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RESEARCH ARTICLE

The fundamental Coase of development: property rights foundations of the effective state

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Abstract

This paper identifies *political property rights* and *jurisdictional rivalry* as two important mechanisms that drive political and economic development. After developing a general framework to explain relative performance in the 'market for governance', we argue that Western Europe during the High Middle Ages presented initial conditions conducive to the development of effective states. We extend the framework by analyzing city-state governance in Renaissance Italy, as well as public finance practices in early modern Germany. We conclude by discussing the implications of our argument for the literature on state capacity and economic development. The takeaway is that well-aligned political property rights and competition in the provision of governance services can promote the protective and productive state while forestalling the predatory state.

Key words: Political property rights; polycentricity; state capacity; Western European development

1. Introduction

In a book that will influence scholarly conversations for some time to come, Acemoglu and Robinson (2019) argue that countries can only become wealthy if their governments are simultaneously strong and responsible. When Leviathan is absent, they argue, societies descend into tribal conflict. When Leviathan is despotic, the centralized state crushes economic initiative. Only when Leviathan is shackled can societies escape the Malthusian trap. But who, or what, does the shackling? Acemoglu and Robinson's answer is the institutions of civil society, which serve as a contravening source of authority. We find much of value in their thesis. We also believe there is more to the story. Focusing on the Western nations since the High Middle Ages, we pose our own answer as to how societies can build a protective and productive state while avoiding a predatory state (cf. Buchanan, 2000). We suggest the twin mechanisms of *political property rights* and *jurisdictional competition* can help achieve this. We offer these mechanisms as one way to solve the ultimate political-economic problem posed by Acemoglu and Robinson. In other words, Acemoglu and Robinson have identified a problem that all societies must solve to become wealthy. We argue for one specific way to solve that problem, as well as offer historical evidence of the solution at work.

Related work has identified the 'effective state' as necessary for sustained economic growth (Besley and Persson, 2010; Johnson and Koyama, 2017).[1] Most of this work falls within one of the following categories: (1) identifying the causal effect of state capacity on long-run economic performance (Dincecco and Prado, 2012); (2) identifying the determinants of different levels of state capacity across time and space (Besley and Persson, 2009); and (3) historical case studies of the evolution of effective

[1]What this literature calls the 'effective state' is, we believe, mostly the same as the conjunction of the protective and productive state in Buchanan's (2000) typology.

states (or lack thereof) in different contexts (Acemoglu *et al.*, 2016; Grassi and Memoli, 2016; Muralidharan *et al.*, 2016). However, this literature lacks a theoretical framework capable of explaining the evolution of the (Western European) state since the decline of feudalism. In particular, the literature has failed to address the *distributional* consequences of the rise of the modern state. In other words, why did political elites not use state capacity to enrich themselves at the expense of the rest of society? As in countless other societies, this would have made elites rich, while everyone else stayed poor. Although some predation did continue, what instead resulted was a *generalized* increase in living standards. Elites got richer over time, but everyone else got richer, too. In the European experience, rulers' investment in state capacity came about alongside an increase in the supply of public goods and generalized enforcement of property rights and contracts.[2]

What explains these facts? We offer a theory that incorporates two fundamental mechanisms from the 'market for governance'.[3] The first is political property rights (Salter, 2015). These refer to control over the use of political assets, and the stream of returns generated therefrom.[4] The second is jurisdictional competition. Combining the two, we develop a framework to study governance institutions, their relationship with economic performance, and their distributional effects.

Our theory can explain why some countries experienced a generalized increase in living standards following the rise of strong centralized states (Dincecco, 2015; Onis, 1991), whereas others saw only the accumulation of wealth by the ruling class (Acemoglu and Robinson, 2012). The development of state capacity in the West resulted in economic success because it took place against a backdrop of well-aligned political property rights among competing 'realm-owners'. The context within which state capacity develops plays a fundamental role in determining its form, function, and trajectory. One cannot understand the historical development of the effective state in Europe if one ignores the institutional context within which European rulers invested in state capacity. Even more fundamentally, without such context, one cannot understand why this investment took the form that it did. The development of the protective–productive state in Western Europe was the result of the peculiar governance structure that characterized the region during the High Middle Ages.[5] This was a polycentric governance structure (Aligica and Tarko, 2013; Ostrom, 2009; Thrasher and Vallier, 2018), in which competition for a mobile tax base constituted a *de facto* constraint on the ruler's predatory ambitions (North, 1979).[6] Competition among governance providers, in turn, created a sociopolitical 'space' in which commercial society could flourish (Cox, 2017; Lopez, 1976). The combined effect of the effective allocation of residual claimancy across different political actors and the presence of jurisdictionally competitive pressures led to market-like institutions that facilitated informational feedback and aligned incentives. The result was rising productivity rather than devolution to predation or rent-seeking (Salter, 2015). Against this backdrop, the growth of state capacity resulted in the rise of the effective state.[7]

Our argument relates to the idea of state capacity in two ways. First, we question the usefulness of state capacity as an explanation for long-run growth. If state capacity takes radically different forms depending on the circumstances within which it develops, looking at it in isolation will not much

[2]See De Soto (2000) for the role of secure property rights for economic development.

[3]We use 'market for governance' to refer to the supply and demand for public services, such as the enforcement of property rights, the provision of public goods, and the supply of administrative services within a given territory.

[4]For example, a region or territory would be a political asset if the sovereign can extract a stream of tax revenues from it, or some other services, such as the supply of men for military defense. Political property rights are, therefore, a subset of economic property rights as defined by Allen (1991).

[5]Throughout this paper, we use the phrase 'Western Europe' to refer to the territories of continental Europe to the West of today's Poland, Slovakia, Hungary, and Slovenia. The latter is a somewhat arbitrary line, but it historically coincides with the Eastern border of the Frankish empire at the death of Charlemagne in 814.

[6]This point shows that there is an essential distinction between the technological and competitive dimensions of state capacity. A state may very well have the technological ability to predate, yet not act in a predatory manner in equilibrium, due to the fear of losing taxpayers to its jurisdictional competitors (Piano, 2019).

[7]This is broadly consistent with the growing realization of the importance of historical path dependencies in political-economic development (Nunn, 2009; Pierson, 2000).

help us understand economic and political development across time or space. As a result, we should become more skeptical of claims that investments in state capacity are the solution to the problem of development in Least Developed Countries. Thus, we see our main contribution as a corrective of a growing body of literature in the social sciences that focuses on state capacity to the exclusion of other institutional factors.

Second, to isolate the social-scientific mechanisms that are actually 'doing the work', we dehomogenize state-capacity through the 'political property rights' framework developed by Salter (2015) and expanded, among others, by Young (2016), Murtazashvili and Murtazashvili (2019), and Piano (2019). We also revive the classic view of the role of inter-jurisdictional competition in the development of Western Europe. Both approaches take inspiration from the work of Barzel (2002) and Libecap (1993). Our analysis also complements existing studies on the role of institutions as determinants of economic development (Acemoglu and Robinson, 2019; DeLong and Shleifer, 1993; Nunn, 2009). Similar to Acemoglu and Robinson (2012), we wish to explain why societies diverge in their trajectory of political and economic development, with some adopting 'inclusive institutions' and others 'extractive ones'.[8]

Our framework shares some similarities with that of North *et al.* (2009). Both focus on how property rights affect the interaction between elites and subjects and between members of the elites. For example, North *et al.* (2009) emphasize that the extension of the rule of law outside of the ruling coalition will only occur when this move is consistent with the interest of its members. They also make the rise of institutions that reduce the costs of organizing political exchange a key part of their story. This led to more robust political property rights (although they do not use that terminology). Overall, the most important agreement between our framework and theirs is that political institutions exist to minimize losses from violence in society. However, our framework differs from theirs in two critical respects. First, beliefs and ideology play a significant role in their story, whereas we mostly abstract from them. Second, inter-jurisdictional competition is central to our argument and only marginal to theirs. Although they recognize that jurisdictional competition between open-access orders helps to keep them from 'regressing' to natural states (North *et al.*, 2009), we claim that jurisdictional competition was crucial to the emergence of open-access orders in the first place.

The core of our argument is the application of Coase's (1960) insights into non-market decision making, which explains our paper's title. Building on the literature that extends transaction cost analysis to the study of political institutions, we conceive effective states as bundles of political property rights that align the interests of rulers with the welfare of the ruled.[9] Well-aligned political property rights (e.g. Salter and Young, 2018, 2019) give rulers an incentive to act in a manner conducive to broad-based economic prosperity, as well as the information required to do so.[10] The remainder of our argument is organized as follows. Section 2 develops the theoretical framework. Sections 3, 4, and 5 provide analytical narratives of three historical case studies of Medieval Western Europe, Renaissance Italian city-states, and Early Modern Germany, respectively. Section 6 concludes with a brief discussion of political property rights, state capacity, and inclusive institutions.

2. Rivalry and residual claimancy in the market for governance

The notion of economic property rights refers to the ability of individuals to dispose freely of the services of their assets, whether through consumption or exchange (Allen, 1991). Social scientists usually employ this notion when analyzing market behavior and institutions, although it has been extended to the study of non-market contexts also.[11] Property rights are harder to enforce in political exchanges

[8]Although Acemoglu and Robinson's (2012) framework provides valuable insights into the feedback mechanism between political and economic institutions, their focus is on power asymmetries between elites and non-elites. Our focus is on the alignment of incentives between rulers and subjects and the competition between rulers for taxing the subjects' product.

[9]See, for example, Acemoglu (2003) and Munger (2019).

[10]Political property rights affect the incentives of all members of society, not just rulers. To qualify as *well-aligned*, political property rights must provide incentives for everyone to foster wealth-creation.

[11]See, among others, Allen (1995), Cheung (1974), and Shepsle and Weingast (1987).

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(Acemoglu, 2003; Barzel, 2002). Nevertheless, the control of political assets (e.g. a committee chair, an elected office, an army, and a territory) is desirable, and political agents will use valuable resources to achieve it (Salter, 2015).

Similar to economic property rights, political property rights will be effectively aligned whenever residual claimancy over the services of an asset (or on the different attributes of the asset) is allocated to that individual or group whose actions have the most significant effect on its value.[12] Political markets across time and space have developed all sorts of institutions and mechanisms to facilitate interactions between political agents, such as the exchange of hostages in Medieval Europe, the venality of public offices, and the committee system in the US Congress.[13]

To be effective, an allocation of political property rights must generate incentives to maximize the value of political assets, net of transaction costs. When political property rights are not so aligned, private and social optimality may not coincide. This is best exemplified by Olson's comparison of roving and stationary bandits (Olson, 1993). A roving bandit moves from territory to territory, taking all it can from each and moving on to the next. A stationary bandit rules over a territory and defends it from other bandits' attacks.[14] The two bandits differ in the degree to which they benefit from reducing their plundering of the territory. Roving bandits gain nothing from this because everything they do not take other bandits will. Hence roving bandits loot all they can, and, in response, the villagers reduce their production efforts. Stationary bandits benefit from reducing predation at the margin because what they do not take villagers get to keep, which increases their willingness to produce in the first place. Thus, stationary bandits can secure for themselves a more sizeable stream of payments throughout time. The lesson of the story is that strengthening the bandit's residual claimancy over the realm reduces the value of wealth dissipated in equilibrium.[15]

Even in the presence of well-allocated political property rights, humans are bound to make some mistakes. In the context of politics, fallible actors will often implement policies that are incompatible with the maximization of the value of the realm.[16] Evolutionary forces can reduce the effects of misguided policies and suboptimal strategies. As an example, in the market, firm owners may not know precisely the marginal cost of producing q^*, but only those firms whose price approximates the marginal cost will survive, whereas the system filters out all others (Albrecht *et al*., 2018; Alchian, 1950).[17]

Realm owners are likely to be more prone to make mistakes than market entrepreneurs.[18] The goods and services they provide tend to have public good-like features and are allocated according to a logic other than that of markets. The absence of markets in politics prevents one from using market-generated prices as guideposts for ascertaining best practices (Hayek, 1945). However, rivalry between jurisdictions may approximate the result of standard markets (Tiebout, 1956). Realm owners

[12]See Barzel (1997: 7): 'The maximization of the value of an asset … involves the ownership or ownership pattern that can most effectively constrain uncompensated exploitation'.

[13]Our approach suggests that all political institutions, including the rule of law, constitutions, and political parties, can all be understood as wealth maximizing, net of transaction costs. However, one need not be an adherent of the 'efficiency always' school to appreciate the explanatory power of viewing institutions as the result of exchanges by maximizing agents.

[14]Consider a basic stationary bandit model. There is a local economy producing some quantity of output by combining labor and land. Assume for simplicity that both land and labor are entirely unalienable (i.e. the bandit has no way to appropriate labor in the form of slaves or take the land with them). Bandits come in, take that period's output, and leave. As such, they bear none of the losses in the value of land due to their actions (they do bear some loss in terms of the reduced equilibrium level of production if locals expect bandits to come by and steal their output). In this scenario, bandits own the flow over a given period but not the stock. A stationary bandit, on the other hand, is a residual claimant over the stock. In the most basic stationary bandit model, the stationary bandit is the (economic) owner of all the land and 'employees'.

[15]See Kurrild-Klitgaard and Svendsen (2003), Skarbek (2011), and Young (2016) for historical case studies of the emergence of stationary bandits.

[16]However, the better aligned the incentives, the less likely this will be.

[17]The key pieces in the literature on efficient political institutions are Wittman (1989) and Stigler (1992). For recent applications, see Barzel (2002) and Allen (2011). See also Acemoglu (2003) and Caplan (2001) for criticisms of this view.

[18]A realm-owner must ultimately be an individual (or group of individuals), although they may find it optimal to exercise their control indirectly (say, through the institution of the crown rather than the person of the King).

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that adopt extremely destructive policies, or that extract too high a portion of the wealth generated from their subjects, will tend to go out of business as they lose their tax-base to others.

The combination of well-aligned political property rights and inter-jurisdictional competition favors the adoption of optimal governance strategies in the short-run and the evolution of political institutions with wealth-generating properties in the long run.[19] Well-aligned political property rights minimize the extent of misguided policy-making, whereas jurisdictional rivalry discourages rulers' predatory behavior.

The absence of competitive pressure means that the elite will be able to extract a larger share of the surplus of these innovations from their subjects. Over time, realm owners will adopt the policies and institutions characteristic of predatory states (Moselle and Polak, 2001; Murtazashvili and Murtazashvili, 2016; Vahabi, 2016). In the opposite scenario, political property rights are not effectively aligned; multiple competing actors can exercise violence within the realm. There is little to no incentive for them to adopt policies and institutions that make the economy more productive. The output of the realm being effectively in the public domain, none of them can expect to capture the benefits of adopting 'good governance'. Pillaging becomes the dominant strategy for every actor.

The above foreshadows the distinction between an effective state and a predatory state. In the former, there needs to be some institutional mechanism aligning bandits' incentives. An effective state is one in which the ruler has low costs of monitoring and measuring the performance of its subjects, but the subjects can move to the land of a different ruler relatively easily. A predatory state is one in which monitoring costs are low, but the costs of moving away are high. Thus, a predatory state may achieve significant levels of productivity. The result will differ from that of effective states in that the fruit of higher productivity are enjoyed by the many rather than the few.

This discussion suggests potential sources of exogenous variation. Geographic and environmental characteristics can affect the costs of measurement, monitoring, and exit. So does technology. For example, it is hard to imagine the Soviet Block being able to enforce its policy against free-movement (both within the block and away from it) without 20th-century technology. This enabled the Soviet Union to employ its vast bureaucratic apparatus toward the extraction of wealth from its population.[20]

The framework we develop gives us some insights into the process of political development. It also points to the importance of political property rights and jurisdictional competition in this process. In the next three sections, we discuss some evidence that the interplay between these two dimensions played an essential role in the evolution of political institutions in Western Europe.

3. The governance structure of Medieval Europe

In this section, we investigate the political situation that characterized Western Europe at the starting point of the process of political development. The eventual result was the rise of the effective state, one characterized by a comparatively efficient and nondiscriminatory administrative structure in the late modern period. We focus on the political property rights that characterized the regions' political organization and the degree of jurisdictional rivalry between political authorities. The combination of (a) political property rights' allocation based on the ability to influence the region's productivity and (b) jurisdictional competition generated the right conditions for a general increase in standards of living.

3.1 Political property rights in Medieval Europe

The governance structure of Medieval Europe was fundamentally polycentric (Rosenberg and Birdzell, 2008). Multiple authorities with overlapping jurisdictions, each with its own specific set of

[19]Our framework is related (and reaches similar conclusions) to that developed by Barzel (2002). Barzel's and our frameworks both emphasize the importance of seeing the relationship between rulers and society as self-enforcing. However, Barzel focuses on how society forces constraints on the ruler to prevent the latter from acting against its interests. In our framework, these constraints play a significant role, but the ruler has incentives to behave in a 'productive' manner, in part due to competing pressures from other rulers and its subjects' ability to exit.

[20]See the discussion in Olson (1995).

rights-claims under their purview, supplied protection and a few other services to the inhabitants of Western Europe. Property rights over the political assets from one territory was divided to reflect each player's ability to affect their value.

The origins of this governance process trace back to the centuries following the fall of the Roman Empire. Early on, this process consisted of a multitude of wandering barbarian tribes, which roved and pillaged the settled locals (Young, 2016, 2018). Following these events, many of Rome's aristocratic families sook refuge within the administrative structure (and sometimes the physical fortresses) of the Roman Catholic Church. The higher ranks of the Church were themselves owners of large tracts of lands (and many of the assets therein), over which they exercised a mix of spiritual and temporal authority. Over time, the wandering tribes settled and started their own hereditary aristocracies. By the late Middle Ages, the territories once occupied by the Roman Empire were governed by a varied set of overlapping jurisdictions: monasteries, universities, guilds, chartered cities, and communes co-existed with the (sometimes nominal) sovereignty of the barbarian kings (Fink, 2012; Levy, 2014).

This *de facto* medieval constitution is characterized by divided political power, with groups rivaling each other over the ability to exert dominion over people and resources. The feudal order of Medieval Western Europe was defined by the presence of numerous centers of hierarchically organized authority. Members of every one level exercised direct authority over those of the level just below, and were sworn to obedience and bound to a set of obligations (mostly of military character) to those above them (Volckart, 2000). This allocation was an efficient response to technological and environmental constraints. A medieval king was poorly positioned to affect the value of a piece of land, nominally his own, while hundreds of miles away. Instead, residual claimancy was mostly allocated down the hierarchy to local lords and their vassals in exchange for military support and other obligations (Contamine, 1986: 77).[21]

The importance of the medieval constitution for later state development lies in the initial structure of political property rights. The essential feature of a political property right is that it grants an individual, or a group of individuals, the right to participate in governance and allocates to them a portion of the revenues generated therefrom (Salter, 2015). The medieval constitution represented an institutional equilibrium in which owners of economic property rights over land, capital, and labor services also wielded political authority. One of the critical features of this system was the division of power between competing interest groups, each checking the other's predation (Young, 2016).

Diffused realm ownership was conducive to the minimization of wealth dissipation. Each realm shareholder would want the system to maximize the capitalized value of their political assets. Consensual decision-making among these shareholders would sometimes give way to armed conflict, as elites took advantage of the perceived insecurity of their rivals' political property rights, and attempted to seize these rights for themselves. Though conflict was always a possibility, it was usually limited to the resolution of specific disputes over political property rights. The mass warfare of modernity was neither feasible nor desirable from the point of view of medieval elites. They lacked the resources necessary for large-scale military mobilization and were aware of the potentially destructive effects of armed conflict on their assets.

3.2 Rivalrous supply of medieval governance

By the turn of the 9th century, a handful of kingdoms controlled the entirety of Western Europe. The Carolingian Empire extended over France, northern and central Italy, the Alps, and a large chunk of Germany. The remainder of the Italian peninsula was divided between the last Lombard kingdom and the western dominions of the Eastern Roman (Byzantine) Empire. The Islamic Caliphate was about to

[21]The argument that *de facto* political property rights were generally exercised by local lords rather than by *de jure* rulers is common in the historical literature (Ganshof, 1996). For example, as we discuss below, the communes of Northern Italy fell under the jurisdiction of the Holy Roman Emperor, who had the right to hand-pick public officials and demanded the payment of tributes (monetary and in-kind). However, the reality on the ground was quite different, as local communities became *de facto* independent from the emperor's authority over the 11th and 12th centuries.

complete its conquest of the Iberian Peninsula, although the Christian Asturian kingdom preserved its independence in the northwest. Each crown's degree of control plummeted the further one moved away from the sovereign's demesne. *De facto* control was a function of the local lords' loyalty to their monarch. Given the inability of the latter to enforce his claim over the periphery of his own kingdom, these territories were effectively left in the public domain, their resources being up for grabs by adventurous foreign lords as well as hordes of nomads coming from the East. These circumstances had the effect of reducing even further the ruler's incentive to provide public goods across his realm, being unable to protect much of the realm from capture from outsiders.

Four hundred years later, the number of sovereign polities was much higher. The process started around the year 1150 and continued almost uninterrupted for the following two centuries. By the end of this process, there were over fifty autonomous kingdoms, principalities, and city republics in Western Europe (Cervellati *et al.*, 2019). Necessarily, the average size of each autonomous territory fell sharply over the same period.

The large number of small sovereignties facilitated exit from any one jurisdiction. Peasants from rural northern Italy and Germany moved from the feudal countryside to the republican communes. Indeed, most urban growth over this period was the result of immigration from the territory of feudal lords rather than that of higher birth rates (Epstein, 1999). Merchants' choice to operate in a given market was also highly dependent on the 'governance bundle' supplied within each sovereignty. A local lord or republican city government attempting to extract a large share of the merchant's surplus would lose the latter's 'business' for a close-by competitor (Cox, 2017).

Innovation in fiscal technology and other public policies spread quickly across jurisdictions. The Italian communes of the late Middle Ages experimented with alternative political and administrative tools. For example, the *podesteria* system of the 12th century[22] emerged to preserve social peace within increasingly divided cities and was soon adopted across the communal republics of northern and central Italy (Greif, 1994). Sovereignties competing for the business of merchants transformed their institutional environment to maximize their appeal. The institutions of the members of the Hanseatic League, the Italian Maritime Republics, the Champaign fairs, and other trade centers across Western Europe are illustrative of this phenomenon. Although these polities differed in the specific strategies due to the relative costs of enforcements, they were all characterized by public institutions that supported and complemented private mechanisms behind the explosion of long-distance, high-value trade of the late Middle Ages.[23] Operating within very limited geographic confines, polities had an incentive to promote the accumulation of capital and the production of wealth within their territory to economize on the costs of enforcing their sovereignty.[24] This furthered the benefits of investing in governance technologies that increased the overall productivity of the economies of Western Europe.

By the end of the Middle Ages, Western Europe's 'market for governance' conformed to the characteristics we identify in our framework as fostering the development of effective states. However, different Western European regions undertook different trajectories resulting in different degrees of state effectiveness. Throughout the early modern era, some regions (the Iberian Peninsula, France, and the Italian peninsula) saw a consolidation of centralized power and experienced economic stagnation whereas others (the British Isles, the Netherlands, and the Germanic polities) lead the way and set the stage for the 'European miracle'.[25]

[22]In this system, some military, executive, and judicial powers were outsourced by the commune to a foreign dignitary, selected by the domestic elite and monitored for the duration of service by a specialized committee.

[23]See Fink (2012) for the Hanseatic League, Greif (1994) and de Lara (2008) for Genoa and Venice, Edwards and Ogilvie (2012) for the Champaign fairs, and Kallioinen (2017) for the Baltic polities.

[24]This argument was originally developed to apply to familiar economic assets and commodities (Allen, 2002). Batchelder and Sanchez (2013) make a similar claim about the strategy of Imperial Spain during the 16th century. However, Hendrickson *et al.* (2018) point out the existence of negative political externalities associated with increasing social wealth.

[25]Nevertheless, even the most badly administered western European polities gained from the success of the rest, and their subjects benefited from the competitive nature of the regions' market for governance. For example, in the 17th century, daily

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4. The Italian city-states

The Italian city-states emerged out of the feudal system and became major centers of commerce, culture, art, religion, and politics. These polities distributed political property rights among key decision-makers in a productive manner. For example, they extended political power to groups that had been traditionally excluded, such as merchants and artisans. They also operated in a context of significant jurisdictional competition, with major regional centers as close as a few dozen miles from each other. In this regard, they resembled our model of a rivalrous market for governance closely. These conditions favored the development of innovative forms of public administration, political decision making, and public policy, which resulted in a rise in citizens' living standards. The communes developed sophisticated forms of debt finance and introduced innovative tax policies (Martines, 1988), anticipating by centuries many similar developments in the rest of the continent, and for which they have been identified as early 'fiscal states' (Jones, 1997; Stasavage, 2007).

The city-states emerged and consolidated over a period of three centuries, starting just around the turn of the second millennium. By then, the region between the Alps to the north and the mountains of Umbria and Marche to the south was populated by a wide array of bishoprics, lordships, and principalities, all formally part of the Kingdom of Italy and thus vassals to the Holy Roman Emperor.[26] The commercial revolution of the 10th century jump-started a process of urbanization, mostly in towns and cities of Roman origins. These small towns were dominated by groups of aristocratic families from the local countryside, often in partnership with the local bishop (Martines, 1988: 21). The ruling families came together to form a corporate entity, the commune, that would become the fundamental urban governance institution for the centuries to come. In the early days, the political organization of the communes was modeled on that of republican Rome, with a general assembly of the citizens (i.e. the members of the aristocracy), with executive power entrusted to elected officials (the consuls) for short periods of time.

In just a few decades, the commune had achieved such a degree of autonomy that the emperor felt the need to reassert his authority over the region. What followed is a series of failed attempts by the emperor to force his will on the communes. Finally defeated, the emperor recognized with the Peace of Constance of 1183 the communes' territorial claims to the immediate countryside, as well as the authority to self-govern, including the right to elect public officials.

There were, by this point, hundreds of communes in Northern Italy. Many had already established themselves as local commercial hubs; some had come to dominate the regional market, and a few were emerging as international powers in trade, finance, and manufacturing. The communes were in a constant state of competition. One margin of competition was that for market shares in international trade, especially between the three 'maritime republics' of Genoa, Pisa, and Venice. Bologna, Florence, Milan, and Siena were major centers in international banking, competing for the capital of kings, princes, and popes. They also competed to attract their workforce. These cities were also large manufacturing centers. To the men and women of the Italian countryside, they offered an alternative to farming someone else's field. Immigration was a major force behind the drastic increase in the population size of these towns. Between 1050 and 1200, Venice almost doubled its population from 45 to 70 thousand, Verona went from 15 to over 30 thousand, and Florence from 15 to 60 thousand. Of the thirty largest cities in Western Europe in 1200, a third were from the Italian north. One hundred years later, four of the six largest cities in Europe (Venice, Milan, Genoa, and Florence) were from an area of 15 thousand square miles in northern Italy. This growth was only indirectly due to increases in living standards, as infant mortality was still very in the cities. Instead, it was the promise of freedom from feudal obligations and perhaps higher wages that attracted an unprecedented influx of immigrants (Greene, 1999: 482).

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wages for unskilled workers in Spanish Milan were much larger than those of the same workers in China (Broadberry and Gupta, 2006).

[26]Venice was an exception, as it formally belonged to the Eastern empire.

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Competition between communes was facilitated by the relatively small size of their territories. Initially, their authority extended only up to the original Roman walls. The peace of Costanza recognized their jurisdiction over the entire bishopric, and over time the communes had grown to incorporate their immediate countryside. The nature of the communal economy also favored competition between the city-states. To be successful, they had to attract labor and capital from throughout the region and beyond. In particular, they had to provide favorable conditions to the development of the local economy. One way was to extend political representation. By the turn of the 13th century, the most productive members of the communal economy began organizing themselves into professional associations to influence the government of their cities. Within a few decades, these *Arti* or guilds achieved political power and formal constitutional representation.[27] For example, in Florence, in the 1250s, the constitution of the *primo popolo* gave access to the local levers of power to the thousands of members of the city's main guilds (Najemy, 2008: 66–70). In Siena, the local *popolo* (an alliance of the members of the banking guild and the largest merchant groups and other professionals) grew in political relevance until its elected officials were officially recognized by the constitution of 1262 (Schevill, 1909: 143). Other major communes went through similar developments, including Bologna, Genoa, and Lucca (Martines, 1988: 48). In 1296, the city reformed its constitution by introducing strict requirements for a citizen's eligibility to one of the many legislative and executive bodies of the republic. Counterintuitively, this actually expanded the size of these bodies and the number of individuals that could participate in domestic politics. Within 50 years of the reforms, the size of Venice's highest political assembly went from 210 to more than 1200 (Norwich, 2003: 184). At the same time, the reform generated rents for the members of the local commercial community, effectively reallocating property rights in an incentive-compatible way (De Lara, 2008).

The combination of jurisdictional rivalry with an incentive-compatible allocation of political property rights characterized the region throughout the 13th and beyond. Over the same period, the Italian city-states emerged as among the most dynamic polities in Western Europe. Venice and Genoa distinguished themselves in international trade; Florence and Venice were at the cutting edge of financial innovation; Bologna, Padova, and Siena became major cultural centers thanks to the establishment of some of the oldest universities in Europe. This institutional environment had large effects on wealth and standards of living. Numbers for the 13th century are scant, but Malanima (1998) estimates that by the year 1300 there were more than 7 million people in the Italian center-north. Also, this area had an urbanization rate four times that of Western Europe at the time (Malanima, 2009). These numbers suggest a high level of productivity for the region. In 1300, agricultural output per worker in northern Italy was twice that of 14th century England and as high as that of France in the 19th century (Federico and Malanima, 2004: 457). Most measures of economic well-being indicate that the standard of living of an Italian commune's average citizen in the year 1300 was higher than that of the average Italian as late as 1861.[28]

Economic progress was supported by the evolution of communal institutions and the government's accumulation of administrative, legal, and fiscal capacity. On the administrative side, the city-states introduced additional bureaucracies to manage the commune's expanding responsibilities. Communes started to undertake significant public investments. Defense considerations played an important role in this development. As population was growing rapidly, the old Roman walls could only protect a shrinking percentage of the city's capital and labor, so the city-states started building new walls with a larger diameter (Epstein, 1999: 29).

On the legal side, one of the most pressing problems in the first decades of the 13th century was that of violence between clans from among a city's oldest and most prestigious families. With the rise of the *popolo* and its enfranchisement, new regulations put an end to the feuding. The ordinances of justice of 1293 created the figure of the *Gonfaloniere di Giustizia*, with the explicit task of monitoring

[27]This process was far from smooth and was often punctuated by episodes of violence. Nevertheless, for more than a century, many Italian polities expanded political representation to include previously disenfranchised categories.

[28]See the discussion in Malanima (2003).

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the behavior of the city's aristocratic families and enforcing the laws against feuding and private violence (Najemy, 2008: 82–85). To meet the growth of public spending necessary to a stronger communal administration, the city-states had to rationalize and expand their tax regimes. Since their birth, communes had relied mostly on in-kind contributions, including for the provision of defense services.[29] Over time, as the towns assumed a primary role as local and regional centers of commerce, the communes introduced trade taxes, soon to become their major source of revenue.[30] By the late-12th-to-early-13th century, the Italian city-states started to experiment with fiscal technology, including wealth taxes and forced loans. In cases of need, communes relied on exceptional forms of taxation. These *dazi* were introduced in the late 13th century by the largest towns in Tuscany. This form of taxation is particularly interesting because its effectiveness relied on an assessment, by the commune, of its citizens' wealth. This forced the towns to conduct some of the most comprehensive large-scale censuses of the time.[31] During the same period, the government of Florence gradually removed tax exemptions for the old aristocratic class, as well as those for major clerical figures and church assets. Overall, these reforms 'suggest considerable improvements in the administrative infrastructure in the territory' (Day, 2000: 102). By the turn of the 14th century, city-states such as Genoa, Florence, Siena, and Venice, though smaller in territory and population than most of their neighboring polities, were able to compete with their neighbors in military and geopolitical matters, thanks to their higher administrative efficiency.[32]

5. German cameralism

For our final case study, we look at the evolution of public finance (both theory and practice) in the German polities of the 17th and 18th centuries.[33] Early modern Germany approximated the conditions favoring the development of effective states.[34] When the rest of Western Europe was experiencing a rapid process of unification (France, Spain, and the British Isles), the Holy Roman Empire retained a characteristically 'medieval' degree of inter-jurisdictional competition, divided as it was among religious and secular principalities, duchies, and free cities.[35]

Consistent with our framework, polycentric Germany took a different path than most of Western Europe in the development of the science and practice of public administration during this time. In most of Western Europe, mercantilism became the fundamental doctrine behind a ruler's administration of his realm. This is consistent with the view that centralized states facing limited jurisdictional rivalry were in a better position to invest in political institutions and adopt public policies that directed wealth-creation to the benefits of the ruling elite. In the German polities, the rival tradition of cameralism emerged instead.[36]

Unlike the relatively small-scale conflicts of the Middle Ages, the Thirty Years' War devastated the populations and economies of the Germanic polities.[37] The Peace of Westphalia (1648), which put an

[29]See Contamine (1986).

[30]See the discussion in Hansen (2000).

[31]Bowsky and Bowsky (1981) discusses the case of Siena, where the *dazio* was employed continuously for 70 years.

[32]See the discussion in Hansen (2000: 287–288).

[33]Salter (2016) provides an extensive overview of the political economy of these themes.

[34]In this section, we use 'Early modern Germany', German polities, and 'Holy Roman Empire' interchangeably to refer to the regions that were nominally under the rule of the Holy Roman Emperor between the 16th and the early 19th century. Although its border changed somewhat during this period, the Empire encompassed most of today's Germany, Austria, Belgium, Czechia, and Slovenia, as well as territories from eastern France, northern Italy, and western Poland.

[35]See the discussion on the evolution of the German states in Volckart (2000). On the process of the development of the territorial state in western Europe, see Abramson (2017).

[36]Cameralism has much in common with mercantilism. However, the two differed significantly in their respective emphases. Mercantilism focused on international trade and related policies, whereas cameralism paid more attention to issues of domestic public finance. This difference is likely to have reflected the peculiar geographical and economic circumstances of the German territories (Magnusson, 2017).

[37]'There can be no doubt that the war was a disaster for most of the German-speaking lands' (Kamen, 1968: 48). On the nature of European warfare during the Middle Ages, see Housley (1999).

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end to the conflict between Catholic and Protestant rulers in central Europe, recognized more than 300 independent sovereign states (Tilly, 1990). Each was governed by an absolutist regime: the prince of each polity was the ultimate political authority.[38] The combination of *de facto* and *de jure* centralized power, in a broader environment of political fractionalization, resulted in an interesting development in the doctrine and practice of public administration. Although the emperor was formally the ultimate source of authority, the German cities, duchies, and principalities 'had their own chambers, treasuries and financial officials':

> Consequently, one confronts an apparent paradox whereby – in contrast, for example, to England and France – it was the subordinate levels of the constitutional structure, the Imperial and free cities and the territories, rather than the Empire itself, that during the Middle Ages came to conform more closely to the modern notion of the 'state' and of the 'state finance'.[39]

The most significant post-Westphalian innovation was the creation of a professional bureaucratic apparatus (Wilson, 2002: 86). Before the late 18th century, university-educated commoners could rise to many prominent offices within the nascent bureaucracy (Wilson, 2002: 95). This was part of a political strategy to consolidate authority by princes. To break the feudal privileges and *de facto* residual rights held by other nobles and trade guilds (remnants of the medieval constitution), princes allied themselves with commoners. This contributed to the development of a uniform legal code and the suppression of private violence (Wilson, 2002: 103). Both princes and commoners had an incentive to form a coalition against intermediate power-holders, namely the local aristocracy, the guilds, and the clergy. From this cooperation, commoners stood to gain wealth and honor, whereas princes stood to gain increased control over their own lands (Backhaus and Wagner, 1987; Jouvenel, 1993; Wagner, 2012).

The ruler rewarded commoners who rose to positions of prominence in the bureaucratic hierarchy with wealth, privileges, and sometimes titles of nobility (Benecke, 1971). This was not to last. By the late 18th century, the prevalence of commoners at the top of the bureaucracy had receded.[40] The political winds had shifted. Whereas previously, princes found it profitable to bargain with commoners against the nobles, eventually, they found it profitable to entice the nobility into prominent positions within the new political order, provided they renounce the last of their medieval privileges and immunities. In exchange, nobles were guaranteed the integrity of their estates and access to prestigious public positions, such as those in the military (Johnson, 1975).

During this period, large states such as England and France adopted mercantilism as a political-economic system (Ekelund and Tollison, 1981). In this system, the sovereign would raise revenue through direct taxation, as well as by auctioning off monopoly production rights to certain goods (North *et al.*, 2009).[41] For this system to work, the ruler's commitment to transfer monopoly rights to interest groups must be credible. In turn, this required some degree of state capacity. Another factor making this system less costly to the ruler was the higher exit costs that his subjects faced: French and English subjects could not easily run away to escape the distortionary effects of mercantilist economic policy.

As we would expect, the case of the Germanic polities was very different, due to the small and fragmented nature of these polities. Formally, the law often bound subjects to the land they worked; in reality, subjects often 'voted with their feet' in response to a prince's predatory actions. Rival princes

[38]On the prince's role as the ultimate executive authority and the concentration of power onto his figure, see Wilson (2002: 91). For how international competition influenced the trajectory of political development in central Europe, see Wilson (2002: 18).

[39]Isenmann (1999: 243).

[40]For example, within the military bureaucracy of the German territories, '[n]obles displaced commoners from officer positions from the late seventeenth century, but many were "foreign" in the sense that they came from outside the territory they served' (Wilson, 2002: 95). Our framework does not speak directly of a ruler's decision to employ members of the aristocracy or commoners within the bureaucracy. On this issue, as it applies to English and British history, see Allen (2011).

[41]During this period, the collection of revenues was the purview of so-called 'tax farmers' in both England and France (Johnson and Koyama, 2014).

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had an obvious interest in attracting labor and capital to their polities. In the struggle to perpetuate their rule, wealth was power, and the means of securing wealth used by the mercantilist polities simply were not within possibility set of the German princes.[42] As Wagner (2012: 6) argues,

> The prince was the ruler of his lands. He did not have to worry about surviving periodic elections, and he could hope to pass his principality along to his eldest son. His ability to do this, however, varied directly with the extent of economic progress within his land. A prince whose land was supporting a growing population of energetic and enterprising subjects would both be wealthier and face better survival prospects than a prince of a land where the population was stagnant or declining, and whose subjects were dull and lethargic. Furthermore, population was mobile in fact, even if it was mostly tied to the land at law through feudal restrictions. Distances between lands were typically short. A peasant who traveled to a new land was not likely to be returned. The rulers of the cameralist lands faced a competitive labor market. Indeed, the cameralist lands represented the kind of competitive industry among localized governments.

The term 'cameralist' refers to a body of thought often identified as the German counterpart to mercantilism. Cameralism was a tradition in early public finance and administration theory focused on advising princes how to maximize revenues and maintain their estates. Because the Germanic princes' ability to extract revenue was limited by their subjects' ability to exit (and with them, their labor services and capital), cameralist writers 'essentially construed rulers as businessmen with their businesses being the operation of states' (Backhaus and Wagner, 1987: 6). The bureaucrats were directly in charge of the prince's private wealth and were entrusted with its maximization. Importantly, there were few legal privileges giving the prince's capital-employing enterprises an advantage over the competition. Public enterprise was seen as a source of wealth for the state, rather than an object of subsidy. In contrast, taxation was discouraged both in theory and practice, and was viewed as a mechanism of last resort in case of emergencies, rather than a regular scheme for raising revenue.[43] Since the Middle Ages, to the extent that the German principalities did rely on taxation, they did so to finance fundamental expenditures, mostly pertaining their defense needs against foreign aggression (Isenmann, 1999: 246). The reluctance to employ taxation, however, soon gave way to political necessity. If a prince's neighbors are all building 'fiscal-military' states, that prince cannot help but follow along, so long as he wishes to remain independent (cf. Geloso and Salter, 2020; Hendrickson *et al.*, 2018).

The next major contribution of German cameralism was the development of a 'coherent taxation theory' (Lee, 1975: 153).[44] During the 17th and 18th centuries, as central Europe was recovering from the Thirty Years' War, the principalities reformed their fiscal regimes. They now favored direct taxes as the major source of revenues for the German states, particularly real estate and property taxes (Denzel, 2006: 2). The German polities developed new instruments of government finance, including the supply of government bonds and reliance on private individuals and firms in the administration of public debt (Denzel, 2006: 13). The early 19th century was characterized by a rationalization of their tax system, especially land taxes, with a movement toward the creation of registers and adjustments in tax rates based on land yields (Lee, 1975: 159). Throughout the 19th century, the German states' competition to attract investment (especially that which could foster industrialization) led to lower tax rates over the secondary, industrial sector, and relatively higher ones on the agricultural sector (Lee, 1975:

[42]The one exception was Prussia.

[43]Cf. Backhaus and Wagner (1987: 15): 'The cameralist state participated in the production of goods and services primarily through its various public enterprises and secondarily through modest taxation. The cameralist states were competing with one another for capital and various forms of labor, so the path to long-term princely prosperity was relatively tightly constrained to follow the road of enlightened political administration, which in turn was administration that facilitated the economic progress of the principality'.

[44]See Isenmann (1999) for a detailed overview of the development of fiscal practices in the German territories during the period of interest.

162–165).[45] Competition discouraged the taxation of foreign capital, out of fear that it would flow to some other region.[46] Similar forces led to a shift away from direct and toward indirect taxation, and to a tax system that heavily favored investment over present consumption (Lee, 1975: 169). Thus, the 'apparently archaic' Holy Roman Empire offered fertile ground for fiscal competition and experimentation with 'surprisingly modern techniques and principles of taxation' (Isenmann, 1999: 244).

Both the initial reluctance to employ widespread taxation, and the latter development of 'rationalized' taxation, make sense in light of elites' political property rights, in an environment of robust jurisdictional competition. That largely illiberal governance structures resulted in surprisingly liberal (for the time) economic policy was a function of the underlying political property rights. Those who participated in governance were still largely residual claimants. Princes and nobles obviously possessed their lands and estates, and their rewards (both in cash flows and the capitalized value of their assets) were reflected in the quality of governance they supplied. Poor governance meant labor and capital exiting their territory in search for rulers offering better terms.

6. Conclusion

State capacity does partly explain economic development. But it is ultimately epiphenomenal; what determines how rulers act within the nexus of administrative capabilities created by modern states depends on the information they have and the incentives they face. This is a function of the structure of political property rights, suggesting the potential for reconciling the literature on polycentricity and jurisdictional competition with that on state capacity. The polycentric governance arrangements of Medieval Europe were the starting point, from which subsequent political bargains would transform into the nascent states of early modernity. Political property rights afforded elites a degree of residual claimancy to the wealth arising from governance. Both features – political property rights conducive to wealth creation and centralized administrative capacity to transcend the medieval governance 'anticommons' – are important to explain the prosperity of Western polities.

In addition to explaining the institutional underpinnings of state capacity, the theory we develop also speaks to the ongoing project exploring the sources and effects of inclusive governance institutions (Acemoglu and Robinson, 2005, 2012; North *et al.*, 2009). These theories suggest economic prosperity will follow after breaking the monopoly on governance held by traditional elites, who tend to use the means of governance to enact distributionally favorable policies, but ones that are also socially wealth reducing. Making governance more inclusive brings in parties whose personal interests align with more growth-friendly policies, as well as institutionalizing checks on predatory governance more generally. Our account suggests we interpret these results with caution. State capacity solidified, and economic growth followed, during a time when traditional elites were still residual claimants to governance revenues, whether in the Parliament-dominated 'aristocratic republic' of England, or the monarch-dominated 'absolutist' polities of Germany.

Thus it makes sense to view the breakup of rent-preserving feudal privileges as conducive to economic growth; but whether stripping traditional elites' roles and privileges in governance was likewise growth-enhancing is far less certain. Governance institutions that are too inclusive have their own pathologies that can stifle economic growth. For example, political power can become so fragmented that no individual has an incentive to acquire the information necessary to wield that power responsibly. Such situations devolve into either the mob tyranny of the Greek polis, or the soft 'democratic despotism' feared by Tocqueville. Today, the latter scenario is clearly more concerning than the former. It is also suited to bureaucratic governance, albeit under an inverted structure of political property rights. Because bureaucrats under inclusive-egalitarian governance institutions will almost certainly not be residual claimants to governance revenues, they do not confront the same information and

[45]Indeed, 'tax assessments on the secondary sector were … structured to promote the growth of rural/domestic industries' (Lee, 1975: 165).

[46]For example, in Sachsen-Weimar, the government adopted a 'mild treatment' of foreign capital taxation to prevent a capital flight (Lee, 1975: 167).

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incentives for social wealth creation. In fact, their incentives are much more oriented toward wealth dissipation. In the absence of residual claimancy, bureaucrats will likely maximize budgets in place of profits. Hence bureaucrats inadvertently maximize the value of resources used up in governing (Niskanen, [1971] 2007; Tullock, 2005; von Mises, 1944). Instead of evolutionary pressure for cost-minimizing behavior, we get evolutionary pressure for cost-maximizing behavior.

By focusing on political property rights and jurisdictional competition, future developments in the theory of state capacity may help solve the puzzle of why polities that appeared destined for economic and political development failed to achieve sustainable growth. Any social-scientific explanation must focus on information and incentives. We hope our framework will provide some new analytical tools to the study of political and economic development in Western Europe, and in other regions and time periods as well.

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