edict to suppress Estates; repealed in 1634 Province survived as Pays d'état through 1789
	Franche-Comté	Did not become part of France until 1674 (previously, part of Spain) Province survived as Pays d'état through 1789
	Gévaudan	1522 First instance of indirect royal borrowing Province survived as Pays d'état through 1789
	Hainaut (French)	1522 First instance of indirect royal borrowing Province survived as Pays d'état through 1789
	Labourd	1522 First instance of indirect royal borrowing 1597 Pancarte resistance Province survived as Pays d'état through 1789
	Languedoc	1522 First instance of indirect royal borrowing 1629 edict to suppress Estates; repealed in 1633 Province survived as Pays d'état through 1789
	Lannes	1522 First instance of indirect royal borrowing 1603 edict creates Pays d'election; repealed in 1611 1621 edict creates Pays d'election
	Lomagne	1522 First instance of indirect royal borrowing 1597 Pancarte resistance 1621 edict creates Pays d'élection
	Mâconnais	1522 First instance of indirect royal borrowing Province survived as Pays d'état through 1789
	Maine	1522 First instance of indirect royal borrowing By 1600 Pays d'élection (unable to identify specific year)
	Marsan	1522 First instance of indirect royal borrowing 1597 Pancarte resistance 1628 edict to suppress Estates; repealed in 1634 Province survived as Pays d'état through 1789
	Nébouzan	1522 First instance of indirect royal borrowing 1628 edict to suppress Estates; repealed in 1634 Province survived as Pays d'état through 1789
	Normandy	1522 First instance of indirect royal borrowing 1655 Last meeting of Estates
	Orléanais	1522 First instance of indirect royal borrowing By 1600 Pays d'élection (unable to identify specific year)
	Périgord	1522 First instance of indirect royal borrowing By 1600 Pays d'élection (unable to identify specific year)
	Provence	1522 First instance of indirect royal borrowing 1630 Aix-en-Provence uprising against conversion to Pays d'élection Province survived as Pays d'état through 1789

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
	Quatre-Vallées	1522 First instance of indirect royal borrowing 1628 edict to suppress Estates; repealed in 1634 Province survived as Pays d'état through 1789
	Quercy	1519 edict creates Pays d'élection; repealed 1522 First instance of indirect royal borrowing 1603 edict creates Pays d'élection; repealed in 1611 1621 edict creates Pays d'élection
	Riviere-Verdun	1519 edict creates Pays d'élection; repealed 1522 First instance of indirect royal borrowing 1603 edict creates Pays d'élection; repealed in 1611 1621 edict creates Pays d'élection
	Rouergue	1519 edict creates Pays d'élection; repealed 1522 First instance of indirect royal borrowing 1603 edict creates Pays d'élection; repealed in 1611 1621 edict creates Pays d'élection
	Soule	1522 First instance of indirect royal borrowing 1597 Pancarte resistance Province survived as Pays d'état through 1789
	Touraine	1522 First instance of indirect royal borrowing By 1600 Pays d'election (unable to identify specific year)
	Velay	1522 First instance of indirect royal borrowing Province survived as Pays d'état through 1789
	Vivarais	1522 First instance of indirect royal borrowing Province survived as Pays d'état through 1789

Notes:

(1) French territories are coded based on Bordes (1986), Hickey (1986), Barbiche (2012), Burg (2014), and Augé (2015). Indirect royal borrowing is coded based on Stasavage (2011: 31).

(2) *Pays d'état* were provinces that had provincial assemblies of Estates and continued to administer taxes (and other matters) in their own territories. These provinces thus differed from both *Pays d'élection* and *Pays d'imposition* (where taxes were set by royal officials). See fr.wikipedia.org/wiki/Pays_d%27%C3%A9tats (Access date: March 18, 2021).

(3) Alsace did not become part of France until 1633. Prior to this year, we count it as part of Austria. See https://es.wikipedia.org/wiki/Landgraviato_de_la_Alta_Alsacia (Access date: April 25, 2023). Artois did not become part of France until 1659. Prior to this year, we count it as part of Spain. See https://en.wikipedia.org/wiki/County_of_Artois (Access date: April 25, 2023). Franche-Comté did not become part of France until 1674. Prior to this year, we count it as part of Spain (i.e. since 1516; see notes to Appendix Table B.7). See https://es.wikipedia.org/wiki/Historia_del_Franco-Condado#El_condado_de_Borgo%C3%B1a (Access date: April 25, 2023). In the regression analysis, we treat Alsace (Austria) and Alsace (France) as distinct territorial units, turning to missing all observations for Alsace (France) before 1633, and turning to missing those for Alsace (Austria) from 1633 onward. We handle Artois and Franche-Comté in a similar manner.

(4) France briefly ceded Burgundy to Austria in 1526. Since this shift in sovereignty endured less than one year, we do not count it. See https://en.wikipedia.org/wiki/Battle_of_Pavia (Access date: April 25, 2023).

(5) Brittany did not become part of France until 1532, while Armagnac and Béarn did not become part of it until 1589, and Bresse and Bugey did not become part of it until 1601. For Brittany, see https://fr.wikipedia.org/wiki/Union_de_la_Bretagne_%C3%A0_la_France (Access date: April 25, 2023). For Armagnac, Béarn, Bresse, and Bugey, see https://en.wikipedia.org/wiki/Territorial_evolution_of_France (Access date: April 25, 2023). In the regression analysis, we thus turn to missing all observations for these territorial units prior to these respective years.

(6) We exclude 5 territorial units (Berry, Maine, Orléanais, Périgord, Orleanais, Touraine) from the regression analysis, since we were unable to identify the specific years of absolutist reform for them.

B.5 Portugal

Monarchy	*Territorial unit*	*Years of Reform Efforts*
Portugal	Kingdom of Portugal	1580 First indirect royal borrowing, using Lisbon only (Macedo et al. 2001: 196) 1637 Spanish efforts to decree taxes lead to Evora riots 1704 decreed tax begins period of absolutism (Macedo et al. 2001: 198, n. 24, and ff.)

Notes:

(1) Portugal coded based on Macedo, Ferreira da Silva, and Martins de Sousa (2001), Burg (2014), and Freire Costa, Münch-Miranda, and Nogues-Marco (2021).

B.6 Prussia

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
Prussia	County of Cleves	Did not become part of Prussia until 1614 1655 tax levied by decree 1660 Formation of fiscal chamber (general war commissariat) 1713 Formation of fiscal chamber (general finance directory)
	County of Mark	Did not become part of Prussia until 1614 1653 Formation of fiscal chamber (*amtskammer*) 1655 tax levied by decree 1660 Formation of fiscal chamber (general war commissariat) 1713 Formation of fiscal chamber (general finance directory)
	County of Ravensberg	Did not become part of Prussia until 1614 1660 Formation of fiscal chamber (general war commissariat) 1713 Formation of fiscal chamber (general finance directory)
	Duchy of Prussia	Did not become part of Prussia until 1618 1660 Formation of fiscal chamber (general war commissariat) 1661 Formation of fiscal chamber (*amtskammer*) 1662 leader of Estates arrested 1713 Formation of fiscal chamber (general finance directory)
	Margraviate of Brandenburg	1549 First instance of indirect royal borrowing 1577 Formation of fiscal chamber (*amtskammer*) 1630 Formation of fiscal chamber (war council) 1652 Formation of fiscal chamber (*amtskammer*) 1655 tax levied by decree 1660 Formation of fiscal chamber (general war commissariat) 1713 Formation of fiscal chamber (general finance directory)

Notes:

(1) Prussian territories are coded based on Bonney (1991: 321-2) and Burg (2014). Indirect royal borrowing is coded based on Carsten (1954: 166-7). Fiscal chambers are coded based on Freidrich (2012: 27-8, Appendix 2) and Cantoni, Mohr, and Weigand (2024: Table A.1).

(2) The County of Cleves, the County of Mark, and the County of Ravensberg did not become part of Prussia until 1614 (Hayden 1973: 22), while the Duchy of Prussia did not become part of it until 1618 (Friedrich 2012: 50, 84). In the regression analysis, we thus turn to missing all observations for these territorial units prior to these respective years.

(3) We do not include the Principality of Neuchâtel in the baseline regression analysis, as it was only ruled by Prussia between 1708 and 1806. See https://en.wikipedia.org/wiki/Canton_of_Neuch%C3%A2tel (Access date: October 17, 2023). For robustness, however, we add the fiscal reform data for this territorial unit. The main results continue to hold (Appendix Table A.10).

B.7 Spain

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
Crown of Aragon	County of Barcelona (Principality of Catalonia)	1626-52 Catalonian rebellion; decreed tax withdrawn and rights reaffirmed 1632 last meeting of Catalan Corts 1716 abolition of Catalan Corts
	Kingdom of Aragon	1683 last meeting of Estates 1707 abolition of Estates
	Kingdom of Majorca	Represented in Catalan Corts 1632 last meeting of Catalan Corts 1716 abolition of Catalan Corts
	Kingdom of Naples	1520 first instance of indirect royal borrowing (Stasavage 2011: 31) 1642 Estates suspended
	Kingdom of Sardinia	1707 power of the purse removed (Toda I Güell 2009: 15)
	Kingdom of Valencia	1645 last meeting of Estates 1707 abolition of Estates
Crown of Castile	Extremadura	Represented in Castilian Cortes 1520-21 Comuneros rebellion; decreed tax withdrawn and rights reaffirmed 1619-24 (temporary) appropriations (Jago 1981: 316-7, 320) 1631 decreed tax (gabelle); tax withdrawn 1655 monarch wrested control of administration of millones from town officials 1665 last meeting of Estates 1707 abolition of Estates
	Kingdom of Castile	1520-21 Comuneros rebellion; decreed tax withdrawn and rights reaffirmed 1619-24 (temporary) appropriations (Jago 1981: 316-7, 320) 1631 decreed tax (gabelle); tax withdrawn 1655 monarch wrested control of administration of millones from town officials 1665 last meeting of Estates 1707 abolition of Estates
	Kingdom of Córdoba	Represented in Castilian Cortes 1520-21 Comuneros rebellion; decreed tax withdrawn and rights reaffirmed 1619-24 (temporary) appropriations (Jago 1981: 316-7, 320) 1631 decreed tax (gabelle); tax withdrawn Anti-superintendant uprising 1647-52 (Jago 1981: 324) 1655 monarch wrested control of administration of millones from town officials 1665 last meeting of Estates 1707 abolition of Estates
	Kingdom of Galicia	1631 decreed tax (gabelle); tax withdrawn 1655 monarch wrested control of administration of millones from town officials Survived through 1800 with tax rights intact (De Artaza 1998)

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
	Kingdom of Granada	Represented in Castilian Cortes 1520-21 Comuneros rebellion; decreed tax withdrawn and rights reaffirmed 1619-24 (temporary) appropriations (Jago 1981: 316-7, 320) 1631 decreed tax (gabelle); tax withdrawn Anti-superintendant uprising 1647-52 (Jago 1981: 324) 1655 monarch wrested control of administration of millones from town officials 1665 last meeting of Estates 1707 abolition of Estates
	Kingdom of Jaén	Represented in Castilian Cortes 1520-21 Comuneros rebellion; decreed tax withdrawn and rights reaffirmed 1619-24 (temporary) appropriations (Jago 1981: 316-7, 320) 1631 decreed tax (gabelle); tax withdrawn 1655 monarch wrested control of administration of millones from town officials 1665 last meeting of Estates 1707 abolition of Estates
	Kingdom of Leon	Represented in Castilian Cortes 1520-21 Comuneros rebellion; decreed tax withdrawn and rights reaffirmed 1619-24 (temporary) appropriations (Jago 1981: 316-7, 320) 1631 decreed tax (gabelle); tax withdrawn 1655 monarch wrested control of administration of millones from town officials 1665 last meeting of Estates 1707 abolition of Estates
	Kingdom of Murcia	Represented in Castilian Cortes 1520-21 Comuneros rebellion; decreed tax withdrawn and rights reaffirmed 1619-24 (temporary) appropriations (Jago 1981: 316-7, 320) 1631 decreed tax (gabelle); tax withdrawn 1655 monarch wrested control of administration of millones from town officials 1665 last meeting of Estates 1707 abolition of Estates
	Kingdom of Navarre	1631 Vizcaya salt tax rebellion; tax withdrawn and rights reaffirmed 1655 monarch wrested control of administration of millones from town officials Survived through 1800 with tax rights intact (Bonney 1991: 324)

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
	Kingdom of Sevilla	Represented in Castilian Cortes 1520-21 Comuneros rebellion; decreed tax withdrawn and rights reaffirmed 1619-24 (temporary) appropriations (Jago 1981: 316-7, 320) 1631 decreed tax (gabelle); tax withdrawn Anti-superintendant uprising 1647-52 (Jago 1981: 324) 1655 monarch wrested control of administration of millones from town officials 1707 abolition of Estates
	Kingdom of Toledo	Represented in Castilian Cortes 1520-21 Comuneros rebellion; decreed tax withdrawn and rights reaffirmed 1619-24 (temporary) appropriations (Jago 1981: 316-7, 320) 1631 decreed tax (gabelle); tax withdrawn 1655 monarch wrested control of administration of millones from town officials 1665 last meeting of Estates 1707 abolition of Estates
	Lordship of Biscay	1631 decreed tax (gabelle); tax withdrawn 1655 monarch wrested control of administration of millones from town officials Survived through 1800 with tax rights intact (Orella Unzué 1989)
	Principality of Asturias	1631 decreed tax (gabelle); tax withdrawn 1655 monarch wrested control of administration of millones from town officials 1717 decree to centralize tax collection, repealed in 1727 Survived through 1800 with tax rights intact
	Province of Alava	1631 decreed tax (gabelle); tax withdrawn 1655 monarch wrested control of administration of millones from town officials Survived through 1800 with tax rights intact (Orella Unzué 1989)
	Province of Gipuzkoa	1631 decreed tax (gabelle); tax withdrawn 1655 monarch wrested control of administration of millones from town officials Survived through 1800 with tax rights intact (Orella Unzué 1989)
Northern Netherlands (Dutch Republic)	County of Holland	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion 1579 gained spending power Declared independence in 1581
	County of Zeeland	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1543 export duty resistance 1567 decreed tax rebellion 1579 gained spending power Declared independence in 1581

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
	Duchy of Guelders	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion 1579 gained spending power Declared independence in 1581
	Lordship of Frisia	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion 1579 gained spending power Declared independence in 1581
	Lordship of Groningen	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion 1579 gained spending power Declared independence in 1581
	Lordship of Overijssel	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion 1579 gained spending power Declared independence in 1581
	Lordship of Utrecht	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion 1579 gained spending power Declared independence in 1581
Southern Netherlands	Artois	Part of the Southern Netherlands until 1659 1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion; although violated during the rebellion, tax powers survive
	County of Flanders	1536 Ghent revolt; crushed and city constitution revoked by emperor 1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion; although violated during the rebellion, tax powers survive 1577 decreed tax (Bonney 1991); although violated during the rebellion, tax powers survive.
	County of Hainaut	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion; although violated during the rebellion, tax powers survive
	County of Namur	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion; although violated during the rebellion, tax powers survive
	Duchy of Brabant	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion; although violated during the rebellion, tax powers survive

Monarchy	*Territorial Unit*	*Years of Reform Efforts*
	Duchy of Limburg	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion; although violated during the rebellion, tax powers survive
	Duchy of Luxembourg	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion; although violated during the rebellion, tax powers survive Absolutism established post-1681 (Cauchies 2013: 678, n. 22) French Pays d'imposition 1681-97; powers never recovered
	Franche-Comté	Part of the Southern Netherlands between 1516-1674
	Lordship of Mechelen	1542 first indirect royal borrowing (Gelderblom and Jonker 2013: 177) 1567 decreed tax rebellion; although violated during the rebellion, tax powers survive

Notes:

(1) The first column in the table above identifies the four groups of provinces administered as units under the Spanish monarchy circa 1500. For the Low Countries, all seventeen provinces were treated by the monarchy as a single group, but it is convenient to divide them up based on the outcome of the Dutch War of Independence.
(2) Spanish Habsburgs' territories are coded based on Jago (1981), Orella Unzué (1989), De Artaza (1998), Burg (2014), www.britannica.com/place/Italy/The-Kingdom-of-Naples (Access date: March 18, 2021), and es.wikipedia.org/wiki/Junta_General_del_Principado_de_Asturias_(Antiguo_R%C3%A9gimen) (Access date: March 18, 2021).
(3) Northern Netherlands' territories are coded based on Gelderblom and Jonker (2013), Burg (2014), and Fritschy (2017). Given their declaration of independence from Spain in 1581 (and the formation of the Dutch Republic), in the regression analysis we turn to missing all observations for these territorial units from this year onward.
(4) Southern Netherlands' territories are coded based on Cauchies (2013), Gelderblom and Jonker (2013), and Burg (2014).
(5) We do not include the Kingdom of Sicily, as its monarch had already secured unilateral control of a substantial amount of taxation prior to 1500 such that it was no longer a pure crown-and-parliament territory by the start of our sample period. See Koenigsberger (1969).
(6) We count Artois as part of the Southern Netherlands until 1659, when it then became part of France. See https://en.wikipedia.org/wiki/County_of_Artois (Access date: April 25, 2023). We count Franche-Comté as part of the Southern Netherlands between 1516 and 1674, when it then became part of France. We do not find evidence that Franche-Comté participated in any absolutist reforms while under Spanish rule. See https://es.wikipedia.org/wiki/Historia_del_Franco-Condado#El_condado_de_Borgo%C3%B1a (Access date: April 25, 2023). In the regression analysis, we treat Artois (Spain) and Artois (France) as distinct territorial units, turning to missing all observations for Artois (France) before 1659, and turning to missing those for Artois (Spain) from 1659 onward. We handle Franche-Comté in a similar manner.
(7) Prior to the start of our period of study (1500-1800), indirect royal borrowing by Iberian monarchs had begun in the following territories: Castile (in 1489; Stasavage 2011: 31); Catalonia (in the 1350s; Ortí, Sánchez, and Turull 1996: 128-9); Aragon and Valencia (both before 1500; Abella Samitier 2009).
(8) Given that the 1619-24 appropriations in Castile were temporary, in our regression analysis we do not count them as parliamentary reforms.

B.8 Sweden

Monarchy	*Territorial unit*	*Years of Reform Efforts*
Sweden	Kingdom of Sweden	1624 reform (Jespersen 2000: 124) 1626 decreed tax resisted 1634-35 constitutional reform (Jespersen 2000) 1680 absolutism accepted by Estates

Notes:

(1) Sweden coded based on Jespersen (2000) and Burg (2014).
(2) The first statutorily funded debt in Sweden occurred with formation of national debt directorate in 1778 (Winton 2012: 434-5).
(3) We do not include the County Palatine of Zweibrücken in the baseline regression analysis, as it was only ruled by Sweden between 1654 and 1720. See https://en.wikipedia.org/wiki/Palatine_Zweibr%C3%BCcken (Access date: October 17, 2023.) We do not include the Duchy of Hesse-Kassel, as it was only ruled by Sweden between 1730 and 1751. See https://en.wikipedia.org/wiki/Political_unions_involving_Sweden (Access date: October 17, 2023.) We do not include the Grand Duchy of Lithuania, as it was only ruled by Sweden between 1594 and 1599. See https://en.wikipedia.org/wiki/Polish%E2%80%93Swedish_union (Access date: October 17, 2023.) We do not include the Kingdom of Poland, as it was only ruled by Sweden between 1588 and 1599. See https://en.wikipedia.org/wiki/Political_unions_involving_Sweden (Access date: October 17, 2023.) For robustness, however, we add the fiscal reform data for each of these territorial units. The main results continue to hold (Appendix Table A.10).

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Appendix C: War Participation Data

This appendix provides additional details about the war participation data. For general information, see Section 4.2 of the main text.

Given that members of the House of Habsburg were both the archdukes of Austria and the emperors of the Holy Roman Empire for the duration of the 1500-1800 period, we code conflicts involving the Holy Roman Empire for Austria.

Due to the Iberian Union, Portugal takes the same war participation codings as Spain from 1580 to 1640.

Due to the Act of Union in 1707, Scotland takes the same war participation codings as England from this year onward.

For the Thirty Years War (1618-48), we generally code participation by the year of entrance according to Clodfelter (2002) (i.e. Austria in 1618; Spain in 1622; Denmark in 1625; Sweden in 1630). While France did not enter until 1635 according to Clodfelter, Wedgewood (1939) argues that the 1618-34 portion of this conflict was a proxy war between the Austro-Spanish Habsburgs and the French Bourbons. We thus code France's participation for the same years as Austria (i.e. 1618-48).

We focus on internal conflicts that Clodfelter (2002) labels as "wars" in the title of his account or that he explicitly describes as "civil wars" in his text. As they suggest smaller magnitudes, internal conflicts labeled by Clodfelter as "coups," "insurrections," "massacres," "rebellions," "riots," "revolts," "revolutions," or "uprisings" are not included.

Table C.1: Major Interstate and Intrastate Wars

Monarchy	War Name	Years	Interstate?	Intrastate?	Winner?
Austria	First Italian War (Charles V vs Francis I)	1521-6	Y	N	Y
Austria	Fourth Italian War (Charles V vs Francis I)	1542-4	Y	N	Draw
Austria	Habsburg-Valois War	1547-59	Y	N	Y
Austria	Thirty Years War	1618-48	Y	N	N
Austria	Dutch War	1672-9	Y	N	N
Austria	Habsburg-Ottoman War	1683-99	Y	N	Y
Austria	War of the Spanish Succession	1701-14	Y	N	Y
Austria	War of the Austrian Succession	1740-8	Y	N	Draw
Austria	Seven Years War	1756-63	Y	N	N
Austria	War of the First Coalition	1792-7	Y	N	N
Austria	War of the Second Coalition	1798-1801	Y	N	N
Denmark	Thirty Years War	1625-29	Y	N	N
Denmark	Dutch War	1672-9	Y	N	N
Denmark	Great Northern War	1700-21	Y	N	Y
England	War of the Holy League	1510-14	Y	N	Draw
England	First Italian War of Francis I	1515-16	Y	N	Y
England	First Italian War (Charles V vs Francis I)	1521-6	Y	N	Y
England	Fourth Italian War (Charles V vs Francis I)	1542-4	Y	N	Draw
England	Habsburg-Valois War	1547-59	Y	N	Y
England	First English Civil War	1642-46	N	Y	Parliament
England	First Anglo-Dutch War	1652-4	Y	N	Y
England	Second Anglo-Dutch War	1665-7	Y	N	N
England	Dutch War	1672-9	Y	N	Y
England	War of the Grand Alliance	1688-97	Y	N	Draw
England	War of the Spanish Succession	1701-14	Y	N	Y
England	War of the Austrian Succession	1740-8	Y	N	Draw
England	French and Indian War	1754-63	Y	N	Y
England	Seven Years War	1756-63	Y	N	Y
England	War of the American Revolution	1775-83	Y	N	N
England	War of the First Coalition	1792-7	Y	N	N
England	Egyptian Campaign	1798-1801	Y	N	Y
England	War of the Second Coalition	1798-1801	Y	N	N
France	Italian War of Louis XII	1499-1504	Y	N	Draw
France	War of the Holy League	1510-14	Y	N	Draw
France	First Italian War of Francis I	1515-16	Y	N	Y

Monarchy	War Name	Years	Interstate?	Intrastate?	Winner?
France	First Italian War (Charles V vs Francis I)	1521-6	Y	N	N
France	Fourth Italian War (Charles V vs Francis I)	1542-4	Y	N	Draw
France	Habsburg-Valois War	1547-59	Y	N	N
France	First War of Religion	1562-63	N	Y	Draw
France	Third War of Religion	1568-70	N	Y	Draw
France	Eighth War of Religion	1585-89	N	Y	Draw
France	Ninth War of Religion	1589-98	N	Y	Huguenots
France	Thirty Years War	1618-48	Y	N	Y
France	First Anglo-Dutch War	1652-4	Y	N	N
France	Second Anglo-Dutch War	1665-7	Y	N	Y
France	Dutch War	1672-9	Y	N	Y
France	War of the Grand Alliance	1688-97	Y	N	Draw
France	War of the Spanish Succession	1701-14	Y	N	N
France	War of the Austrian Succession	1740-8	Y	N	Draw
France	French and Indian War	1754-63	Y	N	N
France	Seven Years War	1756-63	Y	N	N
France	War of the American Revolution	1775-83	Y	N	Y
France	War of the First Coalition	1792-7	Y	N	Y
France	Egyptian Campaign	1798-1801	Y	N	N
France	War of the Second Coalition	1798-1801	Y	N	Y
Portugal	Thirty Years War (under Iberian Union)	1622-40	Y	N	N
Portugal	War of the Grand Alliance	1688-97	Y	N	Draw
Portugal	War of the Spanish Succession	1701-14	Y	N	Y
Portugal	Seven Years War	1756-63	Y	N	Y
Portugal	War of the First Coalition	1792-7	Y	N	N
Prussia	Dutch War	1672-9	Y	N	N
Prussia	Great Northern War	1700-21	Y	N	Y
Prussia	War of the Spanish Succession	1701-14	Y	N	Y
Prussia	War of the Austrian Succession	1740-8	Y	N	Draw
Prussia	Seven Years War	1756-63	Y	N	Y
Prussia	War of the First Coalition	1792-7	Y	N	N
Prussia	War of the Second Coalition	1798-1801	Y	N	N
Scotland	No major war participation before Act of Union with England in 1707				
Spain	Italian War of Louis XII	1499-1504	Y	N	Draw
Spain	War of the Holy League	1510-14	Y	N	Draw
Spain	First Italian War of Francis I	1515-16	Y	N	N

Monarchy	War Name	Years	Interstate?	Intrastate?	Winner?
Spain	First Italian War (Charles V vs Francis I)	1521-6	Y	N	Y
Spain	Habsburg-Valois War	1547-59	Y	N	Y
Spain	Dutch War of Independence	1568-1609	N	Y	United Provs
Spain	Thirty Years War	1622-48	Y	N	N
Spain	Dutch War	1672-9	Y	N	N
Spain	War of the Grand Alliance	1688-97	Y	N	Draw
Spain	War of the Spanish Succession	1701-14	Y	N	N
Spain	War of the Austrian Succession	1740-8	Y	N	Draw
Spain	Seven Years War	1756-63	Y	N	N
Spain	War of the American Revolution	1775-83	Y	N	Y
Spain	War of the First Coalition	1792-7	Y	N	N
Sweden	Thirty Years War	1630-48	Y	N	Y
Sweden	Dutch War	1672-9	Y	N	Y
Sweden	Great Northern War	1700-21	Y	N	N
Sweden	Seven Years War	1756-63	Y	N	N

Notes: See Section 4.2 of the main text and Appendix C for details about data sources and construction methods.

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Appendix D: Random Narratives

In what follows, we apply the random narrative approach in Fearon and Laitin (2008). We evaluate three points for each of three wars chosen at random from the period in which the sample polity under study still retained a crown-and-parliament structure: (1) whether the crown made efforts to expand royal tax authority in anticipation of (or during) the war in question; (2) whether the crown sought such reforms to empower it to take decisive action and/or to avoid fiscal gridlock; and (3) whether any other reasons were given for the crown's efforts to reduce parliament's tax authority besides war pressures.

D.1 Hapsburg-Ottoman War (1683-99; Austria)

(1) The Holy Roman emperor (then also the archduke of Austria) sought to implement new types of taxes to help finance the war:

"During the Great Turkish War at the end of the seventeenth century (1683–1699), the establishment of a 'general excise' ('*Universal-Akzise*') was considered for all Habsburg lands." (Rauscher 2017: 7)

(2) The emperor also sought structural reforms:

In the later years (and immediate aftermath) of this war, "…the Imperial government saw opportunities fundamentally to re-organize the allocation of the tax burden among the Habsburg lands. In spite of Hungarian resistance, the Imperial Court…tried to integrate the Kingdom of Hungary into a 'total system' ('*Gesamtsystem*') of the Habsburg monarchy concerning the financing of the military" (Rauscher 2017: 10). This effort helped spark Rakoczi's Rebellion, leading the government to abandon their plans and reaffirm Hungary's traditional status.

(3) The rationale of this "total system" as described in (2) above was to overcome the local veto that prevented the Imperial government from extracting as much as they would have liked from the Kingdom of Hungary (Rauscher 2017: 10). Also see (1) above.

D.2 First Italian War between Charles V and Francis I (1521-6; France)

(1) The French crown sought new revenues by dispossessing Charles III, the Duke of Bourbon. (Source: https://en.wikipedia.org/wiki/Italian_War_of_1521%E2%80%931526; Access date: February 1, 2022)

(2) The French crown sought structural reforms:

"In the midst of a war with Charles V, Francis I was stung by a financial crisis. He responded by purging the *receveurs* and creating the central treasury to control the disbursement of funds." (White 2001: 85)

"The abysmal state of royal credit led to the creation of a new debt instrument, the *rentes sur l'Hotel de Ville de Paris*, loans collateralized by specific taxes. The king assigned a source of revenue to the Provost of the Merchants and Aldermen of Paris; in turn, the *Hotel de Ville* (city hall) created municipal *rentes* of equivalent value that were sold to the buyer." (White 2001: 85)

(3) The reason for these reforms – creating a fiscal chamber and introducing indirect royal borrowing – was to better finance this war. (White 2001: 85)

D.3 Habsburg-Valois War (1547-59; France)

(1) Upon his accession in 1547, Henry II raised existing tax rates, leading to tax revolts which the French crown brutally suppressed.

"À l'instar de son prédécesseur, Henri II doit faire face à d'importants besoins financiers et suit l'exemple de François I en recourant à l'augmentation des impôts existants (tentatives d'uniformisation de la gabelle, création du taillon et application de nouvelles crues de taille, développement des taxes sur les importations). Les mêmes causes produisant des effets similaires, Henri II doit faire face, comme François I à La Rochelle en 1542, à une révolte paysanne, la jacquerie des Pitauds, qui contamine les villes, dont Bordeaux. Henri II confie la répression au connétable Anne de Montmorency. La réaction de Montmorency est brutale: la cité perd ses privilèges, est désarmée, doit verser une amende de 200.000 livres, voit son parlement suspendu. 140 personnes sont condamnées à mort. La répression s'étend ensuite dans les campagnes d'alentour où l'on pend les meneurs. En 1549, Henri II amnistie la cité." (Source: https://fr.wikipedia.org/wiki/Henri_II_(roi_de_France)#Une_administration_nouvelle; Access date: February 1, 2022)

(2) In addition to raising existing tax rates, Henry II also introduced structural reforms. These reforms did not extend the crown's ability to levy taxes but were intended to improve the efficiency of the fiscal chamber created by his father (cf. Cantoni, Mohr, and Weigand 2024).

"Dès le début de son règne, il met en place un véritable système ministériel, généralisant le gouvernement de son père. En 1547, l'administration est supervisée par quatre secrétaires d'État, choisis dans la compagnie des notaires-secrétaires du roi. Ils sont chargés des commandements du roi et plus particulièrement de l'expédition des affaires financières. À l'origine chargés d'un secteur topographique du royaume, ils prennent en 1557 le titre de secrétaire d'État et des finances du roi. Les registres du Trésor royal sont confiés à un contrôleur général." (Source: https://fr.wikipedia.org/wiki/Henri_II_(roi_de_France)#Une_administration_nouvelle; Access date: February 1, 2022)

(3) The reason for these reforms was in good part to finance on-going wars. (Source: https://fr.wikipedia.org/wiki/Henri_II_(roi_de_France)#Une_administration_nouvelle; Access date: February 1, 2022)

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