Legal Pluralism, Contracts, and Trade in the Ottoman Empire

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Abstract

Throughout the eighteenth and nineteenth centuries, non-Muslim Ottomans paid large sums to acquire access to European law. These protégés came to dominate Ottoman trade and pushed Muslims and Europeans out of commerce. At the same time, the Ottoman firm remained primarily a small, family enterprise. The literature argues that Islamic law is the culprit. However, adopting European law failed to improve economic outcomes. This paper shows that the co-existence of multiple legal systems, “legal pluralism,” explains key questions in Ottoman economic history. I develop a bilateral trade model with multiple legal systems and first show that legal pluralism leads to underinvestment by creating enforcement uncertainty. Second, there is an option value of additional legal systems, explaining why non-Muslim Ottomans sought to acquire access to European law. Third, in a competitive market where a subpopulation has access to additional legal systems, agents who have access to fewer jurisdictions exit the market. Thus, forum shopping explains protégés’ dominance in trade. Finally, the paper explains why the introduction of the French commercial code in 1850 failed to reverse these outcomes.

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1 Introduction

The economics literature emphasizes the role legal and economic institutions played in driving divergent growth paths between Europe and the developing world.\(^1\) Recent research on the Ottoman Empire also stresses economic, legal and political institutions in order to explain its stagnation in the eighteenth and nineteenth centuries.\(^2\) Kuran (2011), for example, argues that egalitarian inheritance law, weak partnership law, and rigid Islamic trusts kept enterprises small and transient. This paper presents an alternative hypothesis by focusing on a specific institution of the Ottoman legal complex: legal pluralism. Proliferation of legal systems led to suboptimal outcomes in the Ottoman Empire independent of any inefficiency associated with Islamic law. I develop a bilateral trade model in a setting with imperfect contract enforcement and multiple legal systems using the Ottoman Empire as a template. I support the model’s predictions with evidence drawn from the British, French, and Ottoman archives to show that legal pluralism explains four key facts in Ottoman economic history: Ottoman partnerships’ small capitalization, non-Muslim Ottomans’ high demand for European protection, Muslims’ and Europeans’ exit from trade, and the failure of Ottoman legal reforms in the nineteenth century.

Legal pluralism describes a single economy where two or more legal systems coexist. In this environment, agents can choose which law applies to their transactions or contracts. Multiplicity of legal systems may foster better economic outcomes through competition between legal systems and through institutional variety. When agents have many legal options, they can choose the most appropriate legal system for each contract or transaction. Competition between jurisdictions can also encourage adoption of more efficient legal norms. On the other hand, agents might have the opportunity to engage in forum shopping among different legal systems when disputes arise

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\(^1\)For instance, La Porta et al. (1998) argue that common law is more conducive to growth. Acemoglu et al. (2005) show that, of the countries engaged in the Atlantic trade, those with more secure property rights enjoyed higher growth rates. Acemoglu et al. (2011) find that exogenous imposition of French civil code led to rapid urbanization in European territories, which the French army conquered. Karaman and Pamuk (2013) show that success in state-building depended on the interaction of political institutions and urbanization. On the other hand, Pomeranz (2000) argues that Western Europe and China were institutionally similar and divergence followed from Britain’s easy access to coal, which provided a cheap and abundant source of energy for factories, and Britain’s colonies, which supplied Britain with land-intensive commodities.

\(^2\)For instance, Pamuk (2004) argues that Ottoman institutions reflected an underlying political economy where the center was interested in propagating itself in its broadly traditional structure. Karaman and Pamuk (2010) show that the Ottoman government could not raise its fiscal capacity effectively compared to Europeans since Ottomans did not implement institutions that included an elite class in tax negotiations.
in such transactions.\textsuperscript{3} \textit{Ex post} forum shopping can distort contracting and investment incentives, thus depressing the surplus such contracts produce. The trade-off between institutional variety and opportunistic forum-shopping is central to this paper.

The Ottoman government offered its subjects a menu of legal systems for contracting and dispute resolution. Since the empire’s inception, its large non-Muslim population had the option to use Islamic law or any other denominational law.\textsuperscript{4} From the eighteenth century onwards, a non-Muslim Ottoman could buy access to any Western European law and partake in its benefits. In 1850, the Ottoman Empire fully transplanted the French commercial code, which came to co-exist with Islamic law and other available legal systems rather than supplanting them. Contrary to the established view, European law’s availability did not improve Ottoman economic performance. Thus, understanding the Ottoman Empire’s development trajectory requires a closer examination of its legal institutions.

The following incident illustrates the extent of forum shopping in the Ottoman Empire. In the 1780s, Jussuf Karaly, a non-Muslim Ottoman who was under Swedish protection (that is, he was a Swedish protégé), was involved in what became a rather infamous dispute with the Dutch protégé Matloub in Aleppo. Matloub entrusted some capital to Karaly to invest elsewhere. After making the investment and carrying out the transaction, Karaly refused to make the contractually-prescribed payment, simply stating that payment terms were not agreeable. Since Karaly was under Swedish protection, Matloub brought the case to the Swedish vice consul. In the midst of this litigation, Karaly renounced his protection, claimed to be an Ottoman subject, and applied to a Turkish court instead, completely circumventing the Swedish jurisdiction.\textsuperscript{5}

\textsuperscript{3}Forum shopping refers to a case where the plaintiff chooses the venue by deciding in which forum to file the case; reverse forum shopping, on the other hand, describes the defendant choosing fora by invoking principles such as \textit{forum non conveniens} or \textit{actor sequitur forum rei}. This paper focuses on the latter but uses the term forum shopping to define both phenomena.

\textsuperscript{4}Ottoman population estimates, especially before the nineteenth century, are fairly scattered and unreliable. Karpat (1985) gave the first comprehensive examination of Ottoman demographics using Ottoman censuses. Around 1840s, Muslims roughly comprised approximately 60 percent of the total Ottoman population. The Muslim population share was lower in the port cities such as Istanbul and Izmir, İnalci et al. (1994) pp. 778–84.

\textsuperscript{5}Karaly was then involved in many other disputes and at some point purchased a protection license (\textit{berat}) from the Spanish ambassador, and thus became a Spanish protégé. Later, in a dispute involving a nonpayment of debt to a French merchant, Karaly once again switched to the Islamic court. At one point, Karaly attempted to acquire French protection even as he was enjoying protection from Spain. Karaly’s disputes appear in the French consular and diplomatic correspondence. See \textit{Centre des archives diplomatiques de Nantes} (CADN) 166PO/D1/22: 3 February 1783, 13 September 1783, 19 April 1784, 17 June 1784, 8 June 1785; 166PO/D1/23: 3 July 1785, 4 July 1785, 5 August 1785, 4 January 1786, 1 April 1786, 11 March 1786, 1 April 1786, 4 May 1786, 10 May 1786, 11 May 1786, 1 June 1786, 12 July 1786, 18 August 1786, 6 September 1786, 25 October 1786; 166PO/D1/25: 10 September 1793; 166PO/D1/27: 23 July 1796; 166PO/D1/28: 23 fructidor an 5 [9 September 1797]; 166PO/D1/29: 28 fructidor an
Karaly’s behavior might have been extreme but it was not unusual. Artunç (2013) shows that non-Muslim minorities switched between various jurisdictions quite regularly in order to obtain the most favorable verdict or delay debt payments. However, legal pluralism is by no means unique to the Ottoman Empire. In medieval Europe, merchants could contract under and take their commercial disputes to merchant, provincial, municipal, or ecclesiastical courts. Today, the United States feature a multiplicity of legal systems with each state retaining a considerable degree of legal sovereignty. Similarly, the European Union is a common market comprising various nations with substantive differences in law. Legal pluralism also appears in transnational contracts. For example, if an American and a Russian firm contract, they can choose which law applies to their transaction.

Forum shopping refers to a litigant’s attempt to have his or her case heard in the forum where it has the greatest chance of success. It can arise either due to legal pluralism or due to competition between courts within a single legal system. The latter can come about when individual courts systematically skew their verdicts to attract more cases despite operating under the same substantive law. Klerman (2007) provides evidence that competition between courts in Medieval England led to a strong pro-plaintiff bias. Stringham and Zywicki (2010) show that this bias vanishes if the choice-of-forum is cooperative. Miller (2008) considers legal competition in the modern U.S. and argues that \textit{ex ante} choice of law reflects an effort to select efficient terms.

Ottoman legal pluralism has received little attention in the literature, largely due to the sheer diversity and size of the data. A study on the full interaction of all these court systems would require knowledge of Ottoman, Arabic, Greek, Hebrew, Judeo-Spanish, Armenian, English, French, German, Italian, and various other European languages. This paper instead develops a theory of legal pluralism and generates predictions across the empire’s legal-economic framework. I support the model’s findings with primary evidence I collected from the British, French, and Ottoman archives. The next section describes a single jurisdiction model, which provides a benchmark for the multiple jurisdiction analysis. Section 3 extends the benchmark setting’s insights to finitely many legal systems. Section 4 generalizes the two-agent bilateral trade model to a competitive market of contracts and shows that legal pluralism leads to a market dominated by agents who have access

\textsuperscript{10} [27 September 1802]; Archives nationales (AN) AE/B1/447: no. 9, 26 March 1785; ibid. no. 15, 10 May 1785; ibid. no. 30, 15 October 1785; ibid. 24 July 1786.

\textsuperscript{6} Edwards and Ogilvie (2012) show that such legal multiplicity in Champagne fairs allowed institutional flexibility and competition in contract enforcement, thus contributing to their success.
to multiple legal systems. Section 5 uses primary evidence to show that the theory’s implications are consistent with empirical evidence on the Ottoman Empire. Subsequent comparative analysis between the Ottoman Empire and nineteenth-century Morocco shows that the differences in how legal pluralism applied in these economies led to different compositions in the market. The section concludes with an empirical discussion on the United States, and the European Union.

2 Single Jurisdiction Benchmark

This section presents a single legal jurisdiction model as a benchmark and identifies the theory’s main insight: enforcement uncertainty distorts contracting incentives but can be attractive to one of the contracting parties. Institutional assumptions in the model reflect the Ottoman legal framework. As Section 3 shows, the multiple jurisdiction environment is equivalent to a single jurisdiction setting with appropriately chosen parameters. In this way, the benchmark model’s results naturally extend to multiple jurisdictions.

The underlying economic activity is bilateral trade, in which agents exchange a single indivisible good. One can interpret these parties as retailer or wholesaler, or as an agent and principal trading at long distances. These two interpretations represent the most common transactions in Ottoman economy.\textsuperscript{7} The first subsection outlines the model’s fundamentals, and the second shows the equilibrium, followed by a comparative statics analysis that relates welfare and investment to enforcement reliability.

2.1 Fundamentals

There are two agents, a buyer $B$ and a seller $S$, who would like to trade an indivisible object. The seller produces the object by choosing investment $x \in \mathbb{R}_+$ at cost $s(x)$. The object has value $b(x)$. For simplicity, assume that $b(x) = x$, and $s(x) = x^2$.\textsuperscript{8} The game’s timing is as follows:

\begin{itemize}
  \item \textit{Time 1.} Parties write a contract which specifies a surplus division rule $\pi \in [0, 1]$, where the seller receives $\pi b(x)$ and the buyer $(1 - \pi) b(x)$.
\end{itemize}

\textsuperscript{7}For examples, see Gedikli (1998), Çizakça (1996), and Kuran (2010).
\textsuperscript{8}Results are robust to arbitrary specifications as long as $b(\cdot)$ is positive, increasing, concave, $s(\cdot)$ is positive, increasing, convex in $x$, $b(x) > s(x)$ for some $x \in \mathbb{R}_+$, and the difference $b(x) - s(x)$ is bounded.
Time 2. The seller chooses investment $x$ and produces the object. The object changes hands, and the surplus is realized.

Time 3. Nature draws an enforcement state of the world $\theta \in \{H, L\}$ with probability $P(H) = \mu \in (0, 1)$. If $\theta = H$, courts enforce the full transfer if the seller sues. If $\theta = L$, courts enforce no payment. The buyer is informed about $\theta$, but the seller is not.

Time 4. The buyer observes the enforcement state and decides whether to breach the contract or comply. If he complies, payoffs are $(-\pi b(x), \pi b(x))$ gross of the surplus value. If he violates the contract, the game proceeds to time 5.

Time 5. The seller decides whether to sue the buyer or drop the case. Litigation payoffs are $(-\pi b(x), (1 - c) \pi b(x))$ in the high enforcement state and $(0, -c \pi b(x))$ in the low enforcement state, where $c \in (0, 1)$. If the seller drops the case, each party gets 0.

Figure 1 displays the dispute subgame’s extensive form (i.e. the proper subgame starting with the node at time 3) with payoffs gross of surplus $b(x)$ and investment cost $s(x)$.

The dispute arises from non-payment of debts. As such, the buyer (or the debtor) is always the defendant and the seller (or the creditor) the plaintiff. This is by far the most common form disputes take in the data. Another common dispute is non-delivered goods, where the buyer makes the payment at time 2, but the seller either refuses to deliver the goods or they are of poor quality. In such cases, the buyer would be plaintiff and the seller the defendant. Otherwise, the game would take exactly the same structure and results would translate naturally.

There is imperfect enforcement in this environment, with courts compelling the contractual payment with probability $\mu$. This is the prior for both agents. There are three possible sources of enforcement uncertainty. First, courts might lack sufficient verification technology to interpret the evidence correctly. Second, parties might have chosen a contractual form that courts do not recognize. Finally, courts might be biased towards the defendant, skewing the probability with which they find him guilty. The defaulting agent, the buyer, has private information about enforcement. As the deviating party, the buyer has better idea about how the evidence of his guilt will hold up at court. This is also a common assumption in the law and economics literature.\footnote{\textsuperscript{9}For instance, see Nalebuff (1987), and Muthoo (1999) p. 264. It is also reasonable that the plaintiff has private information about the true extent of the damages he has suffered. See, for example, Reinganum and Wilde (1986),}
Finally, we assume that only the seller incurs a litigation cost, which is proportional to her financial claim. Results do not change if the buyer also incurs a litigation cost or adjudication fees are lump-sum. In the Ottoman Empire, courts charged 2 percent litigation fees on the plaintiff proportional to the plaintiff’s claim on the defendant (Kuran and Lustig (2012) p. 635).

2.2 Equilibrium

Our solution concept is Perfect Bayesian equilibrium: agents adopt a profile of strategies and beliefs that satisfies sequential rationality at every node, and Bayes’s rule pins down beliefs whenever possible.

**Lemma 1.** The surplus-maximizing Perfect Bayesian equilibrium of the dispute subgame is characterized as follows: (i) If the case has no merit, i.e. $\mu < c$, all types defect, the seller has the posterior belief $\eta = \mu$ and drops the case. (ii) If the case has merit, i.e. $\mu \geq c$, the low type defects with probability 1, and the high type with probability $\beta_H = [(1 - \mu) c] / [\mu (1 - c)]$. The seller takes any such dispute to court.

**Proof.** First, suppose that $\mu \pi b(x) < c \pi b(x)$, or equivalently $\mu < c$. This implies that the seller’s expected payoff from adjudication is less than the litigation cost, rendering litigation a non-credible threat. Thus, the buyer always defects and the seller drops the case.

More interestingly, suppose that $\mu \geq c$, which implies that litigation is a credible threat depending on what the seller believes at time 5. Let $\eta$ denote the seller’s belief that conditional on defection, the enforcement state is $H$. Let $\sigma$ denote the probability with which the seller sues. Then, the seller’s best response is $\sigma = 1$ if $\eta > c$, a mixture $\sigma \in [0, 1]$ if $\eta = c$, and $\sigma = 0$ if $\eta < c$. Anticipating the seller’s litigation decision in time 5, the type $\theta$ buyer defects with probability $\beta_\theta$.

Since the high type buyer incurs a payment of $\pi b(x)$ whether he complies or defects, it is a best response for him to mix and for the low type to defect. By Bayes’s rule, $\eta = \beta \mu / [\beta \mu + 1 - \mu]$. Given the seller’s belief $\eta$, her best response is to sue if $\eta \geq c$, which is equivalent to $\beta \geq [(1 - \mu) c] / [\mu (1 - c)]$.

Any such strategy pairs $\beta \geq (1 - \mu) c / [\mu (1 - c)]$ and $\sigma = 1$, as well as beliefs $\eta = c$ satisfy sequential rationality. However, costly litigation is minimized if the buyer complies more often. Thus, Spier (1994), Wang et al. (1994), and Muthoo (1999) p. 263.
the Perfect Bayesian equilibrium that maximizes total surplus entails \( \beta = [(1 - \mu) c] / [\mu (1 - c)] \) and \( \eta = c \). Note that this is also the limit of the unique Perfect Bayesian equilibrium as \( c_B \to 0 \), where \( c_B \) denotes the buyer’s (fixed) litigation cost when the seller has the case adjudicated. The corresponding unique Perfect Bayesian equilibrium is \( \beta_L = 1, \beta_H = [(1 - \mu) c] / [\mu (1 - c)] \) and \( \sigma = \pi b (x) / (\pi b (x) + c_B) \), provided \( c_B < \pi b (x) \).

Lemma 1 indicates that a buyer will always defect if he knows the plaintiff cannot force payments in court. When the buyer knows that courts will enforce the contract, he will defect with some positive probability (but not with certainty). There is an equilibrium only when buyers at the high state defect with sufficient likelihood, and thus the seller believes adjudication is worthwhile.

Rolling back the equilibrium outcome assuming \( \mu > c \), we have the time 2 expected payoffs,

\[
U_B (x, \mu, c, \pi) = (1 - \mu \pi) b (x), \\
U_S (x, \mu, c, \pi) = \frac{(\mu - c) \pi b (x)}{1 - c} - s (x).
\]

At time 2, the seller undertakes the investment (non-cooperatively) to maximize her own time 2 expected payoff. Thus, the equilibrium investment level \( x^\ast \) solves

\[
\max_{x > 0} \frac{(\mu - c) \pi b (x)}{1 - c} - s (x) = \max_{x > 0} \left( \frac{\mu - c}{1 - c} \right) \pi x - x^2
\]

which yields \( x^\ast (\mu, \pi) = \pi (\mu - c) / [2 (1 - c)] \). Note that the first best level of investment \( x^{FB} \) solves \( \max_x x - x^2 \), and thus \( x^{FB} = 1/2 \). Hence, there is underinvestment in equilibrium. The reason for underinvestment is twofold. First, the seller bears the full cost of investment on the margin but only gets fraction \( \pi \) of its benefit. This is the usual consequence of sharecropping and unrelated to enforcement. Second, enforcement unreliability further depresses the portion the seller obtains for any \( \pi \). In fact, even if we set \( \pi = 1 \) so that the seller can contractually claim the entire surplus, there is still underinvestment by \( \mu < 1 \).

At time 1, parties specify a division rule \( \pi \) that solves the Nash program with equal bargaining weights

\[
\max_{\pi \in [0,1]} U_B (\cdot, \pi) U_S (\cdot, \pi) = \max_{\pi \in [0,1]} \left( 1 - \mu \pi \right) \left[ \left( \frac{\mu - c}{1 - c} \right) \pi - x \right] x^2
\]
such that \( x = x^* \). Substituting \( x^* \) and solving for the first order condition, we obtain the equilibrium division rule \( \pi^* = \min \{1, 3/(4\mu)\} \). Table 1 displays the equilibrium investment level, payoffs, and total surplus conditional on enforcement probability \( \mu \).

**Lemma 2.** The equilibrium contract specifies surplus division \( \pi^* = \min \{1, 3/(4\mu)\} \), where the seller invests \( x^*(\pi) = \pi(\mu - c)/[2(1 - c)] \) and the dispute subgame follows the equilibrium described in Lemma 1.

### 2.3 Comparative Statics

In this subsection, I describe the impact of changing the enforcement parameter \( \mu \) on investment and surplus. As Section 3 shows, a multiple jurisdiction model is equivalent to a single jurisdiction with lower enforcement likelihood \( \mu \). Thus, our comparative statics analysis carries over to a multiple jurisdictional environment naturally.

**Lemma 3.** Suppose \( \mu > c \). (i) The equilibrium investment level \( x^* \) is strictly increasing in enforcement \( \mu \). (ii) The buyer’s equilibrium payoff \( U_B^* \) is strictly decreasing for \((1 + c)/2 < \mu < 3/4\), and increasing otherwise. (iii) The seller’s equilibrium payoff \( U_B^* \) and the equilibrium joint payoff \( W^* \) are both strictly increasing in \( \mu \). (iv) The probability with which the buyer defaults on his contractual payment is strictly decreasing in \( \mu \).

**Proof.** See the Appendix.

Lemma 3 gives two critical results. Changes in enforcement capacity can have opposite effects on the buyer and the seller, and lower enforcement always shrinks investment and reduces the total surplus. As long as the Nash program gives an interior solution, i.e. \( \pi^* \in (0,1) \), parties simply allocate a greater share of the surplus to the seller in order to correct for the buyer’s defection *ex post*. However, when the division rule hits its upper bound, decreases in enforcement capacity starts to benefit the buyer at the seller’s expense. There is an interior value of enforcement likelihood \( \mu \) that is optimal for the buyer as long as the litigation cost \( c \) is not too large (i.e. courts extract less than half of the plaintiff’s financial claim as fees; recall that litigation cost 2 percent in the Ottoman Empire). Thus, the buyer has strong incentives to depress enforcement capacity \( \mu \), which decreases the seller’s payoff and pushes the investment down. Finally, the buyer is more likely to defect on her payments if courts are less likely to enforce these payments.
3 Multiple Jurisdictions

Section 2 presented a benchmark model with a single jurisdiction which identified enforcement likelihood’s impact on investment and individual payoffs. In the model, lower enforcement probability always reduces total surplus and investment but the buyer’s payoff has an inverse-U shape with respect to enforcement. This section extends the model by allowing agents to choose a jurisdiction among a number of available legal systems.

3.1 Exogenous Symmetric Legal Access

Suppose there are \( N \in \mathbb{N} \) legal systems in the economy. At time 1, parties cooperatively choose a jurisdiction under which they proceed to write a contract. This is part of the Nash bargaining procedure. At time 2, the seller produces the object, which then changes hands and the surplus is realized. At time 3, the buyer has private information about each jurisdiction’s enforcement state and unilaterally makes a choice of law. At time 4, the buyer decides whether to comply with the contract or defect. The seller is uninformed about the state and only observes the buyer’s forum and defection decision. At time 5, the seller can either sue the buyer at the buyer’s choice of jurisdiction or drop the case.

Note that the buyer’s forum choice is binding. This is a critical assumption which is consistent with the Ottoman Empire’s legal framework. Jurisdictions in the empire followed the maxim \textit{actor sequitur forum rei}, requiring the plaintiff to sue the defendant in the latter’s native jurisdiction.\(^{10}\) In the case of the Ottoman Empire, where there was no clear demarcation of “nationality,” this allowed defendants to engage in (reverse) forum shopping by claiming jurisdiction in a particular forum.

In this environment, the enforcement technology describes a vector of random variables \( \{\theta_j^i\}_{j=1}^N \) comprising enforcement outcomes \( \theta_j^i \in \{H, L\} \) in each jurisdiction \( j \in \{1, 2, \ldots, N\} \), conditional on an initial choice of law \( i \in \{1, 2, \ldots, N\} \). In other words, the joint realization of states across jurisdictions depends on the legal system under which agents contract at time 1. There is no independence requirement across random variables \( \{\theta_j^i\}_{j=1}^N \) for any \( i \in \{1, \ldots, N\} \), but we do

\(^{10}\)The legal literature defines forum shopping as the phenomenon in which the plaintiff chooses venue. Reverse forum shopping refers to the case where the defendant makes a forum choice. This paper examines the latter.
assume that they are not perfectly correlated. With a slight abuse of notation, let \( \mu_i(\theta_1, \theta_2, \ldots, \theta_N) \) denote the joint probability distribution over the enforcement states if the initial jurisdiction is \( i \).

First, suppose that agents can commit to their initial jurisdiction by writing a binding choice-of-law clause in their contract at time 1. In this full-commitment case, there are \( N \) proper subgames which mirror the benchmark model of Section 2. During the contracting stage, parties agree on a jurisdiction \( i \) that maximizes \( \mu_i(\theta_i = H) \), the marginal probability of enforcement in jurisdiction \( i \) conditional on contracting under the same legal system. Jurisdictions with higher \( \mu_i(\theta_i = H) \) Pareto-dominate those with lower enforcement probability. Thus, parties will contract under the jurisdiction with highest marginal enforcement likelihood. Cooperative \textit{ex ante} choice of law allows parties to choose a jurisdiction that maximizes the total surplus and investment by minimizing the transaction costs related to imperfect enforcement.

Now suppose that commitment is impossible. In this case, the buyer can defect to a more advantageous jurisdiction, one that will not enforce the contract. The following proposition shows that this environment is equivalent to a single jurisdiction setting with an appropriately chosen enforcement parameter.

**Proposition 1.** Suppose both agents have access to legal systems \( 1, 2, \ldots, N \) where \( N \in \mathbb{N} \), and the buyer has the opportunity to engage in forum shopping at time 3. Then, legal pluralism is equivalent to a single jurisdiction environment with enforcement capacity \( \tilde{\mu} = \max_{i=1,2,\ldots,N} \mu_i(H, \ldots, H) \).

**Proof.** When the buyer becomes informed about each court’s enforcement state at time 3, he will choose a jurisdiction that will not enforce the contract. After the good exchanges hands (and the investment is sunk), the buyer strictly prefers avoiding the payment. Thus, he will claim jurisdiction in a forum with enforcement state \( L \), whenever one exists. The buyer’s \textit{ex post} forum shopping behavior effectively pushes the enforcement probability down conditional on any initial choice of law since each jurisdiction now has to draw state \( H \) for the seller to receive the contractual payment. \textit{Ex ante}, parties contract under the jurisdiction whose contracts are enforced most likely across all jurisdictions (and not just the contract’s native jurisdiction). In other words, they will choose an initial jurisdiction \( i \) that maximizes \( \mu_i(H, \ldots, H) \), the joint probability that each jurisdiction’s enforcement outcome is \( H \).

Proposition 1 shows legal pluralism’s main costs and benefits. Multiplicity of legal systems
allows the buyer to forum shop over more options, depressing enforcement probability for any initial jurisdiction \( i \). However, legal pluralism can increase total surplus. The initial jurisdictional choice is cooperative; parties contract under the legal system whose contracts are most likely enforced across all jurisdictions. If we include a legal system whose contracts enjoy high enforcement likelihood in all available courts, then having one more jurisdiction can increase total surplus (conditional on already having legal pluralism).

Note that the main inefficiency associated with legal pluralism arises from the buyer’s inability to commit to the initial legal choice at time 1. If he could commit, parties would only care about the marginal probability of enforcement in each jurisdiction. With forum shopping, agents need to take note of how reliably all other courts will enforce a contested contract.

### 3.2 Exogenous Asymmetric Legal Access

The previous subsection focused on an environment where agents could contract and resolve disputes under any jurisdiction. However, the Ottoman Empire limited choice of law to a subpopulation. Muslims were restricted to Islamic law but non-Muslims could use any of the available legal systems, including European jurisdictions upon paying an entry fee. This subsection extends the model by allowing variation in the legal options agents have in order to capture this asymmetric jurisdictional access.

Suppose there are two legal systems, 1 and 2. Agents have different legal choice sets with the buyer having access to both 1 and 2, and the seller only 1. Further assume that agents can only choose an initial jurisdiction to which they both have access. In this case, the only available initial choice is 1. The buyer can still deviate and force litigation in jurisdiction 2 ex post. Parties are stuck with writing contracts in jurisdiction 1 and the effective enforcement capacity is \( \mu_1 (H, H) \). It would have been welfare improving (in the sense that total surplus would have increased) if the seller also had access to jurisdiction 2 provided that \( \mu_2 (H, H) > \mu_1 (H) \). The following proposition extends this insight to a more general case.

**Proposition 2.** Let the buyer’s legal choice set be \( \mathcal{N}_B := \{1, 2, \ldots, N_B\} \) and the seller’s choice set be \( \mathcal{N}_S := \{1, 2, \ldots, N_S\} \), where \( N_B > N_S \). Then, (i) asymmetric legal pluralism is equivalent to a single jurisdiction with the enforcement capacity \( \tilde{\mu} = \max_{i \in \{1, \ldots, N_S\}} \mu_i (\theta_1 = H, \ldots, \theta_{N_B} = H) \);
(ii) effective enforcement likelihood $\tilde{\mu}$ is decreasing in legal asymmetry $N_B - N_S$; (iii) equilibrium investment is decreasing in legal asymmetry $N_B - N_S$; (iv) the buyer’s equilibrium payoff is increasing for moderate values of $N_B - N_S$, the seller’s payoff and total surplus are decreasing in $N_B - N_S$.

Proof. Assertion (i) directly follows from Proposition 1. Ex ante parties can only contract in jurisdictions to which they both have access. In other words, they can only use the seller’s legal choice set for contracting. However, ex post, the buyer can forum shop across any fora in his choice set.

To prove assertion (ii), suppose that buyer’s legal choice set stays the same but the seller’s shrinks to $\mathcal{N}_S' = \{1, 2, \ldots, N_S'\}$ where $N_S' < N_S$. In this case, the new effective enforcement likelihood is

$$\tilde{\mu}' = \max_{i \in \{1, \ldots, N_S'\}} \mu_i (\theta_1 = H, \ldots, \theta_{N_B} = H) \leq \tilde{\mu}$$

by $N_S' < N_S$. Similarly, suppose that the buyer’s legal choice set expands to $\mathcal{N}_B' = \{1, 2, \ldots, N_B'\}$, with $N_B' > N_B$, and the seller’s does not change. The new effective enforcement likelihood is

$$\tilde{\mu}' = \max_{i \in \{1, \ldots, N_S\}} \mu_i (\theta_1 = H, \ldots, \theta_{N_B} = H, \ldots, \theta_{N_B'} = H)$$

$$\leq \max_{i \in \{1, \ldots, N_S\}} \mu_i (\theta_1 = H, \ldots, \theta_{N_B} = H) = \tilde{\mu}$$

Therefore, the claim follows.

Assertions (iii) and (iv) follow from (ii) and Lemma 3. Any increase in asymmetry decreases enforcement probability. Such an expansion in asymmetry increases the buyer’s payoff for moderate values of effective enforcement, but will always decrease investment, partnership size, seller’s payoff and total surplus.

Note that inefficiency increases in legal asymmetry, $N_B - N_S$. No jurisdiction in the set $\{N_S + 1, \ldots N_B\}$ has positive impact on the surplus since they are useless for contracting. This “institutional variety” only increases the options over which the buyer can engage in one-sided forum shopping ex post. On the other hand, an expansion in the seller’s choice set increases total surplus precisely by decreasing the asymmetry in legal options and opening up more jurisdictions for contracting.
3.3 Endogenous Legal Access

Thus far, the model assumed that the set of jurisdictions available for contracting and litigation is exogenous. However, as noted before, non-Muslim Ottomans could also purchase access to one or more European legal systems.

Suppose there are two legal systems, 1 and 2. This is without loss of generality; legal pluralism is equivalent to a single jurisdiction with an appropriate enforcement probability by Proposition 1. Initially both agents have access to only jurisdiction 1. Before time 1, each agent can simultaneously choose whether to acquire access to jurisdiction 2 at cost \( p > 0 \). Afterwards, each party’s legal options become common knowledge and the legal pluralism game proceeds as before. For notational brevity, let \( \mu_1 := \mu_1 (\theta_1 = H) \) denote the marginal probability that jurisdiction 1 enforces a contract written in the same jurisdiction, \( \mu_1^2 := \mu_1 (\theta_1 = H, \theta_2 = H) \) denote the joint probability with which both legal systems enforce a jurisdiction 1 contract, and \( \mu_2 := \mu_2 (\theta_1 = H, \theta_2 = H) \) denote the joint probability that both jurisdictions enforce a contract conditional on agents having chosen jurisdiction 2 initially.

Proposition 3. There exists cutoff prices \( \bar{p} \) and \( \bar{p} \) such that (i) if \( (1 + c)/2 \leq \mu_1 < \mu_2 \leq 3/4 \), both agents acquire access to jurisdiction 2 for \( p \leq \bar{p} \), and only the buyer acquires access for \( \bar{p} < p < \bar{p} \); (ii) if \( (1 + c)/2 \leq \mu_1 \leq 3/4 \) and \( \mu_2 < \mu_1 \), only the buyer acquires access for \( p \leq \bar{p} \). Otherwise, neither agent acquires access to jurisdiction 2.

Proof. Let the price \( p \) of acquiring access to jurisdiction 2 be sufficiently small. If \( (1 + c)/2 < \mu_1' < 3/4 \) and \( (1 + c)/2 < \mu_2 < 3/4 \), acquiring access to jurisdiction 2 is a dominant strategy for the buyer. The seller, on the other hand, has incentives to acquire access if she believes the buyer will also acquire access and \( \mu_2 > \mu_1' \). More precisely, consider the reduced normal form representation of the game before the contracting stage.

<table>
<thead>
<tr>
<th>Buyer/Seller</th>
<th>Not Acquire</th>
<th>Acquire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquire</td>
<td>( \frac{(1-\mu_1)(\mu_1-c)}{2(1-c)} ), ( \frac{(\mu_1-c)^2}{4(1-c)^2} )</td>
<td>( \frac{(1-\mu_1)(\mu_1-c)}{2(1-c)} ), ( \frac{(\mu_1-c)^2}{4(1-c)^2} - p )</td>
</tr>
<tr>
<td>Not Acquire</td>
<td>( \frac{(1-\mu_1')(\mu_1'-c)}{2(1-c)} - p ), ( \frac{(\mu_1'-c)^2}{4(1-c)^2} )</td>
<td>( \frac{(1-\mu_2)(\mu_2-c)}{2(1-c)} - p ), ( \frac{(\mu_2-c)^2}{4(1-c)^2} - p )</td>
</tr>
</tbody>
</table>
assuming \((1 + c)/2 \leq \mu'_1 < \mu_2 \leq 3/4\). There are two equilibria in pure strategies. If

\[
p := \frac{(\mu_2 - c)^2 - (\mu'_1 - c)^2}{4(1-c)^2} \leq p \leq \frac{(1 - \mu'_1)(\mu'_1 - c) - (1 - \mu_1)(\mu_1 - c)}{2(1-c)} =: \bar{p}
\]

then there is an equilibrium where the buyer obtains access to jurisdiction 2 but the seller does not. There is another equilibrium with both agents obtaining access if \(p \leq \bar{p}\). Otherwise, neither agent buys access to jurisdiction 2.

Thus, endogenous legal access can exacerbate the inefficiency associated with legal pluralism by inducing one or both agents to expend \(p\) unproductively (in fact, it reduces the surplus parties produce by pushing enforcement probability down). Note that the highest price that the buyer is willing to pay for jurisdiction 2 is higher than the seller’s. Hence, for any given price \(p\), the buyer is more likely to acquire access to jurisdiction 2.

Each agent’s legal acquisition has differential impact on the surplus. The seller obtains access to jurisdiction 2 if the effective enforcement likelihood for a jurisdiction 2 contract is sufficiently high and the seller believes that the buyer will also obtain access. Thus, the seller’s acquisition can help mitigate legal pluralism’s adverse effect by reducing legal asymmetry. On the other hand, the buyer seeks to decrease enforcement reliability, which reduces total surplus.

The additional legal jurisdiction has an option value to the buyer regardless of its efficiency, provided \((1 + c)/2 \leq \mu'_1 \leq 3/4\). If only the buyer obtains access to jurisdiction 2, it is useless for contracting. In this case, how reliably each legal system enforces contracts written in jurisdiction 2 is irrelevant; enforcement probability always falls. If the buyer acquires access to an additional legal system \textit{ex ante}, it does not necessarily reflect a desire to switch to a more efficient jurisdiction. The price \(p\) itself however, depends on the jurisdiction’s fundamentals. The buyer is willing to pay more if jurisdiction 2 is less likely to enforce contracts written in jurisdiction 1. Hence, a high price of jurisdictional shift might imply higher, not lower, transaction costs. On the other hand, both agents might be willing to acquire access to jurisdiction 2 if contracts written in this forum are easily recognized and enforced in jurisdiction 1; that is, if \(\mu_2 := \mu_2(H, H) > \mu_1(H) =: \mu_1\).

Since the price incorporates both of these effects, it is difficult to disentangle them using prices alone. For instance, in the eighteenth-century Ottoman Empire, access to French law commanded a
higher price than access to British law did.\footnote{Artunç (2013) shows that the price for access to French law was statistically higher than access to British law.} We cannot immediately conclude that French law was more efficient than the British since the price variation might have been simply a consequence of forum shopping incentives. If anything, French law might have been less efficient in enforcement and thus yielded a higher price. Similarly, the fact that non-Muslim Ottomans were willing to pay large sums for access to European law does not necessarily imply that the Ottoman law was inefficient. Any creditor, broker, or investor would be willing to switch to European law simply in order to delay or avoid payments. This is consistent with the nature of disputes that got started or resolved in European consular courts.

4 Competitive Equilibrium

Thus far, the model assumed that parties were already in business and tied to a particular partner in an exogenous manner. Realistically, agents can choose on which side of the market they participate as well as their contracting partners. Legal pluralism can affect participation incentives by making contracts between certain parties more unattractive. For instance, Ottoman commerce represented the underlying population well until the eighteenth century, with no particular group dominating trade. However, by the early nineteenth century, Ottoman protégés succeeded in monopolizing trade and pushed Europeans and Ottoman Muslims out. In order capture protégés’ commercial success, this section presents a competitive market where each agent decides whether to find a partner and trade or opt out.

Suppose the economy comprises infinitely many agents. Without loss of generality, assume there are two available legal systems, 1 and 2, with some distribution \( \mu_i \) over enforcement states \((\theta_1, \theta_2)\), where \( i \) denotes the initial jurisdictional choice. As in the previous section, let \( \mu_1 := \mu_1 (\theta_1 = H) \), \( \mu'_1 := \mu_1 (\theta_1 = H, \theta_2 = H) \), and \( \mu_2 := \mu_2 (\theta_1 = H, \theta_2 = H) \). Each agent can have one of two types but are otherwise identical. Type 1, or single-jurisdiction, agents have only access to forum 1. Type 2, or multi-jurisdiction, agents have access to both. Assume that a measure \( q \) of the population is type 2.\footnote{Recall that legal pluralism is equivalent to a single jurisdiction environment with enforcement capacity \( \mu = \max_i \mu_i (H, \ldots, H) \). Thus, we can think of this environment as some agents having access to jurisdictions \( 1, \ldots, N \) and the other agents \( 1, \ldots, M \) with \( M > N \).}
Let $M$ denote the market size, which is a measure of active partnerships in the market. There are scarce market opportunities to exploit and thus as the market becomes crowded, the partnership surplus shrinks. More precisely, contracts yield surplus $x/M$. Each agent has the outside option $v > 0$. Entry is costless beyond this opportunity cost. All agents are price takers. They observe the price associated with the contract in each partnership and choose with whom to trade, if at all.

Let $\pi_{ij}$ denote the surplus division rule (the “price”) in a contract between a type $i$ buyer and a type $j$ seller. Let $M^B_i$ and $M^S_i$ denote the measure of active type $i$ buyers and sellers, respectively. A competitive market equilibrium describes a price vector $\pi^* = (\pi^*_{11}, \pi^*_{12}, \pi^*_{21}, \pi^*_{22})$, and participation measures $M^B_1, M^S_1, M^B_2, M^S_2$ such that each agent maximizes her own payoff and there is no excess supply or demand for any trading position or partner. Table 2 displays the payoff matrix across pairs for total market size $M$.

**Proposition 4.** There are no equilibria where both types trade with each other.

**Proof.** Suppose both single and multi-jurisdiction agents trade with all types. Since single-jurisdiction agents are indifferent between trading with single and multi-jurisdiction agents, we have $\pi^*_{11} = \pi^*_{12}$. Similarly, type 1 sellers are indifferent between trading with type 1 and type 2 buyers, which implies that $\pi^*_{11} = \pi^*_{21} (\mu_1' - c) / (\mu_1 - c)$. Single jurisdiction agents’ indifference between participating as a buyer or a seller pins down $\pi^*_{11} = 2 (1 - c) / [\mu_1 (3 - 2c) - c]$. Imposing the same conditions on multi-jurisdiction agents, we get $\pi^*_{21} (1 - \mu_1' \pi^*_{21}) (\mu_1' - c) = \pi^*_{22} (1 - \mu_2 \pi^*_{22}) (\mu_2 - c)$, $\pi^*_{12} = \pi^*_{22} (\mu_2 - c) / (\mu_1 - c)$, and $\pi^*_{22} = 2 (1 - c) / [\mu_2 (3 - 2c) - c]$. These conditions lead to a contradiction. 

Proposition 4 implies that any competitive equilibrium will involve some degree of segregation or limited/no entry by one type. Due to their advantage in forum shopping, multi-jurisdiction agents are always able to extract more of the surplus, discouraging contract formation between single-jurisdiction and multi-jurisdiction agents. If both types appear as buyers in the market, one type undercuts the other, who would then prefer to be sellers. The only exception is a fully segregated market where each type contracts with her own type exclusively. Broadly, we have three classes of equilibria with only single-jurisdiction buyers and a mix of sellers, only multi-jurisdiction buyers and a mix of sellers, and a mix of both types where all contracts are between the same types. In
the first and third cases, each agent receives their outside options \( v \) in equilibrium. The appendix gives a full characterization of these equilibria.

Recall that non-Muslim subjects in the Ottoman Empire could purchase access to additional legal systems by paying large sums. The number of these licenses was fixed by the Ottoman government and they were sold by European embassies in (essentially) first-price auctions. In the following extension, the model incorporates this feature by allowing agents to purchase licenses which grant access to jurisdiction 2. Their supply is fixed at \( q \). There are two periods. Initially, each agent has only access to jurisdiction 1 and decides whether to buy the license at price \( p \). In period 2, agents observe who (if anyone) has a license. The game then proceeds as before.

**Proposition 5.** Suppose \( \min \{\mu_1, \mu_2\} \geq (2 - c) / (3 - 2c) \). There is a class of equilibria where a measure \( q \) of the economy buys the license at price \( p^* = \left\{2 (\mu_2 - c) / [q (\mu_2 (3 - 2c) - c)]\right\}^2 - v \), and the competitive equilibrium in period 2 features a market exclusively dominated by licensees, i.e.

\[
M_{22}^* = M_{2S}^* = M^* = q/2.
\]

**Proof.** In period 2, a market dominated by licensees is an equilibrium if the following market clearing conditions are satisfied:

1. Licensees are indifferent between participating as buyers and sellers.
2. Licensee buyers prefer to trade with licensee sellers, and vice versa.
3. Licensees (weakly) prefer to participate in trade.
4. Non-licensees (weakly) prefer to stay out.

The first condition pins down the contract price \( \pi_{22}^* = 2 (1 - c) / [\mu_2 (3 - 2c) - c] \). There are infinitely many price combinations that satisfy the remaining conditions. A trivial one is \( \pi_{11}^* = \pi_{12}^* = \pi_{21}^* = 0 \). In this case, all other contracts receive zero surplus, and single-jurisdiction agents strictly prefer to take their outside options. For condition (3), we need

\[
\frac{\pi_{22}^* (\mu_2 - c)}{2M^* (1 - c)} \geq v^{1/2}.
\]
This condition binds if there are sufficiently many licensees in the market. In this case, free entry will push licensee payoffs to \( v \) and the equilibrium market size is \( M^* = (\mu_2 - c) / \left[ v^{1/2} (\mu_2 (3 - 2c) - c) \right] \). Otherwise, the market size will simply equal to the licensee population divided by 2.

Suppose \( q \leq 2M^* \). Then, in period 1, agents will purchase licenses if they believe the market equilibrium in period 2 will be dominated by licensees. They will bid up the license price until they are indifferent between trading in period 2 and opting out. The price in this case will be

\[
p^* = \left[ \frac{2 (\mu_2 - c)}{q (\mu_2 (3 - 2c) - c)} \right]^2 - v.
\]

Proposition 5 shows that even if jurisdictions 1 and 2 are equally efficient, the competitive equilibrium features a somewhat segregated market dominated by multi jurisdiction agents. Forward induction allows us to eliminate unreasonable equilibria in period 2. We should observe positive license prices if the market believes that licensees will dominate the economy. This gives us two broad classes of equilibria: one where the license price is zero and the market is dominated by single-jurisdiction agents, and one where the license price is positive and the market is dominated by multi-jurisdiction agents who purchased the license in period 1.

The condition \( \min \{\mu_1, \mu_2\} \geq (2 - c) / (3 - 2c) \) is necessary to obtain prices \( \pi_{11} \) and \( \pi_{22} \) for which a given type is indifferent between participating as a buyer and a seller. If both probabilities are lower than \( (2 - c) / (3 - 2c) \), then the only possible pair is between multi-jurisdiction buyers and single-jurisdiction sellers.

**Proposition 6.** Suppose \( \min \{\mu_1, \mu_2\} \geq (2 - c) / (3 - 2c) \). (i) Multi-jurisdiction agents are more likely to dominate the market if supply \( q \) increases (if the outside option \( v \) or \( \mu_2 \) is sufficiently large). (ii) Investment per partnership is higher in a market dominated by multi-jurisdiction agents than in a market comprising exclusively single-jurisdiction agents.

**Proof.** (i) We want to show that as \( q \) increases, the set of prices \( \pi_{11} \) for which single-jurisdiction agents would like to trade shrinks, and for sufficiently large \( q \), there is no such \( \pi_{11} \). The set of \( \pi_{11} \) that cannot keep single-jurisdiction agents out of trade is given by \( (\pi, 1] \cap (\bar{\pi}, \bar{\pi}) \) where \( \bar{\pi} = (1 - c) qv^{1/2} / (\mu_1 - c) \) and \( \bar{\pi}, \bar{\pi} \) solve the polynomial \( h(\pi) = \pi^2 - \pi / \mu_1 + 2 (1 - c) vq^2 / [2\mu_1 (\mu_1 - c)] \).
This set shrinks as $q$ gets larger since $\bar{\pi}$ and $\bar{\pi}$ are increasing in $q$, and $\bar{\pi}$ is decreasing in $q$. At the extreme, the set of $\pi$ for which single-jurisdiction agents prefer to trade is empty if either $\bar{\pi} > 1$, $\bar{\pi} > \bar{\pi}$, or $\bar{\pi} > 1$.\footnote{The condition $\bar{\pi} < 0$ leads to an immediate contradiction. $\tilde{\pi} > \bar{\pi}$ requires $\mu_2 > \mu_1$, and $\bar{\pi} > 1$ holds only when $\mu_2 = (2 - c) / (3 - 2c)$ if $\mu_2 < \mu_1$.}

Note that $\bar{\pi} > 1$ if

$$\frac{1}{2\mu_1} \left\{ 1 - \left[ 1 - \frac{2(1 - c)\mu_1 q^2 v}{\mu_1 - c} \right]^{1/2} \right\} > 1$$

which, after rearranging terms, yields

$$q^2 > \frac{2(\mu_1 - c)(1 - \mu_1)}{(1 - c)v} =: \bar{q}^2.$$ 

It remains to show that such $q$ is not high enough to discourage licensees from trading. That is, we need to show that

$$\frac{(\mu_1 - c)(1 - \mu_1)}{2(1 - c)} < \left[ \frac{\mu_2 - c}{\mu_2 (3 - 2c) - c} \right]^2. \quad (1)$$

Note that there exists $(2 - c) / (3 - 2c) \leq \mu_2 < \mu_1$ for which (1) holds. For instance, if $c \leq 1/2$, then (1) holds for any $\mu_2 < \mu_1$. Thus, as the license supply $q$ increases, the set of surplus-sharing rules for which single-jurisdiction agents are willing to trade shrinks, completely vanishing for $q > \bar{q}$. Note that $\bar{q} < 2(\mu_2 - c) / \{ [\mu_2 (3 - 2c) - c] v^{1/2} \} =: \bar{q}$, where $\bar{q}$ denotes the license supply at which license price is zero and multi-jurisdiction agents are indifferent between entering the market and taking their outside option. Thus, for license supply $q \in (\bar{q}, \tilde{q})$, the license price is positive at $p = p^*$, and all licensees strictly prefer to enter—and monopolize—the contracts market.

(ii) First, consider an economy where there is only one jurisdiction available. In this case, the investment in each partnership is

$$x_1 = \frac{\pi_{11} (\mu_1 - c)}{2(1 - c) M^*} = v^{1/2}.$$ 

Now suppose there is a license supply $q$ which fetch a positive price. Then, multi-jurisdiction agents are going to dominate the market, with investment in each contract

$$x_2 = \frac{\pi_{22} (\mu_2 - c)}{(1 - c) q} > v^{1/2}$$
by \( q < (\mu_2 - c) / \left[ (\mu_2 (3 - 2c) - c) \nu^{1/2} \right] \). Total investment in this case will be lower than a single-jurisdiction environment as long as \( \mu_2 < \mu_1 \).

Proposition 6 shows that an equilibrium dominated by multi-jurisdiction agents is more likely if the license supply increases. Since multi-jurisdiction agents succeed in monopolizing the market, each contract enjoys a higher surplus. Thus, such an equilibrium features larger partnerships but total investment level in the economy will be smaller. In other words, licensees as a group do well at the whole economy’s expense.

5 Legal Pluralism in the Ottoman Empire

The model generates predictions that explain the role legal pluralism played in realizing four important facts in Ottoman economic history: Ottoman partnerships’ small size, why non-Muslim Ottomans purchased access to European law, how these protégés dominated trade and drove both Muslims and Europeans out, and why the nineteenth-century Ottoman legal reforms, notably adopting the French commercial code in 1850, did not reverse the process. This section demonstrates legal pluralism’s impact on these key questions by using empirical evidence drawn from primary sources as well as from secondary literature.\(^{14}\)

5.1 The Long Divergence and Legal Institutions

In the seventeenth century, the Ottoman Empire was a major economic power; by the end of the nineteenth century the “sick man of Europe” had fallen far behind most of Europe. Table 3 shows the divergence by comparing average annual growth rates in Ottoman territories and Western Europe between 1820 and 2000.

The literature claims that Islamic law itself caused the Ottoman economic decline. Kuran argues that the interaction of Islamic partnership law, inheritance law and pious trusts (\textit{waqfs}) kept Middle Eastern enterprises small and ephemeral. Inflexible and egalitarian inheritance law made partnerships susceptible to untimely dissolution, which firms could have avoided by incorporating. Since Islamic law disallowed corporate forms, agents instead preferred to invest in pious foundations.

\(^{14}\)In order to construct these data, I consulted primary sources at the (British) National Archives (TNA), the British Library (BL), \textit{Archives nationales affaires étrangères} (AN AE), \textit{Centre des archives diplomatiques de Nantes} (CADN), and the Ottoman Archives of the Prime Ministry of Turkey (\textit{Başbakanlık Osmanlı Arşivi} BOA).
which locked capital indefinitely in unproductive enterprises. However, Ottoman subjects had access to European law since the early eighteenth century, and its availability did not improve Ottoman economic performance.\footnote{See Kuran (2003, 2004b, 2011) for details about how Islamic law affected the Middle Eastern economic decline. Kuran (2004a) discusses legal pluralism in the Ottoman Empire and argues that non-Muslim Ottomans switched to European law to take advantage of more business-friendly legal rules.}

Table 4 shows various legal options Ottomans had between 1700 and 1926. The government organized its population across religious affiliation (the millet system) and allowed each denomination to retain its own law and courts regarding civil and commercial matters. European communities enjoyed the same privilege. While Muslims were restricted to Islamic law in all their transactions, non-Muslim Ottomans were free to use any of the available jurisdictions. From 1700 onwards, they could use even European law by acquiring exemption licenses called berats. The Ottoman government responded by implementing a series of legal reforms, which culminated in the adoption of the French commercial code in 1850. These reforms made secular courts and French law available to the whole population. However, denominational, Islamic, and European courts continued to co-exist until 1926, when the Turkish Republic abolished all non-secular and foreign courts, ending legal pluralism for good.

In the Ottoman Empire, courts used the principle *actor sequitur forum rei* to resolve conflicts of law between parties; the plaintiff had to sue the defendant in the defendant’s native court. This rule created opportunities to engage in forum shopping whenever the “native jurisdiction” was not well-defined. A defendant could impose the jurisdiction that favored him the most by claiming to be under the purview of different legal systems.\footnote{On paper, all Muslims had to use Islamic courts whether they were defendants, plaintiffs or faced non-Muslim litigants. However, Europeans and non-Muslims under European protection enjoyed an advantage even in such cases. Their consuls represented these agents in Islamic courts and consuls’ cooperation was necessary to terminate such legal proceedings. This practice effectively imposed the *actor sequitur forum rei* principle even on disputes between Muslim plaintiffs and protégé or European defendants. As such, Muslims found it more expedient to sue agents under European protection in consular courts. See Scott (1907) pp. 196–7 footnote 1, Hickley (1906) p. 152. See Papers relative to the jurisdiction of Her Majesty’s consuls in the Levant, 1845 [663], LII.83, p. 104 for specific examples of Ottoman subjects (including Muslims) suing defendants under British protection in British consular courts between 1841 and 1843.} Forum shopping was common in this environment. Table 5 shows that almost thirty percent of commercial disputes terminated in a jurisdiction different than in which they were first initiated. While the sample size is not large, it is representative nonetheless. The sample primarily comprises British and French protégés’ commercial disputes in Aleppo and Izmir. These cities, the former in Syria and the latter on the Aegean coast in western
Turkey, were important commercial centers in the Ottoman Empire.

The theory predicts that parties initially choose a legal system whose contracts are most likely enforced across all jurisdictions. In the Ottoman Empire, Islamic courts had this character. Non-Muslims regularly registered their contracts in Islamic courts; Muslim tribunals’ function as public notaries was critical to all non-Muslims in intra-communal transactions. On the other hand, recourse to non-Muslim ecclesiastical courts rose as the Ottoman government enhanced these courts’ jurisdiction. For instance, intra-Christian registrations in Islamic courts fell as the Church’s role (and hence enforcement) stabilized and the Orthodox commercial law’s scope expanded (Gradeva (1997) pp. 50–1). There is suggestive evidence that the use of Orthodox courts increased at the same time. Out of the 80 legal documents found in the highest Greek Orthodox tribunal in Istanbul between 1655 and 1753, 37 are promissory notes and the remaining 43 include partnership agreements, sales contracts, and various other settlements.

Thus, Islamic law did not exist as an isolated legal institution. Legal pluralism, especially the asymmetric manner in which it operated in the Ottoman Empire, is critical to understanding key economic outcomes in the empire’s development path.

5.2 Protégés and Jurisdictional Shift

In the eighteenth century, non-Muslim Ottomans could become European protégés by acquiring exemption licenses called berats. These licenses were assigned to each European embassy by the Ottoman government, fixed in number and effectively auctioned off to non-Muslim Ottomans. Artunç (2013) gives a comprehensive analysis of berat sales by documenting prices for Austrian, British, and French berats, showing systematic variation in berat prices across countries and explaining why non-Muslim Ottomans purchased these licenses.

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17 Gradeva (1997) shows that a large number of judicial documents involving non-Muslims exclusively in Sofia in the seventeenth century were non-contested; such documents were registrations and agreements associated with property transactions, loans, sureties, and proxies, pp. 46–50. Jennings (1978) documents regular non-Muslim use of Islamic courts in seventeenth-century Kayseri. Simonsohn (2011) argues that Jews favored Islamic courts because of their better enforcement capacity, pp. 175–82. Cohen (1984) corroborates this finding in sixteenth-century Ottoman Jerusalem. Wittman (2008) also emphasizes Islamic courts’ enforcement capacity and shows that 5 out of the 7 intra-Jewish cases, and 42 out of the 73 cases between Christians filed in the Galata (Istanbul) sharia court in 1683 were registrations, pp. 73–4. For further sources on non-Muslims’ recourse to Islamic courts, see Çiçek (1992), Al-Qattan (1996), and Adıyeye (2001). Wittman (2008) gives an excellent account of non-Muslim presence in Islamic courts in the 1680s and 1690s.

18 Beinecke MS 303 (Ziskind MS 22), Legal Documents, General Collection, Beinecke Rare Book and Manuscript Library, Yale University. Some of these records include settlements between Greeks and Jews, e.g. ibid. case no. LIX and LXIX.
The model has a powerful prediction. Proposition 4 shows that a legal system has an option value solely as an instrument for forum shopping regardless of its efficiency. Thus, protégés were not seeking “better law,” but rather wanted to enhance their position in disputes, for which they were willing to pay large sums. In 1794, a British berat cost roughly 55 times the Ottoman GDP per capita at the time. Using average earnings, a British berat was worth 893,000 US dollars in 2010.19 Figures 2 and 3 display box-whisker graphs of prices for Austrian, British and French berats between 1740 and 1795. In addition to great powers like Great Britain or France, there was demand for the berats of Sweden, Denmark and Kingdom of Two Sicilies, whose trade and presence in the Levant were not substantial. Ottoman minorities made regular attempts to buy multiple berats from different European embassies.20 Finally, protégés took advantage of their titles and status to evade contractual obligations.21 The French ambassador Vergennes notes that French protégés were willing to use Turkish courts when these courts proved more advantageous.22 Liston, the British ambassador in Istanbul between 1793 and 1796, writes that protégés switched around courts frequently to avoid or delay debt payments.

Men of profligate character procured barats, to skreen [sic] them from the punishment of the Law, to enable them to avoid the payment of their just debts, or perhaps to oppress an innocent neighbour . . . And there are instances, not infrequent, that when one minister . . . has determined to withdraw his patronage, and to deliver him over to the Tribunals of the Country, there has been found another minister ready to frustrate the good intention, by an adoption of the criminal.23

Dashkov, who conducted an inspection of Russian diplomatic missions in the early nineteenth century, echoes Liston’s statement by noting the nebulous jurisdictional boundaries protégés had and how easily they shifted between legal systems:

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19 British berats’ nominal price was 425 pounds sterling in 1780. The average earnings method uses indices from Measuring Worth, http://www.measuringworth.com, and Pamuk (2006) p. 815. I used the GDP per capita estimate for the year 1820. Similarly, assuming a constant growth rate and estimating the Ottoman GDP/capita in 1794, I find that the price of a British berat was 63 times the annual Ottoman GDP per capita.

20 For instance, Haïm Camondo simultaneously held Austrian, British, and French berats; Jamgocyan (1988) p. 501. Several British protégés had acquired other countries’ berats c. 1755; TNA SP 110/32: f. 128, 10 October 1755. Jussuf Karalı held a Spanish berat in addition to having protection from Sweden; CADN 166PO/D1/28–29. The Ottoman Greek Antonio Zingrilara solicited a British berat even as he held a French one. He had become a naturalized Dutch citizen before buying a French berat; Boogert (2006) pp. 131–2, CADN 166PO/D84/7: 8 March 1767, TNA SP 110/87: Murray to Hayes, 9 June 1768.

21 Rey notes that protégés often used their titles to avoid payments on l’effets de complaisance that they endorsed, as was the case during the commercial crisis of 1857. Rey (1899) p. 284.

22 “If the law of France harms and ruins them, they will resort to Turkish law” See Archives de la Chambre de Commerce de Marseille, J 168, Vergennes to the Chamber of Commerce, 22 January 1768, cited in Eldem (1999) pp. 282–3.

23 TNA FO 78/16: ff. 90–91, Liston to Grenville, 25 April 1795.
... who are the individuals considered to be Russian subjects in the Ottoman Empire? Everything is counterfeit, nothing is authentically national. Neither at Constantinople nor at any of the ports of the Levant are there any genuinely Russian merchants transacting business. ... An individual changes sides, and a ship abandons its flag just as easily as it was obtained, in order to escape obligations or even legal proceedings. (Prousis (2002) pp. 96–7)

Similarly, Bourville, the French Consul in Chios, remarks that their protégés submit to French law rarely and shift fora as they see fit.24 Fortunately, we do not have to rely on Europeans’ potentially biased observations. Table 5 provides quantitative evidence on the frequency of forum shopping. Using consular correspondence and chancery registers, I constructed a sample of commercial disputes involving British and French berat holders between 1751 and 1802 in Aleppo and Izmir. While the sample size is not large, it is representative of other protégés in the Ottoman Empire. Aleppo and Izmir were major commercial centers in the eighteenth and nineteenth centuries. One should interpret this sample cautiously since it is a non-random sample of conflicts. Consuls and ambassadors’ choice of dispute resolution was often arbitration, and those successfully resolved this way were unlikely to appear in consular correspondence. Even those registered in the consular chancery, but not reported to the ambassador, might be subject to selection. While these cases likely overestimate the frequency of forum shopping, they are still informative. Almost half of all disputes involving British and French protégés in Ottoman provinces involved some form of strategic court deviation.

Unlike this theory, alternative explanations do not fit the empirical evidence. Kuran (2004a) explains religious minorities’ switch to European law through the “jurisdictional shift hypothesis,” arguing that European law involved lower contracting and transaction costs, and agents were willing to pay large sums to take advantage of more efficient legal systems. European law was more efficient, Kuran (2011) claims, because of better enterprise forms, reliance on written evidence instead of testimony, and more flexible inheritance rules. The jurisdictional shift hypothesis is inconsistent with several pieces of evidence. First, if European law were indeed more efficient, we would have observed a difference in enterprise forms and trade patterns due to its availability. It was mostly merchants, brokers, financiers and artisans who sought access to European jurisdictions. Their

economic activities would have made a difference in commerce. Second, if protégés obtained foreign protection in order to have access to a more efficient legal system, then we should not observe Ottomans simultaneously seeking more than one protection. Multiple berat purchases and berat diversification across partnerships are inconsistent with the jurisdictional shift hypothesis but are natural predictions of the model. Finally, there is little evidence that protégés made use of potentially superior legal norms associated with European law. In fact, consular courts did not even apply their country’s law:

...acting in conformity with the Roman legal maxim locus regit actum, the consular courts frequently are influenced in their decisions by local usages and customs. This principle applies in such matters as marriage, in various commercial transactions, the organization of special communities and corporations, and in general in the determination of the validity of juridical acts. (Brown (1914) pp. 60–61)

Therefore, any variation across consular jurisdictions must have arisen from procedural differences, which varied greatly across courts (Brown (1914) p. 54). Such procedural differences led to a great deal of uncertainty in contract enforcement and, as noted earlier, protégés engaged in forum shopping not for efficiency reasons but to evade debt payments.

5.3 Protégés’ Ascent in Ottoman Trade

Proposition 5 shows that in a competitive market, agents with smaller legal choice sets will opt out. Moreover, as Proposition 6(i) proves, this exit will be more likely if either the number of multi-jurisdiction agents or the number of available jurisdictions increase. Thus, the model explains a key puzzle in Ottoman economic history: protégés’ dominance in commerce, and Europeans’ and Muslims’ exit from trade.

Up until the eighteenth century, no particular ethnic or religious group dominated the Ottoman trade, but by the early nineteenth century, non-Muslim minorities—specifically those who were under European patronage through berats—took over a substantial portion of the Ottoman commercial life. Table 6 gives a snapshot, showing that between 1602–19 and 1661–97, out of partnerships that registered or adjudicated in the Istanbul Galata courts, the majority featured Muslim enterprises.

\[\text{Choiseul described protégés who had acquired berats as “almost all rich sarrafs, or bankers,” cited in Eldem (1999) p. 282. Jamgocyan (1988) shows that several rich and prominent financiers held berats. All such French protégés in Izmir c. 1750–1800 were affluent merchants, see CADN 166PO/D84/1–23.} \]
However, by the early nineteenth century, Ottoman protégés became a major force at Europeans’, Muslims’ and other non-Muslim Ottomans’ expense. Customs records in Izmir reveal that there were almost no Muslim merchants involved in imports to or exports from that port during the period 1818–1839.\textsuperscript{26} Various European consuls, ambassadors and merchants noted the local non-Muslims’ rise and blamed their own diminishing trade on being undercut by the protégés. In Izmir, the number of Dutch merchant houses declined from 18 to 6 between 1702 and 1719. The same trend appears in other cities.\textsuperscript{27} In 1911, French, German, and British traders together comprised only 3 percent of the 1,000 registered merchants in Istanbul. At the same time, protégé establishments were steadily increasing.\textsuperscript{28} Table 7 shows the number of mercantile establishments in Istanbul and Izmir, two largest commercial centers, in the late nineteenth century. Despite Muslims making up about 60 percent of the population, non-Muslims Ottoman firms accounted for more than two thirds of merchants in both cities. A contemporary observer, Ubicini, notes that

> The Greeks . . . speedily succeeded, by means of the berats which they purchased at the embassies, in monopolosing a large part of the Levant trade. Protected by Austria, and especially Russia, . . . they daily extended the sphere of their operations, and gradually obtained the first rank in the Turkey trade, which they now occupy. It was thus that the Greek firms of Constantinople, with their partners in London, Marseilles, Leghorn, Genoa, Trieste, and Odessa, reached a continually increasing degree of prosperity, whilst other nations saw their trade steadily decline. (Ubicini (1856) pp. 350–1)

Both numerous primary sources and the secondary literature have noted the protégés’ rise in the Mediterranean trade.\textsuperscript{29} The more famous Greek firms such as Rallis, Rodocanachis, and Petrococo-

\textsuperscript{27}Hamilton et al. (2000) p. 7, Van Den Boogert (2006) p. 130. By the late 1840s, the empire’s nineteen most prominent commercial cities contained not more than 80 British and 70 French merchant houses, shrinking further in the second half of the nineteenth century, İnalçık et al. (1994) p. 839.
\textsuperscript{28}Ibid. p. 839, Cottrell (2008) p. 64.
\textsuperscript{29}One Mavrogordato, who had a Swedish berat, did a quarter of all the Dutch trade in Izmir and had merchants houses and partnerships with other protégés in Izmir, Chios, and Amsterdam, CADN 166PO/D84/15: 8 January 1780. During St. Priest’s tenure (French ambassador to Istanbul between 1768 and 1785), the French trade became mostly free and was mostly carried out by non-Muslim minorities, Eton (1799) p. 494. Protégés brought considerable competition to Muslims and Europeans without much difficulty, Beaujour (1800) p. 288. “The Ottoman merchants trading with foreign countries, who are not Beratlees (privileged), are few in number,” Correspondence respecting the operation of the commercial treaty with Turkey, of August 16, 1838, 1841 Session 2 [341], p. 5. Weguelin, governor of the Bank of England between 1855 and 1857, reported that Greek merchant houses (essentially sociétés en commandites) commanded large capital, had many partners in various ports of the Mediterranean, and succeeded in almost entirely excluding British merchants from the Levant Trade, First report of the commissioners appointed to inquire and ascertain how far the mercantile laws in the different parts of the United Kingdom of Great Britain and Ireland may be advantageously assimilated and also whether any and what alterations and amendments should be made in the law of partnership as regards the question of the limited or unlimited responsibility of partners, 1854 [1791], pp. 127–8. “The business of exporting and importing goods to and from Europe is . . . monopolised by the
cinos, all started as protégé merchant houses.\textsuperscript{30}

Consistent with the model’s prediction, protégés’ dominance followed an increase in *berat* supply. Over the course of the eighteenth century, *berat* numbers increased steadily. Table 8 shows the increase in *berat* numbers for France, Great Britain and the Dutch Republic alone. At the same time, many countries started issuing *berats* in comparable numbers.\textsuperscript{31} Even though protégés existed long before 1740, their rise in commerce came about only in the second half of the eighteenth century.\textsuperscript{32}

The model predicts that protégés are able to dominate trade only where forum shopping is possible; namely, where there are European missions which can auction off protections. Similarly, the model implies that Muslims persist in trade wherever the Muslim population is sufficiently large (since only non-Muslim Ottomans could forum shop). Both İnalçık and Küçükkalay confirm this pattern; Muslim traders were not pushed out in commercial centers where Muslim population was larger and European presence was not substantial (İnalçık et al. (1994) pp. 837–9, Küçükkalay (2007)p. 110). In this regard, access to trade networks or better law cannot explain protégés’ success, since ports such as Salonica or Aleppo lacked any commercial presence of several European

\textsuperscript{30}Rallis (from Chios) held Austrian and British *berats*, CADN 166PO/D84/19 and TNA FO 261/6: Pisani to Hayes, 30 November 1789 and 6 May 1790. Rodocanachis (from Chios) had acquired *berats* from France, CADN 166PO/D84/18: 18 June 1785 and 18 August 1785, AN AE/B1/1066: 31 December 1782. Finally, Petrococcinos had French and Swedish *berats*, CADN 166PO/D84/15: 8 January 1780, 166PO/D84/18, BOA Hatt 196 C. Frangopolos, whose merchant house was also prominent, held Austrian, British, and French *berats*, TNA FO 261/6: Ainslie [British ambassador in Istanbul] to Hayes [British consul in Izmir], 7 January 1781; Archives of Macedonia (IAM) K. 94, 33/34.

Another important family, Zarifi, was under British protection, Jamgocyan (1988) p. 466.


\textsuperscript{32}Berat sales must have become regular practice by the seventeenth century as the Ottoman government attempted to suppress its traffic in 1677, Abbot (1920) p. 266.
nations, whose protections nevertheless commanded significant demand.\textsuperscript{33}

The literature has explained protégés’ success by their tax exemptions and trade privileges, the fact that Muslims did not favor trade, or by the efficiency gains protégés acquired by switching to European law (namely, better enterprise forms). These are inconsistent with several empirical facts. Neither tax benefits nor efficient law arguments can explain why Europeans, who enjoyed the same tax privileges also lost trade to protégés.\textsuperscript{34} Furthermore, the efficient law hypothesis cannot account for the nineteenth-century legal reforms’ failure to reverse Muslims’ exit from commerce (notably the adoption of the French commercial code in 1850). Third, protégés themselves did not make use of the allegedly attractive elements in European law: corporations and joint-stock companies. These enterprise forms’ availability constituted the most important difference between European and Islamic law. However, the Greek protégé merchant houses, which dominated the Mediterranean trade in the nineteenth century, were family-based general or limited partnerships and almost never evolved into sociétés anonymes.\textsuperscript{35} On the other hand, both general and limited partnerships had close substitutes in Ottoman law.\textsuperscript{36} Thus, unlike the alternative hypotheses, the model is consistent with Muslims’ and Europeans’ withdrawal, the timing of protégés’ success, and the fact that Muslims did not re-establish a meaningful presence after the introduction of secular courts.

5.4 Partnership Size and Investment

The model shows that legal pluralism leads to underinvestment. Furthermore, in a competitive market agents with access to additional legal systems dominate the market and enjoy higher surplus due to their monopolization. The theory thus predicts small capitalization in Ottoman partnerships, with protégé firms being larger than intra-Muslim firms.

\textsuperscript{33}For instance, in Aleppo, the French consul protected Swedish and Neapolitan protégés, the British consul Austrian protégés, the Venetian consul Prussian protégés, and the Dutch consul Danish protégés throughout the eighteenth century. In 1768, seven to eight Ottomans held Austrian berats; Naples and Sweden, on the other hand, had each four to five protégés in this city. CADN 166PO/D1/10: 27 April 1768 and 18 August 1768, 166PO/D1/21: 8 November 1781.

\textsuperscript{34}In fact, Artunç (2013) shows that the discounted value of tax exemptions cannot explain berat prices at all.

\textsuperscript{35}McCabe et al. (2005) p. 179; First report of the commissioners appointed to inquire and ascertain how far the mercantile laws in the different parts of the United Kingdom of Great Britain and Ireland may be advantageously assimilated and also whether any and what alterations and amendments should be made in the law of partnership as regards the question of the limited or unlimited responsibility of partners, 1854 [1791], pp. 127–8.

\textsuperscript{36}Société en commandite corresponds to mudaraba, and société en nom collectif to mufawada, see Çizakça (1996) pp. 4–8 and 56.
Throughout the early modern period and well into the eighteenth century, the classic Ottoman enterprise organized as *commendas* and later as *sociétés en commandites*\(^{37}\) While the literature argues that Ottoman partnerships had small number of partners, they were actually comparable to their European counterparts. However, Ottoman firms had small capitalization. Table 6 displays partnership composition and size using data from one of the prominent courts in the commercial district of seventeenth-century Istanbul. On average, such partnerships had an initial capital stock about twice the annual income for skilled labor.\(^{38}\) On the other hand, in the second half of the eighteenth century, protégé traders set up merchant houses in various ports of the Levant and the Mediterranean. These firms required initial investments between 10,000 to 20,000 *kuruş*.\(^{39}\) In the nineteenth century, protégé merchant houses dominated much of the Levantine trade. The most successful of them were fairly large. For example, Ralli Bros. had an estimated nominal capital of 500,000 pounds sterling c. 1850, and Rodocanachi, Sons, & Co. more than 200,000 pounds sterling in 1860. However, the great number of these Greek firms had less than 10,000 pounds sterling of capital in the 1850s; small by British standards (Chapman (2004) pp. 154–5).

Although protégés succeeded in forming comparatively larger firms, forum shopping and jurisdictional conflicts haunted all partnerships involving protégés or Europeans.\(^{40}\) Dashkov noted that proliferation of legal systems led to a great deal of judicial disorder:

... almost everywhere [consular courts’] organization varies, a fact which spawns extraordinary disarray. ... The uncertainty of laws that are applied in court proceedings contribute greatly to this confusion. ... both [Russian and Turkish officials] are out of touch with national laws. (Prousis (2002) p. 103)

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\(^{37}\)See Harris (2009) for a discussion on the commend, its diffusion and adoption across Eurasia.  
\(^{38}\)See Gedikli (1998) and Kuran (2010). Annual wages for unskilled and skilled labor in Istanbul were 72 and 101 *kuruş*, respectively. See Özmucur and Şevket Pamuk (2002) for skilled and unskilled wages in Istanbul during the early modern period.  
\(^{39}\)Eldem (1999) gives this estimate for French merchant houses, which were the main competitors for protégé firms, p. 209.  
\(^{40}\)The model predicts that protégé firms are more likely to default on their contractual obligations. Forum shopping allows these firms to avoid contractually-prescribed payments. Although not a direct implication, this prediction is also consistent with higher default risk among these firms. An illustrative example is a dispute between Diab brothers and Lombardi between 1844 and 1857. Lombardi held a promissory note signed by Joseph and Georges Diab for 2,000 *thalers colonates* plus 1 percent interest per month, dated 11 September 1836. In 1844, Lombardi sued Georges Diab, who placed himself under French protection in the midst of these legal proceedings and imposed the French jurisdiction on Lombardi. The French consular court not only rejected Lombardi’s claim, but also compelled him to pay Diab brothers 30,000 *kuruş* for damages. See France. Cour de cassation and France. Conseil d’État and France. Tribunal des conflits (1859) pp. 194–5. In the 1850s and 1860s, British markets found such firms that had establishments in London or Manchester quite risky. These merchant houses had low credit ratings, with the exception of the big houses such as the Rallis. See Chapman (2004) p. 159. For specific ratings on Manchester firms, see Seyd et al. (1867), section “Private Firms in Manchester.”
Similarly, a nineteenth-century legal scholar shows that defendant forum shopping caused inefficiency by depressing enforcement predictability, especially if there were many defendants with different jurisdictions:

\[\text{\ldots [Each] Court applies a different law, and has a special procedure. \ldots [The] parties to a contract \ldots cannot tell, when they enter into the contract, before what jurisdiction they will have to plead in the event of any dispute, and according to what rules of law or procedure the question will be determined. (Demetriades (1891) p. 148)}\]

The principle *actor sequitur forum rei*, that the plaintiff must sue to defendant in the latter’s jurisdiction, induced lengthy legal proceedings in different fora if there were many defendants. The following example from the archives illustrates this problem. In eighteenth-century Aleppo, when a firm comprising British and Dutch protégés declared bankruptcy, their creditors had to apply to British and Dutch courts separately in order to receive their claims.\(^{41}\) Separate legal proceedings for each partner is a common problem associated with partnerships in general. However, legal pluralism exacerbates this issue by creating uncertainty about which legal system applies to each lawsuit.

The literature claims that Islamic law kept Ottoman firms small and ephemeral. Kuran argues that inflexible and egalitarian inheritance law made Ottoman partnerships vulnerable to untimely dissolution, which they could have avoided if Islamic law had allowed incorporation. This hypothesis is inconsistent with three pieces of evidence. First, European enterprises were also primarily general partnerships in the nineteenth century.\(^{42}\) In the Levant, European chartered companies were not joint-stock at all, and there were no European corporations until after 1850 (by which time Ottomans firms could also incorporate with the government’s permission).\(^{43}\) Second, neither untimely dissolution nor inflexible inheritance law was insurmountable. Ottoman firms with three or more partners were not liquidated immediately if a partner withdrew his shares (Çizakça and Kenanoğlu (2008) pp. 208–9). Furthermore, a testator could circumvent Islamic inheritance rules by transferring his property or the firm to one of his inheritors prior to his demise (Çizakça (2010) pp. 14–5). Third, Ottoman enterprise forms themselves were fairly flexible. Çizakça (1996) argues that Ottoman enterprise forms could and did organize capital-intensive ventures. Similarly, Hanna

\(^{41}\)BL Ad MS 45933, CADN 166PO/D1/5.

\(^{42}\)For instance, even after France introduced general incorporation in 1863, ordinary partnerships still accounted for 60 percent of all new firms. In Prussia (and later Germany), partnerships accounted for more than 80 percent of new firms up until 1902. Guinnane et al. (2007) pp. 702 and 710–1.

\(^{43}\)Walsh and of Merchants of England Trading to the Levant (1825) p. 6, also see BL Add MS 38229: ff. 145—71, a dissertation by F. Daniel on the Turkey trade, 23 March 1794.
(2011) illustrates that artisan-entrepreneurs operating textile guilds in Cairo innovated the Islamic trust (cash *waqf*) and the guild to form pseudo-corporate enterprises.

### 5.5 Introduction of the French Commercial Code

In the nineteenth century, the Ottoman government undertook significant modernization initiatives, including reforming the legal system. In 1840, the government first introduced *ad hoc* mixed tribunals to oversee commercial disputes involving Europeans, protégés, and Muslims. In 1850, the empire transplanted the French commercial code almost entirely. However, such reforms did little for growth and did not succeed in bringing Muslims back to trade and commerce. The French Code’s failure to facilitate growth in the Empire itself is a puzzle if Islamic law is more inefficient. After all, adopting the *code de commerce* removed any legal disparity between Europe and the Ottoman Empire. However, the model shows that any additional legal system has a detrimental effect on the economy. The new secular commercial courts and the French code did not supplant any existing legal system; all such jurisdictions continued to co-exist. The 1850 reform increased the number of options over which one could engage in opportunistic forum shopping, further increasing the uncertainty associated with contract enforcement. Secular courts themselves “applied [...] the law of the country to which the defendant [belonged],” (William (1859) p. 45) giving a defendant means to exploit differences in law if he could claim to be under different jurisdictions, as was the case with protégés. Recall that the theory predicts greater inefficiency under legal pluralism. Proposition 1 shows that investment falls as the number of legal systems increases. Furthermore, Proposition 5 proves that agents who have fewer legal options are more likely to exit trade if the overall menu of legal system expands (thus decreasing enforcement probability). Including more legal systems, even if they involve lower transaction costs, will exacerbate the inefficiencies associated with legal pluralism.\(^{44}\)

Thus, in the early modern period, Ottoman legal pluralism contributed to fostering small partnerships with little investment. In the eighteenth and nineteenth centuries, asymmetric legal access led to the formation of a small merchant corps who succeeded in dominating the market thanks to

\(^{44}\) More precisely, enforcement of intra-Muslim transactions became more uncertain since Muslims now could forum shop as well. Similarly, the new commercial courts had no contracting benefit for intra-protégé contracts as they could already use French law thanks to their licenses. The new secular courts merely provided one more option to engage in forum shopping.
their forum shopping advantage. Opportunities to strategically impose a particular jurisdiction in
disputes eroded any potential gain from adopting European legal norms and only led to an increase
in enforcement uncertainty.

6 Legal Pluralism in Other Settings

6.1 Nineteenth-Century Morocco

A comparison between nineteenth-century Morocco and the Ottoman Empire shows that legal plu-
ralism explains key differences in these economies despite both having implemented Islamic law. Legal pluralism contributed to comparable stagnant growth rates in both economies. Forum shopping was common in both countries and agents took note of how likely all available jurisdictions would enforce their contracts. European protection system existed in both countries. This allowed debtors regularly to make use of the maxim *actor sequitur forum rei* to avoid debt payments, especially by purchasing and relinquishing European protection. On the other hand, Morocco comprised a more homogeneous economy compared to the Ottoman Empire; Morocco’s indigenous Christians in Morocco had either converted or left by the late medieval period. The Jewish community constituted the largest minority group at about 2 to 7 percent of the whole population. While the Moroccan Jews made up a commercial elite, no particular group dominated Moroccan commercial life. In addition, Moroccan legal pluralism did not exclude Muslims, who could just as easily use Judaic courts and become European protégés. In the Ottoman Empire, Muslims were re-
stricted to Islamic law and had no other legal choice until the advent of the French commercial code in 1850. Thus, Morocco had none of the asymmetry that characterized Ottoman legal pluralism.

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45 Marglin (2013) examines the Moroccan Jewish population’s quotidian practices through a legal pluralism frame-
work and shows Moroccan Jews’ and Muslims’ legal strategies within the context of overlapping legal systems in the
nineteenth century.

46 There are no data or estimates on Morocco’s income figures before 1913. In 1913, Maddison estimates Morocco’s
GDP per capita to be 807 in 1990 PPP dollars, Maddison (2001) p. 224. At the same time, Ottoman territories had an estimated GDP per capita figure of 1,023 in 1990 PPP dollars, Pamuk (2006) p. 815. Moroccan commerce attracted a “great number of Arabs, Christians, [and] Jews.” Langlois (1830) p. 284. One early nineteenth-century traveler notes that while most of the European trade was handled by Jewish merchants, there were many Muslim traders as well, Leblich (1814) p. 33.

47 For instance, Muslims registered their purchase of usufruct rights to real estate in Jewish courts since Islamic law would not recognize such claims. In other cases, Muslims and Jews notarized their contracts in the sharia court to ensure themselves against litigation in these fora. Marglin (2013) pp. 375–6.

48 Similar to what unfolded in the Ottoman Empire, Moroccan protégés and foreign subjects switched nationalities to change the forum where contracts were contested. Marglin (2013) pp. 320–9.

49 Although in cities, their population share rose as high as 50 percent, Marglin (2013) pp. 4–5.
The theory explains the emergence of this key difference between Morocco and the Ottoman Empire. Propositions 5 and 6 predict that agents who have access to additional legal systems monopolize the market if the underlying population has heterogenous menus of jurisdictions. Furthermore, this dominance is more likely if the number of multi-jurisdiction agents or the number of available legal systems are large enough. Thus, consistent with the model’s predictions, Muslims were not driven out of trade in Morocco unlike the Ottoman Empire. On the other hand, Moroccan economy suffered from legal pluralism’s other adverse effects due to frequent forum shopping and protection traffic.

6.2 Legal Pluralism in the United States and the European Union

Legal pluralism appears in a broad number of settings today. The United States itself provides an excellent example since it is a large nation comprising a multiplicity of jurisdictions with states retaining considerable legal sovereignty. In the United States, plaintiffs have the choice over which court they can file litigation. Some U.S. counties have even become “specialists” in a race-to-the-bottom to attract plaintiffs. More relevant to this paper is defendant, or reverse, forum shopping, which a defendant can exercise through transfers to another state or federal court, or citing *forum non conveniens*. For instance, Clermont and Eisenberg (1994) show that after the adoption of transfer statutes, the plaintiff win rate dropped from 58 percent to 29 percent, which suggests successful reverse forum shopping. Similarly, bankruptcy rules effectively allow debtors to strategically choose a jurisdiction in which they declare bankruptcy, and thereby augment their bargaining power. The fact that the Southern District of New York quickly became the venue of choice for bankruptcy filings, and rapidly lost that position to Delaware in the 1990s shows that forum selection is nonrandom and strategic. Miller (2008) shows that big companies predominantly

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50 A good example is Madison County, Illinois, which “thrive on class actions brought under Illinois tort law and procedural rules that bring enormous benefits to local trial lawyers but inflict costs on out-of-state corporations.” O’Hara and Ribstein (2009) p. 8.

51 The authors take advantage of a database with 2,804,640 federal civil cases terminated over the fiscal years 1979 to 1991. The effect is persistent over substantively different case types. The authors argue that transfer statutes successfully eliminate plaintiff forum shopping. Similarly, *forum non conveniens* doctrine’s initial purpose was to prevent plaintiff forum shopping but it now allows defendant (reverse) forum shopping, instead, Jurianto (2005) pp. 392-3.

52 For example, LoPucki and Whitford (1991) examine the bankruptcy reorganization of the 43 largest, publicly held companies from 1979 to 1988. The authors find that 30 percent engaged in forum shopping.

53 See LoPucki (2006) for the evolution of bankruptcy law in the United States and how it encourages forum shopping.
specify New York law *ex ante* in their commercial contracts out of a preference for New York’s formalism and predictability.\footnote{In Eisenberg and Miller’s data on publicly-held companies, nearly half of all contracts—conditional on having choice-of-law or choice-of-forum clauses—selected New York law and courts, respectively, Eisenberg and Miller (2008) pp. 1490–1511.}

In the European Union, reverse forum shopping has become prevalent in corporate and personal bankruptcy.\footnote{The Brussels Regime (2001) preserves the maxim *actor sequitur forum rei*, allowing defendants to engage in forum shopping by switching their domicile. See OJ L 12, 16.1.2001, and OJ L 177, 17.6.2008.} The United Kingdom, in particular, is receiving much of this “bankruptcy tourism” due to its more insolvent-friendly rules.\footnote{See Hoffmann (2012) and Ober (2012) for a discussion on why insolvent firms and people select into the U.K. for their bankruptcy proceedings.} As the model shows, multiplicity of legal systems has created uncertainty for creditors who have become more cautious about lending. This phenomenon has led to debates about harmonization of substantive law across member states in order to eliminate incentives for opportunist forum shopping.\footnote{The EU Insolvency Regulation (2000) attempted to reduce abusive forum shopping with little success. Recital 4 in the amendment (2012) to the Insolvency Regulation states that “[i]t is necessary for the proper functioning of the internal market to avoid incentives for the parties to transfer assets or judicial proceedings from one Member State to another, seeking to obtain a more favourable legal position to the detriment of the general body of creditors (forum shopping),” specifically citing abusive COMI-relocation (center of main interest) as a mechanism for forum shopping. EC No 1346/2000, 12.12.2012 p. 14.}

Thus, forum shopping and strategic jurisdictional shift—which had been critical in Ottoman economic history—continue to plague transactions today. The literature has made no formal analysis of legal pluralism’s impact on the economy. However, the theory’s predictions hold for modern settings as well, which will be the focus of future research.

7 Conclusion

Legal pluralism appears in a broad number of settings historically, and conflict of law has become a concern in the current era of expanding transnational trade and globalization. Multiplicity of legal systems can foster growth through legal competition and offering economic agents institutional variety. On the other hand, legal pluralism can discourage investment and distort contracting incentives by allowing forum shopping.

The Great Divergence literature has examined European economic success and the rest of the world’s stagnation but has largely ignored the Ottomans. Kuran, in a series of seminal papers, brought the Ottoman Empire back into this debate. The dominant view has argued that Islamic
legal institutions—through the interaction of Islamic enterprise forms, inheritance law and pious foundations—led to small, ephemeral partnerships and prevented capital accumulation. However, adopting European law failed to reverse economic stagnation. This paper presented an alternative hypothesis to explain key questions in Ottoman economic history: legal pluralism.

This paper used the Ottoman Empire as a template to develop an economic model of reverse forum shopping. The model showed that opportunistic forum shopping opportunities \textit{ex post} can lead to inefficiencies by distorting contracting incentives \textit{ex ante}. The legal pluralism approach is particularly useful for understanding the Ottoman Empire's development trajectory, where no legal system existed in isolation and agents could smoothly traverse jurisdictional boundaries in order to exploit differences in law. The model's predictions accord with the primary and secondary evidence on the Ottoman Empire. Legal pluralism kept Ottoman partnerships small in capital. Furthermore, asymmetric access to additional jurisdictions religious minorities enjoyed allowed them become more affluent and drive both Muslims and Europeans out of trade. These protégé merchant houses operated across the Mediterranean, but essentially remained family firms organized as general or limited partnerships. The advent of European law only exacerbated the asymmetry and associated inefficiencies by expanding the legal options agents could exercise and diverting funds from investment to frivolous protection acquisition. Even if European law were more efficient, forum shopping diminished any such gain.

At one level, this paper confirms that legal institutions matter for growth and other economic outcomes. This work also shows that institutional details are important. The literature has blamed Islamic law for the Middle East's stagnation. However, European law and enterprise forms had been available to Ottoman subjects since at least the early eighteenth century and became open-access in 1850. Furthermore, Islamic law was not applied uniformly across all predominantly-Muslim countries. Institutional features that differed led to variant outcomes. A case in point is the Ottoman Empire and Morocco. Both economies offered legal pluralism and had similar growth patterns. However, the asymmetry with which Ottomans exercised legal pluralism favored religious minorities who came to dominate trade in the Levant. Muslims also enjoyed choice of law in Morocco, where commerce was not monopolized by any group. This paper demonstrates that economic models and careful examination of institutional details can help us better understand countries' development paths in a more precise manner.
References


Cervati, R. C. (1891). *Annuaire oriental (ancien Indicateur oriental) du commerce, de l'industrie, de l'administration et de la magistrature, 10e année, 1891*.


Langlois, H. (1830). *Nouveau dictionnaire universel, usuel et complet de géographie moderne*. Number v. 3 in *Nouveau dictionnaire universel, usuel et complet de géographie moderne*.


Seyd, co, Manchester, and district commercial list (1867). *The Manchester commercial list [afterw.] The Manchester & district commercial list [afterw.] The Manchester, cotton district and general Lancashire commercial list*. The Manchester commercial list [afterw.] The Manchester & district commercial list [afterw.] The Manchester, cotton district and general Lancashire commercial list.


Table 1: Equilibrium payoffs and investment

<table>
<thead>
<tr>
<th>Enforcement Range</th>
<th>( c \leq \mu &lt; \frac{3}{4} )</th>
<th>( \frac{3}{4} \leq \mu \leq 1 )</th>
</tr>
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<tbody>
<tr>
<td>Investment ( x^* )</td>
<td>( \frac{\mu - c}{2(1-c)} )</td>
<td>( \frac{3(\mu - c)}{8\mu(1-c)} )</td>
</tr>
<tr>
<td>Buyer’s payoff ( U^*_B )</td>
<td>( \frac{(\mu - c)(1-\mu)}{2(1-c)} )</td>
<td>( \frac{3(\mu - c)}{32\mu(1-c)} )</td>
</tr>
<tr>
<td>Seller’s payoff ( U^*_S )</td>
<td>( \frac{(\mu - c)^2}{4(1-c)^2} )</td>
<td>( \frac{9(\mu - c)^2}{64\mu^2(1-c)^2} )</td>
</tr>
<tr>
<td>Joint payoff ( W^* )</td>
<td>( \frac{(\mu - c)(2-\mu - c(3-2\mu))}{4(1-c)^2} )</td>
<td>( \frac{3(\mu - c)(5\mu - c(3+2\mu))}{64\mu^2(1-c)^2} )</td>
</tr>
</tbody>
</table>
### Table 2: Partnership Payoffs

<table>
<thead>
<tr>
<th>Partner Type</th>
<th>Type 1</th>
<th>Type 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buyer 1</td>
<td>( \frac{\pi_{11}(1-\mu_1\pi_{11})(\mu_1-c)}{2(1-c)M^2} )</td>
<td>( \frac{\pi_{12}(1-\mu_1\pi_{12})(\mu_1-c)}{2(1-c)M^2} )</td>
</tr>
<tr>
<td>Buyer 2</td>
<td>( \frac{\pi_{21}(1-\mu_1'\pi_{21})(\mu_1'-c)}{2(1-c)M^2} )</td>
<td>( \frac{\pi_{22}(1-\mu_2\pi_{22})(\mu_2-c)}{2(1-c)M^2} )</td>
</tr>
<tr>
<td>Seller 1</td>
<td>( \left[ \frac{\pi_{11}(\mu_1-c)}{2(1-c)M^2} \right]^2 )</td>
<td>( \left[ \frac{\pi_{21}(\mu_1'-c)}{2(1-c)M^2} \right]^2 )</td>
</tr>
<tr>
<td>Seller 2</td>
<td>( \left[ \frac{\pi_{12}(\mu_1-c)}{2(1-c)M^2} \right]^2 )</td>
<td>( \left[ \frac{\pi_{22}(\mu_2-c)}{2(1-c)M^2} \right]^2 )</td>
</tr>
</tbody>
</table>
Table 3: Growth in the Ottoman Empire Territories and the West

<table>
<thead>
<tr>
<th></th>
<th>GDP per Capita in 1820</th>
<th>Annual Change in GDP per Capita (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>680</td>
<td>0.5</td>
</tr>
<tr>
<td>Middle East</td>
<td>611</td>
<td>0.4</td>
</tr>
<tr>
<td>US &amp; W. Europe</td>
<td>1,246</td>
<td>1.1</td>
</tr>
</tbody>
</table>

GDP per capita in 1820 is expressed in 1990 PPP dollars.

Source: Pamuk (2006)
Table 4: The Menu of Legal Systems, 1700–1926

<table>
<thead>
<tr>
<th>Defendant</th>
<th>Plaintiff, European, Protégé</th>
<th>Legal systems the defendant could use in disputes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muslim</td>
<td>Any</td>
<td>Islamic, secular (after 1840)</td>
</tr>
<tr>
<td>Any</td>
<td>Muslim</td>
<td>Islamic, secular (after 1840)</td>
</tr>
<tr>
<td>Non-Muslim Ottoman</td>
<td>Non-Muslim Ottoman, any minority</td>
<td>Islamic, secular (after 1840), any minority</td>
</tr>
<tr>
<td>French</td>
<td>Non-Muslim Ottoman, any minority</td>
<td>Islamic, secular (after 1840), any minority, French</td>
</tr>
<tr>
<td>Protégé</td>
<td>Non-Muslim Ottoman, any minority</td>
<td>Islamic, secular (after 1840), any minority, any European</td>
</tr>
</tbody>
</table>

Secular courts became available only after 1840. Minority jurisdictions include Greek Orthodox, Armenian, and Judaic courts. Protégés and Europeans had their disputes heard at the Sultan’s court (for disputes involving sums greater than 4,000 akçes) and were represented by their respective consuls even if they faced Muslim defendants. Although, in theory, Islamic courts had jurisdiction over disputes involving Muslims, in practice being a protégé was an asset even in such cases. If a protégé claimed to be under European jurisdiction in a dispute with a Muslim, the protégé’s consul or ambassador represented him. Since the ambassador/consul’s cooperation was necessary to terminate the case, he could influence the case in the protégé’s favor. In addition, consuls and ambassadors retained the right to execute the verdict in such proceedings. Thus, Muslims seemed to have preferred to sue protégés and Europeans in consular courts in the first place. See Hickley (1906) p. 152, Scott (1907) pp. 196–7 footnote 1, and Papers relative to the jurisdiction of Her Majesty’s consuls in the Levant, 1845 [663], LIIL83, p. 104.
### Table 5: Frequency of Forum Shopping in Commercial Disputes

<table>
<thead>
<tr>
<th></th>
<th>No Forum Shopping</th>
<th>Weak Forum Shopping</th>
<th>Strong Forum Shopping</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Disputes</td>
<td>67</td>
<td>17</td>
<td>33</td>
<td>117</td>
</tr>
<tr>
<td></td>
<td>(57.3)</td>
<td>(14.5)</td>
<td>(28.2)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>Excluding Muslims</td>
<td>55</td>
<td>17</td>
<td>33</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>(52.4)</td>
<td>(16.2)</td>
<td>(31.4)</td>
<td>(100.0)</td>
</tr>
</tbody>
</table>

No forum shopping refers to cases in which adjudication terminates in the court of application, and there is no appeal to a different jurisdiction. Weak forum shopping category includes cases where adjudication terminates in the court of application but the case might be registered/appealed to another jurisdiction during the process. Strong forum shopping refers to disputes that terminate in a different jurisdiction than the original forum.

The sample is constructed using British and French consular correspondence and chancery registers, primarily in Aleppo and Izmir.

Percentages for each category are reported in parentheses.

*Source:* CADN 166PO/D1/1–4, 5, 7–10, 12, 15, 18–21, 23, 24, 26, 27, 29; 166PO/D71/1–3, 11; 166PO/D84/7–9, 11, 12, 14–20; 18PO/B/40; BL Add MS 45933; TNA FO 261/3–7; SP 105/191; SP 110/26, 53, 58.
Table 6: Religious composition in Istanbul partnerships, c. 1602–19 and 1661–97

<table>
<thead>
<tr>
<th>Religious composition</th>
<th>Number</th>
<th>Percent</th>
<th>No. of Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Muslim</td>
<td>167</td>
<td>40.1</td>
<td>2.4</td>
</tr>
<tr>
<td>All Christian</td>
<td>154</td>
<td>37.0</td>
<td>2.7</td>
</tr>
<tr>
<td>All Jewish</td>
<td>8</td>
<td>1.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Muslim &amp; Christian</td>
<td>56</td>
<td>13.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Muslim &amp; Jewish</td>
<td>4</td>
<td>1.0</td>
<td>3.5</td>
</tr>
<tr>
<td>Jewish &amp; Christian</td>
<td>5</td>
<td>1.2</td>
<td>2.0</td>
</tr>
<tr>
<td>Other or unknown</td>
<td>22</td>
<td>5.3</td>
<td>2.5</td>
</tr>
<tr>
<td>All</td>
<td>416</td>
<td>100</td>
<td>2.7</td>
</tr>
</tbody>
</table>

### Table 7: Number of Mercantile Establishments in Istanbul and Izmir

<table>
<thead>
<tr>
<th></th>
<th>Muslim</th>
<th>Non-Muslim</th>
<th>European</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single Proprietorship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Istanbul c. 1891</td>
<td>43</td>
<td>147</td>
<td>25</td>
<td>215</td>
</tr>
<tr>
<td></td>
<td>(20.00)</td>
<td>(68.37)</td>
<td>(11.63)</td>
<td></td>
</tr>
<tr>
<td>Izmir c. 1891</td>
<td>21</td>
<td>150</td>
<td>19</td>
<td>190</td>
</tr>
<tr>
<td></td>
<td>(11.05)</td>
<td>(78.95)</td>
<td>(10.00)</td>
<td></td>
</tr>
<tr>
<td>Izmir c. 1895</td>
<td>59</td>
<td>280</td>
<td>42</td>
<td>381</td>
</tr>
<tr>
<td></td>
<td>(15.49)</td>
<td>(73.49)</td>
<td>(11.02)</td>
<td></td>
</tr>
<tr>
<td><strong>Partnership</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Istanbul c. 1891</td>
<td>2</td>
<td>43</td>
<td>18</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>(3.17)</td>
<td>(61.90)</td>
<td>(28.57)</td>
<td></td>
</tr>
<tr>
<td>Izmir c. 1891</td>
<td>1</td>
<td>67</td>
<td>30</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>(1.02)</td>
<td>(68.37)</td>
<td>(30.61)</td>
<td></td>
</tr>
<tr>
<td>Izmir c. 1895</td>
<td>3</td>
<td>86</td>
<td>40</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>(2.33)</td>
<td>(66.67)</td>
<td>(31.01)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Istanbul c. 1891</td>
<td>45</td>
<td>190</td>
<td>43</td>
<td>278</td>
</tr>
<tr>
<td></td>
<td>(16.19)</td>
<td>(68.35)</td>
<td>(15.47)</td>
<td></td>
</tr>
<tr>
<td>Izmir c. 1891</td>
<td>22</td>
<td>217</td>
<td>82</td>
<td>288</td>
</tr>
<tr>
<td></td>
<td>(7.64)</td>
<td>(75.35)</td>
<td>(17.01)</td>
<td></td>
</tr>
<tr>
<td>Izmir c. 1895</td>
<td>62</td>
<td>366</td>
<td>82</td>
<td>510</td>
</tr>
<tr>
<td></td>
<td>(12.16)</td>
<td>(71.76)</td>
<td>(16.08)</td>
<td></td>
</tr>
</tbody>
</table>


The table displays entries in the category “négociant” from the cited commercial directories. I classified establishments with single names, such as “Bogossian A. S.,” as single proprietorships, and with multiple names such as “Agopian & Sons” as partnerships. First and family names reliably identify partners or proprietors as Muslim, non-Muslim Ottoman, or European. Raw percentage of Muslim, non-Muslim, and European establishments within each category are displayed in parentheses. In this period, Muslims constituted about 59 and 61 percent of Izmir’s and Istanbul’s population, respectively; Mutlu (2003) p. 19 and 21.
Table 8: The Stock of French, British, and Dutch *Berats*

<table>
<thead>
<tr>
<th>Year</th>
<th>France</th>
<th>Great Britain</th>
<th>Dutch Republic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Istanbul</td>
<td>Izmir</td>
<td></td>
</tr>
<tr>
<td>1703</td>
<td>11</td>
<td>8</td>
<td>–</td>
</tr>
<tr>
<td>1730</td>
<td>17</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>1754</td>
<td>12</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>1757</td>
<td>15</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>1774</td>
<td>9</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>1789</td>
<td>14</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

*Source:* Boogert (2005) p. 88. Cited primary sources are BOA, ED 27/2 (France), 35/1 (Great Britain), 22/1 (Dutch Republic).
Figure 1: Extensive form

\[
\begin{array}{c}
\pi b(x) \\
\mu \\
[1 - \mu] \\
\pi b(x) \\
\end{array}
\begin{array}{c}
\text{comply} \\
\text{defect} \\
\text{Nature} \\
\text{Buyer} \\
\text{Seller} \\
\text{Sue} \\
\text{drop} \\
\text{drop} \\
\text{Buyer} \\
\text{Sue} \\
\text{0, 0} \\
\text{0, 0} \\
\text{0, 0} \\
\text{0, } -c \pi b(x) \\
\text{0, } -b(x), (1 - c) \pi b(x) \\
\end{array}
\]

Notes: Payoffs are gross of the surplus \( b(x) \) and the investment cost \( s(x) \).
Figure 2: Berat prices across countries

Real Berat Prices
only final prices

Number of observations are reported in brackets. Real prices are calculated using figures from Pamuk (2000) p. 163.
Source: CADN 166PO/D1/1-30, 166PO/D7/1-3, 11, 166PO/D64/1-23; TNA FO 261/1-7; BL Add MS 45933.
Figure 3: Berat prices, ask prices, and bids across countries

Number of observations are reported in brackets. Real prices are calculated using figures from Pamuk (2000) p. 163.

Source: CADN 166PO/D1/1-30, 166PO/D7/1-3, 11, 166PO/D8/1-23; TNA FO 261/1-7; BL Add MS 45933.
Appendix

Proof of Lemma 3. (i) Taking the derivative of the investment level with respect to \( \mu \), we obtain

\[
\frac{dx^*}{d\mu} = \begin{cases} 
\frac{3c}{8\mu^2(1-c)} & \text{if } 3/4 \leq \mu \leq 1 \\
\frac{1}{2(1-c)} & \text{if } c < \mu < 3/4 
\end{cases},
\]

which is positive for any \( \mu \). Thus, the equilibrium investment (and hence, the surplus size) is strictly increasing in \( \mu \).

(ii) Taking the derivative of the buyer’s indirect utility with respect to \( \mu \), we obtain

\[
\frac{dU^*_B}{d\mu} = \begin{cases} 
\frac{3c}{32\mu^2(1-c)} & \text{if } 3/4 \leq \mu \leq 1 \\
\frac{1+c-2\mu}{2(1-c)} & \text{if } c < \mu < 3/4 
\end{cases},
\]

Note that this derivative is negative for \((1+c)/2 < \mu < 3/4\), zero at \( \mu = (1+c)/2 \) and positive otherwise. Thus, the buyer’s payoff is decreasing in the enforcement capacity for moderate values of \( \mu \). In fact, the buyer’s payoff is maximized at \( \mu = (1+c)/2 \) provided that \( c < 1/4 \).

(iii) Taking the derivative of the seller’s indirect utility with respect to \( \mu \), we obtain

\[
\frac{dU^*_S}{d\mu} = \begin{cases} 
\frac{9c(\mu-c)}{32\mu^3(1-c)^2} & \text{if } 3/4 \leq \mu \leq 1 \\
\frac{\mu-c}{2(1-c)^2} & \text{if } c \leq \mu < 3/4 
\end{cases},
\]

which is positive for any \( \mu \). Similarly, taking the derivative of the joint payoff with respect to \( \mu \), we obtain

\[
\frac{dW^*}{d\mu} = \begin{cases} 
\frac{3c[4\mu-c(3+c)]}{32(1-c)^2\mu^3} & \text{if } 3/4 \leq \mu \leq 1 \\
\frac{1-c-c^2-2\mu+2\mu c}{2(1-c)^2} & \text{if } c \leq \mu < 3/4 
\end{cases},
\]

which is always positive.\(^{58}\)

(iv) The probability with which the buyer defects from making his contractually-prescribed

\(^{58}\)The assertion is obvious for \( \mu \geq 3/4 \). For \( \mu < 3/4 \), see that the expression is negative if and only if \( \mu > (1-c^2-c)/(1-2c) \geq 3/4 \) by \( 0 < c < 1 \), a contradiction.
payment is

\[ \lambda = \mu \beta + 1 - \mu = \frac{1 - \mu}{1 - c} \]

which is strictly decreasing in \( \mu \).

\begin{proof}
(i) In this equilibrium, all buyers are single-jurisdiction agents and there is a mix of single and multi-jurisdiction type sellers. If single-jurisdiction agents become both buyers and sellers, then in equilibrium these positions give the same payoffs to single-jurisdiction agents. This pins down the price

\[ \frac{\pi_{11}^* (1 - \mu_1 \pi_{11}^*) (\mu_1 - c)}{2 (1 - c) M^2} = \frac{\pi_{11}^2 (\mu_1 - c)^2}{4 (1 - c)^2 M^2} \iff \pi_{11}^* = \frac{2 (1 - c)}{\mu_1 (3 - 2c) - c}. \]

Furthermore, single-jurisdiction agents are indifferent between entry and exit, which pins down the market size by

\[ \frac{\pi_{11}^* (\mu_1 - c)}{2 (1 - c) M^*} = v^{1/2} \]

\[ \Rightarrow M^* = \frac{\pi_{11}^* (\mu_1 - c)}{2 (1 - c) v^{1/2}} \]

\[ M^* = \frac{\mu_1 - c}{[\mu_1 (3 - 2c) - c] v^{1/2}} \]

Single-jurisdiction agents are also indifferent between trading with single and multi-jurisdiction buyers, which holds if and only if \( \pi_{12}^* = \pi_{11}^* \). At this price, multi-jurisdiction agents receive exactly their outside options. Since both seller types are indifferent, any mix of them in the market is feasible. Any other partnership becomes unprofitable simply by setting \( \pi_{21}^* = \pi_{22}^* = 0 \).

(ii) In this equilibrium, all buyers are multi-jurisdiction agents. The proof proceeds similarly to (i): multi-jurisdiction agents’ indifference between becoming buyers and sellers pins down \( \pi_{22}^* = 2 (1 - c) / [\mu_2 (3 - 2c) - c] \). Multi-jurisdiction buyers’ indifference between trading with single or
multi-jurisdiction buyers pins down $\pi_{21}^*$ by

$$\frac{\pi_{22}^* (1 - \mu_2 \pi_{22}^*) (\mu_2 - c)}{2 (1 - c) M^2} = \frac{\pi_{21}^* (1 - \mu_1' \pi_{21}^*) (\mu_1' - c)}{2 (1 - c) M^2}.$$  

At this price, the single-jurisdiction seller is indifferent between entry and exit, which pins down the market size $M^*$ by

$$\frac{\pi_{21}^* (\mu_1' - c)}{2 (1 - c) M^*} = v^{1/2}.$$  

Finally, at this price, multi-jurisdiction agents must receive at least their outside option, thus

$$\frac{\pi_{22}^* (\mu_2 - c)}{2 (1 - c) M^*} \geq v^{1/2}.$$  

All other partnerships are unprofitable for some prices, e.g. $\pi_{11}^* = \pi_{12}^* = 0$. Note that in the extreme where no single-jurisdiction agent enters the market, we have the market size $M^* = q$, price $\pi_{22}^* = 2 (1 - c) / [\mu_2 (3 - 2c) - c]$. We ensure multi-jurisdiction agents’ entry by

$$\frac{\pi_{22}^* (\mu_2 - c)}{2 (1 - c) q} \geq v^{1/2} \iff q \leq \frac{\mu_2 - c}{[\mu_2 (3 - 2c) - c] v^{1/2}}.$$  

(iii) In this equilibrium, each type participates in both sides of the market. Each type’s indifference condition between being a buyer or a seller pins down prices $\pi_{11}^*$ and $\pi_{22}^*$ as in parts (i) and (ii). Single-jurisdiction agents’ indifference between entry and exit pins down the market size $M^* = (\mu_1 - c) / [(\mu_1 (3 - 2c) - c) v^{1/2}]$. All other partnerships are unfeasible for any price, in particular, for $\pi_{21}^* = \pi_{12}^* = 0$. Multi-jurisdiction agents receive at least their outside option if

$$\frac{\pi_{22}^* (\mu_2 - c)}{2 (1 - c) M^*} \geq v^{1/2} \iff \mu_2 \geq \mu_1.$$  

□