

# Fiscal Crisis and Institutional Change in the Ottoman Empire and France

Eliana Balla  
Department of Banking Supervision and Regulation  
Federal Reserve Bank of Richmond

Noel D. Johnson<sup>1</sup>  
Department of Economics  
SUNY at Buffalo

This version: February 19, 2008

## Abstract

Why is it that some countries adopted growth enhancing institutions earlier than others during the early-modern period? We address this question through a comparative study of the evolution of French and Ottoman fiscal institutions. Both countries made extensive use of private agents known as Tax Farmers to collect revenues. Each country also experienced a severe fiscal crisis at the beginning of the seventeenth century which increased the rate of predation on these fiscal contracts. Uncertain property rights, however, led to different paths of institutional change in each state. In France, a coalition of tax collectors successfully overcame the collective action costs of imposing constraint on the King. In the Ottoman Empire, tax collectors faced prohibitive transaction costs to organizing in a similar manner. As a result, fiscal contracts were less secure in the Ottoman Empire during the eighteenth century than in France. This shift helps explain why France experienced fundamental institutional change at the end of the eighteenth century, whereas Ottoman institutions experienced only incremental changes up to the collapse of the Empire in the nineteenth century.

JEL Classifications: N40, P48, H11

Key Words: Tax Farming, Economic History, Early-Modern France, Ottoman Empire

---

<sup>1</sup> We would like to thank the following people for their assistance in writing and researching this project: Douglas Allen and all of the participants in the economic history session at ISNIE 2004, Jean-Laurent Rosenthal, Alejandra Edwards, Timur Kuran, Steven Fazzari, Edgar Kiser, the participants in the Von Gremp Seminar at UCLA, the participants in the University of Manitoba Seminar Series, M. Shahid Ebrahim, Metin Cosgel, Murat Çizakça, Sanjay Subrahmanyam, the participants in the Development and Political Economy Seminar Series at UC Riverside, and three anonymous referees. Any mistakes are the fault of the Authors. Any questions or requests for revised drafts should be directed to Noel Johnson at ndj3@buffalo.edu. An earlier version of this paper was a chapter in Eliana Balla's dissertation. *The views expressed in this paper belong to the authors and do not represent those of the Federal Reserve Bank of Richmond or the Federal Reserve System.*

Good institutions are vital to economic growth. Unfortunately, most of today's countries do not have institutions which, in the words of North and Thomas, "...bring private returns into parity with social returns".<sup>2</sup> Given the role of history in constraining today's choices, this should not come as a surprise.<sup>3</sup> Few regions of the world illustrate this more clearly than the Middle East and the history of much of the Middle East is that of the Ottoman Empire. Among Ottomanists there is significant debate concerning the extent to which Ottoman public institutions were capable of adapting to changing economic circumstances during the early-modern period.<sup>4</sup> We contribute to this debate by contrasting the differential response of the French and Ottoman States to similar fiscal crises during the early seventeenth century. The fundamental question we seek to illuminate is why French fiscal institutions evolved in response to this crisis in ways that ultimately increased the amount of constraint on French rulers, whereas Ottoman institutions did not.<sup>5</sup>

We take as our starting point the fiscal crises faced by the Ottoman Empire and France at the beginning of the seventeenth century. These crises led to institutional failure in both

---

<sup>2</sup> North and Thomas, "The Rise of the Western...", pg. 5.

<sup>3</sup> There is an extensive literature identifying the deep relationship between historical institutions and present-day performance. For example, Daron Acemoglu, Simon Johnson, and James Robinson (2001). "The Colonial Origins of Comparative Development: An Empirical Investigation," *American Economic Review*, vol. 95, no. 5; Rafeal La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer, Robert Vishny (1998). "Law and Finance," *Journal of Political Economy*, vol. 106, no. 6; Kenneth Sokoloff and Stanley Engerman (2000). "History Lessons: Institutions, Factor Endowments, and Paths of Development in the New World," *Journal of Economic Perspectives*, vol. 14, no. 3.

<sup>4</sup> For the argument that Ottoman public institutions were adaptive see Sevket Pamuk (2004). "The Evolution of Financial Institutions in the Ottoman Empire, 1600-1914," *Financial History Review*, vol 11, no. 1; For the view that Ottoman public institutions were less capable of adapting see Timur Kuran (2003). "The Islamic Commercial Crisis: Institutional Roots of Economic Underdevelopment in the Middle East." *Journal of Economic History*, 63, no.2.

<sup>5</sup> We follow North in defining institutions as the formal and informal "rules of the game" governing exchange. See North, Douglass C. (1990). *Institutions, Institutional Change and Economic Performance*, Cambridge: Cambridge University Press. The obvious starting point when discussing the credibility of early-modern European institutions is North and Weingast, "Constitutions and Commitments...", however, we differ from North and Weingast in our emphasis on the possibility of constraint arising through the fiscal system, as a precursor to full-blown constitutional change. This argument resonates with work on England by Stasavage in, "Credible Commitment in Early Modern Europe..."

countries as rulers increasingly violated the property rights they had previously granted to tax collectors. In France, a cartel of tax collectors known as the Company of General Farms emerged and imposed greater constraint on the King.<sup>6</sup> In the Ottoman Empire, fiscal crisis did not lead to the emergence of a similar coalition. Instead, uncertain property rights led to a breakdown in the fiscal system with neither the Sultan, nor the tax collectors, respecting agreements during much of the eighteenth century. We attribute the differential evolution of institutions in France and the Ottoman Empire to the fact that tax collectors in the Ottoman Empire faced higher costs of organizing than did their French counterparts because they started with a different set of institutions. In France, the ability of tax collectors to pool capital was instrumental in allowing them to organize on a scale large enough to act as a credible threat against the Crown. This capital could be pooled at relatively low cost since in seventeenth century France there were already nascent institutions which allowed for the distinction between a “natural” and a “corporate” person, the creation of tradable shares in an organization, and the ability to separate ownership from control rights for investors. By contrast, in the Ottoman Empire the combination of inheritance law and the ability to immobilize property in the Islamic trust (*cash waqf*) system significantly *raised* the costs of accumulating and pooling capital in private enterprises. These factors prevented Ottoman tax collectors from emerging as a unified source of credit to their ruler and thus prevented them from imposing constraint on the fiscal activities of the Sultans.

---

<sup>6</sup> Our argument that coalitions emerged through the fiscal system in France is consistent with work by Bien, “Offices et Corps...”, Bossenga, “The Politics of Privilege...”, and Mark Potter, “Coalitions and Local Politics...”. However, while these authors emphasize the role played by corporate bodies in acting as financial intermediaries for the Crown, they do not interpret their rise as a source of constraint on the King’s actions. We argue, by contrast, that the role played by the Company of General Farms as a financial intermediary went hand in hand with its ability to credibly protect its property rights over the tax system.

We build on an existing literature which emphasizes the role played by private sector institutions in laying the groundwork for the establishment of credible public sector institutions.<sup>7</sup> The experiences of early-modern France and the Ottoman Empire suggest that public sector reforms are unlikely to succeed unless the necessary private sector institutions are in place. Specifically, tax collectors in France would not have been able to overcome the collective action costs of organizing to constrain the absolute authority of the Crown if they had not been able to act as a quasi-private corporation and pool large amounts of capital. In the absence of such private sector institutions to build upon, Ottoman tax collectors remained relatively disorganized and no significant constraint against the actions of the Sultan ever emerged from the fiscal system.<sup>8</sup>

We also shed light on the historical debate concerning the “flexibility” of public institutions in the Ottoman Empire. The contrasting the experiences of the Ottoman Empire and France suggest a much subtler interpretation of what is meant by “flexibility” than currently implied by the literature. The ability of French tax collectors to organize and impose constraint on the absolute monarch *decreased* the flexibility of the *ancien régime* government. Louis XVI faced higher costs to manipulating fiscal institutions than did Louis XIV. In this sense, it does not make sense to argue that *ancien régime* public sector institutions were more “flexible” than those of the Ottoman Empire during the eighteenth century. After all, it was the French public sector that experienced a catastrophic failure in 1789, not the Ottoman public sector. In the long-

---

<sup>7</sup> See Daron Acemoglu, Simon Johnson, and James Robinson (2005). “The Rise of Europe: Atlantic Trade, Institutional Change and Economic Growth,” *The American Economic Review*, vol. 95; Hilton Root (1989). “Tying the King’s Hands: Credible Commitments and Royal Fiscal Policy During the Old Regime,” *Rationality and Society*, vol. 1, No. 2; Kuran, “The Absence of the Corporation,” (2005).

<sup>8</sup> Which is not to say there was no constraint in the Ottoman Empire. As we discuss below, the military, the clergy, and others constrained the Sultans. But no significant constraint ever emerged within the fiscal system.

run, however, it was the inflexibility of French institutions at the end of the eighteenth century which provided traction for the Revolution by limiting the options available to the monarchy. In the Ottoman Empire, by contrast, successive governments were able to engage in incremental reforms more or less at will, for over another century.

### **Tax Collection in France and the Ottoman Empire at the End of the Sixteenth Century**

At the end of the sixteenth century the French fiscal system was relatively decentralized. Tax rates and bases were highly varied, reflecting the different terms under which various regions submitted themselves to royal authority. Consequently, taxes were also collected in many different ways. There were two basic organizational forms for tax collection. “Direct” taxes, on wealth such as the *Taille* were collected under *Régie* by agents of the Crown, usually venal office holders.<sup>9</sup> The Crown determined, at the beginning of each fiscal year, how much it required from a given tax, and then it was the duty of the collector to get that amount in addition to a percentage “cut” out of receipts. Thus, there was really no tax rate, as such, for *Régie* taxes. The collectors decided, within certain bounds, how much to collect from whom. “Indirect” taxes on transactions, such as the *Gabelles* (salt taxes), *Aides* (sales taxes, usually on wine and spirits) and, *Traites* (internal and external customs duties) were typically leased to individuals known as tax farmers. Under tax farming, the tax farmer agreed to make a fixed payment to the Crown in exchange for the residual claim to any tax revenues collected above the fixed amount. Tax farms had clearly defined rates on transactions which could be (and often were) subject to adjudication

---

<sup>9</sup> Strictly speaking, there were two different sort of *Tailles* collected in France. The *Taille Réelle* was collected on property in, primarily, the *Pays d’Etats*. The *Taille Personelle* was collected on heads of households, primarily in the *Pays d’Elections*. In general, the *Taille Réelle* was considered more equitable than the *Taille Personelle*. See Marion, 526.

in tax courts. At the end of the sixteenth century, the tax farms composed about a third of royal revenues and the *taille* brought in another fifty percent. After 1661 the tax farms increased in importance and brought in between forty and fifty percent of tax revenues a year.<sup>10</sup>

Given the variety of taxes involved, each with its own tax base and method of collection, it was costly for the Crown to determine exactly how much each tax was really worth. Local collectors, on the other hand, had at least a vague notion of how much the tax was worth to them. One way for the Crown to overcome this information asymmetry was to allocate the tax contracts using competitive auctions. Tax farming as a means to minimize the King's cost of collecting taxes is consistent with the set of institutions that governed the sixteenth century tax farm system. For example, there were many laws designed to ensure competitive auctions.<sup>11</sup> The number of investors in a single farm was restricted and liability for any investor was unlimited.<sup>12</sup> This had the effect of making it very costly for a cartel of tax farmers to pool their capital and exert market power. There is convincing evidence that, during the sixteenth century, these regulations were binding in the sense that auctions were competitive.<sup>13</sup>

The Ottoman fiscal system shared many similarities with that of France during the sixteenth century.<sup>14</sup> As in France, it was complex and relatively decentralized. The costs of tax collection by state agents alone were considerable given the size of the empire, its diverse

---

<sup>10</sup> See Durand, Y. (1971). *Les Fermiers Généraux au XVIIIe Siècle*. Paris: Presses Universitaires de France, p. 75; Briggs (1998). *Early Modern France*, appendix graph 3.

<sup>11</sup> For example, see Roux, *Les Fermes des Impôts*, pp. 37 and 44.

<sup>12</sup> See Bonney, "The Failure of the French Revenue Farms".

<sup>13</sup> The farms changed hands frequently and there were many bids during the auctions. See Bayard, *Le Monde des Financiers*, pp. 104-16.

<sup>14</sup> If anything, Ottoman fiscal institutions were more effective at extracting revenue from the population. In *per capita* terms, the Ottoman state was raising up to 60 percent more revenues than France around 1600. Authors' calculation with revenue estimates from Lybyer (1919) in Inalcik, Halil and Donald Quataert. *An Economic and Social History of the Ottoman Empire, 1300-1914*. Cambridge: Cambridge University Press, (1994, p. 78) and Inalcik and Quataert (1994, p. 82), and population data from Maddison (1983).

population, and the large number of taxes that varied by territory.<sup>15</sup> As in France, it was common for Ottoman rulers to subcontract with private agents.<sup>16</sup> Two-thirds to three quarters of Ottoman revenues came from the *Timar* System during the sixteenth century.<sup>17</sup> *Timar*-holders were cavalrymen with taxation rights given in place of salaries for their military services.<sup>18</sup> *Timar* contracts specified that, after the obligation to the *timar*-holder was met, the residual from tax collection was sent to the Treasury in Istanbul.

The bulk of the taxes collected through *timar* contracts were in kind, by contrast, the main source of liquid funds to the central administration was competitive tax farming, known as *iltizam*.<sup>19</sup> A typical tax farming contract was constituted as a *mudaraba*, or, classical Islamic partnership. Participants in these tax farm contracts came from diverse backgrounds. There are records of Christians and Jews, in addition to Muslims contributing capital to the partnerships. As in sixteenth century France, Ottoman tax farming contracts during the same period were typically limited to two, three, or four members.<sup>20</sup> Tax farmers were usually unable to pay the full auction price for the contract, instead paying a portion upfront and the remainder in installments. The guarantors of these installments were known as *kefils* and offered collateral either in wealth or in person. Contracts lasted one to three years, after which the tax farm was

---

<sup>15</sup> The most important tax collected by state agents was the *cizye* tax, a head tax paid by non-Muslims living in a Muslim state.

<sup>16</sup> This is supported by studies like that of Cosgel and Miceli who find that direct and indirect tax assignments were driven by a transactions costs rationale. Cosgel, Metin and Thomas J. Miceli (2005). "Risk, Transaction Costs, and Tax Assignment: Government Finances in the Ottoman Empire." *Journal of Economic History*, 65, no. 3: 806-821.

<sup>17</sup> Lybyer (1919) in Inalcik and Quataert (1994, p. 78).

<sup>18</sup> *Timar* means horse-grooming. The term connoted revenues sufficient for a cavalryman. A *timar*-holder's main role was to provide protection in the provinces and they joined the Sultan's army when at war. Only members of the military class were eligible to hold contracts. See Inalcik, Halil (1985). *Studies in Ottoman Social and Economic History*. London: Variorum Reprints, p. 311 and Inalcik, Halil (1973). *The Ottoman Empire: the Classical Age 1300-1600*, trans. N. Itzowitz (New York: Praeger Publishers, 1973) pp 107-115.

<sup>19</sup> For an analysis of the *iltizam* system see Çizakça, Murat (1993). "Tax Farming and Financial Decentralization in the Ottoman Economy, 1520-1697." *The Journal of European Economic History*. Vol.22, No. 2, pp. 219-50.

<sup>20</sup> See Çizakça (1996) for an extensive coverage of Ottoman tax farm business partnerships.

again auctioned out. The tax farmers were legally liable to the sultan and their accounts were regularly checked by bureaucrats.<sup>21</sup>

As in France, the transaction costs of measuring and monitoring collections goes far towards explaining why *timar* contracts were used to collect some taxes and *iltizam* contracts were used in other cases. *Iltizam* was the dominant form of taxation of mines, mints, salt works, mills, dyeing establishments, customs dues, and market taxes, all sources of revenue deemed difficult to forecast or collect.<sup>22</sup> *Iltizam* contracts were also more prevalent in outlying regions of the Empire, providing about twenty percent of revenues in Anatolia, twenty-five percent in the European provinces, and eighty percent in Egypt during the fiscal year 1527-28.<sup>23</sup>

As will be explained below, over the course of the seventeenth century, tax farming in both the Ottoman Empire and France grew in importance. In France, tax farming went from providing around a third of revenues at the beginning of the seventeenth century, to providing close to half of “ordinary” revenues at the beginning of the eighteenth century. Similarly, by the beginning of the eighteenth century, *iltizam* contracts accounted for an estimated thirty to fifty percent of the Sultan’s revenues.<sup>24</sup> However, there were also significant differences in how the organization of tax farming evolved in each country. In France, all the various tax farms were consolidated into a single, quasi-private, organization known as the Company of General Farms. During the eighteenth century, the Company became one of the most influential stakeholders in

---

<sup>21</sup> Çizakça (1996), pp. 140-142 and 149).

<sup>22</sup> See Darling, Linda (1996). *Revenue Raising and Legitimacy: Tax Collection and Finance Administration in the Ottoman Empire 1560-1660*. E.J. Brill: New York, p. 153 and Islamo\_lu-Inan, Huri ed. (1987) *The Ottoman Empire and the World Economy*. Cambridge: Cambridge University Press, pp. 58-59. It is probably no coincidence that salt and customs taxes also composed the bulk of French tax farm revenues.

<sup>23</sup> Çizakça, Murat (1996) *A Comparative Evolution of Business Partnerships: the Islamic World and Europe, with Specific Reference to the Ottoman Archives*, Leiden, New York: E.J. Brill. p. 141 citing figures from Barkan (1953).

<sup>24</sup> Salzmann, Ariel (1993). “An Ancien Régime Revisited : “Privatization” and Political Economy in the Eighteenth-Century Ottoman Empire.” *Politics & Society*, 21, no. 4: 393-423, p. 405.



the French fiscal system, and protected that position with a great deal of success. The organization of Ottoman tax farming, by contrast, moved towards greater decentralization during the seventeenth and eighteenth centuries. By the middle of the eighteenth century, after decades of deteriorating property rights, the relationship between the tax farmers and the Sultan had broken down to such an extent that local warlords (*ayans*) were operating the farms with virtual autonomy from the center. How do we explain the relative security of property rights over fiscal contracts in France as opposed to the Ottoman Empire during the eighteenth century? More specifically, what caused the emergence of a durable and powerful political coalition from within the French fiscal system, whereas no such coalition crystallized in the Ottoman Empire?

### **The Fiscal Crisis of the Seventeenth Century and Its Effect on Fiscal Contracts**

War and the financial necessities it created was the driving force behind institutional change in early-modern public finance.<sup>25</sup> Figures 1 and 2 show the effect of increased military spending on French and Ottoman budgets at the end of the sixteenth and into the seventeenth century.<sup>26</sup> In France, not only did spending increase dramatically just before and during wartime, as in 1635 with the entry into the Thirty Years War, in 1672 with the Dutch War, and in 1689 with the Nine Years War, but the size of expenditures increased with each successive crisis.<sup>27</sup> These deficits were large. In 1680 the King was borrowing about twice his revenues.

---

<sup>25</sup> For an overview of the “Military Revolution” see the articles contained in Clifford Rogers, ed. *The Military Revolution Debate: Readings in the Military Transformation of Early Modern Europe*, (Westview Press, Boulder, CO: 1995); For the increased pressure on state budgets in Europe see in particular the articles by Parker, Lynn, and Thompson; See also Bean, “War and the Birth of the Nation State,” *Journal of Economic History*, 33, 203-221.

<sup>26</sup> The data for Figure 1 are from Alain Guery, “Les Finances de la Monarchie Française Sous L’Ancien Régime,” *Annales ESC*, no. 33, 1978, Appendix Table I. The budget numbers are converted into wheat equivalents using data in Baulant and Meuvret, *Prix des Cereales*, (1960, 1962), “Paris wheat prices, harvest years, 1521-1698.”

<sup>27</sup> Major wars and civil disturbances include: Infrequent fighting against the Protestants throughout the 1620’s; The Thirty Years War, 1635-1648; The Fronde, 1648-1653; The War of Devolution, 1667-8; The Dutch War, 1672-9;

In the Ottoman Empire the first deficits appeared towards the end of the sixteenth century and lasted through the seventeenth century. Ottoman deficits were particularly large during times of war.<sup>28</sup> For example, in 1597-8, as the Ottomans were fighting the Habsburgs, the Sultan borrowed twice his revenues, and in 1690-1, while again fighting the Habsburgs, he borrowed about 50 percent of his revenues.<sup>29</sup>

While certainly a fascinating area for future research, we do not delve into the multifaceted reasons behind the fiscal pressures that struck Europe and Asia towards the end of the sixteenth and the beginning of the seventeenth century.<sup>30</sup> We are primarily interested in their impact on French and Ottoman fiscal institutions. We content ourselves with the observation that many of the organizational and technical innovations which precipitated the rising costs were common to both the Ottoman Empire and France. As such, the seventeenth century military revolution constituted a common, negative, shock to the fiscal systems of both countries. What is of particular interest to us is that this negative shock had a similar effect on property rights in both countries. Faced with increasing expenditures and constant revenues, both

---

The Nine Years War, 1689-97; The War of Spanish Succession, 1701-1713. This trend continues into the eighteenth century. See James C. Riley, "French Finances, 1727-1768," Table 2.

<sup>28</sup> Major wars of the seventeenth century include the Iranian Wars (1603-39), War with Venice over Crete (1654-69), War with the Habsburgs (1593-1606) and (1683-99), various Ottoman interventions in Eastern Europe (Poland, Ukraine, Transylvania, and Hungary) 1600-1681. 62.5 percent of expenditures were war related in the budget of 1669-70 (Inalcik and Quataert p. 542).

<sup>29</sup> The data for the real Ottoman budget in Figure 2 was compiled by the authors using the following sources. The nominal budget data came from Tabakoglu (1985) in Inalcik and Quataert (1994, p. 99) for 1520-1608 and Genç (1975) in Çizakça (1996, p. 144) for 1660-1700. Wheat prices came from the data appendix in Pamuk and \_zmucur (2002). 1 kile equals 26.24 kg.

<sup>30</sup> By this time, Ottoman territorial expansion had stopped and its military power had declined. Among the main reasons for the decline provided in the literature is the change in the technology of war that shifted the balance from mounted to foot soldiers, with the cavalymen no longer useful against musketeers. See Barkey, Karen (1994). *Bandits and Bureaucrats: the Ottoman Route to State Centralization*, (Ithaca: Cornell University Press, pp. 43-53, and Islamo\_lu-Inan, Huri ed. *The Ottoman Empire and the World Economy*, (Cambridge: Cambridge University Press, 1987), 54-58.

Ottoman Sultans and French Kings began to borrow and default more on fiscal contracts.<sup>31</sup> The effect of this decrease in the security property rights on institutional evolution in each country, however, was very different.<sup>32</sup>

We should emphasize that large deficits, in and of themselves, did not constitute a “fiscal crisis” in France or the Ottoman Empire. However, increased deficit spending did significantly alter the incentives surrounding the writing and enforcement of fiscal contracts, ultimately leading to more uncertain property rights. This deterioration in the security of property rights is what we consider a “fiscal crisis”.

The link between increased deficits and uncertain property rights is well illustrated by the evolution of French tax farm contracts during the first half of the seventeenth century. One of the earliest sources of loans to the Crown was tax collectors and a significant proportion of these were from tax farmers. The most straightforward way in which these loans were made was for a tax farmer to forward payments on the lease price to the King before they were due. These were called *anticipations* on future tax receipts.<sup>33</sup> In 1623 *at least* 1,300,000 livres were borrowed through the Aides in anticipation of tax revenues worth about 2,300,000 livres.<sup>34</sup> The King was anticipating about half of his receipts from the Aides before they were collected. In a like manner, the King borrowed at least 1,668,212 livres from the Tailles in 1688 in anticipation of

---

<sup>31</sup> By “fiscal contract” we mean both debt contracts and contracts with tax collectors. As will be explained below, these two types of contracts were often interrelated.

<sup>32</sup> Our arguments here bear similarities to Potter, “War Finance and Absolutist State Development...,” in that we also feel that increases in spending on war did not have the same effect on all states. In France, property rights of fiscal agents were increased in the long run, whereas in the Ottoman Empire this did not occur.

<sup>33</sup> Marion, 50; Matthews, 14. *Anticipations* were assets of the Tax Farmer and were redeemed through deductions in the contracted lease payments known as *charges*. In other words, the Farmer was “paid” for his loan through a reduction in one of his liabilities, the lease payment owed the Crown.

<sup>34</sup> Bonney, “The Failure of the French Revenue Farms,” p. 31. Bonney draws his data from the records of the Conseil de Finance which was charged with overseeing the administration of the Farms during this period. He emphasizes that the figures are almost certainly lower bounds on lending activity through the Tax Farms.

future payments of about 2,000,000 livres.<sup>35</sup> Figure 3 shows the real value of loans through the three largest Tax Farms between 1614 and 1647.<sup>36</sup> These data indicate that lending was a major role of the Farms by the first half of the seventeenth century.

As lending funds became a larger role for French tax farmers during the seventeenth century the incentives surrounding their contracts with the Crown changed. The transaction costs of acting as “bankers” for the King were very different from those associated with being his tax collectors. As the King’s borrowing through the Farms increased, his incentive to “renegotiate” leases with his Farmers *ex-post*, also increased. Evidence of these renegotiations during the first half of the seventeenth century is significant. Of the 68 largest Tax Farms between 1598 and 1655, twenty-six had their leases broken.<sup>37</sup> The largest tax farms by capitalization experienced the greatest rate of renegotiation.<sup>38</sup> For example, between 1598 and 1655, 64.7% of contracts on the *Aides* were ruptured.

Competitive tax farming made sense when the only role for tax collectors was to collect taxes. It created incentives which encouraged the individual with the lowest cost of collection to do so and ensured that the Crown would reap most of the benefits of this specialization. However, competitive allocation of tax farm contracts was inconsistent with the increasing role of the farmers as financial intermediaries. As things stood in the first half of the seventeenth century, the King could default on a loan by revoking a farmer’s lease and then re-lease it to one of his competitors at a relatively low cost.<sup>39</sup>

---

<sup>35</sup> Archives Nationale KK355, 1688.

<sup>36</sup> Data compiled from the appendix to Bonney, “The Failure of the French Revenue Farms.”

<sup>37</sup> Bayard, *Le Monde des Financiers*, p. 128.

<sup>38</sup> These farms were the *Aides*, *Cinq Grosses Fermes*, and the *Grande Ferme des Gabelles*.

<sup>39</sup> For additional examples of the uncertainty of property rights over tax farm contracts pre-1661, and the Crown’s role in this uncertainty, see Johnson, “Banking on the King”, pp. 977-79. *This Journal*.

In the Ottoman Empire, as in France, the costly wars of the last decades of the sixteenth century and the seventeenth century introduced large budget deficits. In their attempts to raise more revenues, the Sultans ran roughshod over the property rights of public officials, the clergy, and fiscal agents. Existing institutions like the *imdadiyye* loan system, which consisted of urgent war contributions from the wealthy, were no longer sufficient.<sup>40</sup> So the Sultan forced loans from the wealthy and confiscated funds from the Islamic trusts or *waqfs* and trust funds of minors.<sup>41</sup>

At the end of the sixteenth century, the Ottoman state resorted to debasing its currency for the first time in over one hundred years. The Venetian golden ducat was worth 60 *akçes* in 1584, 120 in 1588, 150 in 1618, and remarkably 310 in 1624.<sup>42</sup> Seigniorage was recognized as a form of expropriation and was met by popular dissent. Following the first debasement in 1589, the Janissary Corps revolted. A very powerful political group, when their salaries were paid in debased currency, they demanded and succeeded in having the chief treasurer and other officials responsible for the policy executed. This was the first of such uprisings followed by many in the seventeenth century. Sultan Osman II (1618-1622) was assassinated in one such revolt.<sup>43</sup>

In response to fiscal pressures, the availability of liquid funds became a high priority as the central administration struggled to cover military salaries. As a result, during the early seventeenth century, competitive tax farming became the primary method of tax collection. It

---

<sup>40</sup> Inalcik (1985, pp. 314-316).

<sup>41</sup> Inalcik and Quataert, pp. 98-100.

<sup>42</sup> Pamuk in Inalcik and Quataert (1994, p. 964).

<sup>43</sup> The Janissary Corps was the product of the levy of European Christian youth who were then raised by Ottoman families, converted to Islam, and given a military education. Janissaries had been recognized in the fifteenth and sixteenth centuries as the most effective soldiers of Europe. The Janissary revolts indicate the existence of at least one powerful group who posed a credible threat to the Sultan. Yet, this is not an example of a growth enhancing constraint on the ruler and is therefore outside the scope of this paper. With regard to their hand in the tax farms, we thank an anonymous referee for pointing out that lobbies connected to the Janissaries sometimes closed auctions off to various groups, including non-Muslims and various Muslim groups.

was used to collect taxes on state owned land, Islamic trusts, and former *timar* lands.<sup>44</sup> Uncertainty with regard to these tax farming contracts, similar to that seen in France, was prevalent. Figure 4 shows the intended duration of Ottoman tax farming contracts versus their actual duration from 1535 to 1686.<sup>45</sup> Of the 247 tax farm contracts during the period ten percent of the contracts were revoked in less than a year. A good example is the Tax Farm of Salonica Salt Works which in 1618 was taken over by 4 different partnerships within one year. The first of these was a partnership of four Jewish tax farmers, the last one of two Christians and one Jew.<sup>46</sup> Çizakça's sample of tax farm contracts is consistent with the observation that "[t]he central administration was not obliged to leave the tax farm in the hands of any contractor for the duration of the farm. Whenever a better bid was made, the tax farmer either paid the difference or lost his right to collect."<sup>47</sup> So the Sultan could simply default on a contract by revoking a tax farmer's lease and then re-lease it to one of his competitors. The effect was to increase the uncertainty of property rights over tax farm contracts.

### **The Response by Fiscal Agents to Uncertain Property Rights**

During the first half of the seventeenth century the highly decentralized tax systems in both France and the Ottoman Empire were incompatible with the increased incentives of Rulers

---

<sup>44</sup> Darling (1996, p. 153) and Islamoglu-Inan (1987, 58-59).

<sup>45</sup> Intended vs. actual duration data come from Çizakça (1993) data appendix pp 233-250 which tracks 134 tax farms and their associated contracts over the period 1534-1687. Not all contracts sampled by Çizakça contain information on both the actual and the intended duration of the lease. A simple OLS regression of "Actual Duration" on "Year" and "Intended Duration" yields the following:  $\text{Actual Duration} = 17.84 - 0.01 \cdot \text{Year} + 0.27 \cdot \text{Intended Duration} + \text{error}$ . All the coefficients are significant at the 1% level (robust standard errors used). The negative sign on Year is consistent with increased insecurity of property rights during the seventeenth century, holding constant the intended contract length. Not all broken contracts were likely the result of predation by the state. Some broken contracts could have been the result of a premature dissolution of the partnership that owned the lease. However, the increased likelihood of premature dissolution is consistent with our story.

<sup>46</sup> Çizakça 1993 p 224.

<sup>47</sup> Inalcik and Quataert (1994), pp. 537-538.

to manipulate the rules of the game to their advantage. Faced with increased incentives to renege on, or otherwise tamper with, fiscal contracts, rulers confronted only weak resistance from within their existing tax systems. The long-run response to increasingly uncertain property rights in France and the Ottoman Empire, however, was very different. In France, a coalition of tax farmers emerged after 1661 that was capable of coordinating punishments against the Crown. This constraining coalition emerged because existing institutions were conducive to capital pooling and this, in turn, allowed the tax farmers to overcome the transaction costs of managing a coalition large enough to credibly threaten the Crown. In the Ottoman Empire, existing institutions were not as amenable to pooling capital, and this constituted a binding constraint on the ability of fiscal agents to organize in large enough numbers to credibly constrain the Sultan.<sup>48</sup>

There were two significant barriers to the initial consolidation of the French tax farm system. First, the individual tax farms were already under contract. Before they could be consolidated either these contract holders had to be legally “bought out”, or, their contracts had to be illegally abrogated. Second, there were explicit laws in place that outlawed consolidation of the farms. Initially created to prevent collusion on the part of the farmers, by the middle of the seventeenth century, these now constituted an explicit cost to any group of tax collectors attempting to consolidate the system. Louis XIV’s Finance Minister, J.B. Colbert, was instrumental in overcoming these two costs of organizing the Company of General Farms. Through the judicious use of a *Chambre de Justice*, Colbert managed to buy out at reduced price,

---

<sup>48</sup> We do not mean to imply that French constraint after 1661 yielded results like the British had in, say, 1780. We mean by “constraint” that an important group of fiscal agents were able to significantly raise the cost to the Monarchy of engaging in certain actions after 1661 relative to before 1661. We are not making claims for the efficiency of this constraint. Our argument is about the political economy of institutional change.

or kick out, many of the existing tax farmers.<sup>49</sup> He then combined many of these tax farm contracts and re-leased them to members of his trusted inner circle.<sup>50</sup> Lastly, Colbert issued new regulations concerning the legality of a consolidated tax farm system.<sup>51</sup>

The creation of the Company of General Farms gave rise to more secure property rights for the King's tax collectors and this, in turn, led to an increase in the value of the tax farms. Figure 5 shows the sustained increase in the aggregate value of lease prices for the Tax Farms that coincided with the creation of the Company of General Farms.<sup>52</sup> The dramatic increase in lease prices after 1661 reflected the increased security of property rights over the tax farms relative to the previous period.<sup>53</sup> Between 1681 and 1789 the financiers who controlled the Company of General Farms lost their property rights to the Farms only once, during the Law Affair (1716-1720).<sup>54</sup> We should emphasize that we are *not* claiming that the French tax system was more efficient than the Ottoman system because of this constraint. We are simply arguing

---

<sup>49</sup> For how Colbert used the Chambre de Justice to install his relations into the farms see Dessert, *Argent, pouvoir, et société*, pp. 259 and 339-40.

<sup>50</sup> Dessert and Journet, "Le Lobby Colbert."

<sup>51</sup> In May 1680 there was an ordonnance for the Gabelles. See *Recueil général des anciennes lois françaises*, May, 1680. In June 1680 he issued two for the governance of the Aides. See *Recueil général des anciennes lois françaises*, June, 1680. The first covered the jurisdiction of the Cours des Aides in Paris and the second the Cour des Aides of Rouen. These culminated in May 1681 with the issuance of the "Common Title For all the Farms" which concerned the governance and operation of the unified Company of General Farms. See *Recueil général des anciennes lois françaises*, May, 1861. This edict served as the legal basis for Tax Farming until the end of the eighteenth century and explicitly acknowledged the existence of the Company of General Farms.

<sup>52</sup> We implicitly assume that the relationship between a tax farm's lease price and the underlying value of that farm is described by the model presented in Johnson (Dec. 2006), "Banking on the King", *This Journal*, pp. 971-972. The data in Figure 5 are equal to the sum across farms of yearly lease payments. Ideally, we would present data on individual tax farms over time, holding constant tax rates, incomes, tax base, competitiveness of bidding, etc.... This is not possible since, among other things, the farms were consolidated at a rapid rate after 1661 (thus, for example, the *aides* would exhibit a significant increase in lease price after 1661 because they included more local sales taxes that were previously leased out separately). Johnson (2006) pp. 968-971 details the linkages between the aggregate lease price data in Figure 5 and an increase in the *value* of the individual farms. To summarize his evidence, incomes were stagnating during the period of greatest increase in lease prices, tax rates within individual farms did not increase enough to explain the increased lease prices, and the competitiveness of auctions dramatically decreased (thus working *against* the increase in lease price).

<sup>53</sup> See Johnson (2006), "Banking on the King", *This Journal*.

<sup>54</sup> Johnson, "The Cost of Credibility." *Essays in Business and Economic History*, (24) 2006 p. 16.



that after 1661, the ability of fiscal agents in France to restrict the actions of the Crown significantly increased. The King's hands were tied more tightly after 1661 and eventually this restricted range of motion would lead the Crown down the path of fundamental institutional reform rather than a path of incremental reforms as followed by Ottoman Sultans.

The evolution of the French Tax Farms illustrates how, in response to uncertain property rights that were a product of the increasing fiscal pressures placed on the Crown, Tax Collectors were able to form a coalition that allowed them to successfully constrain the King. Importantly for our argument, this constraining body significantly limited the Crown's options when confronted with fiscal problems during the eighteenth century. There are numerous accounts of how the baroque and inefficient French Tax System contributed to the political crisis facing the Monarchy at the end of the eighteenth century.<sup>55</sup> Our point, is simply that fiscal crises like those confronting Louis XVI were nothing new to French Rulers. However, the rise of organizations, like the Company of General Farms, during the seventeenth century fundamentally limited Louis XVI's options by significantly raising the cost of violating the property rights of stake-holders in the existing fiscal system. Defaulting on a large corporate body is different than revoking the property rights of a single subject. As a result of the increased cost of predation, Louis XVI was forced to pursue alternative routes to solve his fiscal problems, routes that eventually resulted in both fundamental fiscal and political reforms.

---

<sup>55</sup> Velde and Weir, "French Government Debt.," *This Journal*, 1989, give a nice overview of the literature. Consistent with our thesis, they also point out on page 36 that at the end of the eighteenth century, "Persistent deficits were not the result of bad planning, court extravagance, economic weakness, or even an administration built on venal officeholders. Cleverer or more honest administrators could not have eliminated them. They arose from a political system that completely separated the privilege of spending from the obligation to pay taxes and at the same time left the public enough political power to resist taxation."

No constraining organizations resembling the Company of General Farms arose from within the fiscal system in the Ottoman Empire. Instead, in the 1690's the Ottoman fiscal system moved in a direction opposite that of France, towards greater decentralization and less security over fiscal contracts. Having increased many existing taxes at the end of the seventeenth century, and confronted with the need to collect even greater amounts of funds, the old short-term tax farming contracts (*iltizam*) were converted to lifetime contracts (*malikane*) beginning in 1695.<sup>56</sup> The *malikane* system represented a mixture of *timar* and *iltizam*. The annual amount of revenues supplied to the state was determined by the Treasury, however, the auctioned component of the contract was the right to lifetime possession of a tax farm.<sup>57</sup>

In the early years of the *malikane* system, 150 to 300 new leases were auctioned annually.<sup>58</sup> The new tax farmers obtained full rights to the tax farm upon winning the auction, including the right to subcontract the revenue collection to smaller tax farmers.<sup>59</sup> Non-Muslims, such as Jews, Greeks, and Armenians, while prohibited from holding tax-farm leases, served as financiers.<sup>60</sup> Throughout the eighteenth century the number of life-grant tax farm holders averaged from one to two thousand.<sup>61</sup> Five to ten thousand secondary tax farmers and financiers were also part of this system. The sub-tax farmers were often the same individuals who had participated in *iltizam*, although they now held longer tenures. Through the *malikane* system the

---

<sup>56</sup> Salzmann p. 339.

<sup>57</sup> Auctions were open to all Muslim males of good standing but upper ranking officials, "viziers, officers, beauracrats, attendants at court, members of the royal family, and high ranking members of the *ulemma* and jurists," dominated the *malikane* market (Salzmann p 409.).

<sup>58</sup> Inalcik and Quataert pp. 713-14. *Malikane* leases included previously farmed out tax sources as well as new taxes. See Çizakça, Murat (1996) for evidence of how the Ottomans implemented liberal trade policies in the eighteenth century which accounted for the increased number of tax farms.

<sup>59</sup> Mehmet Genç in Islamo\_lu-Inan, pp. 346-350.

<sup>60</sup> The Armenian financiers of the eighteenth century were particularly vital for bids in Istanbul, See Salzmann p. 403.

<sup>61</sup> Mehmet Genç in Islamoglu-Inan, pp. 346-350. p. 349 and Çizakça 1996 p 171 .

Ottoman state increased the amount of tax collection it contracted through tax farming to include almost all tax collection outside the *cizye* tax, the religiously prescribed head tax levied on non-Muslims living in a Muslim state.<sup>62</sup>

In contrast to the ability of tax farmers in France to increase the security of their property rights during the eighteenth century, fiscal contracts under the new *malikane* system were far from secure. In 1714, the Sultan retracted contracts in most provinces and then reinstated them in 1717 at prices nearly 50 percent above the original bids.<sup>63</sup> In response to this type of disregard for the law by the Sultan, the owners of *malikane* contracts in the provinces began to ignore the law as well. For example, they would often pass tax farms from one generation to the next instead of returning the farm to the state. Some stopped sending revenues to Istanbul altogether. As a result, revenues fell even further. Provincial problems were further exacerbated by the rise of a class of ex-bandits that took hold of some territories and administered them in full autonomy from Istanbul. The period 1768-74, in particular, is associated with the rise of autonomous provincial warlords known as *ayans*.

As the disregard on the part of tax collectors for the laws governing *malikane* contracts worsened, the Ottoman state followed suit. Confiscations of farms and elimination of local lords became common. In the city of Aleppo, for example, the state either exiled, or, “rehabilitated” local rulers. A prominent figure in Aleppo, Muhammad Chalabi Tahazade, held under his name nearly one fifth of all *malikane* lands as late as 1777. He was exiled in 1775 and never had his titles restored when he returned in the 1780s.<sup>64</sup> In the late eighteenth and early nineteenth

---

<sup>62</sup> Inalcik and Quataert, p. 711.

<sup>63</sup> Salzmann endnote 55, p. 417.

<sup>64</sup> His *malikane* were partially restored to his family members who succeeded to local power after his death (Salzmann, endnote 96, p 421).

century, an ex-bandid Albanian lord, Ali Pasha of Yanina, conquered and held at least one thousand fiscal estates, conducted foreign policy of his own and protected merchants en route for a fee.<sup>65</sup> To regain control over revenue collection, the Ottoman state often used brutal force to eliminate these provincial rulers. For example, Ali Pasha of Yanina was assassinated in 1822, his head sent to the Sultan in Istanbul.<sup>66</sup>

The chaos within the *malikane* system continued until 1793 when, after failing to get a loan from Morocco or Europe as part of the “New Order” treasury reforms, Selim III was forced to finally revoke the *malikane* leases and re-contracted the farms on a short-term basis.<sup>67</sup> Life grants made a come-back in 1808-1840 in restricted form, but even into the 1840s expropriation by the Ottoman government was a regular part of revenue raising.<sup>68</sup>

The contrast between the direction of institutional change within the French and Ottoman fiscal systems during the later seventeenth early eighteenth centuries is stark. In France, tax farmers consolidated their holdings into a single interest group with a large stake in maintaining the existing fiscal system. In the Ottoman Empire, tax collectors did not consolidate, instead, both their numbers and their interests, increased. The Sultan could “pick-off” any given tax collector, however, he could not go after them all. Furthermore, by selectively engaging in predatory behavior, confidence in the entire system was undermined. Neither the French move towards centralization, nor the Ottoman move towards decentralization, were necessarily efficient. However, they profoundly affected the degrees of freedom of the different governments. French Kings were more strongly tied to the existing set of fiscal institutions

---

<sup>65</sup> Inalcik and Quataert pp 667-68.

<sup>66</sup> Sadat p. 558. The purging of the *ayan* political class was not fully completed until 1838-42 when tax farmers were forcefully separated from their farms.

<sup>67</sup> Salzmann p. 407.

<sup>68</sup> Pamuk, 2004.

during the eighteenth century than their Ottoman counterparts. Ultimately, this would lead to a major fiscal crisis in France that could only be solved by reforms deep enough to dislodge the entrenched interests created at the end of the seventeenth century. Ottoman Sultans, by contrast, were free to engage in incremental reforms to the fiscal system well into the nineteenth century.

### **The Transaction Costs of Collusion**

Why did a coalition of fiscal agents emerge in France during the second half of the seventeenth century, but not in the Ottoman Empire? Tax farmers in France faced lower costs to overcoming their collective action problem than their Ottoman counterparts for two reasons. First, they simply started-off as a more homogenous group. In seventeenth century France there were fewer tax farmers, fewer tax farms, and the farmers shared similar social networks. This facilitated, at least initially, the creation of the Company of General Farms. The second, and in our opinion more relevant, difference lay in the ability of French tax farmers to pool capital at a relatively lower cost than their Ottoman counterparts. Social networks may have encouraged the initial formation of a French tax farming coalition, but its long-run survival depended on the organization's ability to align the interests of its members and enforce cooperation through relatively sophisticated "corporate" institutions. Nascent institutions already existed in Western Europe which made it relatively easy to form an organization with legal personhood, separation of ownership from control rights, and transferable shares. This allowed the Company of General Farms to amass enough capital to make punishments against the Crown matter and, importantly, to overcome the costs of implementing these punishments (pulling the trigger). In the

seventeenth century Ottoman Empire, by contrast, it was relatively costly to pool capital on a similar scale.

One obvious difference between France and the Ottoman Empire during the seventeenth century is that the former was a more homogenous political entity than the latter. Reflecting this reality, compared to the tax collectors in the Ottoman Empire, French tax farmers were a small and relatively homogenous group. In the eighteenth century Ottoman Empire 1,000 to 2,000 life-grant tax farmers operated in the cities with 5,000 to 10,000 additional agents serving as sub-contractors in the provinces.<sup>69</sup> The large number of tax farmers reflects a geographic reality. The Empire stretched wide over Southeastern Europe, North Africa, and the Middle East. In France, by contrast, there were relatively few tax farmers. Between 1590 and 1653, before the tax farms were unified, about 303 different signatures can be found on tax farm contracts.<sup>70</sup> Eighty-one of these farmers signed multiple contracts. After unification, for the period 1681-1708, the number of tax farmers decreased significantly, to eighty-eight. The majority, sixty-two, signed more than one contract during the period.<sup>71</sup>

In addition to the data concerning the number of tax farmers, even during the period of decentralization there were always one or two “big” farms in France.<sup>72</sup> Between the years 1600 and 1652, before the creation of the Company of General Farms, the two largest tax farms composed about 52% of total revenues going to the King from the entire tax farm System. This number continued to grow until the farms were formally unified into the Company of General Farms in 1681.

---

<sup>69</sup> See Salzmann (1993).

<sup>70</sup> See Dessert, *Argent, pouvoir, et société*, Appendix.

<sup>71</sup> Johnson, “Banking on the King,” *This Journal*, pp. 983-984.

<sup>72</sup> Johnson, “Banking on the King,” *This Journal*, p. 969.

Given the sheer geographic size of the Ottoman Empire, it may not have been feasible, or optimal, to consolidate the tax farms in a process akin to that in France. However, geography alone does not explain why multiple tax farmer coalitions, each capable of constraining the Sultan, didn't emerge. Heterogeneity does not necessarily imply the decentralization observed in the eighteenth century. Farmers could have organized along regional lines, creating for example an Egyptian consolidated farm, or one big farm over the European territories. These would have been comparable in size to the Company of General Farms and could have acted as effective constraints against the Sultan.

Another possibility is that seventeenth century Ottoman tax collectors were not homogenous enough as a class to overcome the collective action costs of unifying. In France there is ample evidence that, especially by the post-1661 period, many of the tax farmers were either related, or friends.<sup>73</sup> During the eighteenth century, the vast majority of French tax farmers came from the upper bourgeoisie, lived in Paris, read the same books, went to the same operas, went to the same churches (protestant), and intermarried.<sup>74</sup>

By contrast, Ottoman Tax Farmers reflected the diverse ethnic and religious composition of the Empire; Muslims, Christians, and Jews all participated in both large and small tax farms.<sup>75</sup> For example, we know that in the first half of the seventeenth century in the city of Bursa, Jews won the majority of urban tax farms, consistently outbidding the military.<sup>76</sup> Some tax farm contract data from Çizakça (1996) generalize this point to the rest of the empire. Of ninety-six

---

<sup>73</sup> See Dessert and Journet, "Le Lobby Colbert" and Dessert, "Finances et Société".

<sup>74</sup> See Yves Durand, *Les Fermiers Généraux*.

<sup>75</sup> Ottoman historians disagree as to the involvement of the various ethnic and religious groups in tax farming partnerships. See Salzmänn (1993) and Gerber Gerber, Heim (1999). "Muslims and *Zimmis* in Ottoman Economy and Society: Encounters, Culture and Knowledge," for a balanced view.

<sup>76</sup> Gerber, Haim (1999) "Muslims and *Zimmis* in Ottoman Economy and Society: Encounters, Culture and Knowledge" in *Studies in Ottoman Social and Economic Life*. Raoul Motika, Christoph Herzog, Michael Ursinus eds, Heidelberg: Heidelberg Orientverlag pp. 99-124., p. 106.

tax farmers in his empire-wide sample of contracts between 1611 and 1630, sixty percent were Muslim, twenty-seven percent Jewish, and thirteen percent Christian. Of the ten partnerships between two tax farmers in the sample, four were made up by two Muslims, three by two Christians, one by two Jews, and one partnership involved a Muslim and a Jewish Tax Farmer. Of the six partnerships of three Tax Farmers, four were exclusively Jewish and two were mixed Muslim and Jewish.

The eighteenth century Ottoman tax farmers did not share the homogenous backgrounds of their French counterparts.<sup>77</sup> While definitely a more homogenous group than the seventeenth century tax farmers, the *malikane* system still brought together high ranking military officials, bureaucrats and clergy. Furthermore, non-Muslims such as Jews, Greeks, and Armenians, while on paper prohibited from holding tax farm leases, served as critical financiers. Despite this heterogeneity, however, there is ample evidence suggesting that non-Muslims used the Shariah courts astutely and “entered into legal partnerships using the technicalities of Muslim law.”<sup>78</sup> Dealing with the Ruler under Islamic law, however, did pose potentially serious blocks to pooling significant amounts of capital.

The ability of the Company of General Farms to pool large amounts of capital, and to use that capital as a means of punishing rulers when necessary, relied on several factors. First, the Company represented a vital step towards a “modern” form of corporate organization in which the organization adopts “legal personhood” and thus grants individual investors limited liability. After 1668 the individual’s name that appeared on Tax Farm contracts, the *adjudicataire*-

---

<sup>77</sup> This degree of heterogeneity had to increase the cost of coalition formation. For example, we know that Jewish tax-farmers were expected to obey their own Law-Merchant. The Jewish community could prohibit any of its members from joining a particular auction if deemed damaging to the community in some way (Çizakça 1996, p. 158). Dual legal systems raise transactions costs.

<sup>78</sup> Gerber, p. 118.



*général*, was that of the *valet-de-chambre* of the Finance Minister.<sup>79</sup> Unlike the first half of the seventeenth century, loans made by the Company to the Crown were not treated as the personal debt of any individual farmer. This played an important role in 1697 when the General Farmers successfully renegotiated their debt contracts with the King, as a single group. This was in stark contrast to the less successful renegotiation that occurred in 1623 between the largest tax farmer at the time, Antoine Feydeau, and the King. Feydeau ended up fleeing the country and losing most of his property.<sup>80</sup> More striking still, was the difference between the punishments meted out to tax farmers and non-tax farmers as a result of the *Chambre de Justice* of 1716. Tax farmers were tried in this court, but rarely implicated. Those who were most severely punished were without connections to major organizations like the General Farms.<sup>81</sup> The treatment of the tax farmers in 1716 was in marked contrast to the *Chambre de Justice* of 1661-5 in which many were convicted and assessed significant fines.

In 1673 Colbert introduced the French legal form known as the *société en commandite*, or limited partnership. Every six years, when the old lease had expired, the Company of General Farms was reconstituted as a limited partnership by an *acte de société*.<sup>82</sup> This *acte* was a part of private law, as opposed to public law. It was written between the members of the Company and did not rely on upon the authority of the Crown for enforcement and ratification.<sup>83</sup> Technically, each of the twelve leases signed between the Crown and the Farms between 1726 and 1786 was

---

<sup>79</sup> Rousselot de Surgy, "Finances", vol. I, p. 13. The *valet-de-chambre* usually received a *pot-de-vin* of 6,000 livres for performing this service.

<sup>80</sup> For Feydeau's story see Heumann, P. (1938) "Un traitant sous Louis XIII: Antoine Feydeau." ; Clamageran, *Histoire de l'Impôt en France*, vol. III, p. 12. The farmers also negotiated a payment of 800,000 Livres for each of the forty General Farmers in 1697.

<sup>81</sup> Dessert, *Argent et pouvoir*, pp. 260 and 264, discusses in detail the differences between the trials of 1716 and those of 1661-65. Johnson, "Banking on the King," pages. 22-3 also discusses the trials.

<sup>82</sup> The *acte de société* for the Bail David is reproduced in Lavoisier, *Oeuvres*, VI, 629-631.

<sup>83</sup> For more see, Henry Lévy-Bruhl, "Les Différentes espèces de sociétés de commerce en France au XVII<sup>e</sup> et XVIII<sup>e</sup> siècle", *Revue historique de droit français et étranger*, (1937).

a separate legal entity. Each lease had an *adjudicataire* who signed the lease and acted as a representative to the Crown for the other Farmers. Each of the forty core *financiers* in the Company were technically *cautions* of the *adjudicataire*, and thus only liable for the amount they invested into the Company.

The *de facto* standing of the Company of General Farms as a “legal person” was but a small step in the long development of the modern corporate form in Western Europe.<sup>84</sup> One could date the beginning of this evolution as early as the eleventh and twelfth centuries, with the increasing recognition of mercantile law (*lex mercatoria*). This evolution is easiest to trace in Italy. *Commenda* contracts dominated capital pooling arrangements before the thirteenth century and required the dissolution of the contract upon the death of a partner. This severely raised the cost of pooling large amounts of capital for extended periods of time.<sup>85</sup> By the thirteenth century the family firm, or *compagnia*, was often used. As the name implies, participants were generally kin who shared unlimited liability. Unlike the *commenda* contract, however, upon the death of a family member, the *compagnia* was immediately reconstituted under the same name and using the same capital.<sup>86</sup> By the fifteenth century, Italians were using the “hub and spoke” system to effectively give limited liability to investors.<sup>87</sup> During the seventeenth and eighteenth centuries Royally chartered companies, like the British East India Company, the Dutch East India Company, and the French East India Company continued the trend towards the modern corporate form in which the liability of individual investors was limited.<sup>88</sup> The Company of General Farms

---

<sup>84</sup> For an excellent overview of this process see Kuran, “The Absence of the Corporation...” (2005b).

<sup>85</sup> See Kuran (2003) “The Islamic Commercial Crisis...”, pp. 417-18, 421-22.

<sup>86</sup> Kuran, “Absence of the Corporation...”, (2005), p. 804.

<sup>87</sup> Kuran, “Absence of the Corporation...”, (2005), p. 804; The Medici firm between 1397 and 1494 was a famous example of the “hub and spoke” organization.

<sup>88</sup> The French East India Company was constituted under the ministry of Colbert, just as the Company of General Farms was. Scott reports that joint stock companies in England held 5.2 percent of national wealth in 1717.

should be viewed as part of this trend, a vital link in the gradual evolution towards the “modern” corporation in France.<sup>89</sup> A “vital” link because it was the General Farms that ushered the French corporation from a period in which the government did not credibly acknowledge investor rights to a period when it did. The Company was able to flourish during this period because of its unique ability to protect the property rights of its investors through its credible threat to punish the Crown.

Why did a concept of “legal”, as opposed to “natural”, personhood not emerge in the Ottoman Empire as it did in France? One hypothesis is that Islam, from its earliest conception, precluded such a distinction. The politics of pre-Islamic Arabia were characterized by separate tribes which joined individuals together through kinship bonds. These tribes often feuded and there was a great deal of disunity and chaos as a result. Early Islamic teaching reflected these times through its emphasis on the Muslim community (*umma*) as a unifying force.<sup>90</sup> The Quran enumerates duties for individuals and for the *umma*, but none for any intermediate organizations. Of course, as described above, the evolution of the corporate form in Europe was by no means an evolution of religious law. This, however, is part of the point. The separation between church and state which was present relatively early in western political and legal theory did not develop as quickly in Islamic lands. There is no statement in the Koran similar to the Christian Bible’s, “... render unto Ceaser that things that are Ceaser’s, and to God the things that are God’s.”<sup>91</sup> Islam was both a political and a religious system. To the extent that economic laws were based

---

William Robert Scott, *The Constitution and Finance of English, Scottish, and Irish Joint Stock Companies to 1720*, (Baskin & Miranti: 1910-12), pp. 97-98.

<sup>89</sup> The *societe commandite* was formally codified into the Napoleonic Code in 1807. After 1830 the *commandites par action*, which allowed shares to be issued, was instituted. France would have to wait until 1867 for a general incorporation law. See Lamoreaux and Rosenthal (2005), “Legal Regime and Contractual Flexibility...”, *American Law and Economics Review*, vol.7, no. 1., pp. 33-34.

<sup>90</sup> Kuran, “Absence of the Corporation...”, (2005), pp. 794-795.

<sup>91</sup> Matthew 22:21.

on Islamic teachings (as interpreted by religious leaders, the *muftis* and *kadis*) there was no room for the development of intermediate legal “persons” between the individual and the *umma*. This dichotomy is plain in classical Islamic political theory, which contains no political boundaries save those between the community of Muslims (*dār al-Islam*) and everybody else (*dār al-harb*).

Aside from having access to the notion of legal personhood, the tax farmers in France were also aided in forming their coalition by the ability to create tradable shares in their organization which, at the same time, effectively allowed for the separation of ownership from control rights. In practice, the means by which this was done was through the “croupier system.”<sup>92</sup> Most people invested in the Company of General Farms as croupiers. There were forty “core” members of the General Farms. Upon being asked to join, each of these individuals was obliged to pay a sum of money into the capital fund of the Company known as a caution. The caution payment was rarely affordable for a single individual. The potential farmer would, therefore, sell stock in his position, known as *croupes*, in exchange for a portion of his caution. The holder of one of these *croupes* was entitled to a proportion of the profits of the farmer each year, but liable only for the amount he or she invested.<sup>93</sup>

Through the croupier system many thousands of ordinary French men and women tied their fortunes to that of the General Farms. By the end of the eighteenth century the Company had upwards of 30,000 employees. Any employee achieving a rank equivalent to middle

---

<sup>92</sup> Similar organizational changes were occurring throughout France. For example, Bien (1978) discusses how the *secrétaires du roi* gradually evolved the principles of limited liability investment, as in a modern corporation, during the early eighteenth century.

<sup>93</sup> There were many influential croupiers which significantly contributed to the ability of the Company to enforce its will at the Royal Court. The extent of this influence was such that, when the Finance Minister Turgot allowed the list of croupiers for the Lease David to be published in 1776, people were scandalized. Among the stockholders were members of the Royal Controller General Terray’s family, Court insiders like Mme de Pompadour and Mme du Barry, and the King himself (The acte de société is reproduced in Lavoisier, *Œuvres*, vol. VI, pp. 629-631). The Crown did not predate on the assets of the Company of General Farms during eighteenth century because, in a very real sense, it was invested in its success.

manager also had to provide a caution payment. Many of these were also sold as *croupes* to the public. In 1774, for example, 200 employees of the Farms sold *croupes* in the regions of Caen and Rouen. Among the investors were thirty-three shopkeepers, thirty bourgeois, fifteen lawyers, ten farmers, seven doctors, eleven constables, three officers of the courts, two army officers, five artisans, six preachers, two teachers, and ten widows.<sup>94</sup> Hardly a slice of the *haute nobilité*, yet, these were the people who had a direct interest in the General Farms. The transformation of the tax farm system at the end of the seventeenth century was more than the creation of a cartel, it was the birth of a powerful lobby interested in preserving the way in which half of the country's taxes were collected and in protecting the debt hypothecated on those taxes.

The process of dividing ownership in a business venture into tradable shares was not an invention of the Company of General Farms, but was, once again, just an incremental step in the long development of the corporation in Europe. In fourteenth century Italy maritime partnerships (*societas navalis*) would separate the capital value of a ship into shares (*carati*). The purchaser of a share was liable only for his investment and could often trade that share.<sup>95</sup> Steven Epstein outlines how the fifteenth century Genoese Bank of San Giorgio separated ownership from control rights through the issuance of shares.<sup>96</sup> As mentioned above, the Company of General Farms was constituted as a *société en comandite*. This legal form allowed for the issuance of shares to special partners (the *croupiers*), who then played no role in management, but who enjoyed only limited liability and were able to trade their shares. As with the evolution of the corporation as a legal person, the Company of General Farms, again, represented an intermediate step on the path towards the modern corporation (*société*

---

<sup>94</sup> Durand, *Les fermiers généraux*, pp. 76-77.

<sup>95</sup> Kuran, "Absence of the Corporation...", (2005), p. 805.

<sup>96</sup> Kuran, "Absence of the Corporation...", (2005), p. 805.

*anonyme*).<sup>97</sup> The forty or so core members of the Farm bore greater liability for the obligations of the Company, but those who invested in them did not. Once a large enough amount of capital was accumulated, however, the Company used the capital to ensure that even the core members of the Farm would be insulated from the full risks of dealing with the absolute monarchy. In effect, the Company of General Farms became “too big to fail”.

The key to understanding how the Company of General Farms became too big to fail after 1683 was their use of *billets des fermes*. When the King borrowed from the Company, or, assigned another debt to them, the Farmers would issue short-term paper, known as *billets des fermes* in order to finance the King’s transaction. The *billets des fermes* were issued in the name of the Company of General Farms and actively traded on private markets. In 1697 the amount of *billets des fermes* in circulation was equal to the sum of all the lending through the three largest tax farms between 1600 and 1640.<sup>98</sup> During the eighteenth century, the Company was responsible for holding up to a quarter of long-term Royal debt.<sup>99</sup> This figure, however, severely underestimates the leverage which the Tax Farmers could exert against the Crown, since they were also responsible for maintaining about half of the total debt service on Royal borrowing.

Once the fiscal services of the Company reached a certain threshold, they could use this as a credible threat against any moves by the Crown to undermine their role in the tax system. The link between lending and tax collecting meant that if the Crown owed money to the Company of General Farms, then it could not alter its agreement with them on how tax receipts were collected, as long as its loans were outstanding. To do so would have been to default on its

---

<sup>97</sup> Rosenthal and Lamoreaux, “Legal Regime and Contractual Flexibility...,” p. 33-34.

<sup>98</sup> Clamageran, *Histoire de l'Impôt en France*, vol. III, p. 12 gives the number of *billets des fermes* outstanding in 1697. Lending through the farms between 1600 and 1640 comes from Figure 3 and is converted into silver values using Wailly.

<sup>99</sup> Johnson, “Banking on the King,” *This Journal*, Dec. 2006, pp. 981-982

debts.<sup>100</sup> In equilibrium, we would not expect to see punishments actually occur, however, there is at least one clear case in which the actions of the Crown did trigger a punishment. This was in October 1783 when the Finance Minister D'Ormesson attempted to eliminate a significant number of the Farms and “reform” several others. Sensing that their investments would not be safe with the Company out of the picture, the holders of 30,000,000 Livres in short-term debt issued on the credit of the Company of General Farms demanded payment. After meeting with thirty of the General Farmers, the King was sufficiently concerned that his credit might be ruined that he immediately fired D'Ormesson.<sup>101</sup> Shortly thereafter, debt began trading at its previous, higher, value.<sup>102</sup>

The question still remains as to why nascent institutions allowing for corporate personhood, tradable shares, and separation of ownership from control rights were not present in the early seventeenth century Ottoman Empire. Why hadn't previous generations demanded institutional innovation? It is not sufficient to point out a stronger separation of church and state in the West relative to the Near East. After all, Islamic law was perfectly capable of adapting to changing circumstances. If there were gains to be had from introducing corporate institutions, as we claim there was, then their failure to emerge must be explained.

Kuran offers two suggestions as to why corporate forms failed to emerge more quickly in the Ottoman Empire. He first points to Islamic laws governing inheritance and partnerships. A partnership lapsed at the death of a participant in France as in the Ottoman Empire. But unlike in primogeniture Christian societies, a deceased member was likely to have a substantial number of

---

<sup>100</sup> For example, the Bail Forceville contained many articles which contractually forbade the Crown from changing tax rates or methods of collection after signing. See Articles, 593, 594, 595.

<sup>101</sup> Mollien, *Mémoires d'un Ministre*, Vol. I, pp. 89-92.

<sup>102</sup> Marion, *Dictionnaire des institutions*, Vol. I, p. 350.

heirs in the Ottoman Empire. The Islamic inheritance system was more egalitarian and mandated a division of the deceased's property across many heirs in the nuclear and extended family. Thus, to minimize the chances of costly and premature dissolution of the partnerships, they were kept small. Small partnerships inhibited capital pooling and this had negative repercussions for investment and economic growth.<sup>103</sup>

As we have seen, after 1681, the Company of General Farms was managed by a tight-knit group of financiers. This group was able to insulate itself from the predatory behavior of the Crown in large part because of its ability to credibly withhold a large amount of capital from the King as a punishment for "bad behavior". This required the Company to both amass a large amount of capital (so the punishments would hurt) and to separate the ownership over this capital from control rights (to overcome the collective action costs of "pulling the trigger").

Ottoman *malikane* owners were never able to pool capital on the same scale as the French tax farmers at the end of the seventeenth century. To contrast with French tax farming, and to give a sense for the weight of any one investor, note that sixteen separate individuals controlled twenty-five percent of the capital invested in the *malikane* system in 1788 compared to virtually all of the capital associated with the tax farm system being controlled by a single entity in France.<sup>104</sup> In 1789, the amount of capital pooled for the wining bids in the *malikane* system was 11,057,875 piasters, or roughly 75 percent of the Ottoman state's revenues.<sup>105</sup> The largest investors that year were seven pashas responsible for 20 percent of that capital. So the largest investor "block" contributed less than 15 percent of the state's revenues.

---

<sup>103</sup> See Timur Kuran. "The Islamic Commercial Crisis: Institutional Roots of Economic Underdevelopment in the Middle East." *Journal of Economic History* 63, no.2 (June 2003):414-446.

<sup>104</sup> Curiously, 8 percent came from 7 palace women, again highlighting the diversity of the investors.

<sup>105</sup> Authors' calculation with budget data from Genc (1984) in Inalcik and Quataert (1994) p. 717 and capital data from Cizakca (1996) p. 176. The point reference for the revenues is the year 1786, the closest known budget.



Ottoman investors, large and small, consistently chose to diversify across tax farms. For example, the tax farm of Tobacco Customs in Istanbul averaged four owners between 1707 and 1737 but had twenty-two by 1759 with the smallest share being 1/128.<sup>106</sup> In fact, the number of share owners per *malikane* doubled between 1720 and 1820.<sup>107</sup> Investments in twenty to thirty separate tax farms were frequently observed in the later period. These numbers reflect the reality that towards the end of the eighteenth century there was growth in the number of tax farming partnerships and that a secondary market for tax farm shares was slowly developing. In fact, the *malikane* system single handedly paved the way to multiple profit-sharing arrangements and enlarged the base of lenders to the Ottoman State.<sup>108</sup> Still, an individual's investment in any given tax farm remained small. Thus, while the Company of General was able to pool enough capital to be "too big to fail" during the eighteenth century, this critical mass was never reached by an Ottoman tax farm.

Furthermore, no natural progression occurred towards the joint-stock company and the corporation in the Ottoman Empire during the eighteenth century as there was in France.<sup>109</sup> This last point is especially relevant since, even if a single Ottoman tax farm had been large enough to threaten the Sultan, without an effective separation of the ownership from control rights over the invested capital, actually punishing against the government would have been unlikely. Making a

<sup>106</sup> Genç 1993 in Çizakça (1996) p 181.

<sup>107</sup> Çizakça (1996) p 173.

<sup>108</sup> The trading of securities is first seen in the Ottoman Empire in the 1760s. The foreign advisor De Tott, active in Istanbul during 1768-74, noted that Janissary pay was 9 quarters in arrears and that the Ottomans had been issuing pay tickets for military service which were traded as public securities. He estimated that there could be 400,000 of these tickets in circulation, about twice the number of troops the government could raise in wartime. In 1782, Grand Vezier Halil Hamid, during a Janissary inspection, found that only 10 percent of the names on the pay ticket certificates belonged to real men. Inalcik and Quataert (p 716).

<sup>109</sup> Two works by Kuran highlight the mechanisms as to why the corporation did not grow endogeneously in the Middle East. Kuran, Timur (2005a). "The Logic of Financial Westernization in the Middle East" *Journal of Economic Behavior and Organization* Vol 56, April, pp 593-615. and Kuran, Timur (2005b). "The Absence of the Corporation in Islamic Law: Origins and Persistence" *The American Journal of Comparative Law*, Vol. 53, Fall, pp. 785-834.

threat credible is complicated by the fact that punishments are typically costly for both the punished and the punisher.<sup>110</sup>

The second reason given by Kuran for the absence of corporate institutions in Ottoman society is that there already existed a viable substitute for the corporation in the institution known as the *waqf*.<sup>111</sup> The *waqf* was an Islamic unincorporated trust typically established to enable a charitable service. In essence, the provision of public goods, such as education and feeding the poor, was tied to the *waqf* system. Because of their association with the high clergy and sacred activities, *waqfs* received preferential tax treatment and were less subject to predation by rulers. The *waqf* differed from a corporation in several important respects, including no legal personhood, lack of transferable shares, and the fact that the purpose of any given *waqf* was meant to be unchanging.<sup>112</sup> The capital invested in a traditional *waqf* was, in a very real sense, tied to the purpose laid out in the founding of the enterprise.<sup>113</sup>

After the fourteenth century, an alternative to the traditional *waqf*, known as the “Cash *waqf*” was available which paid a return on capital to investors by lending out money at interest.

---

<sup>110</sup> The company of General Farms had a complicated committee structure designed to overcome this problem. The most important committee, which decided when to “punish” the Crown by withholding financial services, was known as the *Caisses*. Even core members of the Company were not allowed to sit on this committee for years after they joined (it took Antoine Lavoisier 15 years to get a seat), the objective being, to have only members of the Farm with the long-run interest of the Company at heart. Adrian Delahante wrote of the *Caisses* that it was, “... fundamentally the senate, or better, the council of ten of the oligarchic republic of finance.” The *Caisses* was as close as France came to having full-blown representative institutions before the Revolution.

<sup>111</sup> Kuran, “Absence of the Corporation...”, (2005), pp. 819-821.

<sup>112</sup> Indeed, one of the literal meanings of *waqf* in Arabic is “to stop”

<sup>113</sup> A dramatic example of how this “immobilization” of capital under a *waqf* impacted institutional change is given by the differential evolution of institutions dedicated to higher education in the Middle East and in Europe. Many *madrasa* colleges and Western universities were founded contemporaneously during the twelfth and thirteenth centuries, both with curricula closely linked to religious themes. The *madrasas* were often financed through *waqfs* whereas the Western Universities were constituted under trust instruments similar to the *waqf*. The European Universities (such as those in Paris and Oxford) quickly became self-incorporated as self-governing institutions capable of changing their mandates. Tied as they were to their directives of their initial founders, however, the curriculum in *madrasas* experienced much less evolution. See Kuran, “Absence of the Corporation...”, (2005), p. 802.

However, a major constraint on the cash *waqfs* was that they were forbidden to merge together in order to pool greater amounts of capital.<sup>114</sup> Therefore, the cash *waqfs* were able to provide a relatively safe haven for investors, but were fundamentally constrained from coalescing to anything near the size of an organization such as the Company of General Farms. In fact, the enlargement of the cash *waqf* system in the eighteenth century is indirect evidence of increased risk of predation by the Sultan in other sectors of the economy.<sup>115</sup> In the course of the eighteenth century, as Ottoman holders of capital sheltered their assets in the *waqf* system, cash *waqfs* grew into large lenders and, as an unintended consequence, also defused the demand for institutional innovations like those pursued by the members of the French General Farms.

## Conclusion

The French tax farmer, and meticulous record keeper, Antoine Lavoisier, estimated that in 1762, 1767, and 1770, there were 60 million, 48.5 million, and 60 million livres tournois respectively of *billets des fermes* in circulation.<sup>116</sup> This compares to the total amount of debt service facing the Crown in 1764 of 124 million livres tournois.<sup>117</sup> As these numbers imply, the Company of General Farms was responsible for financing a significant amount of the debt service of the Crown during the second half of the eighteenth century and it used this debt to block attempts to reform the fiscal system. Finance Ministers, from Turgot up until the end of the Old Regime, attempted to wrest control of the tax system from the Company with limited

---

<sup>114</sup> Kuran, "The Logic of Financial Westernization in the Middle East," *Journal of Economic Behavior and Organization* (56), pp. 606-608.

<sup>115</sup> An estimated eighty percent of urban land was in *waqfs* in the Ottoman Empire and in about seventy-five percent of the cases, the family that established the *waqf*, rather than the charitable activity, was the first beneficiary of the trust. Inalcik and Quataert (1994, p 712).

<sup>116</sup> Cited in Matthews, *Royal General Farms*, pp. 255-56.

<sup>117</sup> Eugene White, "France", table 5.

success. They either could not afford to buy the Farmers out, or, they ran into the same threats of punishment as D'Ormesson faced in 1783.<sup>118</sup> By this time, the French government was trapped in an explosive cycle of borrowing to cover existing debt.<sup>119</sup> Hindered in its attempts to manipulate the fiscal system by its inability to buy out or kick out the tax farmers, the Crown was forced to appeal to a broader coalition to aid with reform. The first Estates General since 1614 was called in 1788 and, from that point, the momentum for fundamental reform only grew. Ultimately, it took the *guillotine* to excise the Company from its role in the fiscal system in 1794, just one of many *ancien régime* institutions swept away by Revolution.

In contrast to the fundamental institutional reforms undertaken in France at the end of the eighteenth century, Ottoman Sultans continued to manipulate fiscal institutions in order to meet their short-term financial needs and these “reforms” continued into the nineteenth century. In order to meet the demands of the Treaty of Kucuk Kaynarca in the aftermath of losing the war of 1768-74 with Russia, the Ottoman Treasury reclaimed many large tax farms, ran them by state agents, and issued shares on their future revenues, public annuities which could be purchased by individuals of far lower incomes than the life-term tax farmers. Under this new fiscal system, known as Esham, the Ottoman bureaucracy was unable to raise enough revenue to pay for its spending and was forced to issue large amounts of debt.<sup>120</sup> With no intermediary protecting common capital holders from the whims of the Sultan, the Esham system was unable to generate the capital necessary to meet the needs of the government. Ultimately, the inability to raise domestic funds led to a reliance on foreign borrowing and by the early 1870's the Ottoman state was spending about 60 percent of its tax revenues to service its foreign debt. The Treasury all

---

<sup>118</sup> See Johnson, “Banking on Bureaucrats...”, pp. 13-16 for a discussion of these attempts.

<sup>119</sup> White, “Was there a solution...”, *This Journal*.

<sup>120</sup> Cizakca (1996, p. 192)

but officially defaulted in 1875. A bankrupt state facing pressure from its European creditors called its first Parliament in 1876.<sup>121</sup> The empire would be fully dissolved less than fifty years later.

There were many similarities between the Ottoman Empire and France during the early-modern period. Both shared an absolute government which faced high transaction costs of extracting revenues from the population. Both Sultans and Kings had to exchange property rights for tax revenues and both Sultans and Kings manipulated those property rights when it was in their best interests. It was their differences, however, which governed how institutions evolved in the response to the fiscal crises of the seventeenth century. In both countries, deficit spending led to uncertain property rights. This institutional failure created incentives for tax collectors to protect their property rights by engaging in institutional innovation. We argue that the transaction costs associated with pooling large amounts of capital explain why more effective constraint emerged in France and not the Ottoman Empire.

The differential response of French and the Ottoman tax collectors to the fiscal crises of the seventeenth century resulted in different courses during the eighteenth. In this paper we contrast the Company of General Farms to the *malikane* system but the trends we highlight in the context of tax farming are symptomatic of the economic and political developments that ultimately led to an increased income gap between Western Europe and the Near East. The institutional rigidities, which the French overcame endogenously, and sooner than the Ottomans, were manifested in greater political constraint through the fiscal system. More generally, we argue that private sector institutions, like those allowing for tradable shares, separation of

---

<sup>121</sup> See Wheatcroft, Andrew. *The Ottomans* (London: Viking, 1993) 188-193.

ownership from control rights, and legal personhood for private companies, played a vital role in bringing about reforms to public sectors institutions in France.

We argue that Ottoman fiscal institutions were actually more “flexible” than their French counterparts. Ironically, however, this allowed Ottoman Sultans to manipulate fiscal institutions on the margin throughout the seventeenth and eighteenth centuries, thereby avoiding the fundamental institutional reforms that French Kings were ultimately forced to pursue. Whereas the Ottoman Sultans were free to continue ruling as absolute monarchs, Louis XV and Louis XVI came under increasing pressure from the creation of their Father in the previous century. The Company of General Farms was a thorn in the side of absolute monarchy, and to the extent that one believes unpaid debt (much of it held by the Company) and upset taxpayers (many of them “clients” of the Company) contributed to the Revolution of 1789, it was part of the process that brought democracy to France.

## References

- Allen, Robert (2001). "The Great Divergence in European Wages and Prices from the Middle Ages to the First World War." *Explorations in Economic History*, 38, no. 4: 411-47.
- Archives National*, KK335.
- Barkey, Karen (1994). *Bandits and Bureaucrats: the Ottoman Route to State Centralization*, (Ithaca: Cornell University Press), pp. 43-53.
- Baulant and Meuvret (1960-2), *Prix des Cereales*, "Paris wheat prices, harvest years, 1521-1698," (Paris: S.E.V.P.E.N).
- Bayard, F. and P. Guignet (1991). *L'Économie Française aux XVIe, XVIIe et XVIIIe Siècles*. Gap France, Ophrys.
- Bayard, F. (1988). *Le Monde des financiers au xvii<sup>e</sup> siècle*. Paris: Flammarion.
- Bean, Richard (1973). "War and the Birth of the Nation State," *Journal of Economic History*, 33: 203-221.
- Bien, David D. (1978). The *secretaires du roi*: absolutism, corporations, and privilege under the Ancien Regime. *Vom Ancien Regime sur Franzosischen Revolution: Forschungen und Perspektiven*, ed. E. Hinrichs, 153-67. Gottingen.
- Bien, David D. (1988). "Les Offices, les Corps, et le Crédit d'État: l'Utilisation des Privilèges sous l'Ancien Régime." *Annales ESC*, 43, no. 2: 379-404.
- Bonney, R. J. (1979). "The Failure of the French Revenue Farms, 1600-60." *Economic History Revue*, 32, no1: 11-32.
- Bonney, M. and R. Bonney (1993). *Jean-Roland Malet Premier Historien des Finances de la Monarchie Française*. Paris, Comité pour l'Histoire Economique et Financière de la France.
- Bossenga, Gail (1991). "The politics of privilege : old regime and revolution in Lille," Cambridge.
- Briggs, Robin (1998). *Early Modern France, 1560-1715*. 2nd ed. Oxford: Oxford University Press.
- Çizakça, Murat (1993). "Tax Farming and Financial Decentralization in the Ottoman Economy, 1520-1697." *The Journal of European Economic History*. Vol.22, No. 2, pp. 219-50.

- Çizakça, Murat (1996). *A Comparative Evolution of Business Partnerships: the Islamic World and Europe, with Specific Reference to the Ottoman Archives*, Leiden, New York: E.J. Brill.
- Clamageran (1867). *Histoire de l'Impôt en France*, (Paris : Guillaumin et cie).
- Colbert, Jean Baptiste (1861-70). *Lettres, Instructions Et Mémoires De Colbert, Publiés D'après Les Ordres De L'empereur, Sur La Proposition De Son Excellence M. Magne, Ministre Secrétaire D'état Des Finances*. Edited by Pierre Clemont. Vol. 2. Paris: Imprimerie impériale.
- Cosgel, Metin and Thomas J. Miceli (2005). "Risk, Transaction Costs, and Tax Assignment: Government Finances in the Ottoman Empire." *Journal of Economic History*, 65, no. 3: 806-821.
- Darling, Linda (1996). *Revenue Raising and Legitimacy: Tax Collection and Finance Administration in the Ottoman Empire 1560-1660*. E.J. Brill: New York.
- Dessert, Daniel and J.L. Journet (1975). "Le Lobby Colbert: Un Royaume, ou une Affaire de Famille?" *Annales E.S.C.*, vol. 30: 1303-36.
- Dessert, Daniel (1984). *Argent, Pouvoir Et Société au Grand Siècle*, Paris: Fayard.
- Dessert, D. (1989). *Louis XIV Prend le Pouvoir : Naissance d'un Mythe?: 1661*. Bruxelles, Editions Complexe.
- Durand, Y. (1971). *Les Fermiers Généraux au XVIIIe Siècle*. Paris: Presses Universitaires de France.
- Forbonnais (1758), *Recherches et considérations sur les finances de France*, (Basle : Frères Cramer)
- Forceville, Jacques. *Bail des fermes royales-unies, fait à Me. Jacques Forceville le 16. septembre 1738....* Paris: Imprimiere Royale, 1738.
- Gerber, Heim (1999). "Muslims and *Zimmis* in Ottoman Economy and Society: Encounters, Culture and Knowledge," in Raoul Motika, Christoph Herzog and Michael Ursinus eds. *Studies in Ottoman Social and Economic Life*. Heidelberg: Heidelberger Orientverlag, 141- 169.
- Greif, Avner, Paul Milgrom, and Barry R. Weingast (1994) "Coordination, Commitment, and Enforcement: The Case of the Merchant Guild." *Journal of Political Economy*, 102:4, pp. 745-76.

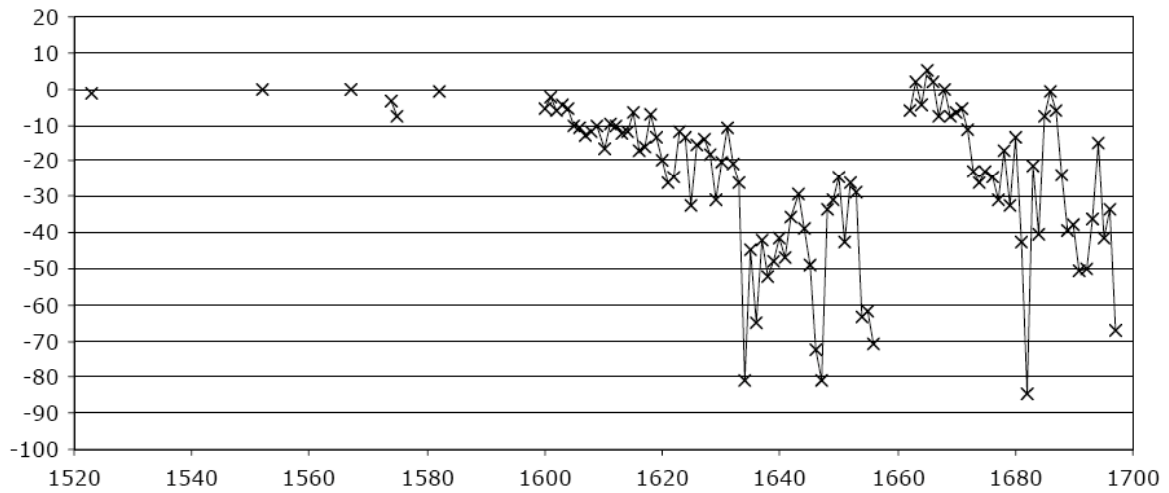


- Heumann, P. (1938) "Un traitant sous Louis XIII: Antoine Feydeau," in *Études sur l'Histoire Administrative et Sociale de l'Ancien Régime*, ed. M. Georges Pagès. Paris: Librairie Félix Alcan.
- Hoffman, Philip T. (1986) "Taxes and Agrarian Life in Early-Modern France: Land Sales, 1550-1730." *Journal of Economic History* 46, no. 1: 37-55.
- Inalcik, Halil (1969). "Capital Formation in the Ottoman Empire." *Journal of Economic History*, 29, no.1: 97-140.
- Inalcik, Halil (1973). *The Ottoman Empire, the Classical Age 1300-1600*. New York: Prager Publishers.
- Inalcik, Halil (1985). *Studies in Ottoman Social and Economic History*. London: Variorum Reprints.
- Inalcik, Halil and Donald Quataert eds. (1994). *An Economic and Social History of the Ottoman Empire, 1300-1914*. Cambridge: Cambridge University Press.
- Isambert, M., Athanase Jean Léger Jourdan, Decrusy, eds. *Recueil général des anciennes lois françaises....* 29 vols, Paris: Plon Frères, 1821-1833.
- Islamo\_lu-Inan, Huri ed. (1987) *The Ottoman Empire and the World Economy*. Cambridge: Cambridge University Press.
- Johnson, Noel D. (2006). "The Cost of Credibility: The Company of General Farms and Fiscal Stagnation in Eighteenth Century France," *Essays in Business and Economic History*, no. 24.
- Johnson, Noel D. (2007). "Banking on the King." *Journal of Economic History*, 66, no. 4: 963-991.
- Kuran, Timur (2003) "The Islamic Commercial Crisis: Institutional Roots of Economic Underdevelopment in the Middle East." *Journal of Economic History*, 63, no.2: 414-446.
- Kuran, Timur (2005a). "The Logic of Financial Westernization in the Middle East" *Journal of Economic Behavior and Organization* Vol 56, April, pp 593-615.
- Kuran, Timur (2005b). "The Absence of the Corporation in Islamic Law: Origins and Persistence" *The American Journal of Comparative Law*, Vol. 53, Fall, pp. 785-834.
- Lavoisier, Antoine (1862-1893). *Œuvres De Lavoisier*. Edouard Grimaux ed. (Paris: Imprimerie Nationale).

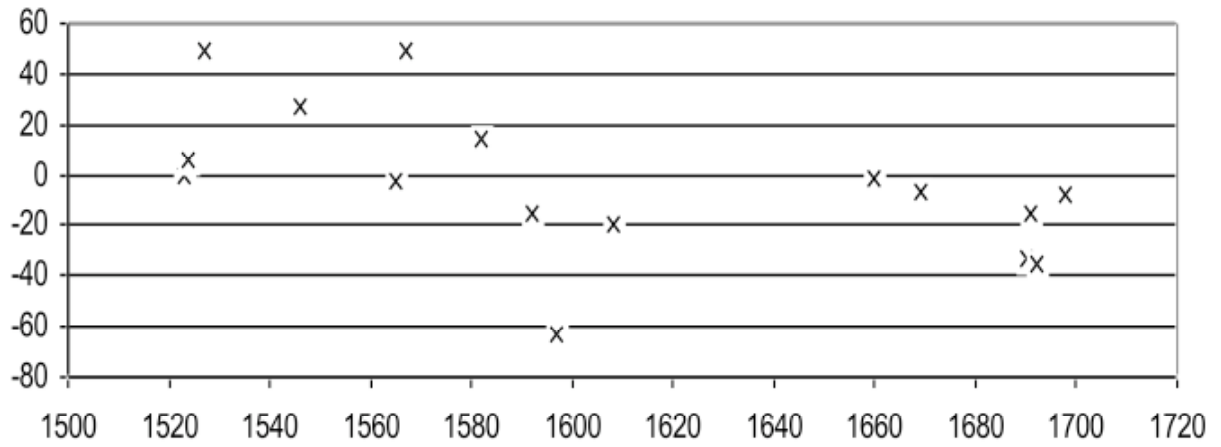
- Levine, Ross (2005). "Finance and Growth: Theory and Evidence." in Handbook of Economic Growth. Philippe Aghion and Steven Durlauf eds. The Netherlands: Elsevier Science.
- Lévy-Bruhl (1937), "Les différentes espèces de sociétés de commerce en France au xvii<sup>e</sup> et xviii<sup>e</sup> siècles," *Revue historique de droit français et étranger*, 4th series (1937), p. 299 and 323.
- Lewis, Bernard (1961). *The Emergence of Modern Turkey*. Oxford: Oxford University Press.
- Maddison, Angus (1983). "A Comparison of Levels of GDP per capita in developed and developing countries: 1700-1914." *Journal of Economic History*, 43, no. 1: 27-41.
- Maddison, Angus. [http://www.eco.rug.nl/~Maddison/Historical\\_Statistics/horizontal-file.xls](http://www.eco.rug.nl/~Maddison/Historical_Statistics/horizontal-file.xls)
- Marion, M. (1974). *Les Impôts Directs sous l'Ancien Régime: Principalement au XVIIIe Siècle*. Genève, Slatkine-Megariotis Reprints.
- Marion, M. (1999). *Dictionnaire des Institutions de la France aux XVIIe et XVIIIe Siècles*. Paris, Picard.
- Mathias, P. and P. O'Brien (1976). "Taxation in Britain and France, 1715-1810: A Comparison of the Social and Economic Incidence of Taxes Collected for the Central Governments." *Journal of European Economic History*, 5, no 3: 601-650.
- Matthews, G. T. (1958). *The Royal General Farms in Eighteenth-Century France*. New York: Columbia University Press.
- Mollien, F. N. and C. Gomel (1898). *Mémoires d'un Ministre du Trésor Public 1780-1815*. Paris: Guillaumin et Cie.
- Mousnier, R. (1979). *The Institutions of France under the Absolute Monarchy, 1598-1789: Society and the State*. Chicago: University of Chicago Press.
- North, Douglass C. and Barry Weingast (1989). "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England," *Journal of Economic History*, 49: 803-832.
- North, Douglass C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- North, Douglass and Paul Thomas (1973). *The Rise of the Western World: A New Economic History*, Cambridge: Cambridge University Press.
- \_zmucur, S\_leyman and \_evket Pamuk (2002). "Real Wages and Standards of Living in the Ottoman Empire, 1489-1914." *Journal of Economic History*, 62: 293-320.

- Pamuk, \_evket (2004). "The Evolution of Financial Institutions in the Ottoman Empire, 1600-1914," *Financial History Review*, vol 11, no. 1, pp 7-32.
- Potter, Mark (2008). "Coalitions and Local Politics in Seventeenth Century France," *French Historical Studies*, 31: 29-49.
- Potter, Mark (2003). "War Finance and Absolutist State Development in Early Modern Europe: An Examination of French Venality in the Seventeenth Century", *Journal of Early Modern History*, (7), no. 1: 120-147.
- Riley, James C (1987). "French Finances, 1727-1768," *Journal of Modern History* 59.
- Rogers, Clifford ed. (1995) *The Military Revolution Debate: Readings in the Military Transformation of Early Modern Europe*, (Westview Press, Boulder, CO.
- Root, Hilton (1989). "Tying the King's Hands: Credible Commitments and Royal Fiscal Policy During the Old Regime," *Rationality and Society*, vol. 1, No. 2.
- Rousselot de Surgy, J.-P. (1784). *Finances*. Paris, Liège, Pancoucke: Plomteux.
- Roux, P. (1916). *Les Fermes d'Impôts sous l'Ancien Régime*. Paris, Rousseau et Cie.
- Sadat, Deena R. (1972). "Rumeli Ayanlari: the Eighteenth Century" *Journal of Modern History*. 44: 346-363.
- Salzmann, Ariel (1993). "An Ancien Régime Revisited : "Privatization" and Political Economy in the Eighteenth-Century Ottoman Empire." *Politics & Society*, 21, no. 4: 393-423.
- Sokoloff, Kenneth L., and Stanley L. Engerman (2000). "Institutions, Factor Endowments, and Paths of Development in the New World." *Journal of Economic Perspectives*, 14, no. 3: 217-232.
- Stasavage, David (2002). "Credible Commitment in Early Modern Europe: North and Weingast Revisited," *Journal of Law, Economics, and Organization*, 18, no. 1: 155-86.
- White, Eugene (2001). "France's Slow Transition from Privatized to Government-Administered Tax Collection: Tax Farming in the Eighteenth Century," Departmental Working Paper 200116, Rutgers University, Department of Economics.
- White, Eugene (1989). "Was There a Solution to the Financial Crisis of the Ancien Régime?" *Journal of Economic History* (49), no. 3: 545-69.

**Figure 1:**  
**Budget Surplus and Deficit in France: 1523 - 1698**  
**(100,000's of Setiers of Wheat)**



**Figure 2:**  
**Budget Surplus and Deficit in the Ottoman Empire: 1523-1698**  
**(100,000's of Kile of Wheat Flour)**



**Figure 3: Total Real Anticipations Through Tax Farms**

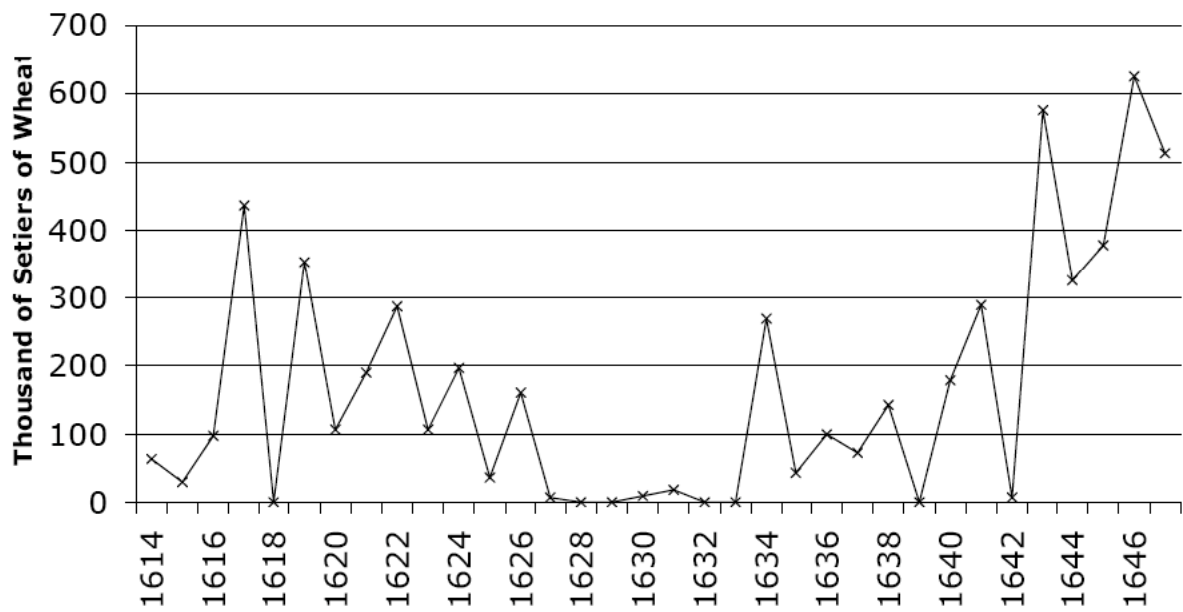


Figure 4: Duration of Ottoman Tax Farm Contracts

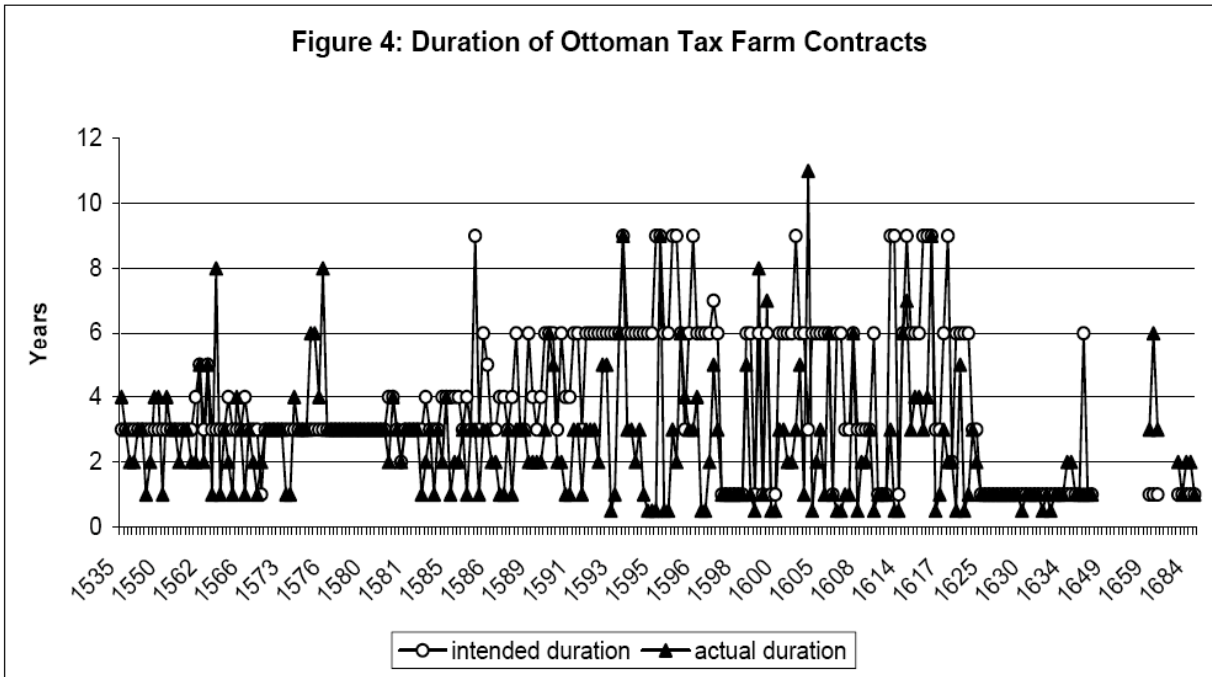


Figure 5: Real Tax Farm Revenues, 1600-1695

