

STATE PREDATION IN HISTORICAL PERSPECTIVE: THE CASE OF OTTOMAN MÜSADERE PRACTICE DURING 1695-1839

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Abstract.

Taxation is a form of predation. However, the ideology of state as provider of public goods and services dissimulates the relationship between taxation and predation. By contrast, confiscations stand as overt forms of predation. The advantage of the specific fiscal system of the Ottoman Empire is that it lends credence to the idea that there is not such a sharp contrast between taxation and confiscation. *Müsadere* was a confiscation routine of elites – including office-holder and tax farmer – by the Sultan in the Ottoman Empire from 1453 to 1839. We offer an analytical narrative of this practice during the long-eighteenth century (1695-1839). We develop a two-step framework modeling the behavior of the Sultan and Ottoman elites. In our model, Sultan's behavior is partly driven by the existence of a Political Laffer Curve depicting a quadratic relationship between fiscal pressure and the probability to stay in power. On the other hand, elites choose to invest in fugitive or captive assets depending on the level of confiscation chosen by the Sultan. We show that *müsadere* was often less efficient than a purely fiscal system and impoverished the Empire in long run. However, *müsadere* had a specific *political* efficiency: it allowed a controlled decentralization by the Sultan. Finally, we find a negative link between the level of fiscal capacity of the Sultan and the expropriation of elites detaining a bargaining power over the sharing of the rent, which is consistent with *müsadere* practice.

Keywords: Captive and Fugitive assets, Confiscations, Fiscal System, Müsadere, Ottoman Empire, Political Laffer Curve, Predation.

JEL codes: D74, H22, N45

1. INTRODUCTION

Recent studies on fiscal regimes and the political economy of premodern states have shown major differences between the origins of the state in the Western Europe and other parts of the world (Monson and Schidel 2015). From Schumpeter (1918/1991) to the pioneering works of Mathias and O'Brien (1976), O'Brien (1988), Tilly (1985, 1990) to Ormrod et al. (1999), the Western scheme of fiscal regimes has been described in four phases: 1) tribute state, 2) domain state, 3) tax state and 4) fiscal state. The first phase is marked by the extraction of tribute from conquered territories by military leaders¹. In the Middle Ages, these leaders replaced tributes by the income from their own domain. It was only during the early modernity that European states started to turn to taxes exacted from their own subjects instead of relying on their own personal property or 'domain' (Ormrod et al. 1999; Hoffman 2017, pp. 1558-1561). This typology, however, is Eurocentric. It does not explain the fiscal regimes in other countries such as the Inka Empire, the Aztec Empire, and the ancient Near East and Egypt (Monson and Schidel 2015, pp. 3-27). Similarly, although fiscal states characterized by bureaucratic and centralized tax regimes emerged in Europe in the nineteenth century, new research on comparative fiscal history have shown that there was not a single path to modern state (Yun Casalilla and O'Brien 2012).

In line with renewed scholarly interest in the rise of modern fiscal states, the evolution of fiscal institutions in the Ottoman Empire has been revisited. In particular, fiscal decentralization in the eighteenth century of which most notable feature was the introduction of life-term tax farming is now regarded as a viable alternative to modern centralism, though arguably a less efficient one, rather than a symptom of decline (Salzmann 1993). Balla and Johnson (2009) has compared fiscal and political institutions of the Ottoman Empire and France during the early modern period. According to them, while both countries made extensive use of tax farming, the organization of tax farming evolved differently in each country. In France, tax-farming was unified in a single, quasi-private organization known as the Company of General Farms that became one of the prominent stakeholders in the French fiscal system

¹ The maximization of tribute or "absolute protection rent" was also one of the major reasons of empire-building through the use of brutal force and diplomacy among the European merchant and territorial empires in the early modernity (see Pietri et al. 2017).

since its establishment in 1681. The French tax-farmers were capable of collective action and could constrain the monarchy. In a sense, the French revolution was caused because of the King's lack of flexibility due to the constraints imposed by the Company. Koyama and Johnson (2014) defines the Company-controlled fiscal regime as cabal tax farming, which they consider as an intermediary institution that facilitated the transition from competitive tax farming to centralized tax collection, though much later than in England. By contrast, tax-farming under the Ottoman Empire moved towards greater decentralization during the eighteenth century. "The great paradox of French and Ottoman institutional history is that Ottoman fiscal institutions were *more* flexible than their Western counterparts and yet, in the long run, Western institutions proved more conducive to growth." (Balla and Johnson 2009, p. 840). The decentralized fiscal system of the Ottoman Empire was more efficient *politically* in maintaining the Sultan's power and shun a revolution but it was less efficient *economically* since local elites retained a large part of the revenues (Pamuk 2014).

Another aspect of this political flexibility might be sought in specific features of the tax system of the Ottoman Empire during its expansion between the fourteenth and sixteenth centuries. Coşgel (2015) particularly explains the discriminatory nature of the Ottoman fiscal system on the basis of transaction costs related to the cost of measuring the tax base. Verifying whether the Laffer curve can be applied to the pre-modern Ottoman Empire, Coşgel (2015, p. 415) explores tax registers and finds that "the sources of revenue allocated to local government officials included a higher proportion of variable taxes than those allocated to the provincial and central treasury, indicating that the variance of the tax base affected the allocation." The explanatory power of purely economic factors notwithstanding, the study demonstrates that political economy constraints particularly the legitimacy of the ruler and the likelihood of a successful revolt against his regime are the key elements in analyzing the tax allocation. To put it differently, a politically revisited "Laffer curve" is warranted to grasp the rationale of tax allocation under the Ottoman Empire (Coşgel 2015, pp. 415-426). In this paper, we coin that as a "Political Laffer Curve". Unlike Coşgel, Miceli and Ahmed (2009) exploring the role of religious officials as a source of legitimacy, we focus on the dynamic relationship between the Sultan and fiscal elites.

Our focus on the long-eighteenth century requires taking an additional institution into account.² In addition to decentralized tax-farming and variable types and rates of taxes according to different regions, the Ottoman fiscal system was also characterized by the routine confiscation (*müsadere*) of elites including office-holders and tax-farmers. This confiscatory system was used either as a punishment or more generally as *post mortem* seizure of the property from fiscal elites notably during the long eighteenth century. This specificity of the Ottoman Empire was tangentially studied until recently (for a detailed study, see Arslantaş 2018). By fusing closely related issues of tax collection and confiscation of fiscal elites, this paper addresses the following questions.³ What was the relationship of this confiscatory system with the fiscal system under the Ottoman Empire? To what extent this predatory confiscatory system could secure the power of the Sultan with regard to local elites? Was it politically efficient in maintaining the empire under the Sultan's rule? If so, was this *politically* efficient predation also *economically* efficient?

In analyzing the economic impact of confiscatory system on the structure of assets, we adopt Vahabi's (2016a, b) distinction between 'fugitive' and 'captive' assets. Fugitive assets possess two properties: "1. Mobility: capable of escaping from a given state space, because they can be easily hidden or displaced geographically; this also refers to the possibility of altering political allegiance without any geographical displacement. 2. Non-confiscable: hardly subject to confiscation because (1) any attempt

² This is mainly where our paper differs from Karaman (2009). He explains the logic of provincial taxation in the Ottoman Empire by employing the aforementioned relationship within the context of fifteenth and sixteenth centuries. He argues that the central administration was concerned not only about the size of taxation but with its bargaining power vis-à-vis the delegates. In the eighteenth century, however, this relationship was more sensitive due to the increasing costs of wars on the center and increasing threat of confiscation on the elites.

³ Our paper is also comparable to Rubin and Ma (2017). To explain low taxation in Qing China, they build a principal-agent model to show that the Qing China invested little in administrative capacity because, in order to keep the tax collecting agents in the game by refraining from confiscating their wealth in the absence of formal constraints to their rule, they were allowed to collect extra-legal taxes and paid low wages at the expense of low tax remitted to the center. Our work puts the issue of confiscation into the center of analysis rather than low levels of taxation in absolutist regimes.

to transfer property rights through coercion destroys the asset or reduces its value to almost nil, and (2) the costs of confiscation are greater than the benefits of confiscation.” By contrast, “captive assets are: (1) unmovable in the sense that they are not invisible or capable of escaping from a given state space and (2) readily subject to confiscation.” (Vahabi 2016b, pp. 158-159).

Our contribution is twofold. First, to the best of our knowledge, we propose the first study of the Ottoman’s confiscatory system (*müsadere*) using an analytic narratives method (Bates et al. 1998). Second, this paper offers the first application of the distinction between ‘fugitive’ and ‘captive’ assets to explain the behavior of a predatory state. Section 2 provides historical context of confiscatory system under the Ottoman Empire. After elucidating the process of *müsadere*, four phases of its practice, namely formation, maturity, aggressive, and termination will be distinguished. To understand this process, we construct an original simple model. The basic setup of our game theoretical model is introduced in section 3. In this section, we assume that the elite is homogenous and the Sultan discriminatively targets elites. Using backward reasoning, we solve the model in section 4, and formulate a proposition on *Müsadere effects* that will be supported by historical narratives. The assumption of the elites’ homogeneity will be then relaxed so that the Sultan’s choice with regard to the expropriated elites can be modeled. Consequently, section 5 is devoted to modeling targeting process by classifying elites in two categories according to the strength of their links with the Sultan (‘high’ or ‘low’). We find a negative link between the level of fiscal capacity⁴ of the Sultan and the expropriation of high-type elites which is consistent with the period over which we have conducted our case study. A short conclusion will follow.

2. HISTORICAL CONTEXT

The Ottoman Empire lasted for six centuries until World War I, ruling at the zenith of its power in the 16th century on a huge territory from the central Europe in the West to the Arab Peninsula in the East. Although it has sometimes been depicted as an absolute monarchy especially in the older historiography (Jones 1981; Finer 1997), the power of the Sultans was far from being unconstrained. These constraints,

⁴ For a critical survey of state capacity and the issue of fiscal capacity see Piano (2018).

which were rather informal than in the form of formal checks and balances, can be best studied within the context of one of the most understudied (yet most speculated about) institutions of the Ottoman governance, that is the routine confiscation of the property of elites from 1453 to 1839. The practice of confiscation (known as *müsadere* in Ottoman political terminology) can be defined as the transfer of property from the hands of a select group of people who were typically but not necessarily office-holders and tax farmers to the treasury, either after death or as a way of punishment.

The *müsadere* practice passed through several phases. The first is the *formation phase*, i.e. 1453-1520, in which confiscations were met with reaction. It is known that Mehmed II's (r. 1444-1446 and 1451-1481) confiscations of the fortunes of high officials and religious foundations particularly during the 1470s led to discontent among the affected groups (Özel 1999). This explains why his son Bayezid II (r. 1481-1512) pledged to return these properties during his struggle for the throne. Like many institutions of the Empire, however, *müsadere* was institutionalized during the sixteenth century. The period 1520-1695 should be considered as the *maturity phase*. In this period, the *müsadere* practice primarily targeted the deceased office-holders, resting on the principle that any wealth made through state grants should return to the treasury after wealth-holder's death. From 1695 to 1839 *müsadere* took a more arbitrary form. The main change during this final phase, which we call *aggressive phase*, was not only frequency of confiscations but its targeted group and methods of enforcement. Local elites, who rose to power mostly due to privatization of fiscal resources through introduction of life-term tax farming in 1695, became the prime targets of *müsadere*. Under the influence of the spread of liberal ideas among Ottoman statesmen and intellectuals, *müsadere* was abolished in 1839 as part of Gülhane edict that started the period of modernization known as Tanzimat era (1839-1876).

The prime targets of confiscation were thus fiscal and political elites which were tax farmers, local administrators or military officials. What made them the target was the sovereign's desire to redistribute wealth from one to another to shun the emergence of aristocratic structures. Particularly in the eighteenth century, *müsadere* was employed as a political tool against local elites who were organized in the form of patrimonial families that had the capacity to act independently from the central government. It is important, however, to emphasize that the Sultan discriminately confiscated. That is, not all people who could easily fall into the category of potential targets were confiscated. The

determinants of this selectivity are examined by Arslantaş (2018). His findings reveal that the targets were chosen based on their bargaining power vis-à-vis the central government as well as the location and the qualities of their wealth.

While our theoretical model below does some inevitable simplification, it is essential to understand how a typical case of confiscation was conducted by the Sultan and his agents. After being informed by a local official, the Sultan decided whether to initiate and implement the confiscation. Other possible alternatives were not to confiscate or ask the family of the deceased or the punished to pay a type of inheritance tax estimated according to the expected amount of wealth. This was mostly open to negotiation with the family. If the decision was to initiate the process of confiscation, the next step was to send an agent (confiscator) to the premises to prepare an inventory. An inventory was simply a list of assets to be confiscated. Alongside the inventory, the confiscator kept informing the center about difficulties facing the confiscation task. After the final inventory was sent to the center and studied there, the Sultan (usually those at the office of confiscation on his behalf) had to decide between no confiscation, inheritance tax and full confiscation. In case the final decision was full confiscation, the confiscator was ordered either to transport all assets to Istanbul, or sell them on the locality (or a combination of these methods). This is a simplified narrative of the confiscation process. One should bear in mind that it could take more complex forms in case of a resisting family or disagreement on the ownership of assets to be confiscated.⁵

The paper focuses on the maturity phase of the practice of *müsadere*, namely the long eighteenth century, 1695-1839, because of the richness of archival records concerning this period and that it allows to study fiscal pressure and confiscation together. It is repeatedly claimed in Ottoman historiography that this was a period of decentralization (see, for example: İnalçık 1977).⁶ Due to fiscal pressures associated with military advancements that occurred in Europe during the sixteenth and seventeenth

⁵ For a detailed analysis of these procedures, see Arslantaş (2018, chapter 4).

⁶ It must be stressed that the Ottoman state was never centralized in a modern sense. Centralization-decentralization dichotomy, however, is still useful when considered in relative terms, that is, the eighteenth century was more decentralized than previous two centuries.

centuries, the Ottoman Empire delegated some power to local elites. Despite their wealth and power, these elites turned into the main targets of the *müsadere* practice. While at first sight it is curious why their power did not translate into collective action, a proper examination of their relationships with the center reveals that they were dependent on the resources granted by the Sultan. Expectant of future grants and offices, they mostly chose not to resist. The ability of the Sultan to confiscate was also constrained for other reasons. He needed the support of local elites, who possessed military resources, for wars waged abroad, domestic rebellions and banditry activities. This explains a good deal of the multiplicity of outcomes of the confiscation process. Inheritance tax, for example, was a type of partial confiscation in which case the family's power was only partially curbed. Selective and self-constrained confiscation, which was a method of wealth redistribution, enabled the central government to control the elite power. This led to controlled decentralization as a way of surviving through fiscal and political crisis facing the Empire.

Recent historiography of the Ottoman Empire has been emphasizing the pragmatic and flexible nature of the Ottoman governance (Pamuk 2004; Fleet 2009; Coşgel 2015). These interpretations can be translated into a statement made by Frederick Lane (1958) that maximizing rule was more important than maximizing revenue. Econometric analysis of confiscatory activity during the period 1750-1839 also lends credence to this argument by examining strategic constraints on the sovereign's power to confiscate (Arslantaş 2018). Given these considerations, the practice of *müsadere* offers a fruitful ground for a theoretical analysis of historical predation under constraints.

3. THE BASIC SETUP

We consider an empire populated by a unitary population of identical elites ruled by a Sultan. The Sultan 'rules' a predatory state in the sense that he is able to confiscate assets from $n \in [0,1]$ elites; $(1 - n)$ is thus a measurement of the elites' property rights enforcement. If $\bar{n} = 1$ (resp. $n = 0$), then all (resp. no) elite are affected by *müsadere*.⁷ The Sultan determines the fiscal policy defined by the

⁷ It should be noted that $(1 - n)$ may be seen as unconditional property rights. It relatively fits well with the Timar system in which property rights belong to the Sultan. Elites totally depend on the Sultan's will. They can take

couple $\{\tau, M\}$, where τ is the tax rate on elites' production and M the amount of captive assets expropriated from elites by the Sultan. The aim of the fiscal policy of the Sultan is twofold: i) staying in power, $p \in [0,1]$ at the end of the game and ii) maximizing the fiscal rent $T \geq 0$ extracted from the elites.

At the beginning of the game each elite i receives one unit of resource. Because she is ruled by a predatory state, she is aware that she has a probability $\mathbb{P}_i \in [0,1]$ to be affected by *müsadere* and a probability $(1 - \mathbb{P}_i)$ to detain economic property rights on her assets. Following Vahabi (2016a, b), in order to protect herself against confiscation, elite i can invest either in captive assets, $c_i \in [0,1]$, or in fugitive ones, $1 - c_i$.⁸ We assume that fugitive assets are less productive than captive ones⁹ but cannot be confiscated by a predatory state.¹⁰

advantage of the *usus* and *fructus* rights but not *abusus* (see for example Sohrabi 1995). The 'emergence of property rights' means the abolition of the Sultan's power over property or what was known in the Western countries as the sanctity of property rights (for a discussion on the rise of private property rights in the Ottoman Empire, see İslamoğlu 2000).

⁸ A way to understand the difference between captive and fugitive assets is to assume that tracking and monitoring costs borne by the Sultan to capture a fugitive asset are infinite. Consequently, the Sultan cannot capture fugitive assets. By contrast, direct costs associated with the confiscation of captive assets are negligible.

⁹ In fact, the fugitive assets as sources of capital flight are less productive for a given empire for several reasons. First because they tend to escape from the given empire and must be regarded as a potential source of wealth for another empire or for a non-state zone in which they cannot be confiscated. Furthermore, the tendency to escape implies costs for tracking and capturing the fugitive assets by the empire. There is also a measurement and monitoring costs (agency costs) for the assets that must be confiscated. This entails deadweight losses related to the use of coercive allocation of resources. Finally, in case of resistance of the elite, the assets might be damaged and incur the costs of pure destruction (Vahabi 2016a, chap 6).

¹⁰ The archival records of the correspondence between the central government and the confiscator clearly show that the ability of the Sultan to confiscate was not equal for every kind of property. The center is understood to have ordered confiscators to make further and more detailed searches especially in cases it was not satisfied with the total value. These searches have mostly remained inconclusive. To use an example, when the wealth of

1. The design of the game is as follows: Each elite i chooses the share of her resources devoted to captive assets, c_i , in order to maximize her payoffs, π_i .
2. The Sultan decides the fiscal policy that maximizes its probability, p , to stay in power and, his fiscal rent, T .

4. RESOLUTION

We use backward reasoning.

Stage 2: Fiscal rules enacted by the Sultan

The objective of the Sultan is to maximize his probability to stay in power and then to extract the highest possible fiscal rent from his subjects. To that end, the Sultan detains two fiscal tools: taxing

Çapanoğlu Ahmed Paşa, the head of a prominent tax-farmer family based in central Anatolia, was confiscated, the center reached the conclusion that the family members could have escaped some property from the confiscator. The governors of the neighboring cities where Ahmed Paşa possessed property were ordered to be further searched. These orders, however, were inconclusive. (C.DH 152/7576 (17 August 1765 (20 Safer 1179))). In addition, it was not uncommon to see a potential victim of confiscation fleeing his hometown, presumably together with a lot of property that was light in weight but heavy in value. Documents that mention such people use the term “*fugitive*”. In many such cases, a local military administrator was asked to track and capture the fugitives. While the outcome of tracking process could be affirmative, many people seem to have managed to vanish without a trace. An example to that is the case of İsmail Ağa of Antakya. Many local elites in the fiscal business were rivals. It is thus not surprising that İsmail Ağa killed Amanzade Mustafa Ağa following a conflict between the two families. The evidence from this case demonstrate that İsmail Ağa fled to Hedjaz after the homicide because he was scared of punishment that would include confiscation (AE.SABH.I 65/475-3 (6 September 1785 (2 Zilkade 1199))), AE.SABH.I 65/475-6. AESABH.I 66/4604-3 (25 March 1785 (14 Cemaziyülevvel 1199)). Although we don’t know what he had taken with him, another instance from the history of the Çapanoğlu family shows that Mustafa, the son of above-mentioned Ahmed Paşa, fled to Crimea with some 45,000 piasters (around 5,625 pounds) (AE.III.Mustafa 25565, C.ML 22924 (1766)). It is interesting that Caniklizade Ali, the head of Caniklizade family that was the “enemy” of the Çapanoğlu family, also fled to Crimea after his family lost the battle against their rivals (Karagöz, 2003). His wealth was being confiscated while he was in Crimea.

elites' exploitations and/or expropriating n of them by *müsadere*.¹¹ In our framework, we assume the existence of a 'political Laffer curve'¹² (hereafter 'PLC') depicting a quadratic relation between the rate of fiscal pressure, noted f , and the probability of survival of the regime, p (see Fig. 1). In particular, p is positive and concave taking the value 0 for nil fiscal pressure ($f = 0$) and total appropriation ($f = 1$). The intuition is the following: very low fiscal pressure does not allow the Sultan to protect his territory against internal and external threats; on the other hand, high rate of confiscation fosters internal conflict in order to overthrow the Sultan. Consequently, p admits only one maximum for $f = \tilde{f}$, such that $p' \geq 0$ for all $f \leq \tilde{f}$, and $p' < 0$ for all $f > \tilde{f}$.

Insert Fig. 1 here

The basic intuition of this 'political Laffer curve' is that very low level fiscal revenue does not allow the creation of effective military protection forces.¹³ Consequently, the regime would be vulnerable both to

¹¹ By elites, we mean those elites in the fiscal business. In the 18th century, people under the risk of confiscation were tax farmers who bought the rights of tax collection of tax units for lifetime. They were supposed to make a lump sum payment to be followed by annuities. In this respect, they were the agents of the Sultan (Çizakça 1996). Although it was not uncommon that they were engaged with other economic activities such as international trade and commercial agriculture, they were generally collecting taxes from peasants, miners and artisans (Yaycıoğlu 2016).

¹² The importance of linking coercive behavior of the Sultan to the level of taxation by a 'Laffer curve' is present in the work of Grafe and Irigoien (2013, p. 203).

¹³ There were mainly two military units in the Ottoman Empire. One of them was called *Janissaries*, most of which were based in the capital. They were paid salary as their (expectedly) only occupation was military service. The other unit of troops was *Sipahis* (cavalries). They were holders of a tax unit assigned by the sultan and was entitled to the income of it in return for military and administrative services. In addition to providing military protection for the territory under their protection, they were ordered to join the army at wartime with a requested number of soldiers. This military system called *timar* was quite similar to those of the Muslim Empires of the Middle East. The main rationale behind the use of this system was the low levels of monetization. It was a viable solution under

invasions from competing neighbors, and from rebellious elites against the Sultan. In stark contrast, by imposing too high fiscal pressure on his subjects, he would foster internal protests.

We define fiscal pressure as follows:

$$f = \frac{\tau Y}{Y - \delta M} \quad (1)$$

where $Y = \sum_i y_i$ is the production of the elites and $(1 - \delta)$ is the level of redistribution of the captive assets $M = \sum_{j=1}^n c_j$ of the n elites expropriated by *müsadere*. In particular, $\delta = 0$ represents a situation in which the Sultan fully redistributes the captive assets to other elites. In that case, the fiscal pressure would be $f = \tau$. On the other hand, $\delta > 0$ means that the Sultan captures a fraction of captive assets to increase the treasure.

A partial redistribution typically took the form of public auctions in the case of the *müsadere* practice. After one's wealth was decided to be confiscated, there were three modes of transfer: (1) transportation of all assets to Istanbul in kind, (2) auctioning all assets on premise and transferring revenues in cash and (3) a mix of these modes. Although auctions tended to take place in the original location of the wealth, some moveable assets were auctioned after transportation to Istanbul. In the matter of which mode to choose, the central government followed the principle of cost-minimization, which is evident from the observation that auctions were more often held in more distant regions (transportation costs increase with distance).

Insert Fig. 2 here

the constraint that the scarcity of precious metals that were extensively used in the Middle Ages was leading the states to pay centrally based military forces, and the peasants to pay taxes in cash (İnalçık 2001).

Based on a sample of five auctions, Fig. 2 shows that many bidders present at auctions were again office-holders. It displays how much each occupation and title group paid to buy the auctioned assets. Ultimately the administrative officials paid some 44 per cent of the total payment. The categories of ‘no occupation’ and ‘no title’ reflect those not specifying title or occupation. However, the fact that most of the bidders included in the category of ‘no occupation’ are titled as either *efendi* or *ağa*¹⁴ means that they likely fall in the occupation categories of either government officials or local elites too. It is striking to see that two purchasers of the assets of Ali Esad Paşa and one of those of Salih Paşa were the officials of the Bureau of Confiscation (located in Istanbul) themselves. The former two purchased some textiles.¹⁵ Taken together, these lists of purchasers demonstrate that when auctioned, confiscated properties were mostly bought by other elites. This reflects their satisfaction in paying for confiscated assets without much care for the fact that their families were also on the possible path of being denied the inheritance of their wealth when the time came. These kinds of public auctions and all incomplete forms of redistribution of captive assets decrease the fiscal pressure ($\partial f / \partial \delta > 0$) with report to a situation of full appropriation of captive assets by the Sultan.

The main objective of the Sultan being to stay in power, he will choose the level of fiscal pressure \tilde{f} . Note that \tilde{f} is exogenously determined by political constraints borne by the regime and by the level of external threats. For example, if the Sultan is appreciated by the elites, the PLC is curved to the right with respect to Fig. 1. As a result \tilde{f} should be higher because the Sultan would be able to set a higher fiscal pressure without provoking an internal rebellion. In the same vein, a dramatic increase in external threats would have a positive impact on \tilde{f} : to face these new risks, the Sultan would need to increase the fiscal pressure.¹⁶

¹⁴ These are honorific titles used by people of high rank or social status, indicating membership in the elite.

¹⁵ D.BŞM.MHF 13454, D.BŞM.MHF 13465.

¹⁶ This is closely related to the issue of bargaining power of the ruler vis-à-vis his administrators. In the relationship between a ruler and his agents, the probability of retaliation by the agents in the case of confiscation of their wealth is determined by the administrative structure. If administration is partially or entirely delegated to asset holders, the ruler tends to respect their property rights because he does not want to bear the costs that they could create by

We derive from (1):

$$\tau = \frac{\tilde{f}(Y - \delta M)}{Y} \quad (2)$$

Relation (2) describes the link between the two fiscal tools, τ and M . We now define the level of protection rent extracted by the Sultan:

$$T = \tau Y + \delta M - sn^2 \quad (3)$$

where $s \geq 1$ and sn^2 represents convex costs associated with the expropriation of the \bar{n} elites. In particular, we have $\bar{n} = M/\theta$, where θ is a positive parameter capturing the average level of captive assets detained by the expropriated elites. Indeed, enforcing *müsadere* requires the employment of agents and transportation of assets both incurring high costs. In addition to the afore-mentioned agency costs, there were also transportation costs associated with *müsadere*. If the assets were not auctioned at the spot, they were typically transported to Istanbul, or occasionally to the warzone. The more wealth is seized, the more sophisticated transportation means are required which supports convex costs assumption.

Lemma 1 (Appropriation through *müsadere*). $M \geq 0$ if and only if $\delta \geq \underline{\delta}$, where $\underline{\delta} = \frac{sM^2 - \tilde{f}Y\theta^2}{\theta^2 M(1 - \tilde{f})}$.

Proof. We have $T = \tilde{f}(Y - \delta M) + \delta M - sM/\theta$ and $\underline{\delta} = \{\delta | T = 0\}$. Considering that $\forall M, \tilde{f}, \partial T / \partial \delta =$

$M(1 - \tilde{f}) \geq 0$, it directly implies that where $\underline{\delta} = \frac{sM^2 - \tilde{f}Y\theta^2}{\theta^2 M(1 - \tilde{f})}$ is such that if $\delta \geq \underline{\delta}, T \geq 0$.

cutting off administrative services. In a way, the greater the resources that others possess relative to those of the ruler, the greater capacity they possess to resist the ruler's demands (Levi 1988; Greif 2008).

Lemma 1 simply expresses that enforcement of *müsadere* is fiscally advantageous for the Sultan if it is sufficiently appropriative. Otherwise, the costs incurred by expropriating through *müsadere* is superior to the fiscal rent generated by it.¹⁷ In other words, the Sultan would not be incentivized to expropriate elites if there is a full redistribution of confiscated captive assets.

By incorporating (2) into (3), we will be able to define the first order condition (FOC):¹⁸

$$\frac{\partial T}{\partial M} = 0 \Leftrightarrow M = \frac{\delta(1 - \tilde{f})\theta^2}{2s} \quad (4)$$

We derive from (2) and (4) that:

$$\tau = \tilde{f} - \frac{\tilde{f}\delta^2(1 - \tilde{f})\theta^2}{2Ys} \quad (2')$$

Including *müsadere* allows the Sultan to reduce fiscal taxes. As recently evidenced the Ottoman Empire collected the least amount of taxes per capita in early modern Europe together with Poland (Karaman and Pamuk 2010). On the one hand, this was related to the vast size of the empire and the heterogeneity of its population, leading to administrative inefficiencies. On the other hand, the existence of *müsadere*

¹⁷ It should be noted that, when $\delta < \underline{\delta}$ the Sultan does not use *müsadere* (this case is detailed in Annex 1).

¹⁸ Second Order Condition (SOC) $\frac{\partial^2 T}{\partial \tilde{c}^2} = -\frac{s}{\theta^2} \leq 0$ is verified because $s \geq 1$.

could refund the treasury through confiscation of highly wealthy individuals.¹⁹ In a way, *müsadere* provided the central government with immediate, though irregular, revenue (Cezar 1986).²⁰

Stage 1: Elites' choice of assets

Payoffs of representative elite i are given by:

$$\pi_i = \mathbb{P}_i(M)[(1 - \tau)y_i + (1 - c_i)] + (1 - \mathbb{P}_i(M))[(1 - \tau)y_i + 1]$$

$$\pi_i = (1 - \tau)y_i + 1 - \mathbb{P}_i(M)c_i \quad (5)$$

¹⁹ In some cases, the need for refunding the treasury or even affluence was used as a pretext by the government to confiscate. One of the interesting explanations for considering 'affluence' as a - justification for confiscation is as follows. When the confiscator was commissioned with the confiscation of the wealth of Karaosmanoğlu Hacı Mehmed, he was told that 'because he has been the ayan [tax farmer] for a long while now, it is expected that he possesses so much wealth.' C.DH 329/16413 (28 August 1792 (10 Muharrem 1207)). Quantifying the contribution of confiscation revenues to total state revenues is tricky because it is hard to find revenue data of good quality and to know the total number of confiscations, N , in a given period. Arslantaş (2018) finds an approximate number, which is around 6.85 and 6.84 per cent, for the years of 1784 and 1785 for which revenue data exist.

²⁰ Low levels of taxation together with confiscation can be understood in light of the following narrative. Over-taxation of the subjects often resulted in *müsadere*. As fiscal entrepreneurs, tax farmers signed a contract in either primary or secondary markets of tax farming, making them liable to make prefixed payments to be followed by annuities. The revenue they collected above that amount was their profit. The natural outcome of this process was that many entrepreneurs did their best to squeeze tax payers. From the central government's point of view, oppressing the subjects could mean permanent damage to the tax base by lowering tax compliance through damaging the ruler's legitimacy. The fact that such acts of over-taxation resulted in confiscation of the tax farmer's wealth reveals that high taxation was also not preferred. See, for example: C.ML 460/18682 (12 January 1793 (29 Cemaziyülevvel 1207)).

where $\mathbb{P}_i(M)$ is the probability of elite i to be expropriated by *müsadere* which positively depends on the level of captive assets M that the Sultan decides to extract from elites. To keep the model tractable, we assume a linear production function:

$$y_i = \beta c_i \quad (6)$$

where β determines the strictly positive return of captive assets.²¹

Incorporating (2') and (6) into (5) allows us to express FOCs²² of the representative elite:

$$\frac{\partial \pi_i}{\partial c_i} = 0 \Leftrightarrow \beta(1 - \tau) - \frac{\partial \tau}{\partial c_i} \beta c_i = \frac{\partial \mathbb{P}_i(\bar{C})}{\partial c_i} c_i + \mathbb{P}_i(\bar{C}) \quad (7)$$

Since elites were assumed to be identical, at equilibrium we have by definition: $c_i^* = c^*$ and $Y = y_i = y, \forall i \in N$.²³ This also entails that the Sultan randomly targets the elites, *i.e.* $\mathbb{P}_i(M) = n$, the number of elites expropriated by *müsadere* is given by $n = M/c^*$ and $\theta = c^*$. We deduce from (7) that:²⁴

$$c^* = \min \left\{ \frac{\beta s}{\delta(1 - \tilde{f}\delta)}, 1 \right\} \quad (8)$$

²¹ It should be noted that, for the sake of clarity, this production function assumes that fugitive assets are unproductive.

²² SOCs are verified if $-\frac{\partial^2 \tau}{\partial c_i^2} \beta c_i - \frac{\partial \tau}{\partial c_i} \beta - \frac{\partial^2 \mathbb{P}_i(\bar{C})}{\partial c_i^2} c_i - 2 \frac{\partial \mathbb{P}_i(\bar{C})}{\partial c_i} \leq 0, \forall i \in N$.

²³ SOCs : $\frac{\partial^2 \pi_i}{\partial c_i^2} = -\frac{\delta(\tilde{f}\delta-1)(\tilde{f}-1)}{ns} \leq 0, \forall i \in N$ because $\tilde{f} \leq 1$ and $\delta \leq 1$.

²⁴ Considering the case $c^* = \min \left\{ \frac{\beta s}{\delta(1 - \tilde{f}\delta)}, 1 \right\}$ suggests that elites do not have access to loan. However, it is noteworthy that elites actually had access to loans provided by the Greek, Armenian and Jewish bankers, which was especially true in the case of major tax farmers, and sometimes by other tax farmers (Çizakça 1996; Barkey 2008; Yaycıoğlu 2016). For the sake of clarity, we assume in the model that such loans did not exist.

It is worth noting that the level of captive assets positively depends on their productive returns, β . Similarly, c^* is positively linked with the cost of expropriation, s . The impact of the level of appropriation δ on c^* is trickier.²⁵ Indeed, for high levels of redistribution (*i.e.* low δ), increasing appropriation is associated with a decrease of captive assets. On the contrary, for low levels of redistribution (*i.e.* high δ), we observe a positive link between δ and c^* .

To ease tractability, we focus on the interior solution – *i.e.* $\beta \leq \bar{\beta} = \frac{\delta(1-\tilde{f}\delta)}{s}$ – but the case $\beta > \bar{\beta}$ is treated in Annex 1. By injecting (8) in (2') and (4) we obtain the equilibrium values of fiscal tools controlled by the Sultan:

$$\tau^* = \frac{2 - \delta(1 + \tilde{f})}{2(1 - \tilde{f}\delta)} \quad (9)$$

$$M^* = \frac{(1 - \tilde{f})\beta^2 s}{2\delta(1 - \tilde{f}\delta)^2} \quad (10)$$

The value of tax, $\tau^* \in [0,1]$, only depends on the level of redistribution associated with expropriation and the threshold of fiscal pressure given by the PLC. In particular, we see from (9) that the level of tax rate is negatively related with the appropriation through *müsadere*, δ .²⁶ This result stems from the PLC and the substitution between the two fiscal tools controlled by the Sultan. Regarding M^* , the redistribution associated with *müsadere* also plays a key role. Indeed, as we show in Annex 1, the sign of $\frac{\partial M^*}{\partial \delta}$ hinges on the curvature PLC. If the PLC is curved to the left ($\tilde{f} \leq 1/3$), the level of appropriation negatively impacts M^* . By contrast, a PLC curved to the right ($\tilde{f} > 1/3$) involves the existence of a positive relationship between a low redistributive *müsadere* (high δ) and the volume of

²⁵ $\partial c^*/\partial \delta = \beta ns(2\tilde{f}\delta - 1)/[(\tilde{f}\delta - 1)^2 \delta^2]$. Considering that both \tilde{f} and $\delta \in [0,1]$, $\frac{\partial c^*}{\partial \delta} \leq 0$ (resp. > 0) if $\delta \leq 1/2\tilde{f}$ (resp. $\delta > 1/2\tilde{f}$).

²⁶ $\partial \tau^*/\partial \delta = (\tilde{f} - 1)\tilde{f}/[2(\delta\tilde{f} - 1)^2] < 0$.

captive asset captured by the Sultan. Then, our framework emphasizes a positive relation between M^* and \tilde{f} . In particular, it means that if external threats increase, the Sultan would make a more intensive use of *müsadere*. There was indeed a positive relationship between the intensity of external threats, and confiscation of elites. Based on 1,017 cases of confiscation during the period 1750-1839, Arslantaş (2018) finds that the likelihood of confiscation increased with war pressure – a variable created based on annual war casualties. But the evidence suggests that the Sultan preferred those elites far from warzones since he needed the military support of those proximate to warzones. It is not surprising that the long-18th century is labelled as an age of wars and confiscations at the same time. The fact that there was a boom in the number of family-type pious foundations (by 80%) in the 18th century is interesting as these organizations have long been argued to have served as a shelter from confiscation due to their sacred status (Kuran 2001; Yediyıldız 2003). Last, one could directly note from (10) that the high values of the elites' productivity, β , encourages the Sultan to confiscate captive assets. It is linked with an abundance effect: if the representative elite i invests intensively in captive assets, it would trigger higher level of *müsadere*. Interestingly, one could notice that the number of elites expropriated is given by $n^* = \frac{(1-\tilde{f})\beta}{2(1-\tilde{f}\delta)}$.²⁷ It notably confirms the fact that higher β , increases both the attractiveness of captive assets (see (8)) and the number of elites affected by *müsadere*.

We can now formulate our first proposition.

Proposition 1 (Müsadere effects). *Müsadere effects differ according to the productivity of elites.*

1. *When β is low ($\beta \in [0, \beta_1]$), müsadere generates lower economic performance and lower fiscal rent than a fiscal system without müsadere.*
2. *When β is intermediate ($\beta \in (\beta_1, \bar{\beta}]$), müsadere generates lower economic performance but higher fiscal rent than a fiscal system without müsadere.*
3. *When β is high ($\beta > \bar{\beta}$), müsadere generates identical economic performance and higher fiscal rent than a fiscal system without müsadere.*

Proof. See Annex 1.

²⁷ We show in Annex 1 that $n^* \leq 1$, which is logical with regard to the unitary population of elites.

Proposition 1 compares a situation in which the Sultan uses *müsadere* with a situation in which he only has the ability to choose the tax rate, τ . It provides useful insights to understand the rationale of *müsadere*. The first implication of Proposition 1 is that *müsadere* is always dominated regarding the total creation of wealth, Y . Indeed, in the best-case scenario (3.), *müsadere* provides identical economic performance than a fiscal system only based on taxes.

Insert fig. 3 here

Figure 3 illustrates the fiscal advantage of *müsadere* (\hat{T}) defined as the difference between the fiscal rent extracted through *müsadere* and without it. First, when elites' productivity is low, we see that $\hat{T} \leq 0$ meaning that the Sultan would extract higher fiscal rent if $M = 0$. Generally speaking, *müsadere* provides higher fiscal rent as soon as $\beta > \beta_1$, however we distinguish here two subcases. The intermediate case, $\beta \in (\beta_1, \bar{\beta})$ is interesting because the Sultan simultaneously receives a higher fiscal rent with *müsadere* but generates lower incentives for elites to invest in captive assets. Therefore, in a static framework, *müsadere* appears more appealing than a fiscal system only based on τ . However, in a more dynamic perspective, it would impoverish the Empire undermining seriously the survival of the Sultan in the long run.²⁸ Last, if captive assets are really productive ($\beta > \bar{\beta}$), then using *müsadere*

²⁸ Many Sultans were dethroned during the history of the Empire. During the period 1603 and 1703 alone, dethronements put an end to the reign of six out of nine Sultans (Evrensel and Minx 2017). Selim III (r. 1789-1807) exemplifies the risk of pursuing policies against the interests of established groups. In order to finance his Western-style reforms particularly in the military, he followed a centrist policy including confiscation of elites. In the event known as the 1806 Edirne Incident, the New Order Troops (Selim's newly founded army) confronted a coalition of Balkan elites whose lands were under the threat of confiscation. The fact that the Edirne incident ended in favor of the Balkan elites greatly shook the authority of Selim III (Shaw 1971). He was eventually deposed by the Janissaries who acted with a fatwa (religious verdict) from the Grand Mufti.

appears to be rational because it provides both higher fiscal rent ($\hat{T} > 0$), and equal economic performance.²⁹

We can also deduce another result from Proposition 1.

Corollary of Proposition 1 (Using *müsadere*). *Ceteris paribus, müsadere is more likely to be used if the external (resp. internal) threat is high (resp. low)*

Proof. A positive shock from external threats curves the PLC to the right. Consequently it corresponds to an exogenous increase of the required level of fiscal pressure, \tilde{f} . We demonstrated in Annex 1 that

$\beta_1 = -\frac{4\tilde{f}\delta(\delta^2\tilde{f}^2-2\delta\tilde{f}+1)}{s(3\delta\tilde{f}^2-4\tilde{f}+2\delta\tilde{f}-\delta)}$, and we have:

$$\frac{\partial\beta_1}{\partial\tilde{f}} = -\frac{\delta^2}{s} \leq 0$$

Consequently, we have the following sequence: higher external threats increase \tilde{f} which, in turn, reduces the value of β_1 . It then increases the likelihood of a profitable use of *müsadere* (see Proposition 1). With a symmetrical reasoning, one could deduce that an increase in internal threats – *i.e.* a diminution of \tilde{f} – corresponds to a lower likelihood of a profitable use of *müsadere*.

The corollary of Proposition 1 is consistent with historical evidence in two ways. First, greater number of wars fought abroad required more revenue in the treasury and *müsadere* was a quick way of extracting that revenue (Cezar 1986). Second and even more importantly, decentralization of power in the 18th century, which happened as a result of introduction of life-term tax farming that can be regarded as a method of sovereign lending, was an outcome of relative weakening of Ottoman military power as well since revenue from uncollected taxes of many years ahead were thus brought into the treasury. In

²⁹ However, one could argue that there exists a positive link between fiscal rent and the risk of political rebellion.

this respect, war pressure was indirectly associated with the increasing number of confiscations during the aggressive phase.

5. TARGETING ELITES

In the previous section, elites are assumed to be homogenous. Consequently, the Sultan randomly targets elites and the model cannot provide insights regarding the choice of expropriated elites. To circumvent this shortcoming, we consider a new setting only focusing on the decision of the Sultan regarding the *müsadere* practice. We assume that the Sultan wants to expropriate a given number of elites, $n \in (0,1)$ and that elites' population is formed of two groups: $h \in (0,1)$ elites characterized by a high symbiotic relationship with the Sultan and $l = 1 - h$ elites with low one.³⁰ A high level of symbiotic relationship may be due to three elements: military strength of an elite i , the economic reliance of the Sultan with respect to the elite, and political closeness.³¹ This symbiotic relationship involves

³⁰ An archival document dated to 1786 is quite telling in terms of symbiotic relationship between the Sultan and elites. Upon the allegations that Çapanoğlu Süleyman was oppressing the people under him, the Sultan asked the opinion of the Grand Vizier how to proceed. While for many others, this could result in execution and confiscation, the first part of the response of the Vizier as follows: "It cannot be said that what is being rumored about the Çapanoğlus is wrong. But at this time if there is a need of 5,000 and 10,000 soldiers, we have only Çapanoğlus from the dynasties that can send. They were the ones who sent 1,000 soldiers to Egypt and this time 2,000 to the army of Ismail. If they are needed again, they would do the same." The words of the vizier refer to a type of reciprocity based on the military support in exchange for non-confiscation. The second part of the vizier's answer emphasizes the irreplaceability of the family's know-how by a centrally appointed official: "If a Paşa is appointed to replace him, his influence will not be like that of the Çapanoğlu because of inexperience. That is because he knows the temperament of people. For now, we shall try to warn him by sending a letter." The Sultan responded as follows: "My vizier, it is understood that his execution is not timely. There should be a more appropriate time for it." (Uzunçarşılı 1974) (HAT 25642).

³¹ In analyses of economic relations between the sovereign and constituents, new institutional research has usually focused on merchants as victims of state predation and thus taxation as a source of credible retaliation, meaning that the ruler avoids confiscation if a potential target can provide revenue through tax higher than the gains from one-off confiscation (Veitch 1986; Olson 1993; Greif 2006). This does not explain the Ottoman case in which the

two implications with regard to the practice of *müsadere*. First, expropriating a h-type elite is more costly ($s_h \geq s_l$). Second, only h-type elites are able to claim for a share of the fiscal rent of the Sultan, T (i.e. they have a bargaining power on the sharing of the fiscal rent). Consequently, by reducing their number, the Sultan secures a larger share of T . In this last section we are interested in the rationale of the Sultan to expropriate h-type elites (n_h) rather than l-type ones (n_l), with $n = n_h + n_l$. In order to stay tractable, we rely on a few simplifications. Firstly, we normalize to one the l-type elites' expropriation costs such as $s_l = 1$ and $s_h \geq 1$. Secondly, we rewrite the fiscal rent as follows:

majority of the targets of confiscation were exempt from tax payment. Shirking in tax collection was not the issue either as taxes were mostly collected under the tax farming system, requiring fiscal contractors to make a lump sum payment. Potential victims of *müsadere* could have three sources of bargaining power. In other words, three things could have deterred the sovereign from confiscation. First, some elites who were organized as patrimonial families had their own troops in which they had invested for decades. They could and did sometimes use their military power against the central government. Certainly, the center's military power was always superior to theirs. But the fact that they possessed armed troops had a deterrence effect, especially when the opportunity cost of fighting a local trouble-maker was high. Second, many potential targets of confiscation had a symbiotic relationship with the imperial center, which required them to provision wars abroad by manning imperial armies or sending food and munition to warzones. Third, credibility of these threats depended also on the nature of fiscal markets in which they operated. As for provincial elites, some enjoyed monopolies, while some had to compete with others. A family, which was particularly successful in capturing monopoly rents over its territorial zone of influence, was unlikely to be replaced when its wealth and power was confiscated. By contrast, the relative bargaining power of those families that operated in competitive fiscal markets was lower since they could be easily replaced by others. For example, consider two families, i.e. the Karaosmanoğlus of Manisa in western Anatolia and the Çapanoğlus of Yozgat in central Anatolia. These families enjoyed monopoly power in their spheres of influences from the mid-18th to early 19th century. The more they monopolized, the more they became irreplaceable. Out of 21 (13 and 8 respectively) confiscation attempts initiated against these families, only 4 ended with full confiscation. In 16 cases (11 and 5) they managed to eschew full confiscation. In other words, when an elite had a monopoly over a market, she was able to negotiate with the Sultan to secure better economic positions (Arslantaş 2018).

$$T = \Gamma - s_h(n_h)^2 - (n_l)^2 \quad (3')$$

where $\Gamma = \tau Y + \delta M$ is supposed to be known by the Sultan and not affected by the choice of targeted elites. This last point means that, contrary to the model developed in Section 4, we disregard the choice of assets made by elites and we focus on the choice of the Sultan regarding the practice of *müsadere*.

Fiscal rent being contestable by h-type elites, the share leaving to the Sultan, T_S , is given by:

$$T_S = \alpha T \quad (11)$$

where $\alpha \in [0,1]$ is the level of bargaining power detained by the Sultan over the h-type elites. When it takes the value 1 he captures the whole fiscal rent, and $\alpha = 0$ refers to a situation in which the h-type elites enjoy T . The Sultan maximizes his share of the fiscal rent T_S , solving the following problem:

$$\max_{\{n_h\}} T_S \quad s. t. \quad n_l = n - n_h \quad (12)$$

Proposition 2.a. (Non-contestable fiscal rent). When $\alpha = 1$ the Sultan

- equally targets elites if $s_l = s_h$;
- targets more intensively the l-type elites otherwise.

Proof. For $\alpha = 1$, $T_S \equiv T$ for all n_h . Consequently, the value of n_h that solves the problem in (12) is $\frac{n}{s_h+1}$. Considering that $n_l = n - n_h$, one can easily see that $n_l > n_h$ when $s_h > s_l$, and $n_l = n_h = \frac{n}{2}$ when $s_h = s_l$.

In Proposition 2.a., the only source of elites' heterogeneity is related to the cost of expropriation borne by the Sultan using *müsadere*. As it is costlier to seize the wealth of h-type elites, it appears straightforward to observe that the Sultan targets more severely the l-type elites when the fiscal power is fully centralized. However, when the Sultan is not able to fully secure fiscal rent ($\alpha < 1$), targeting h-type elites becomes more attractive because it also reduces the number of claimers. In other words, we consider a situation in which $\partial\alpha/\partial n_h \geq 0$. More specifically we adopt the following affine formulation:

$$\alpha = n_h + \alpha_0 \quad (13)$$

where α_0 is the share of T secured by the Sultan when he does not use *müsadere* on h-type elites. As a consequence, α_0 may be seen as a proxy of the level of the Sultan's fiscal capacity. Indeed, high (*resp.* low) value of α_0 means that he is able to secure an important (*resp.* feeble) share of fiscal rent without expropriating h-type elites. Considering (13) and the problem in (12), we are now able to formulate our next proposition:

Proposition 2.b. (Fiscal capacity and elites' targeting). When $\alpha = n_h + \alpha_0 < 1$, The lower the fiscal capacity of the Sultan is, the more h-type elites are targeted.

Proof. See Annex 1.

Insert fig. 4 here.

Fig. 4 presents partial evidence to the propositions 2.a. and 2.b. Given that the size of wealth was positively correlated with high bargaining power, high average value of assets confiscated in a given ten-year period signifies the targeting of h-type elites. The period 1770-1780, where there is a sharp decline, was marked by the beginning of fiscal and political centralization which continued until the end of the period for which data is available. While a higher of confiscations were conducted after 1770, they were directed at less wealthy elites.

6. CONCLUSION

Describing the pristine states, Scott (2017, p. 14) defined a state as “a tax collector”, and Usher (1992) explained that taxation is a form of predation. The ideology of state as provider of public goods and services dissimulates the relationship between taxation and predation. By contrast, confiscations stand as overt forms of predation. The advantage of the specific fiscal system of the Ottoman Empire is that it lends credence to the idea that there is not such a sharp contrast between taxation and confiscation. In fact, *müsadere* or the routine confiscation of elites including office-holders and tax-farmers was part of the Sultan's fiscal system. As previously emphasized, *müsadere* has not been studied sufficiently until recently. One of the originality of this paper is to focus on this specific system and explores the relationship between fiscal system and confiscations.

We have already mentioned that according to Karaman and Pamuk (2010) the Ottoman Empire collected the second least amount of taxes per capita in early modern Europe. Bang (2015) generalized this finding claiming that large empires such as Roman Empire, imperial China and the Ottoman Empire imposed low per capita taxes. Their centrally controlled administrations were tiny, and they relied on local elites to support them financially and militarily during critical moments notably in warfare. The main issue was to find methods to eschew siphoning of the revenue by local elites that could be mobilized for the central state. The political economy of fiscal regimes illustrates different trajectories pursued in different empires. These trajectories were principally determined by political factors.

Following analytic narratives methodology, our model demonstrates that from a purely *economic* point of view, in the best-case scenario, *müsadere* affords identical economic performance compared with a purely fiscal system. In fact, the level of tax rate is negatively related with the appropriation through *müsadere*. In our model, this result is derived from the PLC and the fact that the two fiscal tools managed by the Sultan are substitutable. Historically speaking, confiscations were positively related to external wars. It can be concluded that *müsadere* was often less efficient than a purely fiscal system and impoverished the Empire in long run. However, *müsadere* had a specific *political* efficiency: it allowed a controlled decentralization by the sultan. In other words, its importance was not in respect of revenue-maximizing but rather maximizing predatory rules. Finally, the paper briefly tackled the question of the *müsadere* targeting process. Using a very simple framework, we found a negative relationship between the ability of the Sultan to secure his fiscal rent and the expropriation of h-type elites (those able to claim for the sharing of the fiscal rent). The results of our case study, which are consistent with qualitative and quantitative evidence from the Ottoman archives, explain the functional aspect of the *müsadere* practice that had thus far remained ambiguous in the Ottoman historiography. Further comparative studies between the Ottoman Empire and other types of empires will cast light on the impact of different types of state predation on economic performance.

APPENDIX

Annex 1: Computational details

Corner solution ($\beta > \bar{\beta}$)

We study here the case $\beta > \bar{\beta}$. By definition, $c^* = 1$. Based on (2') and (4), we have:

$$\tau^* = \tilde{f} - \frac{\tilde{f}\delta^2(1-\tilde{f})}{2\beta s} \quad (A1)$$

$$M^* = \frac{\delta(1-\tilde{f})}{2s} \quad (A2)$$

It should be noted that $\tau^* \geq 0$. Indeed, we deduce from (A1) that $\tau^* \geq 0$ for $\beta \geq \frac{\delta^2(1-\tilde{f})}{2s}$, and we have

$\beta > \frac{\delta(1-\delta\tilde{f})}{s} = \bar{\beta}$ (corner solution). By factoring $\frac{\delta^2(1-\tilde{f})}{2s} - \bar{\beta}$, we obtain, $\forall \delta, \tilde{f} \leq 1$:

$$\frac{\delta(\delta\tilde{f} + \delta - 2)}{2s} < 0$$

In other words, $\beta \geq \frac{\delta^2(1-\tilde{f})}{2s}$ is always verified and thus $\tau^* \geq 0$.

Following (3), (A1) and (A2), the fiscal rent may be written as follows:

$$T^* = \frac{4\tilde{f}\beta s + \delta^2(\tilde{f} - 1)^2}{4s} \quad (A3)$$

Proof of Proposition 1

For the sake of clarity, we use the subscript r to denote the situation in which the Sultan cannot use *müsadere* ($M^* = 0$). In the second stage of the game, the fiscal policy – *i.e.* τ^{*r} – is thus fully determined by the PLC. From (1) with $M^* = 0$, it can be derived that $\tau^{*r} = \tilde{f}$, and $T^r = \tau Y^r$. In the first stage, elite i maximizes (5) considering (6) and $\tau^{*r} = \tilde{f}$:

$$\frac{\partial \pi_i}{\partial c_i} = \beta(1 - \tilde{f}) > 0, \forall c_i \in [0,1]$$

Consequently, elite i is always incentivized to devote more resources in captive assets such that $c_i^{*r} = c^{*r} = 1$. Finally, one could easily see that $T^{*r} = \tilde{f}\beta$.

On the other hand, with *müsadere*, $\forall \beta \in (0, \bar{\beta})$ each elite invests $c^* = \frac{\beta s}{\delta(1-\tilde{f}\delta)} < c^{*r}$ and $Y^* =$

$\frac{\beta^2 s}{\delta(1-\tilde{f}\delta)}$. We now prove that $Y^{*r} \geq Y^*$. It is equivalent to show that:

$$\frac{(\beta s - \delta + \tilde{f}\delta^2)\beta}{\delta(\tilde{f}\delta - 1)} \geq 0$$

$$\Leftrightarrow \beta \leq \frac{\delta(1 - \tilde{f}\delta)}{s} = \bar{\beta}$$

Consequently, $\forall \beta \in (0, \bar{\beta})$, we always have $Y^{*r} \geq Y^*$.

We now look at the sign of T^* when $\beta \in (0, \bar{\beta})$. Using (8), (9) and (10), Lemma 1 becomes:

$$\delta \geq \underline{\delta} = \frac{4\tilde{f}}{3\tilde{f}^2 + 2\tilde{f} - 1} \quad (A4)$$

We deduce from (11) that $T^* > 0$ if and only if:

$$-3\delta\tilde{f}^2 + 4\tilde{f} - 2\tilde{f}\delta + \delta > 0$$

$$\Leftrightarrow \delta > \frac{4\tilde{f}}{3\tilde{f}^2 + 2\tilde{f} - 1}$$

Which is always ensured by (A4).

We now address the issue of *müsadere's effect* on fiscal rent when $\beta \in (0, \bar{\beta})$. Let $\hat{T} = T^* - T^{*r}$ represents the fiscal advantage of enforcing *müsadere*. We have:

$$\hat{T} = \frac{\beta^2 s (\delta(1 - 2\tilde{f}) + \tilde{f}(4 - 3\delta\tilde{f}))}{4\delta(\tilde{f}\delta - 1)^2} - \tilde{f}\beta$$

One could easily show that $\hat{T} = 0$ for two values of β :

$$\beta_0 = 0, \quad \text{and} \quad \beta_1 = -\frac{4\tilde{f}\delta(\delta^2\tilde{f}^2 - 2\delta\tilde{f} + 1)}{s(3\delta\tilde{f}^2 - 4\tilde{f} + 2\delta\tilde{f} - \delta)}$$

It should be noted that $3\delta\tilde{f}^2 - 4\tilde{f} + 2\delta\tilde{f} - \delta < 0$ (Lemma 1), and $\delta^2\tilde{f}^2 - 2\delta\tilde{f} + 1 \geq 0$ due to the fact that $\delta\tilde{f} \in (0, 1)$. Consequently, we have $\beta_1 > 0$.

Due to (A4), the second derivative of \hat{T} with respect to β is:

$$\frac{\partial^2 \hat{T}}{\partial \beta^2} = -\frac{s(3\delta \tilde{f}^2 - 4\tilde{f} + 2\tilde{f}\delta - \delta)}{2(\tilde{f}\delta - 1)^2 \delta} \geq 0$$

To put it differently, \hat{T} is concave on β and $\hat{T} = 0$ admits two solutions. One could easily see that $\hat{T} \leq 0$, for $\beta \in (0, \beta_1]$, and $\hat{T} \geq 0$ for $\beta \geq \beta_1$.

We consider a situation in which $\beta < \bar{\beta}$, where $\bar{\beta} = \frac{\delta(1-\tilde{f}\delta)}{s}$. By factoring $\beta_1 - \bar{\beta}$, with Lemma 1 and $\tilde{f}\delta \leq 1$, we obtain:

$$-\frac{\delta^2(\tilde{f}-1)^2(\tilde{f}\delta-1)}{s(3\delta\tilde{f}^2-4\tilde{f}+2\tilde{f}\delta-\delta)} \leq 0$$

We now address the case $\beta > \bar{\beta}$. As $c^* = c^{*r} = 1$, it implies that $Y^* = Y^{*r}$. Then, we know from (A3) that

$$\hat{T} = \frac{4\tilde{f}\beta s + \delta^2(\tilde{f}-1)^2}{4s} - \tilde{f}\beta = \frac{\delta^2(\tilde{f}-1)^2}{4s} \geq 0$$

Therefore, when $\beta > \bar{\beta}$, $T^* \geq T^{*r}$.

Last, we can conclude that

- $\hat{T} \leq 0$, for $\beta \in (0, \beta_1]$, and $\hat{T} \geq 0$ for $\beta > \beta_1$;
- $Y^* < Y^{*r}$ for $\beta \in (0, \bar{\beta})$ and $Y^* = Y^{*r}$ for $\beta > \bar{\beta}$.

Proof that $n^* \leq 1$

We know from (8) and (10) that:

$$n^* = \frac{M^*}{c^*} = \frac{(1-\tilde{f})\beta}{2(1-\tilde{f}\delta)}$$

Proving that $n^* \leq 1$, is equivalent to show that $n^* \leq 1$ both for $\beta \in [0, \bar{\beta}]$ and for $\beta > \bar{\beta}$.

First, we consider $\beta \in [0, \bar{\beta}]$. One could notice that $\frac{\partial n^*}{\partial \beta} = \frac{(1-\tilde{f})}{2(1-\tilde{f}\delta)} \geq 0, \forall \tilde{f}, \delta$. Therefore, we just need to prove that $n^* \leq 1$ when $\beta = \bar{\beta} = \frac{\delta(1-\tilde{f}\delta)}{s}$, $n^* = \frac{(1-\tilde{f})\delta}{2s} \leq 1$. Proof is direct considering $\tilde{f}, \delta \in [0,1]$, and $s > 1$.

Second, let $\beta > \bar{\beta}$. We know from that $c^* = 1$ and $M^* = \frac{\delta(1-\tilde{f})}{2s}$ (see (A2)). Here again the proof is trivial: $\forall \beta > \bar{\beta}, n^* = M^* \leq 1$.

□

Sign of $\frac{\partial M^*}{\partial \delta}$

From (10), one can easily show that:

$$\frac{\partial M^*}{\partial \delta} = \frac{(1-\tilde{f})\beta^2 s(1-3\tilde{f}\delta)}{(\tilde{f}\delta-1)^3 \delta^2}$$

Considering that $\tilde{f}, \delta \in [0,1]$, it directly implies that the sign of $\frac{\partial M^*}{\partial \delta}$ is the same as the one $(1-3\tilde{f}\delta)$.

In particular, $\frac{\partial M^*}{\partial \delta} \geq 0$ if $\delta \geq \frac{1}{3\tilde{f}}$. We know from Lemma 1 that $\delta \geq \underline{\delta} = \frac{4\tilde{f}}{3\tilde{f}^2+2\tilde{f}-1}$.

Therefore, $\frac{\partial M^*}{\partial \delta} \geq 0$ if and only if:

$$\frac{9\tilde{f}^2 - 2\tilde{f} + 1}{3(\tilde{f} + 1)(3\tilde{f} - 1)\tilde{f}} \geq 0 \quad (A5)$$

We first show that the numerator of (A5) is always positive $\forall \tilde{f} \in [0,1]$. Indeed, $9\tilde{f}^2 - 2\tilde{f} + 1$ is a concave on \tilde{f} , and admits a minimum of $8/9 \geq 0$ for $\tilde{f} = 1/9$. Consequently, $9\tilde{f}^2 - 2\tilde{f} + 1 \geq 0, \forall \tilde{f} \in [0,1]$. Then, (A5) is positive if $\tilde{f} \geq 1/3$, and negative if $\tilde{f} < 1/3$. Figure A1. illustrates the two cases.

Insert Fig. A1 here

Proof of Proposition 2.b.

FOC of the problem in (12) is given by:

$$\frac{\partial T_s}{\partial n_h} = \Gamma - s_h(n_h)^2 - (n - n_h)^2 + (nh + \alpha_0)(2n - 2n_h(1 + s_h)) = 0 \quad (A6)$$

Let n_h^* be the value of n_h verifying (A6), we have³²:

$$n_h^* = \frac{1}{3(s_h + 1)} \left[2n - \alpha_0(1 + s_h) + \sqrt{(\alpha_0(1 + s_h) + n)^2 + 3(\Gamma(s_h + 1) - shn^2)} \right] \quad (A7)$$

We need to ensure that $(\alpha_0(1 + s_h) + n)^2 + 3(\Gamma(s_h + 1) - shn^2) \geq 0$. It is always verified if $s_h(\Gamma - n^2) \geq 0$ which holds by definition because we only consider the case $T \geq 0$.

Considering α_h as a proxy of the fiscal capacity of the Sultan, we prove the Proposition 2.b. by showing that $\partial n_h^* / \partial \alpha_0 \geq 0$. To ease tractability, let $\lambda = (\alpha_0(1 + s_h) + n)^2 + 3(\Gamma(s_h + 1) - shn^2) \geq 0$, then

$$\frac{\partial n_h^*}{\partial \alpha_0} = \frac{1}{3\sqrt{\lambda}} (\alpha_0 s_h + \alpha_0 + n - \sqrt{\lambda})$$

We have $\lambda - (\alpha_0 s_h + \alpha_0 + n)^2 = 3(s_h(\Gamma - n^2) + \Gamma) \geq 0$, therefore $\frac{\partial n_h^*}{\partial \alpha_0} \leq 0$. In other words, the lower the fiscal capacity (α_0) of the Sultan is, the more h-type elites are targeted.

Annex 2: Archival Sources

Note: All archival documents used in this paper were purchased from the Prime Ministry Ottoman Archives in Istanbul. The following abbreviations refer to the name of the catalogue they are located, while the number part shows the exact location of the document in a given catalogue.

³² We keep only one solution due to the fact that $n_h^* \geq 0$ and $(\alpha_0(1 + s_h) + n)^2 + 3(\Gamma(s_h + 1) - shn^2) - (2n - \alpha_0(1 + s_h))^2 = -3(n^2 - \Gamma - 2\alpha_0 n)(s_h + 1) \leq 0$.

Abbreviations:

AE.III.Mustafa: Ali Emiri 3. Mustafa

AE.SABH.I: Ali Emiri 1. Abdülhamid

C.DH: Cevdet Dahiliye

C.ML: Cevdet Maliye

D.BŞM.MHF.d: Başmuhasebe Muhallefat Defterleri

AE.III.Mustafa 25565

AE.SABH.I 65/475-3

AE. SABH.I 65/475-6

AE.SABH.I 66/4604-3

C.DH 152/7576

C.DH 329/16413

C.ML 460/18682

C.ML 22924 (1766)

D.BŞM.MHF.d 13289

D.BŞM.MHF.d 13327

D.BŞM.MHF.d 13341

D.BŞM.MHF.d 13454

D.BŞM.MHF 13465.

D.BŞM.MHF.d 13465.

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Fig. 1. ‘Political’ Laffer curve

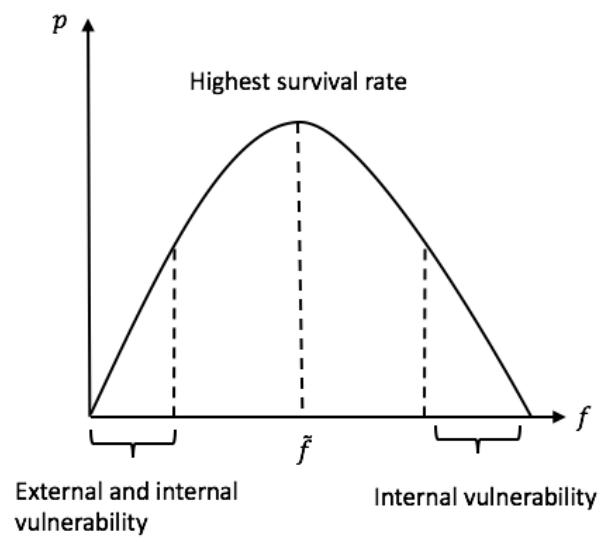
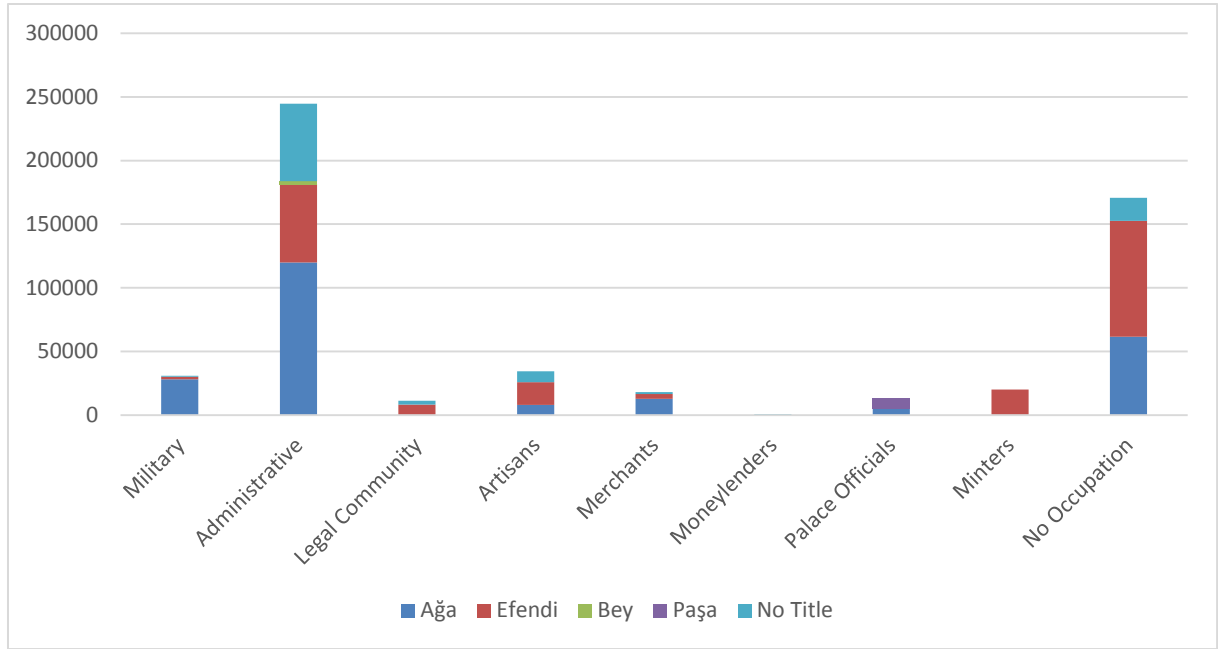


Fig. 2. Occupational and Title Distribution of Bidders of Confiscation Auctions in a Chosen Sample

(in piasters (*kuruş*))³³

³³ *Kuruş* was the Ottoman monetary unit that emerged in the eighteenth century replacing *akçe*. One British pound sterling was equal to 8 *kuruş* in 1800 (Pamuk 2000).



Source: D.BŞM.MHF.d 13289, D.BŞM.MHF.d 13327, D.BŞM.MHF.d 13454, D.BŞM.MHF.d 13341, D.BŞM.MHF.d 13465.

Notes: Those cases included in the data presented are Mustafa Mazhar Efendi (Head of Finance Department, 1818), Halil Efendi (Mufti, 1821), İsmail Paşa (Governor of Niğde, 1822), Ali Esad Paşa (Governor of Alanya, 1828), Salih Paşa (Governor of Damascus, 1828)

Fig. 3. The rationale of using *müsadere*

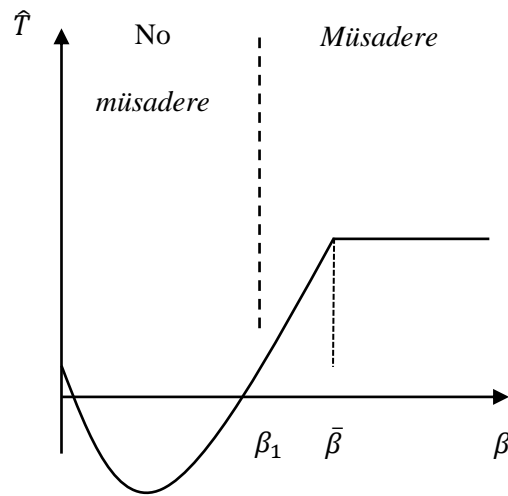
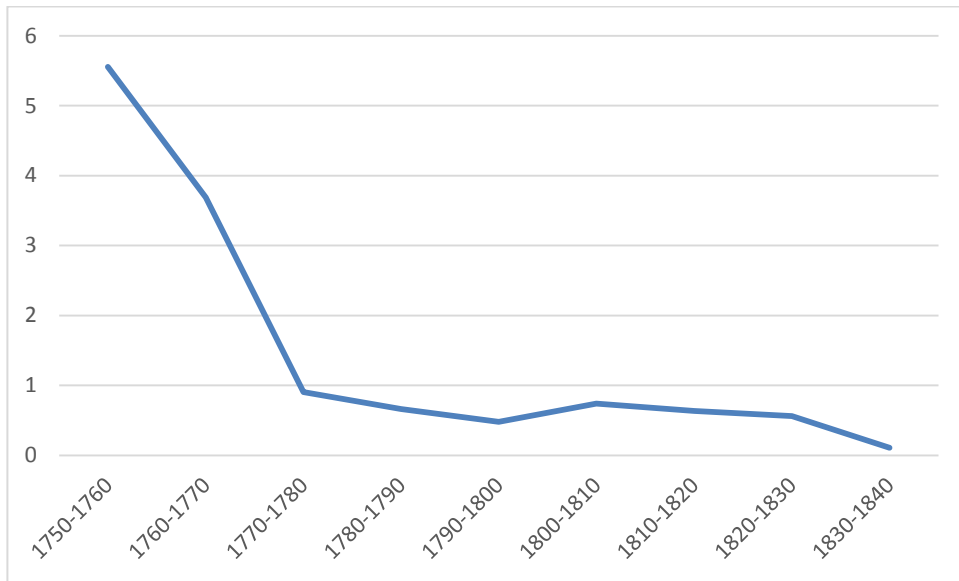


Fig. 4. Average value of confiscated assets per person (in tons of silver)



Source: Extensive number of archival sources used behind this graph can be reached at (Arslantaş 2018)

Figure A1. Curvatures of PLCs

