

Iyigun, Murat

Working Paper

Lessons from the Ottoman Harem (on ethnicity, religion and war)

IZA Discussion Papers, No. 3556

Provided in Cooperation with:

IZA – Institute of Labor Economics

Suggested Citation: Iyigun, Murat (2008) : Lessons from the Ottoman Harem (on ethnicity, religion and war), IZA Discussion Papers, No. 3556, Institute for the Study of Labor (IZA), Bonn, <https://nbn-resolving.de/urn:nbn:de:101:1-2008062558>

This Version is available at:

<https://hdl.handle.net/10419/34957>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

IZA DP No. 3556

**Lessons from the Ottoman Harem
(On Ethnicity, Religion and War)**

Murat Iyigun

June 2008

Lessons from the Ottoman Harem (On Ethnicity, Religion and War)

Murat Iyigun

*University of Colorado,
CID, Harvard University and IZA*

Discussion Paper No. 3556
June 2008

IZA

P.O. Box 7240
53072 Bonn
Germany

Phone: +49-228-3894-0
Fax: +49-228-3894-180
E-mail: iza@iza.org

Any opinions expressed here are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent nonprofit organization supported by Deutsche Post World Net. The center is associated with the University of Bonn and offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral program. IZA engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ABSTRACT

Lessons from the Ottoman Harem (On Ethnicity, Religion and War)*

The Ottoman Empire had a profound impact in Europe, the Middle East and North Africa at the apogee of its power, covering the era between 1453 C. E. and 1699 C. E. In this paper, I exploit the empire's unique culture and institutions to examine the roles of ethnicity and religion in conflict and war. Based on one theory, the Ottoman conquests were driven by the Gaza ideology according to which the empire's central motivation was provided by a spirit of Holy War in the name of Islam. This is generally emphasized as the reason why the Ottomans initiated more conflicts in the West, and why on the eastern fronts, more conflicts were started by its rivals. Another not necessarily mutually exclusive theory claims that the Imperial Harem wielded considerable political power in Ottoman affairs. Accordingly, the members of the Harem with different ethnic or religious backgrounds often lobbied the Sultan to influence the geography of Ottoman conquests. Using comprehensive data on Ottoman wars and conflicts between 1401 C. E. and 1700 C. E., I document that Ottoman conquests were concentrated in the West throughout the mid-16th century. Then, I show that the ethnic background of Valide Sultan (the queen mother) was an important and independent determinant of whether the empire engaged in military conquests in Europe, North Africa or the Middle East. Depending on the empirical specification, the reign of a sultan with a European maternal genealogy was enough to offset more than 70 percent of the empire's western orientation in imperial conquests. Still, these findings do not rule out the possibility that the sultans' ethnic and cultural heritages – but not the politics of the queen mothers or their harems – influenced Ottoman conquests.

JEL Classification: C72, D74, N33, N43, O10

Keywords: conflict, religion, production and appropriation, family economics

Corresponding author:

Murat Iyigun
University of Colorado at Boulder
Department of Economics
Campus Box 256
Boulder, CO 80309-0256
USA
E-mail: murat.iyigun@colorado.edu

* For detailed suggestions and highly constructive comments, I am very much indebted to Latika Chaudhary, Jared Rubin and Petra Moser. For various improvements, I also thank Ran Abramitzky, Lee Alston, Alan Olmstead, Stephen Haber, Paul Rhode, Philip Hoffman, Naci Mocan as well as participants of the 2008 All-University of California Conference on Economic History. All errors and speculations are mine.

1. Introduction

What determines war and peace? And how important have religion, ethnicity and state ideology been for conflict historically? In a variety of forms and contexts, these two questions have long intrigued political scientists and economists alike.

The conventional studies of conflict and war overwhelmingly, if not solely, emphasize differences between social groups. This is primarily due to a tendency to think of religion, ethnicity and culture within the context of “club theories” by which differences in identity produce wholesale “clash of civilizations”.¹ Accordingly, religiously-motivated wars are primarily about societies and not their rulers. Political leaders’ motives for war and peace have been studied quite extensively in more contemporary political economy contexts.² Nonetheless, the degree to which rulers themselves are driven by religious motives or the extent to which their own preferences, identities as well as political and cultural ties influence the patterns of international war has never been examined. A serious impediment to such an empirical investigation has been the difficulty to observe variations in the rulers’ ethnic or religious identities independently of those of their own societies at large.

Ottoman history is relevant for this quest for at least three reasons. First, the empire had a profound and lasting impact in Europe, the Middle East and North Africa, especially during the apogee of its power between the 15th and 17th centuries. Most of the Balkans and eastern Europe remained under Ottoman imperial rule for centuries and many countries there today reflect the remnants of various institutional features inherited from the Ottomans.

Second, some historians share the view that the Ottomans were motivated by the *Gaza ideology*, at least during the empire’s early era running through the end of the 16th century. They state Gaza as the reason why the empire steadily looked westward for expansion driven by religious motives. As analyzed by Paul Wittek and noted by Kafadar (1996, p. 11) “what fueled the energies of the early Ottoman conquerors was essentially their commitment to Gaza, an ‘ideology of Holy War’ in the name of Islam. Ottoman power was built on that commitment...” Hence, to the extent that this view accurately describes the Ottomans’ imperial predisposition and their geopolitical objectives, it provides a useful yardstick with which we can gauge and quantify the influence of other relevant determinants of conflict and war.

Third, within a fairly swift period of time following its foundation, the empire became a multi-ethnic and multi-religious civilization with many important posts within

¹For the club theory of religion, see for instance Inmaccone (1992) and Berman (2000).

²Among the more notable papers in this strand, see for instance Hess and Orphanides (1995, 2001).

the military, administrative and palace hierarchies routinely being held by converts to Islam from the Balkans, the Mediterranean and the Black Sea.

In this paper, I exploit the Ottomans' unique imperial history to examine the influence of state ideologies versus that of ethno-religious ties in perpetuating or diverting conflicts and war. Whereas Gaza is put forward as the reason why the Ottomans initiated more conflicts in the West, and why on the eastern fronts, more conflicts were started by its rivals, another—not necessarily mutually exclusive—hypothesis claims that the Imperial Harem wielded considerable political power in Ottoman affairs. And various historians have suggested that the members of the Harem with different ethnic or religious backgrounds often lobbied the Sultan to influence the geography of Ottoman conquests.³

Using a comprehensive dataset on conflicts and war in the Middle East, Europe and North Africa for the period between 1401 C. E. and 1700 C. E., I find that Gaza was important for Ottomans' imperial motives but it was not sufficient. What also mattered almost as much was the sultans' ethno-religious identities. In particular, while Ottoman conquests were predominantly in the West until the mid-1500s, I show that the ethnic background of *Valide Sultan* (the queen mother) was an important and independent determinant of whether the empire engaged in military conquests in Europe versus North Africa or the Middle East. Depending on the empirical specification, the reign of a sultan with a European maternal ethnic background was enough to offset more than 70 percent of the empire's western orientation in imperial conquests. In contrast, the sultan having a European matrilineal descent mostly had no discernible influence on the empire's eastern conflicts. If it mattered at all, though, a European maternal genealogy stimulated Ottomans' wars in the east, which were overwhelmingly, if not solely, fought against other Muslim co-religionists.

It is difficult, if not impossible, to discern how general these results are. But, as some level, they are a testament to the deep roots of ethnic and religious identities. That is because conversions to Islam, even and particularly among the elite of the Harem hierarchy who had influence on Ottoman policymaking, seem not to have been enough to maintain loyalty to the "Holy cause". The ethno-religious identities of the Sultans' inner circle originally played a significant and independent role in subverting the imperial ambitions of the empire toward the Middle East and North Africa. It is on this basis that one can account for the distinct geographical patterns of and shifts in the Ottomans' history of imperial conquest.

In addition to the literatures referenced above, the work below relates to various

³For example, see Peirce (1993), Imber (2002), Goffman (2002) and Shaw (1976).

strands in economics and political economy. To start with, we know fairly well that differences of religion have been important for conflict. As Richardson (1960) has shown, differences of Christianity and Islam, have been causes of wars and that, to a weaker extent, “Christianity incited war between its adherents.” Similarly, Wilkinson (1980) has claimed that “the propensity of any two groups to fight increases as the differences between them (in language, religion, race, and cultural style) increase.” The corollary of such findings were in fact articulated earlier by the likes of Montesquieu, Kant and Angell. Their ‘liberal peace’ view emphasized that “mutual economic interdependence could be a conduit of peace.” Counter-arguments to this view have involved various negative consequences, such as exploited concessions and threats to national autonomy emanating from asymmetric interdependence (Emmanuel, 1972 and Wallerstein, 1974). The empirical evidence is mixed, with earlier studies such as Polachek (1980) and Polachek et al. (1999) finding that bilateral trade ties reduced conflict whereas Barbieri (1996) and Barbieri-Schnedier (1999) showing that they raised it. Most recently, however, Lee and Pyun (2008) have provided evidence in favor of the conflict-dampening role of bilateral economic ties, particularly among geographically-contiguous states.

Next, we have the political economy literature on the determinants of conflict and war on the one hand versus production on the other. The notion that appropriation and violent conflict over the ownership for resources should be modeled as an alternative to economic production was originally articulated by Haavelmo (1954) and further developed by follow-up papers such as Hirshleifer (1991), Grossman (1994), Grossman and Kim (1995), Grossman and Iyigun (1995, 1997), Skaperdas (1992, 2005), Alesina and Spolaore (2007) and Hafer (2006). The work below sits at the junction of these two strands since it examines the role of religion in influencing conflict and war.

There is also an active strand in economics which emphasizes religion, social norms and culture as important factors in individual behavior and social organization. The main focus of some papers is religion and culture in general (e.g., North, 1990, Iannaccone, 1992, Temin, 1997, Glaeser and Sacerdote, 2002, Fernandez et al. 2004, Fernandez, 2007, Barro and McCleary, 2005, Guiso, Sapienza and Zingales, 2006, and Spolaore-Wacziarg, 2006). Other papers in this line emphasize how individual behavior and the evolution of various institutions interact with adherence to a specific religion, such as Judaism, Islam or different denominations within Christianity (e.g., Greif, 1993, 1994, 2006, Botticini and Eckstein, 2005, 2007, Kuran, 2004a, 2005, Arrunada, 2005, Iyigun, 2008). The work below relates to this strand since it examines how the interplay between institutional state objectives and rulers’ personal motives influenced religiously-motivated and sustained international conflicts.

Finally, there is a nascent but burgeoning subfield within development and economic growth that has documented the role of leadership in economic performance and political stability (e.g., Jones and Olken, 2005, 2007). What follows complements these papers because it documents how leadership influenced the politics and actions of a historically important empire which left a lasting sociopolitical and economic imprint in eastern Europe, Middle East and North Africa.

The remainder of this paper is organized as follows: In Section 2, I provide the historical background. In Section 3, I present the baseline findings. In Section 4, I expand upon the main results. In Section 5, I conclude.

2. Historical Background

2.1. The Ottoman Empire & Its Conquests (1299 C. E. – 1699 C. E.)

Anatolia became a breeding ground for many small feudal states after the demise of the Selçuk Turkish Empire at the end of the 13th century. The Ottoman tribe (*beylik*) was one of these states, being founded by Osman I around the Anatolian city of Eskişehir in 1299. Osman moved the capital of his fledgling settlement soon after its foundation to Bursa, 82 miles northwest of Eskişehir, and rapidly consolidated his power dominating the other Anatolian *derebeyliks*. With the exception of an interregnum period between 1402 and 1413, which began when the Empire collapsed after Tamerlane decimated the Ottoman army, the Empire grew fairly steadily and rapidly during the 14th and 15th centuries. According to standard historiography, the Ottomans' era of political and military dominance covers the period between its conquest of Constantinople (Istanbul) in 1453 and the signing of the *Treaty of Karlowitz in 1699*.⁴

When one examines the Ottomans' geographical patterns of conquest, it is not difficult to discern the empire's westward orientation from its foundation running through the reign of Beyazid II, later giving way to more frequent conquests in the Middle East and North Africa in much of the 16th century, during the reigns of Selim I (the Grim) and Suleyman I (the Magnificent).

Maps 1 through 4 show Europe, the Middle East and North Africa at the turn of the 14th, 15th, 16th and 17th centuries, respectively. As can be seen in Map 3, even as late as 1500 C. E., the Ottomans controlled only parts of Asia Minor in the east, although they had full sovereignty in all of the Balkans and a significant chunk of southeastern Europe too. In particular, by the end of the 16th century, the Ottomans had conquered the city

⁴With this treaty, Ottomans ceded most of Hungary, Transylvania and Slavonia to Austria, Podolia to Poland and most of Dalmatia to Venice. According to Shaw (1976, p. 224), the agreement marked the Ottomans' transition from the "offensive to the defensive."

of Istanbul (in 1453) thereby ending the East Roman (Byzantine) Empire; had gained important military victories against Hungary in central Europe (such as the capture of Belgrade in 1521 and the Mohacs Battle victory in 1526); had established a garrison in Otranto on the Italian Peninsula (in 1481); and had put the capital of the Austrian Monarchy, Vienna, under what eventually turned out to be the first of two unsuccessful sieges (in 1529).⁵ Within another century, however, the Ottomans had primarily turned eastward for imperial expansion. As shown in Map 4, all of the Arabian peninsula and most of North Africa—with the notable exception of the northwestern coastal regions remaining under the control of Kingdom of Morocco—were under Ottoman rule by 1600 C. E. And, as Map 5 shows, the era of decline had formally begun within another century when the Ottomans lost for the first time a significant amount of real estate with the signing of the *Treaty of Karlowitz* in 1699.

[Maps 1 through 5 about here.]

In Iyigun (2008), I document and quantify the geography of Ottoman expansion in some detail. But, in any event, I shall revisit this issue in Section 4.

2.2. The Harem, Sultans & Some Genealogy

The Imperial Harem, *harem-i hümayûn*, was the sacred, private quarters of the Ottoman sultan, who was “God’s shadow on earth.”⁶ Throughout the middle of the 16th century, the imperial harem consisted only of an administrative quarter which was inhabited only by males, including the Sultan himself and the top echelons of the palace hierarchy. Towards the end of the century, however, when another private quarter to house the immediate family of the sultans was established, it too began to be called the imperial harem. This inner sanctum included the wives and concubines of the Sultan as well as his imperial offspring.

That Ottoman imperial wives and mothers played an influential role in shaping, directly or indirectly, Ottoman administration and practices is well established. For instance, Stanford Shaw (1976, p. 24) states this quite explicitly when he discusses the influence of the wives and queen mothers on Ottoman policy-making: “Beginning in the Seljuk times and continuing into the fourteenth century, Byzantine and other Christian women were taken in to the harems of Seljuk, Turkoman and early Ottoman rulers. The mother of the Seljuk ruler Izuddin II was the daughter of a Greek prince. Izuddin II

⁵For detailed references on the history of the Ottoman Empire, see Faroqhi (2004), Kinross (1979), Inalcik (1973), Karpas (1974), Shaw (1976), and Goodwin (2000).

⁶Peirce (1993, pp. 5 – 7, 17, 24).

is said to have been secretly baptized and to have followed strong Greek influence at his court. Orhan's wife Theodora, daughter Cantacuzene, is said to have remained a Christian and to have provided help to the Christians of Bithynia while she was in the Ottoman court. Murat I and Bayezit I had Christian Greek mothers. Murat married the Bulgarian princess Tamara and the Byzantine princess Helena. Bayezit married Despina, the daughter of the Serbian prince Lazar. All these women brought Christian advisers into the Ottoman court, influencing Ottoman court practice and ceremonial as it evolved in this crucial [14th] century."

Peirce (1993, pp. 6, 7) describes in more detail how the harem hierarchy was typically controlled by the mother queen, *Valide Sultan*: "The imperial harem was much like the household harem, only much more extensive and with a more highly articulated structure... The larger the household, the more articulated the power structure of the harem." Invariably, but more so after the 16th century, the harem hierarchy functioned under the control of the mother queen, *Valide Sultan*. More to the point, her influence transcended the harem boundaries because the empire itself was accepted as the personal domain of the royal family. According to Peirce (1993, p. 7), for example, "Women of superior status in this female [harem] society, the matriarchal elders, had considerable authority not only over other women but also over younger males in the family, for the harem was also the setting for the private life of men... The authority enjoyed by the female elders transcended, in both its sources and its effects, the bounds of the individual family. In a polity such as the Ottomans, where the empire was considered the personal domain of the dynastic family, it was natural that important women within the dynastic household—in particular, the mother of the reigning sultan—would assume legitimate roles of authority outside the royal household."

While the institutional powers of the *Valide Sultan* solidified with the establishment of the inner sanctum of the imperial harem in mid-16th century, she exerted influence over the eventual Sultan long before that. Again, referencing Peirce (1993, p. 24), "From the middle of the fifteenth century, and possibly earlier, when a prince left the capital for his provincial governorate, he was accompanied by his mother, whose role was to preside over the prince's domestic household and perform her duty of "training and supervision" alongside the prince's tutor. But when the queen mother emerged as an institutionally powerful individual toward the end of the sixteenth century, there were two generations of "political mothers" related to the single politically active make of the dynasty, the sultan... With the lapse of the princely governorate, the entire royal family was united in the capital under one roof, rather than, as previously, dispersed throughout the royal domain. There was now only one royal household, over which the senior woman, the

sultan's mother, naturally took charge.”

Goffman (2002, pp. 124-25) takes exception to the canonical account of the imperial women: according to such historiography, the era of “the sultanate of women” which roughly spanned the period between the mid-16th century to mid-17th century, was a manifestation of the decline of the empire. To Goffman, however, the prominence of Valide Sultans in Ottoman state affairs was more of a statement about the maturity and preparation of the sultans: “Many voices... echoed this condemnation of female meddling in politics; many commentators both contemporary and modern considered this trend ruinous. There is another way to consider the situation, however. The imperial prince's mother's principal task long had been the training and protection of her son. In the fifteenth and sixteenth centuries her job was finished when her well-prepared and grown-up offspring defeated his brothers and gained the sultanate. In the seventeenth century, however, when her ill-prepared son became sultan despite youth or the incompetence spawned by a lifetime of seclusion, it can be argued that it was appropriate that the *valide sultan* remained as his guide.”

It is important to establish next that Ottoman throne successions were deliberately non-institutionalized and highly random events. The only established rule was *unigeniture* and, starting in the 1450s, *infracticide*.⁷ Goffman (2002) states “[When one sultan died], one of his sons, rather than his many brothers and sons, succeeded him...the road toward unigeniture remained rocky, its institutionalization a matter of luck as well as strategy. Beyazid, for example, probably was able to eliminate his competent elder brother Yakub with ease because it was Beyazid who in 1389 was on the battlefield at Kosovo when his father fell...Yakub, meanwhile, had the misfortune to be far away in Anatolia.” Peirce (1993) makes this point even more succinctly when she declares “...the history of Turkish states, the Ottomans included, demonstrates a number of options for succession, none of them regarded as illegitimate or unconstitutional... However, the prevailing tendency in most Turkish states was to avoid restrictions on eligibility and to regard all males as having a claim to eligibility for succession. In theory, the will of God, who had bestowed sovereignty on the dynastic family, would determine in each generation which of its scions should emerge victorious.”

Imber (2002, p.98) goes a step further to ascribe the resilience of the Ottoman empire to its two principles of succession: “The first, which seems to date from the earliest days of Ottoman rule, was that Ottoman territory was indivisible. The sons of Beyazid fought each other to the death rather than split up the lands that remained

⁷Inalcik (1973). For more details on the Ottoman succession struggles between 1300 and 1650, also see Imber (2002, pp. 96 - 115).

to them after Timur's victory. The second principle was that none of the sultan's heirs enjoyed primacy in the succession. The sultanate passed to whichever one of them could eliminate the competition... Ottoman subjects were, it seems, prepared to accept as ruler almost any legitimate heir to an Ottoman sultan, without regard to any order of precedence."

Finally, an essential observation for our pursuit is that the royal offspring were predominantly born to concubines who were themselves slaves captured in various non-Muslim domains and converted to Islam. Imber (2002, p. 89) notes, for instance that "Throughout its history, the Ottoman dynasty continued to reproduce through slaves, but between the fourteenth and early sixteenth centuries it was also the custom to restrict each consort's reproductive life to a single son. " While the maternal genealogical links of sultans' are somewhat debated, most credible accounts confirm that, with the exceptions of at most five of the nineteen sultans who ruled over the empire during the three centuries between the 15th and 17th centuries, all Sultans had non-Turkish maternal origins.

Table 1 lists a genealogical map of all Ottoman sultans between 1400 C. E. to 1700 C. E. In the three centuries on which we shall focus below, the empire had nineteen sultans. Of those, 5 were Turkish, 3 were Venetian and the rest were Polish (2), Greek (2), Serbian (2), Albanian (2), Bosnian (2) and Russian (1). Some of these genealogical links are debated and contested, as there are various claims about the maternal ethnic ancestors of some of these sultans. For instance, an alternative claim about the maternal genealogy of Mehmed II is that he had a Serbian mother instead of Turkish; that of Beyazid II is attributed to Serbian or French in some sources, instead of Albanian. A second hypothesis for the ancestry of Suleyman I involves a mother of European descent rather than a Turkish/Crimean one. The last column of Table 1 lists the alternative genealogy of each sultan, if he has one. In what follows, I shall adhere to the first genealogical classification although, later on, I shall also discuss how alternative classifications impact the main findings.

[Table 1 about here.]

If the imperial harem exerted a significant amount of political and familial influence in Ottoman affairs and the *Valide Sultan*, whose genealogical background varied, was the top of the hierarchy, a natural question to ask is whether and to what extent the political and familial influence of the imperial harem played a role in Ottomans conquests. In fact, even without the Ottoman Harem influencing political and military affairs, the sultans themselves could have been impartial to their ethnic and genealogical backgrounds in deciding Ottoman military plans. All of this playing out, of course, against the backdrop

of the *Gaza* ideology defining the imperial objective of the empire from its foundation. In the next section, I empirically test the role of sultans’ genealogical links vis-a-vis the empire’s stated mission of *Gaza* against the west.

3. The Empirical Analysis

3.1. Ethnic Lineage, Politics & Ottoman Wars (1401 C. E. – 1700 C. E.)

The primary source of the empirical work is the *Conflict Catalog* being constructed by Brecke (1999). It is a comprehensive dataset on violent conflicts in all regions of the world between 1400 C. E. and the present. It contains a listing of all recorded *violent* conflicts with a Richardson’s magnitude 1.5 or higher that occurred during the relevant time span on five continents.⁸ While the Catalog is still under construction, it is virtually complete for Europe, North Africa and the Near East. It is this portion of the catalog that I rely on below.

For each conflict recorded in the catalog, the primary information covers (i) the number and identities of the parties involved in the conflict; (ii) the common name for the confrontation (if it exists); and (iii) where and when the conflict took place. On the basis of this data, there also exists derivative information on the duration of the conflict and the number of fatalities, which is available for less than a third of the sample. Supplementary data come from a variety of sources: for population measures, I use the estimates by McEvedy and Jones (1978) and, for genealogical background data, I rely on Peirce (1993) and <http://turkboard.com>.

Using these data, I generate 300 annual observations for the period between 1401 C. E. and 1700 C. E. I obtain the impact of ethnic identities on Ottoman military conquests by estimating the following equation:

$$OTTOWAR_t = \lambda_0 + \lambda_1 EUROMOM_t + \lambda_2 X_t + \varepsilon_t, \quad (1)$$

where $OTTOWAR_t$ is one of four alternative dependent variables described below, and $EUROMOM_t$ is a dummy variable for whether the sultans had a European maternal genealogical link.

⁸Brecke borrows his definition for violent conflict from Cioffi-Revilla (1996): “*An occurrence of purposive and lethal violence among 2+ social groups pursuing conflicting political goals that results in fatalities, with at least one belligerent group organized under the command of authoritative leadership. The state does not have to be an actor. Data can include massacres of unarmed civilians or territorial conflicts between warlords.*”

Richardson’s index corresponds to 32 or more deaths ($\log 32 = 1.5$) and the five continents covered are all those that are inhabitable (i.e., Europe, Asia, the Americas, Australia, and Africa).

In various alternative empirical specifications, the dependent variable, $OTTOWAR_t$, will be: (1) the number of newly-initiated conflicts between the Ottoman Empire and European powers at time t , $OTTOMAN_t$; (2) the count at time t of the newly-initiated number of Ottoman conflicts with its non-European foes, $OTHEROTTOMAN_t$; (3) the *aggregate* number of conflicts the Ottoman Empire had with continental Europeans at time t (both those which began at time t and those began earlier), $AGOTTO_t$; and (4) the *aggregate* number of Ottomans conflicts with its non-European foes, $AGOTHER_t$.⁹

While the central justification for using (1) and (2) is quite straightforward, that for (3) and (4) is provided by two factors: One, we would like to identify whether the sultans' ethnic backgrounds affected not only the immediate and pending confrontations, but also the longer running ones. Two, warfare in the medieval and pre-industrial eras was a highly seasonal activity, with longer-running hostilities typically coming to a halt during the winter months, only to be picked up again with the onset of warmer weather in the spring. In this sense, all unresolved military confrontations were renewed every year. In any case, if matrilineal genealogical links did matter for the Ottomans' conquest patterns, then we would expect λ_1 to be negative and statistically significant for specifications in which (1) and (3) are the dependent variables. As a corollary, we would also expect λ_1 to be positive and statistically significant, or at least, insignificant, for specifications in which (2) and (4) are the dependent variables.

The dependent variables are comprehensive: they include all Ottoman conflicts on record (including naval battles) with their rivals in Europe, the Middle East and North Africa. Classifying Ottoman confrontations by geographic region can be complicated because of the ambiguities of defining the border of the European continent vis-a-vis Asia.¹⁰ For practical purposes, I divide the Eurasian landmass roughly vertically with reference to Istanbul (the Ottoman capital), and consider Ottomans' involvements to the west of that division to be in Europe and to the east of it to be in Asia (hence, as elsewhere).¹¹

In all the empirical tests below, the control variables X_t include a time trend,

⁹To confirm the validity of this empirical specification using annual conflict data, I employed the Dickey-Fuller test for cointegration. At a significance level of one percent, I rejected the existence of a unit root in all four dependent variables, $OTTOMAN_t$, $OTHEROTTOMAN_t$, $AGOTTO_t$ and $AGOTHER_t$.

Also, in neither of the main specifications reported below, I could reject the null of no autocorrelation using the Durbin-Watson d statistic.

¹⁰See, for example, Findlay and O'Rourke (2007, p. 2).

¹¹Accordingly, Ottomans' various Crimean, Muscovy and Russian engagements are classified as $OTHEROTTOMAN$, while those with and in Lithuania, Moldavia and Poland are categorized as $OTTOMAN$. These classification choices do not have an effect on the conclusions presented below.

TIME; the lagged dependent variable, $OTTOWAR_{t-1}$; estimates of the Ottoman and European population levels, $OTTOPOP_t$ and $EUROPOP_t$; and an indicator variable for each of the three centuries, $CENTURY_t$.

Depending on the parsimony of the empirical specification I employ and various alternative estimates, other control variables in X_t are: the age at which the sultans ascended the throne, *ASCENDAGE*; dummy variables for each Sultan's period of reign; a dummy variable to denote whether period t is before or after the Lepanto Sea Battle in 1571, $LEPANTO_t$; and, the length of reign of the sultan at time t , $REIGNLENGTH_t$.

A time trend is included because there has been a secular decline in warfare in Europe since the 15th century.¹² I include *LEPANTO* to examine if the Ottomans' patterns of military activity were altered following their first decisive defeat against European allied forces in 1571. I control for the age at which the sultan ascended the throne, *ASCENDAGE*, as well as his length of reign, *REIGNLENGTH*, to identify if those had systematic discernible effects on Ottoman military activities.

Table 2 presents the summary statistics and the correlation matrices. There are various interesting facts to highlight here. First, there was roughly one Ottoman military engagement with Europeans every three years, while there was one with non-Europeans, including domestic uprisings, every five years. The nineteen Ottoman sultans which reigned over the empire between 1400 and 1700 ascended the throne around 22 years of age and remained at the helm for an average of about 14 years. We confirm that Ottoman rulers were predominantly born to concubines who were slaves of mostly east European descent: as indicated by the averages for *EUROMOM* and *TURKMOM*, the empire was under the rule of a sultan with a European matrilineal descent for roughly 127 years, in contrast to the 115 years when it was ruled by a sultan with a Turkish maternal genealogical background.

Turning to the correlation matrices, we note that the Ottomans' European military engagements were positively associated with the sultan having a Turkish matrilineal descent, the age at which he ascended the throne as well as how long he remained in charge. The empire's military engagements elsewhere, in contrast, were only weakly linked to the maternal genealogy of the sultan, although sultans who ascended the throne at an older age were more likely to have engaged in Ottoman military conflicts elsewhere, with those remaining at the helm longer being less likely to engage foes outside Europe. Note also that the correlations of Ottomans' European confrontations and those elsewhere show clearly opposite trends, with the former declining over time and the three centuries and

¹²See, for instance, Woods and Baltzly (1915), Richardsdon (1960), Wilkinson (1980), Brecke (1999) and Lagerlöf (2007).

the latter increasing with time and the passage of each century.

[Table 2 about here.]

Table 3 reports the baseline estimates where the dependent variable is $OTTOMAN_t$, the number of newly-initiated conflicts between the Ottomans and continental Europeans in year t . As in the three tables that follow, I report *OLS estimates* with heteroskedasticity-corrected (robust) errors in the first three columns of Table 3 and *Probit regressions* (negative binomial) with robust errors in columns (4) through (6).¹³ Columns (1) and (4) present results of the most-parsimonious specification, in which only the maternal ethnicity of the sultan, the lagged-dependent variable, the European and Ottoman population levels and time as well as century trends are included. In both columns, the coefficient estimates on the maternal ethnic genealogy of the sultan's mother, $EUROMOM$, is negative and statistically significant at the five percent level or higher. This is in favor of the view that the sultans' ethnic backgrounds mattered in Ottoman wars, with a European maternal link offsetting the empire's underlying western imperial orientation. In fact, the impact of $EUROMOM$ on Ottoman conflicts was remarkably large: taking the estimate of $-.221$ in column (1) and the average value of the Ottomans' European wars over the sample period, which was $.31$, these estimates suggest that a European matrilineal tie reduced the Ottomans' military ventures in Europe (or against them) by more than 70 percent. And the estimate in column (4) generates a very similar but smaller decline of about 60 percent.¹⁴ As for the other control variables in the column (1) and (4) regressions, there was a clear, negative and statistically significant time trend in the Ottomans' European military engagements, according to the coefficient estimates for $TIME$ and $CENTURY$. In addition, the European population level shows a positive and significant impact on our dependent variable. Since the population levels were rising fairly steadily over this time frame, this is also indicative of some partial offset in the declining time trend of Ottomans' European conflicts.

Columns (2) and (5) add the age at which the sultans took charge, the duration of their reigns as well as a dummy for the Lepanto Sea Battle in 1571. As can be seen in the two columns, neither of these variables exert a statistically meaningful impact on the propensity of Ottomans to engage in conflicts with Europeans, although the

¹³Probit regressions are designed primarily for count data that are discreet and have a preponderance of zeros and small values, such as my dependent variables.

¹⁴The dependent variable in Poisson regressions is in logs. This implies that the dependent variable, $\log OTTOMAN_t$, drops by $.862$ when the sultan's mother was of a European ethnic background. Thus, evaluated at the mean of $\log(.31)$, this produces a reduction in the Ottomans' European conflicts of roughly $.18$ in levels, which corresponds to about a 60 percent drop.

matrilineal background of the sultan being European or not still makes a statistical difference. If anything, the magnitude impact of *EUROMOM* on lowering the empire’s military engagements with Europeans is now somewhat larger.

Finally, columns (3) and (6) include a break down of the maternal ethnic links into five distinct classifications: sultans with Turkish descent, *TURKMOM*, Polish descent, *POLISHMOM*, Venetian descent, *VENETIANMOM*, Balkan descent, *BALKAN – MOM*, and, Russian descent, *RUSMOM*. Of the 19 sultans who ruled the empire between 1400 and 1700, five had Turkish descent, two had Polish backgrounds, three others had Venetian descent, eight had Balkan descent and one had Russian heritage. These two specifications provide further detail as to how maternal genealogical links affected Ottoman conquests. In both columns (3) and (6), the coefficient on *TURKMOM* is statistically significant, positive and quite large, with an overall impact that is in excess of 95 percent.¹⁵ In contrast, according to those same estimates shown in columns (3) and (6), sultans whose mothers were of Venetian descent, i.e., Murad III, Mehmed III and Mustafa II, were statistically much less likely to engage in European conquests. In fact, given the magnitudes of the negative and statistically significant coefficient estimates on *VENETIANMOM*, we see that *Valide Sultans* with Venetian descent could account for altogether eliminating Ottoman-European confrontations.

[Table 3 about here.]

In Table 4, I re-estimate the regression shown in Table 3, this time using, *AGOT – TO*, the number of *all* longer-running confrontations of Ottomans with the Europeans (those began at date t as well as those which began earlier, but that were continuing at that time), as the dependent variable. Two important observations can be made by comparing the results in Tables 3 and 4. First, the qualitative nature of the results are very similar in both tables: the European ethnic identity of the queen mother exerts a statistically significant and negative impact on *AGOTTO* in all four specifications in Table 4, while a Turkish matrilineal background accounts for a significant and positive impact on *AGOTTO* in the two estimates shown in columns (3) and (6). Second, the *OLS* estimates shown in columns (1) and (2) of Table 4 indicate magnitudes of the ethnic

¹⁵The average number of Ottoman-European violent confrontations was .310 over the whole sample period. Hence, the linear estimate in column (3) produces an increase of more than 96 percent in these conflicts.

In column (6) the dependent variable in Poisson regressions is in logs. This implies that the dependent variable, $\log OTTOMAN_t$, increases by 1.29 with a Turkish matrilineal heritage. Thus, evaluated at the mean of $\log(.31)$, this produces an increase in the Ottomans’ European conflicts of roughly .80 in levels, which corresponds to about a 250 percent rise.

maternal effects to be on the order of about 20 percent.¹⁶ This is some empirical support for the fact that the genealogical maternal background of the sultans primarily influenced the *initiation* of wars between the Ottomans and Europeans and not necessarily their *continuation*. In fact, when we turn to the estimates shown in columns (4) and (5) of Table 4, we deduce that the impact of *EUROMOM* on the aggregate number of Ottoman-European wars was again roughly equal to 20 percent.¹⁷ And in columns (3) and (6), we identify that a Turkish maternal genealogy produced a boost of anywhere between 105 percent to 190 percent in Ottomans' conflicts with European foes.¹⁸

[Table 4 about here.]

As we shall next see, things were quite different as far as the Ottomans' confrontations with other parties were concerned. Table 5 reports the baseline estimates when the dependent variable is *OTHEROTTOMAN_t*, the number of newly-initiated conflicts between the Ottomans and non-European entities in year t . Recall that this variable is not confined to Ottomans' international wars in the Middle East, North Africa or in the Caucasus only; it also includes Ottomans' domestic civil discords and uprisings in various parts of the empire.¹⁹ As shown in columns (1), (2), (4), (5) and (6), we have no support for the idea that the matrilineal descent of the sultans had any influence on the Ottomans' conflicts with non-Europeans. This stands in stark contrast to the results shown in the comparable columns of Table 3, where *EUROMOM* depressed Ottomans' European military ventures by something on the order of 60 to 70 percent and *TURKMOM* stimulated them at least 95 percent. The *OLS* estimate presented in column (3) yields slightly different estimates in that *TURKMOM* shows a statistically significant and positive impact on Ottomans' conflicts with non-European parties too. This finding is in line with the positive impact of *TURKMOM* on Ottomans' wars with

¹⁶Recall that the mean number of Ottoman-European conflicts over this time span was 1.37 confrontations per year. Thus, the coefficient estimate of $-.265$ in the first column corresponds to about a 19 percent drop, while that of $-.333$ in the second column equals about a 24 percent decline in *AGOTTO*.

¹⁷Again, the dependent variable in Poisson regressions is in logs. This implies that the dependent variable, $\log OTTOMAN_t$, drops by $.202$ with *EUROMOM*, according to the column (4) estimate. Thus, evaluated at the mean of $\log(1.37)$, this produces a reduction in the Ottomans' European conflicts of roughly $.25$ in levels, which corresponds to about an 18 percent drop. The estimate in column (5) yields a slightly higher magnitude impact which is on the order of 20 percent.

¹⁸In column (6), note once more that the dependent variable *AGOTTO* is in logs. This implies that the dependent variable, $\log AGOTTO_t$, rises by $.746$ when the sultan's mother was of a Turkish ethnic lineage. Hence, evaluated at the mean of $\log(.31)$, this produces an increase in the Ottomans' European conflicts of roughly $.33$ in levels, which corresponds to about a 105 percent increase.

¹⁹Excluding Ottomans' internal uprisings and succession wars does not materially affect the results I discuss here.

Europeans. Note, however, that even if the impact of Turkish matrilineal descent was positive on Ottoman wars in the east as well as the west, its role in stimulating wars on Ottomans' eastern frontiers was about half of that in generating wars on the western front.

[Table 5 about here.]

The final set of baseline estimates are shown in Table 6. As the dependent variable, they involve *AGOTHER*, the number of *all* longer-running confrontations of Ottomans with its foes elsewhere. These results are much in line with those reported in Table 5 in qualitative terms. In particular, *EUROMOM* has no significant effect on the total number of Ottomans' conflicts with foes in the Middle East, Anatolia or North Africa. And breaking down the matrilineal backgrounds of the sultans, as I have done in columns (3) and (6), produces no significant impact for any of the five categories of geographic matrilineal descent.

[Table 6 about here.]

With respect to the other control variables included in Tables 3 through 6, there are some interesting regularities worth pointing out. First, *TIME* and *CENTURY* typically come in with negative signs. In sixteen of the 24 estimates shown in those four tables, *TIME* has a negative and statistically significant effect on Ottomans' war with European as well as non-European foes. Likewise, *CENTURY* carries a significant and negative coefficient in thirteen of those 24 regressions. In the next subsection, I will discuss the significance of these estimates for the main conclusions.

Another interesting estimate is provided by the age at which the sultans ascended the Ottoman throne, *ASCENDAGE*. In all specifications where the dependent variable is Ottomans' European conflicts, this variable comes in with a positive coefficient and, in two regressions, it is also statistically significant. In contrast, *ASCENDAGE* enters negatively in all specifications where the dependent variable is Ottoman-non-European confrontations and it yields significance in two estimates. Taken together, these findings suggest that sultans who took the Ottoman helm at older ages were more likely to engage European foes as opposed to those on the eastern frontiers. Finally, the length of reign of each sultan seems to have played no role in influencing the empire's western campaigns, but it had a statistically strong and negative impact in all six specifications where the dependent variable was *OTHEROTTOMAN*. This implies that longer tenures served to dissuade sultans from engaging non-European, mostly coreligionist foes on the eastern fronts.

3.2. Alternative Specifications & Robustness

The empirical findings above show quite a strong pattern in how the ethnic genealogical links of the Ottoman sultans factored in the empire's patterns of conquest and war.

In particular, we have seen some consistent and strong support for the idea that, while the empire might have been built on the foundations of a *Gaza ideology*, targeting Christian Europe in the name of Holy War, either the harem politics or the ethnic identity of the sultan himself directly were strong enough to negate or propagate the empire's westward orientation for conflict and imperial conquest. That noted, there are various empirical and conceptual issues that need to be dealt with regarding the results we have reviewed thus far.

To start with, is it possible that the maternal ethnic link variables are picking up a time trend, because most sultans had Turkish maternal ties early on and they had non-Turkish and often European genealogical ties later in the sample period? Indeed, as shown in Table 1, five of the seven sultans who were in power in the first half of the sample period were of Turkish maternal descent. But it is important to acknowledge in this context that, in a majority of the estimates shown in Tables 3 through 6, both *TIME* and *CENTURY* yield typically significant and almost always negative coefficient values. Thus, the impact of the maternal histories of the sultans on the patterns of Ottoman war and conflict is their direct effects which are above and beyond those captured by our two time trends.

Second, are there possible channels of reverse causality? Given the discussion in subsection 2.2, this is highly unlikely. As I have already noted in detail, Ottoman throne successions were deliberately non-institutionalized and highly random events. In this, it is fairly acceptable to think that the patterns of Ottoman confrontations in the east and the west had little to no influence on who among the sultans' sons managed to accede the Ottoman throne.

That noted, there is one channel through which Ottomans' external confrontations could have influenced the matrilineal background of the sultans:²⁰ given that each sultan acceded the throne at about 22 years of age, there is a chance that the Ottomans' wars with European or non-Europeans in any given period are correlated with their conflicts roughly twenty two years ago. If the Ottoman harem likely consisted of a larger portion of whomever they were defeating in war, then it is more likely that the mother of a sultan who began to rule the empire roughly two decades later had an ethnic tie to those foes. Thus, if whom the Ottomans engaged militarily in a given period had a (negative)

²⁰Thanks to Jared Rubin who first pointed out this scenario.

correlation with whom they might have confronted two decades prior, the estimates above would be biased. In order to account for this possibility, I reran the estimates shown in Tables 3 through 6 with the 22-year lagged value of the left-hand-side variables as an additional control variable. The negative impact of *EUROMOM* on *OTTOMAN* was retained. Its insignificant role in *OTHEROTTOMAN* was not altered either, so I have chosen not to report these estimates here.

Another important issue involves the degree of uncertainty in the ethnic lineage of some of the sultans. As shown in Table 1, there are alternative hypotheses for the ethnic lineage of three Ottoman sultans, Mehmed II, Beyazid II and Suleyman I. In addition, there are some doubts about the lineage of two other rulers, Selim I and Murad III, although no clear alternatives have been established for their backgrounds. To examine the extent to which these classifications might have affected the baseline results, I created some alternative ethnic lineage series in which I use the ethnic background alternatives for Mehmed II, Beyazid II and Suleyman I. Note, however, that these alternative claims make a difference for only Mehmed II (with his Turkish ethnic maternal link switching to European) and Suleyman I (with his maternal lineage of Turkish Crimean becoming European, specifically Balkan). Beyazid II, in fact, has two alternatives for his primary maternal background, which is Albanian. However, neither of the two alternatives of Serbian and French affect a change in his *EUROMOM* status. Due to these observations, I created nine alternative maternal background series for *EUROMOM*, *TURKMOM* and *BALKANMOM*: in three of them, I altered Mehmed II's alternative ethnic lineage only; in the next three, I changed Suleyman I's ethnic background only; and in the final three, I switched the maternal ethnic histories of both Mehmed II and Suleyman I.

Some of the results generated with these alternative maternal genealogical series are shown in Table 7 where the dependent variables are *OTTOMAN* and *OTHEROTTO* – *MAN* in alternating fashion, respectively. In the first two columns, the ethnic background variables reflect the change in Mehmed II's status only; in columns (3) and (4), they reflect the alternative for Suleyman I only; and in the final two columns, the ethnic background variables are comprehensively revised. As can be seen in columns (1), (3) and (5), the change in classification makes the conflict-augmenting impact of *TURKMOM* weaker only when the backgrounds of both sultans are revised. Even in that case, however, the alternative *TURKMOM* enters with the predicted positive sign and with a p-value of 11 percent in column (5). In all three specifications where the dependent variable is *OTTOMAN* (i.e., columns (1), (3) and (5)), we see that *RUSMOM* also had a positive and significant impact on Ottomans' European conflicts; this is perfectly consistent with the baseline results in Table 3. On the downside, *BALKANMOM* now

plays a significant and *positive* role in stimulating Ottoman-European confrontations in two of the three specifications shown in columns (1), (3) and (5). For this result, however, the alternative ethnic background of Mehmed II seems to be the driving influence, because switching the matrilineal heritage of Suleyman I does not produce this effect, as shown in column (3).

Turning to the impact of changes in matrilineal status on *OTHEROTTOMAN*, which are shown in the even numbered columns of Table 7, we find that none of the matrilineal descent variables except *VENETIANMOM* enters significantly. The latter had a positive impact on producing more conflicts between the Ottomans and its non-European foes on the eastern frontiers in all three estimates, with a significant estimate in column (6) and p-values of 13 and 12 percent in columns (2) and (4), respectively.

[Table 7 about here.]

In Table 8, I repeat the above robustness check using *CUMOTTO* and *CUM – OTHER* as the dependent variables, again in alternating fashion. As in the previous table, the ethnic background variables in columns (1) and (2) reflect the change in Mehmed II’s status only; those in the next two columns consider the alternative for Suleyman I only; and those in the last two columns are based on the alternatives for Mehmed II and Suleyman I together. The general pattern of findings here is much in line with what we have seen above. In particular, sultans whose matrilineal descent was Turkish account for a positive and significant impact on creating Ottoman-European wars in the aggregate (i.e., wars including those which began in a given year as well as those that were a continuation from earlier years). This was the case in all three estimates shown in columns (1), (3) and (5). A change in the status of Suleyman I is quite benign in that, in column (3), only *TURKMOM* comes in with the predicted sign and all other ethnicity variables are insignificant. The switch in Mehmed II’s matrilineal status is more problematic in that it produces a statistically significant and positive impact of some ethnic European backgrounds, namely for *POLISHMOM* and *BALKANMOM*.

The estimates shown in columns (2), (4) and (6) reveal that the impact of maternal genealogical links on *CUMOTHER* is quite robust to all possible changes in matrilineal status. Moreover, *VENETIANMOM* now enters significantly and positively in columns (2) and (6) and, when it is not significant in column (4), it still yields a positive effect with a p-value of 19 percent. In columns (2) and (4), none of the other matrilineal backgrounds played a significant role in Ottomans’ wars with its non-European foes in aggregate; this is consistent with the results shown in Table 6 and in line with the main hypothesis examined here. The major difference vis-a-vis results shown in Table

6 is that, in column (6) of Table 8, two other matrilineal dummies, *TURKMOM* and *RUSMOM*, also generate positive and significant effects on *CUMOTHER*.

[Table 8 about here.]

Although I have chosen not to report them here, I also examined the extent to which the alternative matrilineal genealogies influenced the empirical results when *EUROMOM* is utilized as the sole maternal background variable. When I did so, I found results that were qualitatively quite in line with those shown in Tables 7 and 8. That is, *EUROMOM* continued to have a negative and statistically significant effect on Ottomans' conflicts with Europeans when Suleyman I's maternal background is altered only. But changes in neither Suleyman I nor Mehmed II's maternal lineage influenced the role of *EUROMOM* in Ottomans' conflicts with non-Europeans; *EUROMOM* remained insignificant for determining violent confrontations between the Ottomans and its rivals in the Middle East, North Africa and Anatolia.

To summarize, for three of the nineteen sultans who ruled the Ottoman Empire over the three centuries between 1400 C. E. and 1700 C. E., there are some alternative claims regarding their ethnic maternal links. Relying on the alternative hypothesis for the maternal link of Suleyman I has no significant qualitative impact on the baseline results, although entertaining the option for Mehmed II produces some conflicting findings. Even when we confine our attention to the alternatives for both sultans, however, we can still establish the following: Various maternal ethnic links might have positively influenced Ottomans' European campaigns, but *TURKMOM* almost always did. In some other cases, the maternal backgrounds from eastern Europe played a positive role too, in contradiction to the main hypothesis examined above. In terms of the Ottomans' confrontations on its eastern frontiers, most maternal ethnic lineages did not factor in, although a maternal link of European origin, *VENETIANMOM*, seems to have positively affected such Ottoman conflicts. More broadly, *EUROMOM* still had a negative and statistically significant effect on Ottomans' conflicts with Europeans and it remained insignificant for determining violent confrontations between the Ottomans and its rivals elsewhere.

Next, I checked the extent to which the sample time period influences the central findings. In Table 9, I replicate the Poisson estimates originally presented in Tables 3 and 5 using two alternative cuts of the data: in the first three columns, the dependent variable is *OTTOMAN* for the 250-year interval between 1451 and 1700; in columns (4) through (6), it is *OTTOMAN* for the interval between 1451 and 1650. These estimates confirm that shortening the analysis period to cover 1451 to 1700 or 1451 to 1650

has no major impact on the findings that *EUROMOM* typically depressed Ottomans' European military ventures.²¹

[Table 9 about here.]

As an alternative inquiry, I removed all of the maternal ethnicity dummies and included dummies for the reign of each sultan instead.²² Doing so helps to isolate the fixed effects of each sultan who ruled the Ottoman empire between the 15th and 18th centuries. As right-hand side control variables, all of the estimates included *TIME*, *CENTURY*, *OTTOPOP*, *EUROPOP*, *ASCENDAGE*, and *REIGNLENGTH* in addition to the thirteen dummy variables for sultans. I regressed *OTTOMAN* and *OTHEROTTO – MAN* on these explanatory variables. For Ottomans' European conflicts, only Mehmed II, Suleyman I and Mehmed IV entered with statistically significant signs and they were all positive. Of those Ottoman rulers, Mehmed II and Suleyman I had Turkish ethnic lineages and Mehmed IV had a Russian background. For Ottomans' eastern frontier conflicts, only Murad III and Mehmed III yielded statistically significant signs and they were both positive. Murad III and Mehmed III both had Venetian matrilineal descent. And when I reran these regressions with Ottomans' all wars in the west and the east, *CUMOTTO* and *CUMOTHER*, as the dependent variables, I got similar results. The exceptions were the positive and significant impact of Murad IV on *CUMOTTO* and the negative and significant influence of Murad II on *CUMOTHER*.²³

As a final line of exploration, I also tested the extent to which matrilineal heritage affected the duration of Ottomans' wars with Europeans and non-Europeans. In particular, I ran the estimates shown in Tables 3 and 5, this time using the average length of Ottomans' European wars in any given period and their wars elsewhere with others as two alternative dependent variables. A sample of my main findings is shown in Table 10. Now we have a total of 76 observations when we regress the average length of Ottoman-European conflicts on the explanatory variables due to the fact that there were conflicts between the Ottomans and Europeans in 76 of the 300 years in the sample. For the same

²¹I have also checked the robustness of findings when *OTHEROTTOMAN* is the dependent variable. I have chosen not to report those results here, but the findings were generally consistent with those shown in Table 4. While in some specifications *EUROMOM* attained negative and significant coefficients, the magnitude of the effects were always smaller than those estimates where the dependent variable was *OTTOMAN*.

²²The only restriction I imposed is that a sultan had to be at the helm for at least five years. On this basis, Mustafa I (r. 1617-18, 1622-23), Osman II (r. 1618-22), Suleyman II (r. 1687-91) and Ahmed II (1691-95) were excluded.

²³Clustering errors by the reign of each sultan did not influence findings either. All results that are not shown are available upon request.

reason, there are 46 observations when the average duration of Ottomans' non-European conflicts is used as the dependent variable. As shown in columns (1), (2), (4) and (5), *EUROMOM* had a positive and significant impact on lengthening the duration of Ottomans' European confrontations, whereas it had no discernible effect on its conflicts with non-European foes. One can only speculate as to why *EUROMOM* had opposite effects on the duration and number of Ottomans' European wars. But one possibility might be that European matrilineal links depressed the initiation of Ottoman conflicts in Europe but, conditional on the fact that they began, such ties helped to produce a stalemate instead of a typically outright Ottoman victory. The comparison of columns (3) and (6) show that it was the Russian maternal link that significantly reduced the length of Ottoman-European confrontations, whereas Polish and Venetian mothers had a positive impact on Ottomans conflicts elsewhere.

[Table 10 about here.]

4. Discussion

I shall conclude this paper by making some observations that relate to the analyses above.

First, the average magnitude of the effects of maternal lineage, say for *EUROMOM*, is quite large. It implies that, while Ottomans engaged its European foes once every three years on average, they did so once every decade when a sultan with a European matrilineal descent was at the helm. To put this in further context, and as I have shown in Iyigun (2008), of the 93 Ottoman-European military conflicts, 63 were historically documented to be initiated by the Ottomans (roughly about 68 percent), but only 17 out of 52 of the Ottomans confrontations with other sovereigns and groups elsewhere (including Anatolia) were instigated by the empire itself (about 33 percent).²⁴ Even more remarkable is the fact that most of the Ottomans' European ventures were front-loaded: in the period between 1401 and 1550, Ottomans engaged Europeans in 51 conflicts; of those, 40 were begun with some Ottoman initiative (which is close than 80 percent). Thus, when one factors in the fact that some Ottoman-European wars were initiated by the Europeans too, the impact of having a European matrilineal descent becomes even larger.

In this context, one ought to also bear in mind that economic and financial motives would not have been major factors in Ottomans' tendency to primarily target eastern continental Europe: according to Maddison's (2001) estimates, eastern Europe had per-capita incomes of 400 and 462 in 1990 U. S. dollars around 1000 and 1500 C. E.

²⁴There are only a few cases where border skirmishes prior to the conflict itself make it harder to assess how the confrontation began; otherwise this turned out to be a fairly straightforward exercise.

respectively, whereas his estimates for the geographic regions what are now modern-day Iran and Egypt for the same periods are 450 and 565, respectively. Hence, the pattern and timing of Ottoman conflicts are consistent with its hypothesized ideology. Nonetheless, when pitted against the influence of “family culture and ties” on afflicting conflict and war, the empire’s institutional objectives and motives—as exemplified by *Gaza*—seem to have been secondary. In particular, the results above have shown how sultans’ own genealogical backgrounds almost entirely offset the Ottomans’ imperial orientation and its implicit religious motives.

Second, there are at least two possible channels through which maternal genealogy might have mattered for Ottomans’ imperial quests. One is in line with the ideas articulated in the introduction: the Ottoman Imperial Harem was an institution that played a typically varying but influential role in determining the empire’s political actions and the highest member of its hierarchy was the *Valide Sultan*. Alternatively, it is also possible that the harem played no role in influencing the sultan in state matters, but the sultans acted cognizant of their family legacies. Obviously, the empirical work above cannot distinguish between these two channels. Nonetheless, it does verify that ethnic lineage—and perhaps religious identities too—was a strong enough influence on Ottoman matters so as to almost completely nullify one of the founding motives of an inherently Islamic empire.

All the same, we can try to exploit the fact that the private quarters of the imperial harem were built only in the mid-16th century, around 1566.²⁵ If it was primarily the political influence of the harem that drove Ottoman conquests and not the sultans’ ethnic and cultural matrilineal upbringing, then it is plausible that the queen mothers’ influence should have risen after the private harem quarters were built. In Table 11, I present some negative binomial regression results that reproduce four specifications shown in Tables 3 and 5. The only exception now is that a dummy variable for the construction of the private harem quarters, *HAREM*, as well as its interaction with *EUROMOM* are included as additional explanatory variables. As shown, these new variables neither yield statistically significant effects, nor alter the impact of *EUROMOM* on Ottoman conflicts reported earlier. While this is no doubt cursory, it can be suggestive of the fact that the sultans’ upbringing mattered more than the queen mothers’ political influence.²⁶

²⁵Recall that the private quarters of the Ottoman Harem were added later, as a consequence of which the role of the harem in Ottoman politics is believed to have risen. This is why, for example, Peirce (1993, ch. 4) labels the era between 1566 and 1656 as the ‘age of the Queen Mother’.

²⁶There is one other possibility which needs to be entertained: since the Janissary corps as well as the top echelons of the Ottoman military and administration relied on converts to Islam whose origins lay in conquered lands, it is possible that they—not Valide Sultans nor the Sultans’ ethnicities themselves—

[Table 11 about here.]

Third, we have the issue of ethnicity versus religion. In particular, is it possible to say more about whether it was ethnic or religious matrilineal ties that mattered more in the patterns of Ottoman conquest? At some level, this is obviously difficult to discern because either the sultans' mothers were Turkish and Muslim or they were Christian and non-Turkish (which meant European, with the exception of the Russian Orthodox mom of Mehmed IV). So it is quite difficult, if not impossible, to dissect whether it was religious or ethnic ties that affected the sultans' conquest motives. However, there is a way by which we can explore if the impact of having moms of Balkan descent depended on whether or not the mother's ethnic region was under Ottoman rule. The idea is that, if it was religion (ethnicity) which mattered more, then the incentive to divert Ottomans away from Europe ought to have still remained high (declined) after the mothers' home regions fell to the Ottomans.

To test this idea, we can in fact interact the queen mothers' ethnicities with dummies for the dates at which that ethnic region came under Ottoman control (if it did at all). The downside of this exercise is that, of the maternal ethno-regional backgrounds, only *BALKANMOM* (those of Serbian, Greek, Albanian and Bosnian descent) came under the control of the Ottomans, typically around the mid- to late-15th century during the reign of Mehmed II (the Conqueror). And only one sultan, Beyazid I, had a mother of Balkan descent prior to the Balkans being transferred to Ottoman control. All the same, I report some of the results of an exercise in which the analogs of columns (3) and (6) of Tables 3 and 5 are estimated. They include the control variable of a dummy for the period during which the Balkans were under Ottoman control, *BALKANINDP*, as well as the interaction of this dummy with *BALKANMOM*.²⁷ As indicated, the conflict-suppressing role of *BALKANMOM* in Ottoman-European wars was all the more important *before* the region fell under Ottoman control. Equally interesting is the fact that, for Ottomans' confrontations with non-Europeans, the conflict-propagating role of *BALKANMOM* was more pronounced *before* the region became an Ottoman territory. In general, I take these results to be suggestive of the idea that ethnicity and nationalities, but not so much religion, drove some of these results. Alas, given that

account for the changes in the pattern of Ottoman conquests. There are two issues to bear in mind in this regard. First, we clearly do not have the ethnicity details for the military and palace hierarchies that we do on those of queen mothers. Second, political power was still concentrated but, nonetheless, more diluted among the viziers and the top echelons of the Janissary corps. As such, one would expect less of an impact from the ethnic and religious backgrounds of a member of these hierarchies.

²⁷The dummy *BALKANINDP* attains the value of 1 during independence from the Ottomans and 0 after conquest.

these findings hinge on the rule of only one sultan, Beyazid I, they should be interpreted with a great deal of caution.

[Table 12 about here.]

Fourth, recall that membership in the Ottoman harem, bureaucracy or public administration required a Muslim identity. Thus, all wives and queen mothers were either Muslims at birth or converts to Islam of Christian or Jewish backgrounds.²⁸ In this, we have some implication that ethnic and religious identities had some latent persistence.

Finally, the role of women in Muslim civilizations in general and the Ottoman Empire in particular has been extensively debated. Indeed, Peirce (1993) details the power of imperial women in the Ottoman Harem and other Ottoman historians, such as Shaw (1976) and Inalcik (1973), also review this topic at some length. The caveat in the second point above notwithstanding, the empirical analyses discussed here lend some credence to the view that women—in this case, the queen mothers in particular—had influence and extensive power in decision-making.

5. Conclusion

In this paper, I rely on the Ottomans' unique imperial history to examine the influence of religion, ethnicity and family ties in perpetuating or diverting conflict and war. The Gaza ideology is generally emphasized as the reason why the Ottomans initiated more conflicts in the West, and why on the eastern fronts, more conflicts were started by its rivals. But according to another, not necessarily mutually exclusive, theory the Imperial Harem wielded considerable political power in Ottoman affairs.

Using a comprehensive dataset on conflicts and war in the Middle East, Europe and North Africa for the period between 1401 C. E. and 1700 C. E., I find that Gaza was important but not sufficient for explaining Ottomans' imperial motives. What also mattered almost as much was the sultans' ethno-religious heritage. In particular, while Ottoman conquests were predominantly in the West until the mid-1500s, I show that the ethnic background of Valide Sultan (the queen mother) was an important and independent determinant of whether the empire engaged in military conquests in Europe versus North Africa or the Middle East. Depending on the empirical specification, the reign of a sultan with a European maternal ethnic background was enough to offset more than 70 percent of the empire's western orientation in imperial conquests. As I have also

²⁸A possible exception was Orhan's wife, Theodora, who might have retained her religion even after becoming an imperial wife. However, Orhan is the second Ottoman sultan with his reign corresponding to a much earlier period before 1400.

identified, however, the sultan having a European matrilineal descent mostly had no discernible influence on the empire's eastern conflicts. In some rare cases where it played a role, a European maternal genealogy stimulated Ottomans' wars in the east.

On this basis, we have found that the religious, ethnic or cultural identities of the Sultans' inner circle played a significant and independent role in subverting the imperial ambitions of the empire toward the Middle East and North Africa. Hence, we have evidence in Ottomans' history that the rulers' *individual* identities as much as those of their societies more broadly were important in the long run for maintaining conflicts, conquests and wars on ethnic or religious grounds.

6. References

- Armstrong, K.** (1988). *Holy War: Crusades and their Impact on Today's World*, (New York, NY: Anchor Books).
- Alesina, A. and E. Spolaore.** (2007). "International Conflict, Defense Spending and the Size of Countries," *European Economic Review*.
- Barbieri, K.**(1996). "Economic Interdependence: A Path to Peace or a Source of Interstate Conflict?" *Journal of Peace Research*, 33(1), 29-49.
- Barbieri, K. and G. Schneider.** (1999), "Globalization and Peace: Assessing New Directions in the Study of Trade and Conflict", *Journal of Peace Research*, 36(4), 387-404.
- Barro, R. and R. McCleary.** (2003). "Religion and Economic Growth," *American Sociological Review*, October.
- Barro, R. and R. McCleary.** (2005). "Which Countries Have State Religions?," *Quarterly Journal of Economics*, November.
- Becker, O. S. and L. Woessmann.** (2007). "Was Weber Wrong?: A Human Capital Theory of Protestant Economic History," University of Munich, unpublished manuscript, January.
- Berman, E.** (2000). "Sect, Subsidy and Sacrifice: An Economist's View of Orthodox Jews," *Quarterly Journal of Economics*, August.
- Botticini, M. and Z. Eckstein.** (2005). "Jewish Occupational Selection: Education, Restrictions, or Minorities?," *Journal of Economic History*, 65:4, December.
- Botticini, M. and Z. Eckstein.** (2007). "From Farmers to Merchants, Voluntary Conversions and Diaspora: A Human Capital Interpretation of Jewish History," *Journal of the European Economic Association*, no. 5, September, 885-926.
- Brecke, P.** (1999). "Violent Conflicts 1400 A.D. to the Present in Different Regions of the World," 1999 Meeting of the Peace Science Society, unpublished manuscript.
- Brecke, P.** (in progress). "The Conflict Dataset: 1400 A.D. - Present," Georgia Institute of Technology.
- Cioffi-Revilla, C.** (1996). "Origins and Evolution of War and Politics," *International Studies Quarterly*, 40 (1), March, 1-22.
- Emmanuel, A.** (1972). *Unequal Exchange: A Study of the Imperialism of Trade*, (New York & London: Monthly Review Press).
- The Euro Atlas Shop**, *The Euro Atlas*, <http://www.euroatlas.com>.
- Fernandez, R., A. Fogli and C. Olivetti.** (2004). "Mothers and Sons: Preference Formation and Female Labor Force Dynamics," *Quarterly Journal of Economics*, 119 (4), 1249-1299, 2004.
- Fernandez, R.** (2007). "Culture and Economics," in the *New Palgrave Dictionary of Economics*, 2nd edition, edited by Steven N. Durlauf and Lawrence E. Blume, Palgrave

Macmillan (Basingstoke and New York).

Findlay, R. and K. H. O'Rourke. (2007). *Power and Plenty: Trade, War and the World Economy in the Second Millennium*, (Princeton, NJ: Princeton University Press).

Glaeser, E. L., and B. I. Sacerdote. (2002). "Education and Religion." Harvard University, unpublished manuscript.

Glaeser, E. L., R. La Porta, F. Lopez-de-Silanes, and A. Shleifer. (2004). "Do Institutions Cause Growth?" *Journal of Economic Growth* 9 (3): 271-303.

Goffman, D. (2002). *The Ottoman Empire and Early Modern Europe*, (Cambridge: Cambridge University Press).

Greif, A. (1993). "Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders' Coalition," *American Economic Review*, 83 (3), June, pp. 525-48.

Greif, A. (1994). "Cultural Beliefs and the Organization of Society: A Historical and Theoretical Reflection on Collectivist and Individualist Societies," *Journal of Political Economy*, 102 (5), October, pp. 912-50.

Greif, A. (2006). *Institutions: Theory and History*, (Cambridge: Cambridge University Press).

Grossman, H. I. (1994). "Production, Appropriation, and Land Reform," *American Economic Review*, 84(3), June, 705-12.

Grossman, H. I. and M. Kim. (1995). "Swords or Plowshares? A Theory of the Security of Claims to Property," *Journal of Political Economy*, 103(6), December, 1275-1288.

Grossman, H. I. and M. Iyigun. (1995). "The Profitability of Colonial Investment," *Economics & Politics*, 7:3, November, 229-24.

Grossman, H. I. and M. Iyigun. (1997). "Population Increase and the End of Colonialism," *Economica*, 64(3), August, 483-493.

Guiso, L., P. Sapienza, and L. Zingales. (2003). "People's Opium? Religion and Economic Attitudes." *Journal of Monetary Economics*, 50 (1), 225—82.

Guiso, L., P. Sapienza, and L. Zingales. (2006). "Does Culture Affect Economic Outcomes?" *Journal of Economic Perspectives*, Spring, 20 (2), 23-48.

Haavelmo, T. (1968). *A Study in the Theory of Economic Evolution*, (Amsterdam: North-Holland).

Hafer, C. (2006). "On the Origins of Property Rights: Conflict and Production in the State of Nature," *Review of Economic Studies*, January, 73 (1) 119- 43.

Hess, G. D. and A. Orphanides. (1995). "War Politics: An Economic, Rational-Voter Framework," *American Economic Review*, 85 (4), September, 828-846.

Hess, G. D. and A. Orphanides. (2001). "War and Democracy," *Journal of Political Economy*, 109(4), August, 776-810.

- Hirshleifer, J.** (1991). "The Paradox of Power," *Economics & Politics*, 3:3, November, 177-200.
- Hotelling, H.** (1929). "Stability in Competition," *Economic Journal*, 39:1, March, 41-57.
- Iannaccone, L. R.** (1992). "Sacrifices and Stigma: Reducing the Free-Riding in Cults, Communes and Other Collectives." *Journal of Political Economy* 100 (2), April, 271—91.
- Imber, C.** (2002). *The Ottoman Empire: 1300-1650*, (New York, NY: Palgrave, MacMillan).
- Inalcik, H.** (1973). *The Ottoman Empire: The Classical Age, 1300-1600*, (London).
- Iyigun, M.** (2008). "Luther and Suleyman," *Quarterly Journal of Economics*, November.
- Iyigun, M.** (forthcoming). *Tales of Faith in Socioeconomic Progress*, (Chicago, IL: The University of Chicago Press), book manuscript in progress.
- Jones, B. F. and B. A. Olken.** (2005). "Do Leaders Matter? National Leadership and Growth since World War II" *Quarterly Journal of Economics* 120 (3), pp. 835-864, August 2005.
- Jones, B. F. and B. A. Olken.** (2007). "Hit or Miss? The Effect of Assassinations on Institutions and Growth" NBER Working Paper No: 13102, May.
- Kafadar, C.** (1996). *Between Two Worlds: The Construction of the Ottoman State*, reprinted edition, (Berkeley, CA: University of California Press).
- Karpat, K.** (1974). *The Ottoman State and its Place in World History*, ed., (Leiden).
- Kinross, L.** (1979). *Ottoman Centuries*, (New York, NY: Harper Perennial).
- Kuran, T.** (2004a). "Why the Middle East Is Economically Underdeveloped: Historical Mechanisms of Institutional Stagnation," *Journal of Economic Perspectives*, 18, Summer, 71-90.
- Kuran, T.** (2004b). "The Economic Ascent of the Middle East's Religious Minorities: The Role of Islamic Legal Pluralism," *Journal of Legal Studies*, 33, June, 2003, 475-515.
- Kuran, T.** (2005). "The Logic of Financial Westernization in the Middle East," *Journal of Economic Behavior and Organization*, 56 (April 2005): 593-615.
- Lagerlöf, N.** (2007). "From Malthusian War to Prosperous Peace," University of York, unpublished manuscript.
- Lee, J. and J. H. Pyun.** (2008). "Does Trade Integration Contribute to Peace?," University of California, Davis, unpublished manuscript.
- Levy, J. S.** (1983). *War in the Modern Great Power System, 1495 - 1975*, (Lexington, KY: The University Press of Kentucky).
- Maddison, A.** (2001). *The World Economy: A Millennial Perspective*, (Paris: OECD Publications).

- McEvedy C. and R. Jones.** (1978) *Atlas of World Population History*. Facts on File, New York.
- McNeill, W.** (1984). *The Pursuit of Power : Technology, Armed Force, and Society since A.D. 1000*, (Chicago, IL: University of Chicago Press).
- Mokyr, J.** (1990). *The Lever of Riches*, (New York: Oxford University Press).
- Mokyr, J.** (2002a). *The Gifts of Athena: Historical Origins of the Knowledge Economy*, (Princeton: Princeton University Press).
- Mokyr, J.** (2002b). “The Enduring Riddle of the European Miracle: the Enlightenment and the Industrial Revolution,” Northwestern University, unpublished manuscript.
- Mokyr, J.** (2005a). “Mobility, Creativity, and Technological Development: David Hume, Immanuel Kant and the Economic Development of Europe,” Northwestern University, unpublished manuscript.
- Mokyr, J.** (2005b). ““The Great Synergy: the European Enlightenment as a Factor in Modern Economic Growth,” Northwestern University, unpublished manuscript.
- Moore, R. I.** (1994). *The Origins of European Dissent*, originally published by Allen Lane, 1985, (Toronto, ON: University of Toronto Press).
- Peirce, Leslie, P.** (1993). *The Imperial Harem: Women and Sovereignty in the Ottoman Empire*, (Oxford: Oxford University Press).
- Polachek, S.** (1980), “Conflict and Trade”, *Journal of Conflict Resolution*, 24 (1), 57-78.
- Polachek, S., J. Robst and Y-C. Chang.** (1999), “Liberalism and Interdependence: Extending the Trade-Conflict Model”, *Journal of Peace Research*, 36 (4), 405-422.
- Richardson, L. F.** (1960). *Statistics of Deadly Quarrels*, (Pittsburgh, PA: The Boxwood Press).
- Rosenberg, N. and L. E. Birdzell, Jr.** (1986). *How the West Grew Rich: The Economic Transformation of the Industrial World*, (New York, NY: Basic Books).
- Shaw, S.** (1976). *History of the Ottoman Empire and Modern Turkey*, Vol. 1, (Cambridge: Cambridge University Press).
- Skaperdas, S.** (1992). “Cooperation, Conflict, and Power in the Absence of Property Rights,” *American Economic Review*, September, 82, 720-39.
- Skaperdas, S.** (2005). “The Market for Protection and the Origin of the State,” University of California at Irvine, unpublished manuscript, May.
- Spolaore, E. and R. Wacziarg.** (2006). “The Diffusion of Development,” Stanford University, unpublished manuscript.
- Temin, P.** (1997). “Is it Kosher to Talk about Culture?” *Journal of Economic History*, 57 (2), June, 267—87.
- Tilly, C.** (1992). *Coercion, Capital and European States: AD 990 - 1992 (Studies in Social Discontinuity)*, (New York, NY: Blackwell Publishers).

Wilkinson, D. (1980). *Deadly Quarrels: Lewis F. Richardson and the Statistical Study of War*, (Berkeley, CA: University of California Press).

Woods, F. A. and A. Baltzly. (1915). *Is War Diminishing? A Study of the Prevalence of War in Europe from 1450 to the Present Day*, (Boston, MA: Houghton Mifflin Co.).

Table 1: Ottoman Sultans & their Genealogical Links (1400 C. E. – 1700 C. E.)

Ottoman Sultans' Genealogical Chart				
Name	Period of Reign	Mother's Name	Genealogy	Alternative G.
Beyazid I	1389 – 1401	Gülçiçek Hatun	Greek	–
Mehmed I	1413 – 1421	Devlet Hatun	Turkish	–
Murad II	1421–1444, 1446–1451	Emine Hatun	Turkish	–
Mehmed II	1444–1446, 1451–1481	Hüma Hatun	Turkish	Serbian
Beyazid II	1481 – 1512	I. Gülbahar Hatun	Albanian	Serbian, French
Selim I	1512 – 1520	II. Gülbahar Hatun	Turkish	?
Süleyman I	1520 – 1566	Ayşe Hafsa Sultan	Turkish	Balkan
Selim II	1566 – 1574	Hürrem Sultan	Polish*	–
Murad III	1574 – 1595	Nurbanu Sultan	Venetian*	?
Mehmed III	1595 – 1603	Safiye Sultan	Venetian	–
Ahmed I	1603 – 1617	Handan Sultan	Greek	–
Mustafa I	1617–1618, 1622–1623	?	Albanian	–
Osman II	1618 – 1622	Mahfiruz H. S.	Serbian	–
Murad IV	1623 – 1640	Kösem Sultan	Bosnian	–
İbrahim I	1640 – 1648	”	”	–
Mehmed IV	1648 – 1687	Turhan Sultan	Russian	–
Süleyman II	1687 – 1691	Saliha D. Hatun	Serbian	–
Ahmed II	1691 – 1695	Hatice Muazzez S.	Polish*	–
Mustafa II	1695 – 1703	Emetullah R. G. S.	Venetian	–

Sources: Shaw (1976), Peirce (1993), <http://turkboard.com> & Turk Wikipedi. ? denotes some degree of uncertainty about genealogy; – indicates no alternative theories exist and * represents of Jewish decent.

Map 1: The Ottoman Empire circa 1300 C. E.



Map 2: The Ottoman Empire circa 1400 C. E.



Map 3: The Ottoman Empire circa 1500 C. E.



Map 4: The Ottoman Empire circa 1600 C. E.



Map 5: The Ottoman Empire circa 1700 C. E.



Table 2: Descriptive Statistics and the Correlation Matrix

1401 C. E. – 1700 C. E.			<i>The Correlation Matrix</i>								
<i>n</i> = 300	<i>Mean</i>	<i>St. Dev.</i>	<i>OTT</i>	<i>OTHR</i>	<i>AGOTTO</i>	<i>AGOTH</i>	<i>TMO</i>	<i>EMO</i>	<i>RLEN</i>	<i>AGE</i>	<i>OTP</i>
<i>OTTOMAN</i>	.310	.585	1	...	...	...	...	...	...	...	...
<i>OTHEROTT.</i>	.170	.426	.056	1	...	...	...	...	...	...	...
<i>AGOTTO</i>	1.37	1.10	.529	.043	1	...	...	...	...	...	...
<i>AGOTHER</i>	.507	.641	-.064	.589	-.051	1	...	...	...	...	...
<i>TURKMOM</i>	.383	.487	.169	.072	.239	-.046	1	...	...	...	...
<i>EUROMOM</i>	.423	.495	-.085	.007	-.052	.123	-.676	1	...	...	...
<i>R.LENGTH</i>	14.0	11.2	.067	-.069	.077	-.134	.273	-.272	1	...	...
<i>ASCENDAGE</i>	22.2	11.7	.044	.038	.078	-.067	.160	.306	-.027	1	...
<i>OTTOPOP</i>	16.5	9.00	-.092	.031	-.065	.119	-.573	.459	.017	-.173	1
<i>EUROPOP</i>	89.7	16.8	-.094	.039	-.093	.086	-.519	.403	.078	-.073	.951

1401 C. E. – 1700 C. E.			<i>The Correlation Matrix</i>							
<i>n</i> = 300	<i>Mean</i>	<i>St. Dev.</i>	<i>OTT</i>	<i>OTHR</i>	<i>TIME</i>	<i>CENT</i>	<i>BMOM</i>	<i>PMOM</i>	<i>VMOM</i>	<i>RMOM</i>
<i>OTTOMAN</i>	.310	.585	1	...	...	...	...	...	...	...
<i>OTHEROTT.</i>	.170	.426	.056	1	...	...	...	...	...	...
<i>TIME</i>	150.5	86.7	-.099	.028	1	...	...	...	...	...
<i>CENTURY</i>	1.00	.816	-.128	.056	.943	1	...	...	...	...
<i>BALKANMOM</i>	.270	.445	-.040	.004	.177	.265	1	...	...	...
<i>POLISHMOM</i>	.040	.196	.008	.038	.144	.083	-.124	1	...	...
<i>VENET.MOM</i>	.113	.318	-.082	-.019	.225	.102	-.217	-.073	1	...
<i>RUSMOM</i>	.130	.337	-.053	-.061	.525	.473	-.235	-.079	-.138	1
<i>TURKMOM</i>	.383	.487	.169	.071	-.520	-.508	-.480	-.161	-.282	-.305

Table 3: Ethnic Backgrounds & Ottomans' Newly-Initiated European Wars

Dependent Variable: No. of New Ottoman-European Wars per Year						
	OLS			Poisson Regressions		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>EUROMOM_t</i>	-.221* (.087)	-.234* (.096)	...	-.862* (.327)	-.995* (.427)	...
<i>TIME</i>	-.011* (.005)	-.011* (.006)	-.013* (.007)	-.047* (.022)	-.049 (.026)	-.061** (.032)
<i>CENTURY_t</i>	-.347* (.130)	-.331* (.133)	-.467* (.141)	-1.25* (.440)	-1.28* (.534)	-2.08* (.618)
<i>OTTOPOP_t</i>	.016 (.011)	.018 (.015)	.030* (.015)	.062 (.040)	.064 (.052)	.202* (.064)
<i>EUROPOP_t</i>	.065* (.028)	.061* (.031)	.065** (.035)	.266* (.117)	.275* (.139)	.282** (.159)
<i>OTTOMAN_{t-1}</i>	-.018 (.056)	-.018 (.056)	-.054 (.057)	-.073 (.160)	-.079 (.162)	-.187 (.167)
<i>ASCENDAGE_t</i>	...	.0016 (.0036)	.005 (.004)	...	.005 (.011)	.023* (.010)
<i>REIGNLENGTH_t</i>	...	.0002 (.003)	.0001 (.0035)	...	-.003 (.011)	-.004 (.011)
<i>LEPANTO_t</i>	...	.009 (.225)	.288 (.265)	...	.139 (.705)	.792 (.637)
<i>TURKMOM_t</i>	...	...	.300* (.132)	...	...	1.29** (.713)
<i>POLISHMOM_t</i>	...	...	.029 (.251)	...	...	.035 (1.02)
<i>VENETIANMOM_t</i>	...	...	-.362** (.197)	...	...	-1.71 (1.13)
<i>BALKANMOM_t</i>	...	...	.048 (.145)	...	...	.223 (.834)
<i>RUSMOM_t</i>	...	...	.337** (.198)	...	...	1.96** (1.13)
No. of obs.	299	299	299	299	299	299
<i>R</i> ²	.045	.045	.081	...	...	...

Note: * and ** respectively denote significance at the 5 percent and 10 percent levels. Dependent variable: no. of new Ottoman-European conflicts that began in a given year between 1401 - 1700. Source for the conflict data: Brecke (1999). Source for population data: McEvedy and Jones (1978).

Table 4: Ethnic Backgrounds & Ottomans' Cumulative European Wars

Dependent Variable: No. of All Ottoman-European Wars per Year						
	<i>OLS</i>			Poisson Regressions		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>EUROMOM_t</i>	-.265* (.109)	-.333* (.126)	...	-.202* (.092)	-.288* (.120)	...
<i>TIME</i>	.003 (.007)	.003 (.007)	.0038 (.0078)	.0045 (.006)	.0048 (.0067)	.0068 (.0061)
<i>CENTURY_t</i>	-.584* (.189)	-.584* (.189)	-.782* (.215)	-.526* (.141)	-.500* (.154)	-.801* (.226)
<i>OTTOPOP_t</i>	.047* (.015)	.041* (.020)	.050* (.020)	.046* (.012)	.052* (.017)	.076* (.020)
<i>EUROPOP_t</i>	-.015 (.035)	-.011 (.038)	-.023 (.038)	-.017 (.031)	-.023 (.034)	-.039 (.031)
<i>AGOTTO_{t-1}</i>	.642* (.047)	.637* (.048)	.576* (.052)	.394* (.032)	.395* (.032)	.335* (.037)
<i>ASCENDAGE_t</i>	...	.0040 (.0050)	.0059 (.0052)	...	.006 (.004)	.0088* (.0040)
<i>REIGNLENGTH_t</i>	...	.0006 (.004)	.0017 (.0047)	...	-.002 (.004)	-.0020 (.0038)
<i>LEPANTO_t</i>	...	.215 (.297)	.756* (.343)	...	.034 (.214)	.452** (.253)
<i>TURKMOM_t</i>	...	...	.604* (.193)	...	...	.746* (.273)
<i>POLISHMOM_t</i>	...	...	.325 (.339)	...	...	.173 (.370)
<i>VENETIANMOM_t</i>	...	...	-.374 (.299)	...	...	-.196 (.378)
<i>BALKANMOM_t</i>	...	...	.166 (.204)	...	...	.344 (.298)
<i>RUSMOM_t</i>	...	...	.365 (.267)	...	...	.482 (.322)
No. of obs.	299	299	299	299	299	299
<i>R</i> ²	.507	.508	.534	...	...	...

Note: * and ** respectively denote significance at the 5 percent and 10 percent levels. Dependent variable: no. of all Ottoman-European conflicts that began or continued in a given year between 1401 - 1700. Source for the conflict data: Brecke (1999). Source for population data: McEvedy and Jones (1978).

Table 5: Ethnic Backgrounds & Ottomans' Newly-Initiated non-European Wars

Dependent Variable: No. of New Ottoman-non-European Wars per Year						
	<i>OLS</i>			Poisson Regressions		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>EUROMOM_t</i>	-.091 (.071)	-.125 (.097)	...	-.536 (.419)	-.573 (.558)	...
<i>TIME</i>	-.011* (.005)	-.011* (.006)	-.010** (.006)	-.063* (.025)	-.051* (.025)	-.053 (.041)
<i>CENTURY_t</i>	.109 (.103)	.029 (.105)	.114 (.122)	.547 (.677)	.164 (.758)	.715 (.811)
<i>OTTOPOP_t</i>	-.004 (.009)	.008 (.012)	.003 (.012)	-.032 (.056)	.034 (.071)	.009 (.068)
<i>EUROPOP_t</i>	.057* (.023)	.057* (.026)	.054* (.030)	.323* (.142)	.281* (.140)	.269* (.209)
<i>OTHEROTT_{t-1}</i>	-.046 (.057)	-.067 (.055)	-.074 (.055)	-.283 (.389)	-.385 (.382)	-.429 (.385)
<i>ASCENDAGE_t</i>	...	-.0001 (.0029)	-.0021 (.0036)	...	-.0025 (.018)	-.016 (.021)
<i>REIGNLENGTH_t</i>	...	-.0057* (.0027)	-.0063* (.0029)	...	-.029** (.016)	-.031* (.016)
<i>LEPANTO_t</i>	...	-.203 (.165)	-.227 (.171)	...	-1.18 (.932)	-1.14 (.849)
<i>TURKMOM_t</i>	...	...	.174** (.094)	...	...	1.49 (1.13)
<i>POLISHMOM_t</i>	...	...	.150 (.213)	...	...	1.53 (1.53)
<i>VENETIANMOM_t</i>	...	...	.157 (.192)	...	...	1.50 (1.53)
<i>BALKANMOM_t</i>	...	...	.042 (.134)	...	...	.771 (1.33)
<i>RUSMOM_t</i>	...	...	.178 (.176)	...	...	1.39 (1.55)
No. of obs.	299	299	299	299	299	299
<i>R</i> ²	.032	.049	.057	...	...	...

Note: * and ** respectively denote significance at the 5 percent and 10 percent levels. Dependent variable: no. of new Ottoman-non-European conflicts that began in a given year between 1401 - 1700. Source for the conflict data: Brecke (1999). Source for population data: McEvedy and Jones (1978).

Table 6: Ethnic Backgrounds & Ottomans' Cumulative non-European Wars

Dependent Variable: No. of All Ottoman-non-European Wars per Year

	<i>OLS</i>			Poisson Regressions		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>EUROMOM_t</i>	-.050 (.095)	-.084 (.125)	...	-.113 (.252)	-.352 (.369)	...
<i>TIME</i>	-.013* (.005)	-.017* (.006)	-.019* (.007)	-.030* (.013)	-.035* (.014)	-.051* (.021)
<i>CENTURY_t</i>	.002 (.125)	-.125 (.124)	.015 (.141)	-.156 (.265)	-.703** (.397)	-.210 (.427)
<i>OTTOPOP_t</i>	.014 (.012)	.010 (.017)	.0035 (.018)	.025 (.024)	.040 (.041)	.032 (.040)
<i>EUROPOP_t</i>	.062* (.030)	.092* (.034)	.100* (.037)	.152* (.072)	.203* (.076)	.274* (.108)
<i>AGOTHER_{t-1}</i>	.541* (.060)	.513 (.062)	.494* (.065)	.801* (.097)	-.764* (.097)	.734* (.099)
<i>ASCENDAGE_t</i>	...	-.005 (.0037)	-.0079** (.0046)	...	-.010 (.008)	-.022** (.012)
<i>REIGNLENGTH_t</i>	...	-.006* (.003)	-.0078* (.0033)	...	-.020* (.010)	-.022* (.009)
<i>LEPANTO_t</i>	...	-.046 (.237)	-.245 (.242)	...	-.211 (.553)	-1.09** (.634)
<i>TURKMOM_t</i>	...	...	.062 (.132)	...	...	.109 (.415)
<i>POLISHMOM_t</i>	...	...	.067 (.324)	...	...	-.063 (.952)
<i>VENETIANMOM_t</i>	...	...	.321 (.268)	...	...	.922 (.862)
<i>BALKANMOM_t</i>	...	...	-.0043 (.203)	...	...	-.070 (.667)
<i>RUSMOM_t</i>	...	...	.182 (.232)	...	...	.759 (.762)
No. of obs.	299	299	299	299	299	299
<i>R</i> ²	.371	.383	.394	...	...	...

Note: * and ** respectively denote significance at the 5 percent and 10 percent levels. Dependent variable: no. of all Ottoman versus non-European conflicts that began or continued in a given year between 1401 - 1700. Source for the conflict data: Brecke (1999). Source for population data: McEvedy and Jones (1978).

Table 7: Specifications with Alternative Matrilineal Links I

Dependent Variable: No. of New Ottoman-European Wars per Year, (1), (3), (5);
 No. of New Ottoman-non-European Wars per Year, (2), (4), (6).

	Poisson Regressions					
	(1)	(2)	(3)	(4)	(5)	(6)
<i>TIME</i>	-.042* (.168)	-.041 (.036)	-.045** (.028)	-.044 (.416)	-.041 (.029)	-.048* (.019)
<i>CENTURY_t</i>	-1.42* (.463)	.746 (.668)	-1.54* (.511)	.786 (.737)	-1.01* (.449)	.042 (.379)
<i>OTTOPOP_t</i>	.179* (.067)	.005 (.069)	.198* (.066)	.031 (.076)	.197* (.068)	.020 (.041)
<i>EUROPOP_t</i>	.161 (.142)	.210 (.173)	.195 (.135)	.236 (.174)	.107 (.139)	.244* (.096)
<i>DEPVAR_{t-1}</i>	-.127 (.168)	-.395 (.382)	-.154 (.166)	-.448 (.416)	-.152 (.168)	.746* (.103)
<i>ASCENDAGE_t</i>	.016 (.013)	-.021 (.022)	.018 (.011)	-.024 (.021)	.027* (.014)	-.018 (.011)
<i>REIGNLENGTH_t</i>	.007 (.011)	-.031* (.016)	.0045 (.106)	-.031** (.016)	.011 (.011)	-.020* (.008)
<i>LEPANTO_t</i>	.235 (.668)	-1.73* (.810)	-.153 (.779)	-2.31* (.854)	.557 (.720)	-1.00** (.585)
<i>TURKMOM_t</i>	1.35** (.738)	1.46 (1.13)	1.26** (.725)	1.48 (1.15)	1.18 (.740)	-.112 (.414)
<i>POLISHMOM_t</i>	1.07 (.978)	1.83 (1.44)	.431 (1.12)	1.21 (1.65)	1.49 (.969)	.187 (.871)
<i>VENETIANMOM_t</i>	-.414 (1.02)	2.12 (1.38)	-.940 (1.13)	1.70 (1.59)	-.038 (1.00)	1.23* (.602)
<i>BALKANMOM_t</i>	1.32** (.748)	1.42 (1.17)	.735 (.839)	.842 (1.35)	1.81* (.738)	.237 (.443)
<i>RUSMOM_t</i>	2.47* (1.05)	1.67 (1.49)	1.93** (1.08)	1.11 (1.67)	3.22* (1.09)	1.03 (.717)
No. of obs.	299	299	299	299	299	299

Note: * and ** respectively denote significance at the 5 percent and 10 percent levels. Cols. (1), (3) and (5) dependent variable: no. of new Ottoman-European conflicts that began in a given year between 1401 - 1700. Cols. (2), (4) and (6) dependent variable: no. of new Ottoman-European conflicts that began in a given year between 1401 - 1700. Source for the conflict data: Brecke (1999). Source for population data: McEvedy and Jones (1978).

Table 8: Specifications with Alternative Matrilineal Links II

Dependent Variable: No. of All Ottoman-European Wars per Year, (1), (3), (5);
 No. of All Ottoman-non-European Wars per Year, (2), (4), (6).

	Poisson Regressions					
	(1)	(2)	(3)	(4)	(5)	(6)
<i>TIME</i>	.013* (.006)	-.046* (.019)	.009 (.006)	-.049* (.020)	.013* (.006)	-.132* (.036)
<i>CENTURY_t</i>	-.502* (.186)	.011 (.369)	-.686* (.190)	-.183 (.392)	-.432* (.186)	-1.48** (.813)
<i>OTTOPOP_t</i>	.070* (.019)	.037 (.042)	.085* (.020)	.043 (.049)	.065* (.019)	.220* (.095)
<i>EUROPOP_t</i>	-.083* (.031)	.240* (.096)	-.049 (.031)	.268* (.100)	-.096* (.032)	.555* (.174)
<i>DEPVAR_{t-1}</i>	.349* (.035)	.747* (.099)	.337* (.036)	.735* (.099)	.332* (.037)	-.255 (.170)
<i>ASCENDAGE_t</i>	.0079** (.0045)	-.022** (.011)	.0075* (.0039)	-.023* (.011)	.012* (.005)	.049* (.014)
<i>REIGNLENGTH_t</i>	.0028 (.0038)	-.021* (.009)	-.0001 (.0035)	-.022 (.009)	.004 (.004)	.005 (.010)
<i>LEPANTO_t</i>	.099 (.243)	-1.53* (.676)	-.026 (.243)	-1.43* (.659)	.430** (.261)	.733 (.839)
<i>TURKMOM_t</i>	.658* (.280)	-.028 (.409)	.708* (.274)	.114 (.412)	.600* (.276)	1.11** (.599)
<i>POLISHMOM_t</i>	.631* (.350)	-.044 (.860)	.210 (.366)	-.191 (1.07)	.770* (.354)	-.618 (1.21)
<i>VENETIANMOM_t</i>	.359 (.334)	1.28* (.635)	-.080 (.360)	.992 (.752)	.456 (.334)	1.31** (.891)
<i>BALKANMOM_t</i>	.801* (.281)	.201 (.433)	.359 (.304)	-.061 (.626)	.971* (.292)	.685 (.793)
<i>RUSMOM_t</i>	.789* (.316)	.928 (.697)	.405 (.327)	.725 (.789)	1.02* (.336)	3.19* (1.03)
No. of obs.	299	299	299	299	299	299

Note: * and ** respectively denote significance at the 5 percent and 10 percent levels. Cols. (1), (3) and (5) dependent variable: no. of all Ottoman-European conflicts that began or continued in a given year between 1401 - 1700. Cols. (2), (4) and (6) dependent variable: no. of all Ottoman-European conflicts that began or continued in a given year between 1401 - 1700. Source for the conflict data: Brecke (1999). Source for population data: McEvedy and Jones (1978).

Table 9: Specifications with Shorter Time Intervals

Dependent Variable: No. of New Ottoman-European Wars per Year, 1451 - 1700, (1) - (3);
 No. of New Ottoman-European Wars per Year, 1451 - 1650, (4) - (6).

	Poisson Regressions					
	(1)	(2)	(3)	(4)	(5)	(6)
$EUROMOM_t$	-.724* (.326)	-.761** (.456)	...	-.600** (.344)	-.604 (.432)	...
$TIME$	-.032 (.023)	-.038** (.023)	-.057** (.035)	-.054 (.045)	-.046 (.037)	-.036 (.035)
$CENTURY_t$	-.765** (.466)	-1.15** (.620)	-1.72* (.644)	-.864 (.552)	-1.18* (.607)	-1.73* (.710)
$OTTOPOP_t$	.090* (.044)	.093 (.059)	.198* (.068)	.073 (.088)	.063 (.128)	.121 (.127)
$EUROPOP_t$	.141 (.128)	.195 (.129)	.240 (.175)	.261 (.213)	.254 (.178)	.185 (.171)
$OTTOMAN_{t-1}$	-.167 (.181)	-.198 (.187)	-.253 (.187)	-.116 (.180)	-.138 (.184)	-.195 (.185)
$ASCENDAGE_t$	...	-.017 (.019)	.014 (.017)	...	-.017 (.020)	.0027 (.019)
$REIGNLENGTH_t$	...	-.014 (.013)	.0044 (.014)	...	-.012 (.013)	-.007 (.015)
$LEPANTO_t$	...	-.314 (.924)	.697 (.817)	...	-.306 (1.09)	.716 (.831)
$TURKMOM_t$	...	...	-.728 (.951)	...	...	.661 (.740)
$POLISHMOM_t$	...	...	-1.63** (.962)	...	...	-1.43 (.876)
$VENETIANMOM_t$	...	...	-3.37* (1.11)	...	...	-1.72* (.731)
$BALKANMOM_t$	...	...	-1.67** (.993)	...	...	-.235 (.660)
$RUSMOM_t$	...	...	-11.9* (1.68)	...	...	-20.5* (1.32)
No. of obs.	250	250	250	200	200	200

Note: * and ** respectively denote significance at the 5 percent and 10 percent levels. Cols. (1) through (3) dependent variable: no. of new Ottoman-European conflicts that began in a given year between 1451 - 1700. Cols. (4) through (6) dependent variable: no. of new Ottoman-European conflicts that began in a given year between 1451 - 1650. Source for the conflict data: Brecke (1999). Source for population data: McEvedy and Jones (1978).

Table 10: Explaining the Average Duration of Ottoman Conflicts

Dependent Variable: Average Length of New Ottoman-European Wars per Year (in months), (1) - (3);
 Average Length of No. of New Ottoman-non-European Wars per Year (in months), (4) - (6).

	Poisson Regressions					
	(1)	(2)	(3)	(4)	(5)	(6)
<i>EUROMOM_t</i>	.803* (.407)	.859* (.420)	...	.182 (.253)	.198 (.287)	...
<i>TIME</i>	.033 (.026)	.036 (.027)	.502* (.241)	-.007 (.017)	-.013 (.020)	-.031 (.029)
<i>CENTURY_t</i>	-.109 (.496)	-.345 (.567)	-1.33 (2.56)	-.805 (.556)	-.338 (.514)	.120* (.538)
<i>OTTOPOP_t</i>	.011 (.055)	.093 (.079)	-.888** (.521)	.035 (.052)	-.037 (.047)	-.100* (.048)
<i>EUROPOP_t</i>	-.170 (.146)	-.181 (.162)	-1.90** (1.11)	.059 (.101)	.075 (.117)	.197 (.149)
<i>DEPVAR_{t-1}</i>	-.061* (.018)	-.067* (.020)	-.438* (.168)	-.558* (.217)	-.430* (.212)	-.389* (.199)
<i>ASCENDAGE_t</i>	...	-.011 (.014)	-.132* (.052)	...	.017 (.015)	-.017 (.014)
<i>REIGNLENGTH_t</i>	...	-.008 (.012)	-.056 (.053)	...	.021** (.012)	.010 (.012)
<i>LEPANTO_t</i>	...	-.537 (.508)	1.56 (4.19)	...	1.28** (.731)	-.010 (.916)
<i>TURKMOM_t</i>	...	...	-2.74 (3.47)	...	...	.596 (.475)
<i>POLISHMOM_t</i>	...	...	2.36 (4.79)	...	...	1.28** (.711)
<i>VENETIANMOM_t</i>	...	...	1.86 (5.19)	...	...	2.31* (.721)
<i>BALKANMOM_t</i>	...	...	-.593 (4.03)	...	...	.686 (.484)
<i>RUSMOM_t</i>	...	...	-18.6* (8.24)	...	...	.992* (.618)
No. of obs.	76	76	76	46	46	46

Note: * and ** respectively denote significance at the 5 percent and 10 percent levels. Cols. (1) through (3) dependent variable: average duration in months of new Ottoman-European conflicts that began in a given year between 1401 - 1700. Cols. (4) through (6) dependent variable: average duration of new Ottoman-non-European conflicts that began in a given year between 1401 - 1700. Source for the conflict data: Brecke (1999). Source for population data: McEvedy and Jones (1978).

Table 11: Building the Private Quarter of Harem & Queen Mothers' Role

Dependent Variable: No. of New Ottoman-European Wars per Year, (1) - (2);
 No. of New Ottoman-non-European Wars per Year, (3) - (4).

	Poisson Regressions			
	(1)	(2)	(5)	(6)
<i>EUROMOM_t</i>	-.873* (.408)	-.887* (.414)	-1.02 (.666)	-.829 (.697)
<i>HAREM_t</i>	.985 (.724)	1.20 (.769)	-.282 (.991)	-.259 (1.16)
<i>HAREM_t * EU.MOM_t</i>	-.668 (.642)	-.736 (.669)	1.10 (.886)	.760 (.934)
<i>TIME</i>	-.072* (.030)	-.071* (.033)	-.052** (.031)	-.043 (.030)
<i>CENTURY_t</i>	-1.27* (.444)	-1.15* (.515)	.694 (.735)	.225 (.870)
<i>OTTOPOP_t</i>	.049 (.055)	.053 (.064)	-.072 (.075)	.012 (.098)
<i>EUROPOP_t</i>	.384* (.154)	.369* (.167)	.278 (.174)	.245 (.157)
<i>DEPVAR_{t-1}</i>	-.095 (.164)	-.100 (.168)	-.323* (.386)	-.395 (.378)
<i>ASCENDAGE_t</i>	...	.008 (.011)	...	-.006 (.019)
<i>REIGNLENGTH_t</i>	...	.002 (.012)	...	-.027 (.021)
<i>LEPANTO_t</i>	...	-.076 (.677)	...	-1.28 (.934)
No. of obs.	299	299	299	299

Note: * and ** respectively denote significance at the 5 percent and 10 percent levels. Dependent variable in cols. (1) and (2): no. of new Ottoman-European conflicts that began in a given year between 1401 - 1700. Dependent variable in cols. (3) and (4): no. of new Ottoman-non-European conflicts that began in a given year between 1401 - 1700. Source for the conflict data: Brecke (1999). Source for population data: McEvedy and Jones (1978).

Table 12: Timing of Conquests & Queen Mothers' Role

Dependent Variable: No. of New Ottoman-European Wars per Year, (1) - (2);
 No. of New Ottoman-non-European Wars per Year, (3) - (4).

	Poisson Regressions			
	(1)	(2)	(5)	(6)
<i>TIME</i>	-.056 (.036)	.061** (.032)	-.061 (.050)	-.055 (.045)
<i>CENTURY_t</i>	-1.72* (.534)	-2.02* (.626)	.816 (.707)	.334 (.872)
<i>OTTOPOP_t</i>	.173* (.060)	.203* (.064)	-.013 (.050)	-.001 (.075)
<i>EUROPOP_t</i>	.267 (.174)	.282** (.158)	.290 (.246)	.284 (.231)
<i>DEPVAR_{t-1}</i>	-.159 (.164)	-.187 (.167)	-.334 (.376)	-.416 (.380)
<i>ASCENDAGE_t</i>	...	.023* (.009)	...	-.014 (.023)
<i>REIGNLENGTH_t</i>	...	-.004 (.011)	...	-.028** (.016)
<i>LEPANTO_t</i>	...	.664 (.876)	...	-.331 (1.00)
<i>TURKMOM_t</i>	1.40** (.729)	1.29** (.718)	.880 (1.07)	1.21 (1.14)
<i>POLISHMOM_t</i>	.953 (.989)	.117 (1.03)	.866 (1.29)	.916 (1.54)
<i>VENETIANMOM_t</i>	-.604 1.01	-1.57 (1.21)	.303 (1.27)	.515 (1.51)
<i>BALKANMOM_t</i>	.744 (.830)	.306 (.876)	-.141 (1.17)	.016 (1.30)
<i>BALKANINDP_t</i>	.111 (.388)	.103 (.544)	-.383 (.619)	-.653 (.890)
<i>B.MOM_t * B.INDP_t</i>	-19.6* (1.12)	-24.6* (1.18)	2.96* (.611)	2.66* (.881)
<i>RUSMOM_t</i>	2.07** (1.20)	2.04** (1.15)	.472 (1.49)	.667 (1.64)
No. of obs.	299	299	299	299

Note: * and ** respectively denote significance at the 5 percent and 10 percent levels. Dependent variable in cols. (1) and (2): no. of new Ottoman-European conflicts that began in a given year between 1401 - 1700. Dependent variable in cols. (3) and (4): no. of new Ottoman-non-European conflicts that began in a given year between 1401 - 1700. Source for the conflict data: Brecke (1999). Source for population data: McEvedy and Jones (1978).