

# Keeping while Giving

## The Perpetuation of Inequalities through the Islamic Waqf

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### Abstract

In premodern Western Europe, private philanthropy, including charity, never exceeded one percent of private wealth. In principle, this share could have been greater in other regions, for instance, in the Middle East, where Islamic institutions regulated economic life. In the premodern Middle East, privately endowed trusts known as waqfs used their income partly to finance social services. Because they came to control massive resources, waqfs might have intermediated substantial redistribution. Using an original data set of Istanbul waqf deeds from 1453 to 1923, this paper shows that “regular waqfs”—waqfs ordinarily founded by people outside the sultan’s close circle—served mainly to shelter wealth and to finance prayers for the salvation of founders and their kin. Supplying temporal social services was among their minor functions; and seldom did these services target the poor. Records of waqf functions and expenditures indicate that they could not have alleviated poverty appreciably. In providing material security to prosperous families, regular waqfs perpetuated material inequalities. Among the services that they funded commonly were prayers for expiating the sins of waqf founders and their families. Hence, the intended effects of regular waqfs included the extension of temporal inequalities into the afterworld.

*JEL codes:* N95, G51, P50, O53, K11

*Keywords:* waqf, inequality, elite, redistribution, property rights, wealth shelter, philanthropy, charity, social service, religion, afterlife, Islam, Islamic law, Istanbul, Ottoman Empire

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## 1. Introduction

Charity, which entails assistance to the poor, ill, or needy, loomed large in the legitimation of premodern societies. But whether the ideals of spreading wealth and helping the downtrodden found expression in the practices of the well-off has long been debated. A common finding on preindustrial wealth redistribution in Western Europe, whose transfer patterns have been studied most extensively, is that the rich showed little interest in reducing poverty, let alone in eliminating it. Private giving never exceeded one percent of private wealth. Moreover, generally it involved transfers within socioeconomic groups rather than across them—philanthropy but not charity (van Bavel and Rijpma 2016; Lindert 2014; Rijpma 2012, chap. 6; Geremek 1994, chaps. 1-3). Though the Church counseled giving to the poor, it also helped the rich rationalize stinginess. Instructing the poor to accept their deprivations as God's will, it categorized many, if not most, as “undeserving”; and it justified withholding alms from beggars as essential to preserving the social order (Muers 2021; Pullan 2005). Institutional help to the poor gradually gained significance through corporations, such as guilds and chartered cities, and state initiatives, such as England's Poor Laws of 1597-98. But the foundations of a broad economic safety net were laid only in the 1880s, with the expansion of Germany's welfare programs (Alfani and Di Tullio 2019; Ştefan 2015; Ben-Amos 2008, chap. 3; Hennock 2007; Lindert 1998).

In Western Europe, then, charity became economically significant only through collective action. Whereas personal transfers had hardly dented poverty, transfers carried out by socially managed entities, whether private organizations or state agencies, did reduce destitution. These patterns pose a puzzle with respect to the premodern Middle East, where, through the 1700s, living standards were comparable to those of Western Europe. Until its modernization drive of the 1800s, the Middle East, North Africa, and the Balkans (“Middle East” for brevity) provided charity and philanthropy (“benevolence” as an umbrella term covering both) through the perpetual Islamic trust known as the waqf. Under Islamic law, a waqf's endowment could not involve resource pooling. Its founder had to be a single property-owning individual, whose unmodifiable deed governed all expenses during and beyond his or her lifetime. Yet a waqf's benevolence was not strictly personal. Once established, an indefinitely long sequence of single caretakers executed the deed, often with the help of employees. Thus, its stipulated services were delivered through a collectivity. In essence, relative to the two patterns observed in Western Europe—personal benevolence through individual initiatives and collective benevolence through

private or public organizations—the Middle East presented a “third way,” personal benevolence through perpetual organizations that their founders ran from the grave.

This paper’s objective is to explore the extent to which the Middle East’s distinct instrument of benevolence, the waqf, redistributed resources from the wealthy to the poor. For reasons just sketched, the widely investigated redistribution patterns of premodern Europe leave it unclear what to expect for the premodern Middle East. For more than a millennium, Islamic teachings have portrayed the waqf as an instrument of philanthropy, including abundant charity (Moumtaz 2021, chap. 5). Modern waqf scholarship generally takes this historical characterization at face value. It tends to view philanthropy, if not charity specifically, as the Islamic waqf’s main function. However, the functions chosen by a waqf’s founder could include self-support, family support, and social services meant to benefit mainly, if not exclusively, constituencies that were neither poor nor otherwise disadvantaged materially. Moreover, the waqf’s range of social services transcended ones geared to worldly life. In line with Abrahamic teachings about existence after death, they could be aimed at shaping outcomes in the unseen otherworld. How waqf founders divided endowment revenue among various constituencies and functions are empirical matters that have not been addressed comprehensively using statistically representative data. Patterns might have varied, of course, across founder types and over time. If nothing else, intertemporal changes in the opportunity cost of establishing a new waqf or in the menu of available investment instruments could have influenced the forms and magnitudes of charity.

There are several grounds for doubting that the waqf ever became a major instrument of charity. Firstly, although premodern Middle Eastern cities benefited disproportionately from waqf services, none was free of chronic poverty. Second, whatever meager aid went to the urban poor, the benefactors were mainly wealthier acquaintances; rarely were the poor assisted through impersonal institutions. Third, until at least the 1800s, Middle Eastern elites considered mass poverty an irreducible fact of life rather than a curable social ill. Fourth, wealthy Muslims often used the waqf also to secure assets for themselves and their kin. Finally, at least to Muslim Middle Easterners, orphanages, homes for the elderly, and homeless shelters were practically unknown until the mid-1800s; and, when they emerged, the vehicle of delivery was not the Islamic waqf. All these patterns suggest that waqf’s role as a redistribution instrument has been exaggerated. Might the popular narratives about its functions be misleading? This paper presents

evidence that waqfs founded by people outside the Sultan's close circle of family and top aides benefited primarily their founders. Even more strikingly, it shows that very few of these waqfs assisted the poor. To use a term coined by Weiner (1992), they enabled the wealthy to keep while giving.

Strictly speaking, what we are calling a waqf is an Islamic waqf—a trust founded under Islamic law. It is distinct from the modern waqf, which is organizationally more complex as well as self-governing (Bazzi, Koehler-Derrick, and Marx 2020, pp. 857-61; Kuran 2016, pp. 444-52). Unless otherwise noted, “waqf” will stand as a shorthand for “Islamic waqf.” A waqf's deed stipulated how its endowment would be used to provide one or more social services. Typically, the endowed assets were exempt from taxation and immune to expropriation (Singer 2002, pp. 1-37).<sup>1</sup> Up to the 1800s, in areas where Islamic law was operative, the waqf was the main vehicle for providing urban services. Under the rubric of benevolence (*khayr* in Arabic, *hayır* in Turkish), it played a major role in the Middle East's economic and political development.<sup>2</sup> The waqf's historical significance is evident in the enormity of its asset base. Around 1800, waqfs owned between one-quarter and one-third of all real estate in many parts of the region.<sup>3</sup>

Benevolence refers to the act of doing good. Of its two forms central to this study, philanthropy is socially beneficial giving generally, and charity is generosity targeted specifically at the poor, ill, or destitute. Waqf scholarship recognizes wealth sheltering for the benefit of the founder and his or her kin as an additional, but usually secondary, motive.<sup>4</sup> However, in devoting the lion's share of attention to benevolence, and especially to charity, it effectively treats the waqf as a social safety net.<sup>5</sup> Some researchers go so far as to assert that the waqf dampened inequality (Genç 2014, Khan 2015, Abdur-Rashid 2019). Yet, efforts to validate such claims

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<sup>1</sup> For surveys of waqf studies, see Moumtaz (2018) and Singer (2018).

<sup>2</sup> On the mechanisms by which Islamic institutions, including the waqf, contributed to turning the Middle East into an underdeveloped region (Bisin, Rubin, Seror, and Verdier 2024, Rubin 2017, Blaydes and Chaney 2013, Kuran 2011).

<sup>3</sup> Kuran (2016, table 1) lists the available estimates.

<sup>4</sup> Following a long line of premodern legal interpreters, some modern waqf scholars treat sheltering wealth for one's family as a type of philanthropy on the grounds that assisting kin is itself a social service (Moumtaz 2021, chap. 4; Doumani 2017, chap. 4). Whatever the doctrinal considerations, the distinction made here serves an analytic purpose in exploring the waqf's distributional effects.

<sup>5</sup> Moumtaz (2021, chap. 4), Boyar and Fleet (2010, chap. 4). Even if wealth sheltering were the waqf's dominant initial function, many scholars suggest, every waqf founding amounted to an act of charity, if only because, by law, its ultimate contingent beneficiary was the poor (Hoexter 2003, pp. 148-51; Singer 2002, pp. 25-32).

rarely go beyond descriptive case studies. The few attempts to test it quantitatively through Middle Eastern data fall short analytically.<sup>6</sup>

A problem that afflicts much pertinent research is the conflation of the Islamic waqf's two main types, the "state waqf" with the "regular waqf." State waqfs were founded by rulers, their families, top bureaucrats, and high military commanders to provide services that modern cities, including those of the Middle East, supply through local government and private utilities. Most state waqfs provided social services, though often in ways partial to elites; and many were eventually captured by influential families that diverted their resources to personal uses (Barnes 1987, chap. 4). Whatever the specifics of state waqfs, they were unrepresentative of waqfs generally. To draw general conclusions about waqfs from highly prominent state waqfs is akin to treating Apple and Google as typical American firms of the 2020s. More than 97% of all waqfs were regular waqfs whose founders rarely belonged to the ruling circle.<sup>7</sup> Charity was among their minor functions, our data reveal. Regular waqfs had two principal purposes: to shelter wealth for temporal comfort and to expiate sins for the salvation of founders and their kin.

Our findings draw on an original data set of waqf deeds registered in Istanbul's Islamic courts from 1453, when Istanbul became an Ottoman city, to the founding of the Turkish Republic in 1923. The deeds contain information on the founders, assets, functions, and beneficiaries of Istanbul's regular waqfs. During most of the analyzed half-millennium, Istanbul was the leading commercial center of the Eastern Mediterranean and the capital of its most powerful state. With local variations, Istanbul's waqf rules were enforced across the Middle East.<sup>8</sup> Our analysis thus yields insights into premodern redistribution in an area spanning more than 30 modern states.

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<sup>6</sup> Quantitative studies include Yediyıldız (1990, table 1), who studies 324 waqfs founded within the borders of modern Turkey during the 1700s, and Öztürk (1995, table 1), who studies 60 from the 1800s. These works do not use modern sampling methods, and their interpretations rest on raw data alone. Using modern sampling methods, Özvar and Yıldırım (2022) disaggregate the founders of 4500 cash waqfs by gender and, for male founders, by whether they were a state official, over the 1550-1900 period. But they do not perform a multivariate analysis of the trends.

<sup>7</sup> According to a census of state waqfs, 447 state waqfs were founded in Istanbul from 1453 to 1923 (*İstanbul'da Padişahlar, Sultanlar ve Paşalara Ait Şahsiyet Kayıt Defteri*). During the same period, around 17,500 regular waqfs were established (see note 23). On state waqfs generally, see Kunt (1994) and Orbay (2017).

<sup>8</sup> Layish (1983) points to differences between the waqf procedures accepted by the Maliki school of Islamic law, which has been prevalent in North Africa and parts of Arabia, and the other three major schools. He also shows that the differences did not prevent wealth sheltering in 18th to early 20th century Tangier. Blaydes (2019) confirms the latter finding for Medieval Egypt and Blackman (2019) for Tunisia under French rule.

Certain regular waqfs served inherently religious functions. They, too, benefited mostly the founder and his or her family. The pro-founder biases of regular waqfs are particularly salient in waqf-financed prayers meant to cleanse souls and improve afterlives. The stipulated beneficiaries of such prayers, almost always financed in perpetuity, were usually the founders themselves and their families. As with perpetual prayers financed through medieval European monasteries (White 1988, pp. 34-36), rarely did they include the poor.

The analysis ahead disaggregates founders into demographic groups differing in social status, vulnerability to expropriation, and legal rights. In line with economic logic, these groups varied systematically in their uses of the waqf. For instance, economically vulnerable groups, such as converts to Islam, were especially likely to use the waqf as a vehicle for sheltering personal wealth. Contrary to popular claims, regular waqfs did not become less charitable with the launching of Westernizing economic reforms in the 1800s; if anything, they became more likely to finance social services and more likely to serve the poor. This finding validates for the Middle East a pattern detected in the broad literature on the rise in impersonal pro-sociality and generalized generosity observed in other contexts during the economic modernization process. As Henrich (2020, chaps. 9, 11), Johnson and Koyama (2019, chaps. 12-13), and Greif and Tabellini (2017) have shown through complementary analyses, economic modernization involves a transition from mainly kin-based exchanges to impersonal exchanges, in other words, to exchanges conducted mainly among mutual strangers. Accordingly, generalized charity—assistance to disadvantaged people unknown to the donor personally—is more common in today’s industrialized economies than in any premodern economy. Consider the Ultimatum Game, in which two randomly paired individuals must divide a sum of money; the first player must make an offer to the second between 0 and the full sum; if the second accepts, the players get the proposed amounts; and if the second player rejects, neither side gets anything. In advanced modern economies, most offers equal half the sum, and offers below 40% are commonly rejected. By contrast, where personal exchange remains the norm, the mean offer is about 26% of the stake, and almost all low offers are accepted (Henrich and Smith 2004). Although we cannot have the residents of premodern Istanbul play the Ultimatum Game, modern comparative studies suggest that they would have played more selfishly than their descendants living in the modernizing city of the late 1800s and certainly of modern Istanbul’s residents in the 2000s.

About one-third of Istanbul's regular waqf founders were women, which aligns with gender ratios observed in other economic contexts in premodern Middle Eastern history (Doumani 2017, chaps. 4-7; Özgüleş 2017; Deguilhem 2003; Meriwether 1999, chap. 5). In reconfirming the gender distribution of aggregate wealth, we offer two refinements. First, waqf functions differed systematically by the founder's gender and social status; low-status women were especially inclined to use waqfs for economic security. Second, perhaps because women had more property in the Middle East than in Europe, but also because women tend to be more religious than men, they were disproportionately likely to finance perpetual prayers. Such variations will strike a familiar chord among readers versed in the economics of religion, which explores how internalized religious duties compete with other personal goals (Bentzen and Gokmen 2023, McCleary and Barro 2019, Iyer 2016, Iannaccone 1998).<sup>9</sup>

The misperception that waqfs served mainly as instruments of benevolence is implicit in the view that Middle Eastern modernizers destroyed an egalitarian institution, sometimes in collusion with European colonizers (Baqtayan, Ariffin, Mohsin, and Mahdzir 2018; Çizakça 2018, pp. 86-90). Like indigenous reformers, colonizers and foreign companies expropriated waqfs on a large scale (Blackman 2019, sect. 2.3; Fischer 2003, pp. 117-19; Powers 1989). But the systems they dismantled through modernization or colonization consisted mostly of waqfs serving the privileged; and disproportionate shares of their main beneficiaries were clerics whose duties included rationalizing entrenched inequalities in religious terms (Kuru 2019; Rubin 2017, Platteau 2017). Clerics earned rents from waqfs through their supervisory duties. Whatever the harms of colonial and post-colonial policies, the shrinking of waqf assets did not necessarily hurt the downtrodden, whose stakes in waqfs were minimal.

The paper is structured as follows. Section 2 provides historical background and introduces an analytically useful typology. Section 3 reviews the relevant controversies and poses new questions. Data are described and master trends presented in Section 4. Sections 5 and 6 explore, respectively, the functions of waqfs and their founders. Statistical analysis of functions and founders follows in Section 7. Section 8 explores the otherworldly investments that waqf founders made by endowing prayers. The amounts invested in various functions are investigated

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<sup>9</sup> Contributions to this field show also that practices of Islam lend themselves to rational explanations (Saleh 2018, Binzel and Carvalho 2017, Campante and Yanagizawa-Drott 2015, Iyigun 2013).

in Section 9. Finally, Section 10 draws together the paper's main findings and presents further implications.

## **2. Historical Evolution of the Waqf**

The waqf entered the Islamic institutional complex a century after the birth of Islam, around 750 CE.<sup>10</sup> The apparent impetus was the material insecurity of high state officials, who were paid mostly through land grants. These officials lived in fear of losing favor and getting expropriated. Like materially insecure people in other contexts, they sought a wealth shelter. What emerged was an Islamic variant of the trust, an institution through which the Persians and Romans had been financing temples. Unlike these other variants, the waqf could finance any function allowed under Islamic law. Legitimate functions included the founder's own material security as well as his or her posthumous comfort. Hence, in providing social services, founders could also shelter wealth for their own benefit, whether temporal consumption or a pleasant afterlife. The implicit quid pro quo suited the recipients of waqf-supplied social services. It also benefited Muslim rulers, who earned legitimacy in the eyes of their subjects—elites through conditional property rights and the masses through free amenities financed by the rich.

A caretaker would manage any given waqf's inviolable endowment according to the founder's instructions. The inviolability provision was made credible by broadening beyond temples a legal rule transplanted from Roman and Persian domains: the sacredness of endowed property. All waqf assets would be considered sacred, not just those serving inherently religious purposes. This broadened sacredness principle made rulers reluctant to expropriate waqf property, lest they appear impious. It also incentivized conversions of private property into waqfs.<sup>11</sup>

Only a natural person could found a waqf. Because Islamic law admits no concept of corporation, a collective entity would have lacked legal standing anyway. The deed could stipulate contingencies under which the caretaker would have discretion over specific matters. Islamic courts were expected to enforce the deed terms, as necessary through financial audits. In

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<sup>10</sup> For details on this section's information, see Barnes (1987), Kuran (2011, chaps. 6-7), and Werner (2015, chaps. 1-4).

<sup>11</sup> In their capacity as waqf founders, sultans and their inner circles benefited from the sacredness principle themselves. Families, including the ruling dynasty, could be divided on priorities. Hence, endowing assets insured against rifts in the family. Besides, in the event a dynasty was toppled, its endowed assets were relatively more secure than its private properties.

principle, and usually in practice as well, a waqf's asset portfolio was fixed. When they occurred, modifications usually involved legal ruses that enriched caretakers as well as supervising judges.

### *2.1 Diversity of uses*

As Islamic law attained its classical form in the 900s, sheltering private wealth remained an accepted waqf function.<sup>12</sup> But wealth sheltering was not meant to be, nor did it ever become, the waqf's sole purpose. Rulers expected state officials to help in keeping the masses happy through benevolent initiatives. This expectation was the Islamic analog of *noblesse oblige*, the French aristocratic norm that has had variants around the globe (Patzold 2010; Brodman 2009, Wong 2000).<sup>13</sup> Indeed, high-ranking officials of Muslim dynasties established waqfs not only to shelter wealth but also to finance mosques, water fountains, inns for merchants, schools, public kitchens, and sundry other structures that legitimized the prevailing order. A single waqf could serve multiple purposes, such as material security for the founder, several forms of temporal philanthropy, and perpetual prayers for the souls of kin.

In old Middle Eastern cities, most surviving structures dating from their periods under Islamic law—typically from the start of Muslim rule to the legal modernization drives of the late 1800s or early 1900s—were financed through waqfs. The major exceptions are palaces and military structures, which rulers generally financed themselves.

### *2.2 Rise and fall of the Islamic waqf*

During the millennium following the waqf's emergence as a core Islamic institution, it absorbed vast resources. Because endowed property was meant to remain inviolable forever, in cities governed under Islamic law the share of wealth immobilized in waqfs rose over time (Blaydes 2019; Boyar and Fleet 2016, chap. 4; Leeuwen 1999, chap. 6). Waqf expropriation was rare until the 1700s. When it took place, the pretext was usually that the founder had acquired the endowed assets illegally; and the confiscation could get reversed in response to protests (Argun 2022; Nizri 2014, chap. 5; Behrens-Abouseif 2002, pp. 64-66; Yüksel 1992; Baer 1969, chap. 5).

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<sup>12</sup> A minority of legal experts objected to the waqf's wealth sheltering function on the pretext that it allowed the circumvention of Quran-based inheritance rules. The Islamic inheritance system fragmented estates by stipulating shares for many surviving relatives, male and female (Abbasi 2012, p. 148). The consequent risk of wealth fragmentation was avoided by placing assets in a waqf to be managed by successive caretakers. Many jurists accommodated this practice, reasoning that when the family line ended the sheltered resources would go to the poor (see sect. 5.2).

<sup>13</sup> The norm lives on in the form of expectations that the rich mark their class status through social services that transmit elite values—schools, museums, scholarship programs, and the like (Ostrower 1995, chaps. 1, 4; Fiddick, Cummins, Janicki, Lee, and Erlich 2013).

The structural rigidities of waqfs could reduce their efficiency over time. That is among the reasons why, during the millennium preceding the Industrial Revolution, urbanization lagged in the Middle East relative to Western Europe (Blaydes and Paik 2021, Bosker, Buringh, and Zanden 2013, Kuran 2011, chaps. 6-7). In themselves, these rigidities spurred illicit initiatives to convert the assets of established waqfs to private property.<sup>14</sup> Starting in the 1700s, an added incentive for privatization was the emergence of lucrative new investment instruments (Cansunar and Kuran 2023). Meanwhile, rising budget deficits and growing awareness of the waqf's drawbacks induced states to begin nationalizing waqfs systematically. In the Ottoman Empire, nationalizations started furtively through neighborhood associations created ostensibly to assist troubled waqfs, but in fact to put them under state control (Öztürk 1995, pp. 69-77). In the 1800s, Ottoman nationalizations gained transparency with the establishment of a Waqf Ministry (Öztürk 1995, pp. 379-471). This new bureaucracy channeled certain revenues of previously autonomous waqfs to nascent municipalities established to deliver modern social services (Ortaylı 2008, pp. 435-43).<sup>15</sup>

### 2.3 A typology

Before the nationalization wave, the largest of all waqfs were urban philanthropic complexes that supplied numerous social services at once. Founded by sultans, their relatives, or their top officials, these complexes were effectively state-founded Islamic waqfs, as opposed to what we are calling regular Islamic waqfs. On the left side of Figure 1, the two branches of the Islamic waqf depict the introduced categorization in simpler terms: state waqfs and regular waqfs. Recall that both subtypes differ from the modern waqf in lacking self-governance.

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<sup>14</sup> The main vehicle for privatization was a formally legal long-term lease of waqf assets (*icâreteln*). With the connivance of judges abusing their supervisory duties, these leases were used to strip waqfs of their most productive assets (Barnes 1987, chap. 3).

<sup>15</sup> On parallel developments in Egypt, see Baer (1969, pp. 83-84) and Reimer (1999).

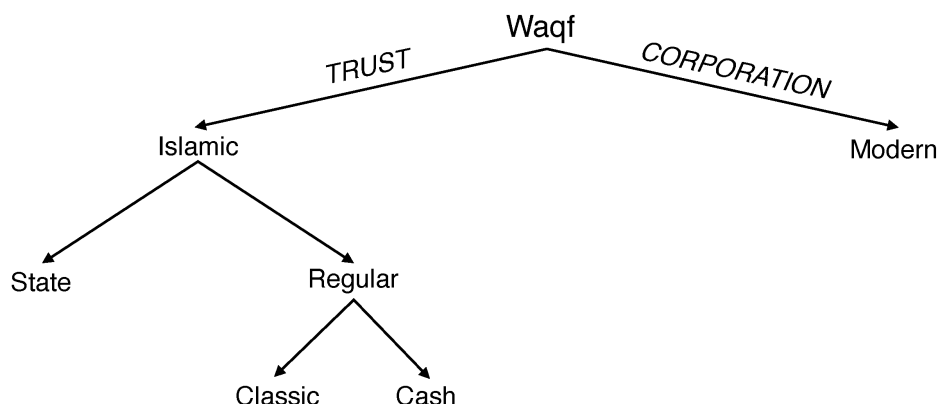


Fig. 1. Types of waqfs and their legal structures.

The Islamic waqf differs from the modern waqf, a corporation, in lacking self-governance. It has two types: the state waqf, which is founded through special procedures by a member or high official of the ruling dynasty, and the regular waqf, whose deed is executed in an Islamic court. The regular waqf has two subtypes: the classic waqf, whose endowment consisted of real estate, and the cash waqf, whose endowment consisted of cash.

The two types of the Islamic waqf are distinguishable empirically through their founding procedures. A regular waqf's deed was ratified by an Islamic judge, who recorded it in a register of his court. By contrast, the deed of a state waqf was ratified by a high official who was not necessarily a cleric; and it was housed at an administrative building, often the ruler's palace (Aydın, Yurdakul, Işık, Kurt, and Yıldız, eds. 2015; Hayashi 2008; Yılmaz 2008, p. 37). In effect, waqfs founded by members of the ruler's close circle received special treatment for serving his strategic goals.

Under classical Islamic law, a waqf's endowment could contain only immovables. The underlying logic is that only durable structures, land or buildings, could ensure services in perpetuity; coins and precious metals could be spent or stolen. Nevertheless, around the 1400s, in the face of high credit costs, judges in certain Ottoman territories took to authorizing regular waqfs whose endowments consisted partly, if not entirely, of cash. The new type of the regular waqf was known as a "cash waqf," as distinct from one conforming to classical waqf law, which we shall call a "classic waqf." Cash waqfs earned income by lending at interest.<sup>16</sup> They sowed controversy by breaching, on the one hand, the immovability requirement and, on the other hand, the teaching that interest is sinful. Supporters of cash waqfs countered that, by raising credit supply, they produced outweighing social benefits. Ultimately, the pragmatists prevailed, and, by

<sup>16</sup> The assets of some cash waqfs included real estate, which provided rental income.

1600, judicial opposition to the cash waqf petered out.<sup>17</sup> In Istanbul, the setting of our empirical analysis, both classic and cash waqfs were used for wealth sheltering, and likewise for supplying social services and financing prayers.

### **3. Analytic Controversies, New Questions, Hypotheses**

Given that a waqf's founder selected its type and functions, one may expect variations in both choices, possibly with time trends. Although the literature contains many pertinent claims and counterclaims, empirical testing based on representative data has been lacking. In reviewing the key distributional controversies of waqf scholarship, this section also highlights factors that, *a priori*, should have affected waqf choices.

#### *3.1 Wealth sheltering vs. benevolence*

Observing that Islamic law allowed waqfs for the benefit of family members, certain waqf studies suggest that, for founders outside the ruling dynasty and its top officials, sheltering wealth may have outstripped benevolence in terms of their main function (Doumani 2017, Powers 1999).<sup>18</sup> This claim conflicts with a historiographical tradition that treats benevolence as relatively more important to understanding the traditional Islamic order. Hodgson (1974, p. 124), a leading Islamologist of the twentieth century, characterizes the waqf as a “vehicle for financing Islam as a society,” meaning that its historical significance lies mainly in its supply of social services. In the same vein, Yediyıldız (1990, p. 5), a prominent waqf researcher, proposes that waqfs enabled Ottoman subjects to live on charity from “cradle to grave.” Though such commentaries capture a key feature of state waqfs, even in that specific context they require qualification. As for regular waqfs, because their founders did not necessarily belong to the ruling coalition, one might expect them to have been relatively less benevolent. Relative to rulers and their close associates, the ruled have less stake in either mass contentment or political stability. Accordingly, they do not feel obliged to finance social services as a means of reinforcing the incumbent social order.

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<sup>17</sup> Mandaville (1979) narrates the controversy and its resolution. For 1602-1799, Kuran and Rubin (2018) show, the real interest rate averaged 18.8% in Istanbul's private credit market, around double the rates in Western Europe. Absent cash waqfs, the gap would have been even larger.

<sup>18</sup> This literature compares “family waqfs,” defined to include waqfs that benefited the founder alone, with “charitable waqfs,” defined as inclusive of waqfs whose functions are better described as philanthropic. As such, it treats the two types as binaries as opposed to the ends of a continuum. Related works add a third category: “semi-charitable waqfs.”

Özvar and Yıldırım (2022, pp. 30-31) suggest that Islamic waqfs were benevolent institutions. They also assert that benevolence was a more common feature of (what we are calling) regular waqfs than of state waqfs, in other words, that waqfs of the rich were more benevolent than those of the super-rich. Both claims are suspect in view of the history of private giving in Western Europe. For reasons already given, closeness to a Middle Eastern ruler should have made founders more benevolent, not less; specifically, state-connected founders of Istanbul's regular waqfs should have been relatively more likely to endow social services than founders outside the Sultan's circle. Fortunately, our data enable the testing of competing claims involving status-based variations in benevolence.

### *3.2 Intertemporal changes in mix of functions*

The Ottoman palace consultant Koçi Bey (1631/2008, pp. 71-73). considered the waqf to have degenerated by his own time from an instrument of charity and philanthropy to a vehicle for sheltering elite assets. Although modern scholarship has shown that in various Middle Eastern locations wealth sheltering was ubiquitous in the 1700s and 1800s (Moumtaz 2021, chap. 4; Doumani 2017, pp. 89-96; Baer 1969, chap. 5), the time trend of the mix between wealth sheltering and benevolence has not been explored systematically.

Private property rights strengthened in the 1800s, and, at the same time, waqfs became less secure than in earlier centuries (Cansunar and Kuran 2023). On those grounds alone, one should expect the demand for wealth sheltering to have fallen over time. Meanwhile, growing contacts with the relatively more modernized economies of Western Europe were acquainting Middle Easterners with alternative organizational forms for providing social services. The emergence of alternatives to the waqf should have discouraged the founding of new waqfs generally. The time trend for the functional distribution of new waqfs would have depended, then, on the relative strengths of these two competing forces.

### *3.3 Poverty relief*

No consensus exists on the extent to which formally benevolent waqfs helped the poor. State waqfs whose declared functions fell incontrovertibly within the definition of philanthropy, if not also of charity, did not necessarily help the poor. Waqf-financed public kitchens and hospitals offer instructive cases.

Public kitchens evoke images of feeding the destitute. But through their deeds, and more saliently their practices, Ottoman public kitchens founded by sultans or their close associates

targeted well-off constituencies (Meier 2007). Merchants and travelers qualified for free food by virtue of being away from home; scholars to encourage the study of Islam; dignitaries in recognition of their eminence; Sufis to reward piety; and waqf employees for their services. Menu and portion sizes, too, varied according to social status; at many public kitchens, the poor ate only if food remained, with schooled men having top priority and women the lowest (Singer 2005, pp. 485-92, 497-99). In one public kitchen, the deed phrase “the poor and the humble, the weak and the needy” was interpreted to include high local officials (Peri 1992). Evidently, the concept of charity was sufficiently manipulable to serve as an instrument of political patronage.

Waqf-supported hospitals were viewed as expressions of magnanimity. Because elites preferred to be treated at home, with health workers going to them, they served mainly people of lesser rank. With that caveat, in Ottoman Istanbul social status and political connections determined which care seekers got admitted, not medical diagnosis or economic deprivation. Quality of care, too, depended on status and connections (Shefer-Mossensohn 2009, pp. 187-96).

In general, formally benevolent state waqfs perpetuated existing hierarchies and traditional privileges. Might regular waqfs have performed equalizing functions that state waqfs neglected? This is unlikely. Studies on poverty in premodern Muslim-governed cities indicate that the poor received minimal assistance from waqfs of any kind (Özkoray 2021, pp. 318-22; Ginio 2003; Marcus 1990). For that reason alone, one should expect few of Istanbul’s regular waqfs to have stipulated services for the poor.

### *3.4 Roles of social status*

Uses of the waqf to shelter wealth could have differed across demographic groups. But whether the variations were systematic has not been explored. Intergroup differences in social status, which correlated with wealth and economic opportunities, should have mattered. Specifically, people of high social status should have received disproportionately large shares of the benefits.

For several reasons, women controlled less wealth than men. Rarely did they work for pay. Under Islamic law, they inherited half as much as equivalent males (daughters half as much as sons, sisters half as much as brothers, and so on). They could travel only with a male guardian, which limited their interactions outside the family. Finally, courts considered female testimony less credible than male testimony, making women relatively more vulnerable to commercial fraud. Lower wealth should have made them relatively eager to protect what they had. As waqf founders, they should have been more likely than men to opt for sheltering wealth.

Converts to Islam constituted another socially handicapped group. People converted as children, as with Janissaries, were stationed deliberately in places where they lacked local roots (Yılmaz 2009). For their part, people who converted as adults were widely suspected of opportunism—abandoning the faith of their ancestors just to benefit from Muslim privileges (Boyar and Fleet 2010, pp. 136-37). Both factors would have fueled insecurity, incentivizing converts to shelter wealth.

As in other societies, past and present, the visibility of personal wealth tended to rise with the owner's social status (Frank 2020, chap. 8; Bertrand and Morse 2016; Heffetz 2011; Veblen 1899). Insofar as such visibility raised vulnerability to confiscation, the incentive to shelter wealth should have increased with social status (Boix 2013). But there were countervailing factors. As a marker of status, the act of founding a benevolent waqf, as opposed to a self- or family-serving waqf, was a normal good. And rulers expected influential people to establish benevolent waqfs in support of the prevailing political order's legitimacy. A priori, then, the relationship between social status and waqf sheltering appears ambiguous.

### *3.5 Investment in the afterworld*

Like other monotheisms, Islam teaches that temporal behaviors may have consequences in afterlife. For instance, stealing can bring punishment after death. Yet, and again as with other Abrahamic religions, sins are redeemable through acts pleasing to God. Such acts include prayers said oneself as well as those said by others for one's benefit (Öztürk 2019, pp. 98, 101; Kaya, Algin, Trabzonlu, and Erkan 2012, fatwas 1201, 1203). Because of its perpetuity, a waqf was conducive to helping the dead. Indeed, financing perpetual prayers for the souls of founder-selected people was among the functions of regular waqfs.

In premodern Istanbul, every demographic group would have had a demand for afterlife-enhancing prayers to serve as insurance against sins, including those committed inadvertently. Likewise, every demographic group would have wanted to endow prayers benefiting the souls of relatives—living, dead, or unborn. But the temporal opportunity cost of endowing such prayers would have differed across demographic groups. All else equal, it should have been relatively higher for low-status groups, because their temporal consumption was lower.<sup>19</sup> Gender differences in religiosity might have been an added source of variation in endowing prayers.

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<sup>19</sup> This assumes diminishing marginal utility from consumption.

Because women tend to be more religious than men (Trzebiatowska and Bruce 2012), one expects, a priori, women to have given greater priority to endowing prayers.

#### 4. Data and Master Trends

In addressing the foregoing issues, we rely mainly on an original data set of waqf deeds registered in Istanbul's Islamic courts from 1453 to 1923. By 1550, Istanbul was the world's second largest city, after Beijing; and by 1650, it was the largest. Dropping to fourth place by 1750, it fell out of the top-five only around 1875 (Chandler 1987). During most of our period, then, Istanbul was a globally prominent city. It was also the largest Muslim-governed city, the main commercial hub of the Eastern Mediterranean, and the capital of a powerful state.

Due to its strategic value to the Ottoman Sultan, Istanbul received more than its share of waqf services. Around 21% of all Ottoman waqfs served Istanbul, which in the middle of our period held about 3% of the empire's total population.<sup>20</sup> Until the 1800s, when the leading cities of Western Europe started supplying modern social services, European visitors admired Istanbul's living standards, to which waqfs contributed substantially (Brentjes 2010, I:437, II:135; MacLean 2004, pp. 155-56; Campbell 1758, pp. 149-50). So, we are exploring the mixes of waqf founders, functions, and beneficiaries in a context where, for centuries, the waqf was highly prominent as a source of widely admired social services. Istanbul is an ideal place for studying waqfs also because its historical archives are richer than those of anywhere else in the region.<sup>21</sup>

Our data come from three sources, each of which has a clustered structure. First is a 1600-dated waqf census for Istanbul. It gives the deed of the 3265 waqfs founded until that time (Canatar 2004). Selecting randomly across 226 neighborhoods, we digitized 1195 of these deeds (36.6% of total).<sup>22</sup> The second data source is a catalog of 9867 waqf deeds in surviving Istanbul

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<sup>20</sup> Orbay (2017, p. 136) estimates that at least 60,000 waqfs were founded across the Ottoman Empire, adding that the figure excludes many cash waqfs as well as waqfs founded to pay neighborhood taxes. Given that 36.5% of all of Istanbul's regular waqfs were cash waqfs, the total must have exceeded 70,000. The number of regular waqfs founded in Istanbul was around 17,500 (see n. 24). Istanbul's population in 1700 was around 385,000 and the total Ottoman population 16 million in the late 1700s, the middle of our period (Koç 2010, p. 195; Koç 2013, p. 173).

<sup>21</sup> Iran's Safavid Empire, the top Muslim-governed Ottoman rival, would offer an alternative context for studying the waqf's functions. But relatively fewer Iranian records were kept until the 1700s, and Iranian rulers systematically destroyed the records of their predecessors (Bhalloo and Rezai 2019, pp. 825-32; Amanat 2012, pp. 294-95).

<sup>22</sup> The waqf census is organized by neighborhoods. Randomly picking 66 of the 226 neighborhoods, we coded all waqf deeds within the subsample.

court registers, including 8921 for 1600-1923 (Aydın et al. 2015). This catalog was assembled by İSAM, an Islamic Studies institute. İSAM's listing appears representative of the corpus of surviving registers.<sup>23</sup> Picking a court-randomized subsample of 1172 entries in the İSAM catalog for 1600-1923 (13.1% of total), we digitized the originals of the corresponding deeds.<sup>24</sup> The third source is 49 court registers from 1602-1861 that we ourselves had digitized previously, for other purposes. These registers contain 27 waqf deeds missing from the İSAM catalog.<sup>25</sup> The combined group of 2394 deeds forms our core data set of regular waqfs. The İSAM catalog excludes state waqfs by limiting its coverage to deeds recorded by an Islamic court located in Istanbul. Likewise, the waqf census excludes all major waqfs founded by the imperial family or its top officials.<sup>26</sup>

Each entry of this core data set gives the waqf's founding date and its location as well as the founder's name, religion, and (if any) honorific titles. The set of founders is 62.4% male, 73.9% titled, and 99.6% Muslim.<sup>27</sup> Every entry also states the endowment and names the primary functions that the waqf was supposed to serve, often along with contingent functions.

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<sup>23</sup> İSAM's team browsed the 9872 surviving registers of the 27 Islamic courts in operation in Istanbul during the 470-year period to the declaration of the Turkish Republic. It found the deed of about 65% of the regular waqfs founded between 1453 and 1923. The estimate is derived from two sub-estimates, one of the Aydın et al. (2015) catalog's comprehensiveness and the other of the non-surviving registers. Of the deeds recorded in 49 registers that we ourselves have digitized and 40 others that have been transliterated in full, the team surveying the 9872 surviving Istanbul registers missed about 10% of the waqf deeds; the omissions appear random. And the catalog itself suggests (p. 14) that 3,000 to 4,000 registers belonging to the 27 courts perished in natural disasters or otherwise disappeared before the formation of a centralized archive. Jointly, these subestimates yield a comprehensiveness measure of around 65%.

<sup>24</sup> Waqf deeds are nested within the court registers, each of which records cases handled by one of Istanbul's courts over a short period, typically one or two years. Choosing 538 registers belonging to 21 courts randomly from the 8921 for 1600-1923, we coded every deed within each. Randomizing by registers as opposed to the whole sample was unavoidable, as it greatly reduced search and scanning costs during the Covid-19 pandemic, during which access to the institute housing Istanbul's court records was restricted.

<sup>25</sup> The 49 that we have digitized are Galata 24 (1602-3), Galata 25 (1604), Galata 27 (1604-5), Istanbul 1 (1611-13), Istanbul 2 (1615-16), Galata 41 (1616-17), Galata 42 (1617), Istanbul 3 (1617-18), Istanbul 4 (1619), Istanbul 9 (1661-62), Istanbul 16 (1664-65), Galata 130 (1683), Galata 145 (1689-90), Istanbul 22 (1694-96), Istanbul 23 (1696-97), Galata 197 (1704-5), Bab 89 (1708), Galata 224 (1713-16), Bab 122 (1718-19), Galata 266 (1726-27), Bab 154 (1730-31), Galata 279 (1731-33), Bab 173 (1740), Galata 308 (1745-46), Bab 204 (1751-53), Galata 353 (1759), Galata 360 (1760-61), Galata 379 (1765), Bab 240 (1767-68), Galata 410 (1770-71), Bab 269 (1778), Galata 515 (1792-93), Galata 526 (1794-95), Istanbul 68 (1796-97), Galata 541 (1797-98), Istanbul 70 (1797-99), Galata 567 (1803), Galata 587 (1808-9), Istanbul 105 (1811-12), Istanbul 122 (1817-18), Galata 636 (1820-21), Istanbul 142 (1823), Istanbul 151 (1828), Galata 694 (1836), Galata 704 (1839), Istanbul 178 (1843-45), Galata 762 (1848), Istanbul 194 (1851), and Istanbul 208 (1860-61). Transcripts of the first fifteen registers, all from 1600-1700, are reproduced in the modern Turkish script and English summaries in Kuran (2010-13).

<sup>26</sup> Nothing kept a member of the imperial family or a top official from registering a waqf in court. Both the census and the İSAM catalog contain a few waqfs established by high elites.

<sup>27</sup> Under the law, Muslims could establish a waqf at will. Non-Muslims required special permission, which was given for a hefty fee.

For a typical example of the catalog's entries, consider number 9308. According to its record in the Beşiktaş Court's 79th register (pp. 13b-14a), the waqf was founded in 1672 by Dilgüşâ Hatun, a woman with an honorific title signaling a distinguished lineage, or an influential husband, or both. Her cash endowment consisted of 400 kuruş. It was to earn income through loans. During Dilgüşâ Hatun's lifetime, the revenue would support her own consumption. After her death, it would finance prayers for her own soul and the souls of her relatives. If the waqf's stipulations became impossible to fulfil, its revenue would be redirected to poor Muslims.

An earlier example is entry 2879 of the waqf census. It records a deed filed in 1570 by İskender, a male commoner.<sup>28</sup> İskender's endowment consisted of a house located within an orchard. During his lifetime, he himself would reside in the house and receive the orchard's income. After his death, the house would pass to his wife, then his children, then their descendants, and so on until his family line expired. At that point, usufruct rights would fall to the neighborhood mosque's imam, who was to recite one Quran fascicle daily in the presence of neighborhood residents. The location of the recitation could vary from day to day, depending on where residents could be reached most easily.

The time trends of new regular waqfs, along with those of their two types, classic and cash, are shown in Figure 2.<sup>29</sup> Both types rise to around 1650. Thereafter, classic waqfs lose popularity, whereas cash waqfs remain steady for about a century, then reach a second peak around 1850. The post-1850 period marks the twilight for both subtypes. The variations in trends inform the analysis that follows.

Data on endowment size is available for cash waqfs. Section 9 ahead contains information on how the aggregate wealth of cash waqfs changed over time. Comparable information is unavailable for classic waqfs, whose deeds describe the endowed real estate (for example, my house plus my shop situated at the neighborhood square) without any indication of value. For classic waqfs, then, we must rely on indicators other than endowment size for evidence concerning redistribution to the poor.

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<sup>28</sup> Commoners lacked an honorific title.

<sup>29</sup> The time trends shown in Fig. 2 are based on the "full data set" of 12,213 waqf deeds. It consists of all 3265 deeds in the 1600 census along with the İSAM catalog's 8921 deeds for 1600-1923, plus 27 additional digitized cases for 1602-1861.

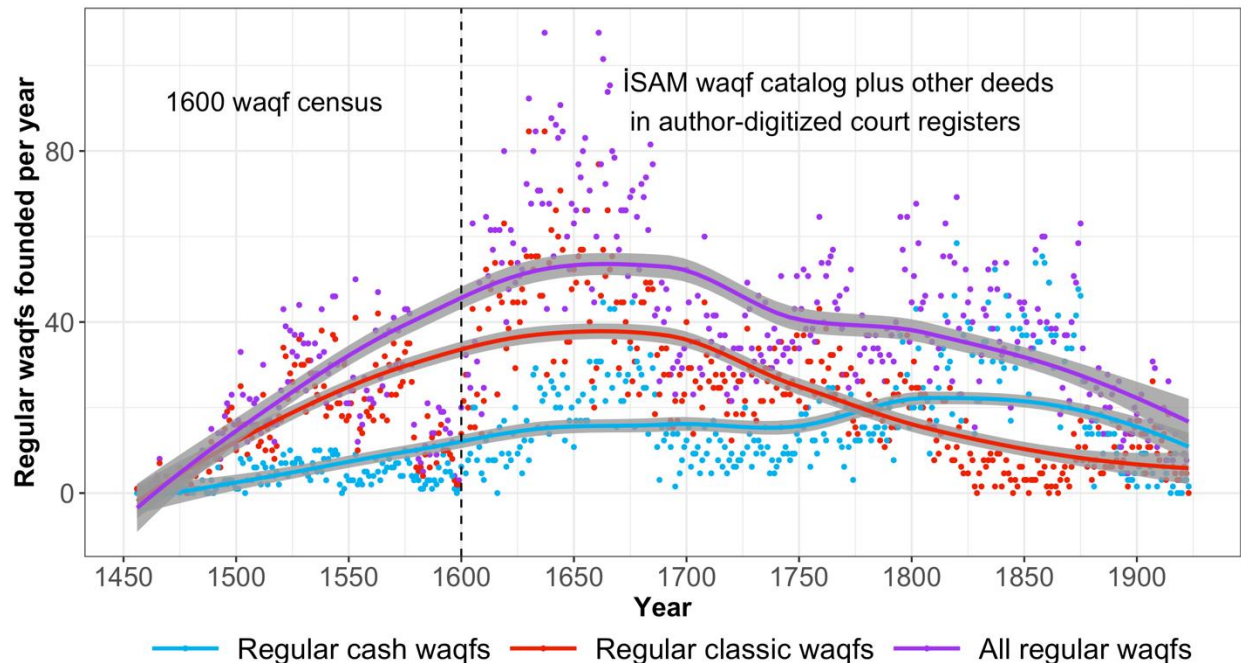


Fig. 2. New regular waqfs registered in Istanbul courts, disaggregated by types, 1453-1923. Through 1599, the dots represent numbers founded in each year, according to the 1600 census. For 1600-1923, they represent the total in the waqf catalog and our own digitized registers, multiplied by 1.538 to account for deeds missed by İSAM's browsers and absent from our own digitized registers. Each of the three curves smooths annual data through LOESS (locally weighted smoothing), with a 95% confidence interval. Data sources: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

## 5. Waqf Functions

Since a waqf could finance anything that Islamic courts considered legitimate, regular waqf deeds include a bewildering variety of stipulations. Two categorizations are useful here. One divides waqfs into seven categories according to their stipulated beneficiaries and the religious significance of their functions. The other contrasts support for founders and their kin with assistance to the poor. Neither categorization follows a template based in Islamic doctrine. Islam does not distinguish between religious and non-religious pursuits, and Islamic discourses treat waqf support for kin as a form of charity.

### 5.1 Functional categorization

The seven functional categories appear in Figure 3, along with their incidences among primary stipulations. The first two categories were meant to shelter wealth, for oneself in one case and for the benefit of relatives in the other.<sup>30</sup> The third is a religious category: prayers, which entail

<sup>30</sup> The classes of relatives are always mentioned explicitly in the deed. Children and their descendants are included most often, commonly along with spouse and/or parents. Rarely do more distant relatives get mentioned.

readings from the Quran. The fourth, religious services for the living, includes building a mosque; but usually the service is more modest, such as an existing mosque's illumination or housing for its imam. Next is a hybrid category, education. Because premodern Islamic schools had a Quran-based curriculum, financing education was an inherently religious act. But every school also imparted non-religious skills, such as reading, arithmetic, and geography (Küçük 2020, chap. 2; Ergin 1939-43/1977, pp. 5-302). The sixth function is material support for the poor. And the last comprises other non-religious services, specifically, services lacking an explicitly Islamic dimension. Examples include public kitchens, hospitals, bathhouses, fountains, and roads.

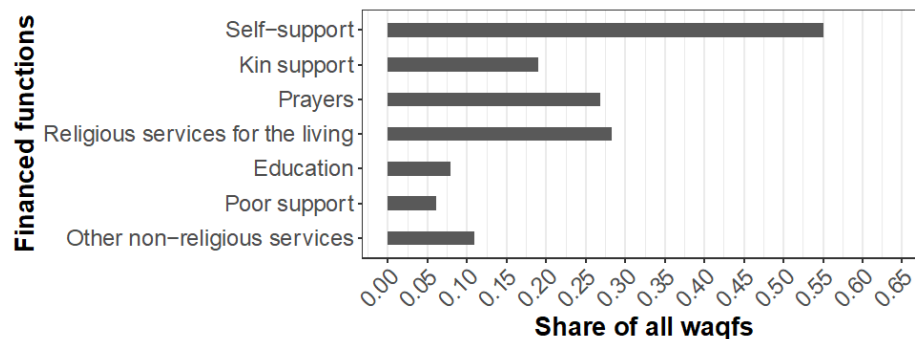


Fig. 3. Primary functions of regular waqfs, 1453-1923. Data sources: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

The shares in Figure 3 sum to more than 1 (specifically, to 1.55), because any given waqf could serve multiple functions. Self-support is by far the most prevalent function; and kin support is also substantial. No fewer than 67.3% of all waqfs supported the founder and/or the founder's kin (48.3% founder only, 12.3% kin only, 6.7% both). By contrast, 38.5% of waqfs had one or more religious functions (10.2% just prayers, 10.5% only religious services for the living, 17.8% both). The remaining three categories appear in few waqfs. Education is named as a primary function in 7.9% of the deeds, poor support in 6.1%, and other non-religious services in 10.9%. Evidently, wealth sheltering was a priority for founders. Religious services were far less common than wealth sheltering ( $p < 0.001$ ). The last three categories, which receive enormous attention in waqf scholarship, were evidently uncommon choices among the founders of regular waqfs.

## 5.2 Contingent functions

Since waqfs were supposed to operate in perpetuity, their deeds contained provisions for redirecting funds if ever one or more primary functions could no longer be met. With self-support, the founder's death would require the reallocation of income. With family support, the founder's family line would have to end. With a social service, it would have to become undeliverable, as when depopulation makes a school useless. Every such possibility required contingent spending instructions. Certain contingencies kept resources within the same functional category; for instance, they substituted one religious service for another. Other contingencies shifted resources across our categories.

The Sankey diagram in Figure 4 visualizes the contingencies in our sample of deeds as flows from primary functions to contingent functions. The width of any given transition arrow is proportional to that transition's prevalence. What jumps out is the huge flow from self-support to kin support. Waqfs designed to shelter material wealth for the founder commonly passed that wealth onto the founder's descendants. Prayers are also common among contingent functions. Typically, their intended beneficiary was the founder and his or her relatives.

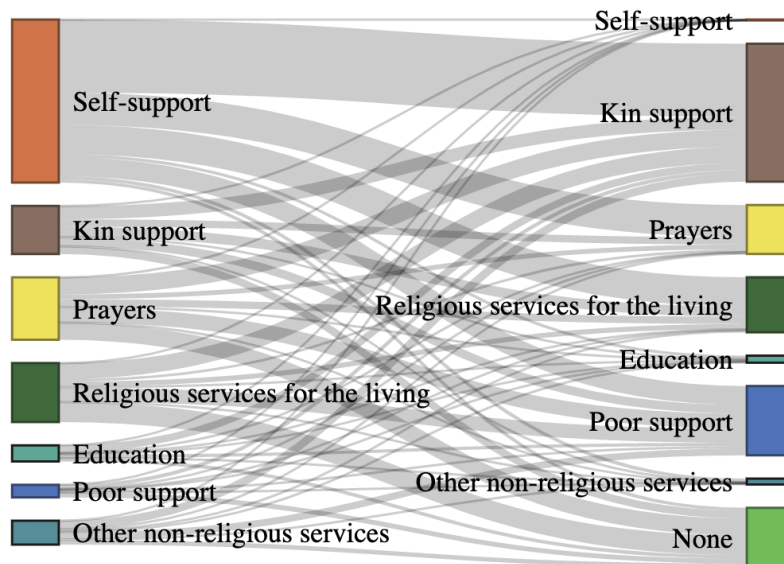


Fig. 4. Sankey diagram showing the contingent functions (right rectangles) associated with each of the eight primary waqf functions.

The flows into poor support are also noteworthy. Often, they reallocated funds specifically to “the poor of [the Arabian Holy City of] Medina,” who were also the ultimate

beneficiaries of every waqf's revenue in case none of its founder-chosen functions, primary or contingent, could be fulfilled. In practice, however, poverty-stricken Medinese rarely benefited from Istanbul's waqfs or those elsewhere. Mismanagement or outright corruption could deplete a waqf's resources well before the poor of Medina became eligible for aid.<sup>31</sup> In any case, local elites routinely usurped resources that deeds assigned to the Medinese poor (Faroghi 1994, pp. 86-88). Accordingly, until the Arabian oil boom, widespread poverty was among Medina's fixed features (Ochsenwald 1984, pp. 4-5, 23). Had Medina received aid from even a fraction of the world's dysfunctional waqfs, it would have prospered during the half-millennium under consideration here.

Waqf scholarship does not always distinguish between primary and contingent functions. This oversight is akin to conflating the immediate and distant returns of a long-term investment.<sup>32</sup>

### *5.3 Non-religious social services*

Since charity is a subset of philanthropy, it is of interest to dissect the non-religious services of regular waqfs other than poor support. Another striking pattern emerges, that water supply accounts for the lion's share. Of the 258 other primary non-religious services in our core data set, 191 (74.0%) involved water supply (Figure 5). Usually, the purpose was the construction and maintenance of a water fountain. Although a fountain ordinarily benefited people at all income levels, usually its funding entailed more than philanthropy. Its location could benefit the founder's household disproportionately. Often it was placed near his or her residence, with pipes carrying water to faucets inside (Cansunar 2022).

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<sup>31</sup> For examples, see Behrens-Abouseif (2002, p. 67) and Behar (2003, pp. 78-83). On waqf corruption generally, see Kuran (2016, sect. 5).

<sup>32</sup> The confusion in the literature is reflected in the İSAM catalog in use here. İSAM is one of the world's leading Islamic Studies centers, and this 2015 catalog is the most ambitious effort anywhere to list surviving waqf deeds. A column of the catalog lists up to three functions to describe each waqf's main purpose. Alas, the choices conflate primary and contingent waqf functions. Evidently, the İSAM team that listed functions did not prioritize primary functions. In browsing a deed, it recorded whichever one, two, or three functions caught attention first. Sometimes it omitted the primary services in the deed and listed contingent ones instead, conveying a distorted sense of the waqf's roles, especially if it was privatized or nationalized before any of its contingent provisions were implemented. It is worth reiterating that this paper uses the İSAM catalog merely to generate a randomized set of deeds. The information in our core sample comes from original deeds, not the catalog itself.

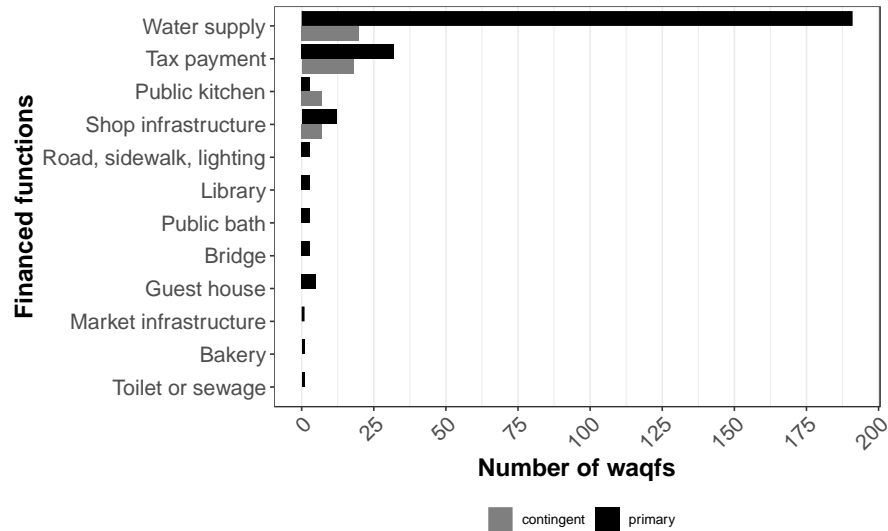


Fig. 5. Other non-religious functions of regular waqfs, 1453-1923, both primary and contingent. Data sources: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

The second most common non-religious service was payment of a neighborhood's taxes (12.4%). Though this function could have involved tax relief to families of modest means, ordinarily it served instead as a cloak for sheltered resource pooling. Specifically, a group made loans jointly and used the tax-exempt interest partly to pay their personal taxes on non-waqf wealth or income. Some "tax payment waqfs" helped the state with identifying taxable wealth, which is probably why they were tolerated (Çiftçi 2006, Kıvrım 2019).<sup>33</sup> No other non-religious service came close in frequency to these two functions.

Might other services have been more common among contingent functions? On the contrary, non-religious social services are even less prominent among the contingent functions named in Istanbul's regular waqf deeds. Just 52 services in the residual "other non-religious" category appear as contingent functions in our core sample of 2394 deeds. Whereas 10.8% of these deeds stipulate the provision of at least one non-religious good unconditionally, just 2.2% include one among their contingent functions.

Waqf samples that conflate state and regular waqfs generate much higher figures for waqfs providing non-religious social services. In the Ottoman sample of Yediyıldız (1990, tables 1-2), half of all waqfs fund a non-religious service; and in that of Öztürk (1995, table 1), one-

<sup>33</sup> These waqfs violated classical waqf law in two respects. Their endowment consisted of pooled capital, and they lacked autonomy from the state.

third do so.<sup>34</sup> The far lower figures here point again to sharp functional differences between state waqfs, which were founded by the Sultan or someone in his close circle, and regular waqfs. The provision of non-religious social services was a major function only of state waqfs.

#### 5.4 Distributional categorization

The foregoing patterns suggest that Istanbul's regular waqfs contributed to preserving material inequalities. Waqf founders and their families, necessarily people of means, appear in deeds as primary beneficiaries of waqf income much more often than the poor do (Figure 3). But certain social services could target specific groups. Consider public kitchens, known also as soup kitchens. Although Sultan-financed public kitchens served mainly privileged groups, in principle, those endowed by people of lesser status might have benefited the poor disproportionately.<sup>35</sup> No other service in our data set explicitly targeted the poor. Hence, an upper bound on poor support can be obtained by taking the union of waqfs financing public kitchens and waqfs that provided poor support explicitly. Figure 6 gives that upper bound as 6.1%. In Ottoman Istanbul, as in other places under Islamic law, judges took "the poor" (*fukarâ*) to encompass all clerics, whose ranks included affluent functionaries. Here is another reason, then, why the poor support recorded in Figure 6 overstates the extent to which regular waqfs alleviated poverty.

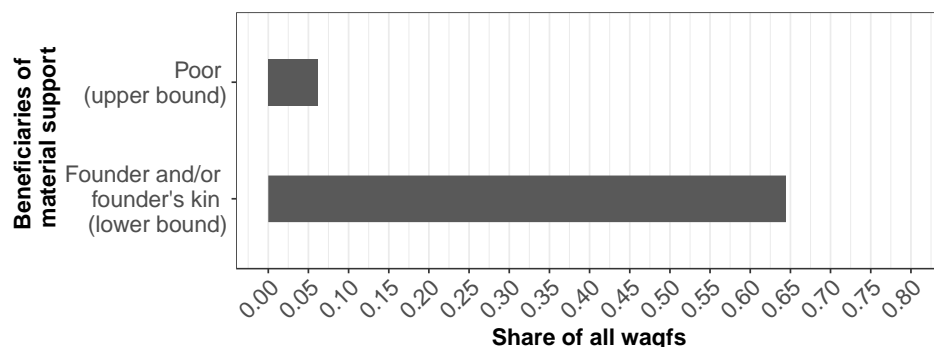


Fig. 6. Shares of regular waqfs providing primary support to the poor and to the founder's self and/or kin, 1453-1923. Data sources: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

The union of regular waqfs stipulating self-support and those stipulating kin support was 64.5%. As with water fountains, founders sometimes chose the locations of social services to

<sup>34</sup> Neither book tabulates its data in this paper's format. The first reports 159 non-religious services in a sample of 324, counting charitable complexes as one observation. The latter distinguishes among three "main functions," which are religion, education, and social services; 28.3% of the sample consists of "social service waqfs."

<sup>35</sup> Whatever the differences, they hardly matter here. Just three waqfs (0.1%) included a public kitchen as a primary service.

benefit their families disproportionately. Hence, this measure provides a lower bound for material support targeted at the “founder and/or founder’s kin.”

In sum, material support for the founder and his or her kin appears as a primary waqf objective at least eleven times more often than poor support. This disparity is particularly striking because of the prevalence in scholarship of the references to the waqf’s role as an instrument of charity.

## 6. Waqf Founders

Under Islamic law, a waqf’s founder had to be a single person.<sup>36</sup> How were the founders of Istanbul’s regular waqfs distributed according to status? Eight status groups may be distinguished, the first two consisting of commoners, who appear in records as untitled. The top rows of Figure 7 separate commoners by gender, because females had relatively inferior legal, economic, and social rights, all of which could have altered waqf choices. Female low-elites form our third category; they consist of distinguished women outside the Sultan’s household.<sup>37</sup> Next are three categories of male low-elites. Clerics, who are exclusively male, include religious officials as well as spiritual leaders who enjoy authority by virtue of their education and/or spiritual reputation.<sup>38</sup> Military low-elites consist of officers below the very top tier, who are included among the male high-elites.<sup>39</sup> Economic elites comprise men with honorific titles that mark communally recognized success in private commerce.<sup>40</sup> The final two groups, sorted by gender in the bottom rows of Figure 7, include members of the Sultan’s family and officials in leadership positions within his administration.<sup>41</sup> High officials, too, were exclusively male. Palace women had no formal role in government, though some exercised political power by

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<sup>36</sup> Judges did make exceptions. In our core sample of 2394 deeds, 36 (1.5%) have multiple founders, of which half were married couples.

<sup>37</sup> Women titled *hanım*, *hatun*, or *kadın*. These titles were conferred customarily to a woman who had a distinguished lineage and/or was married to a man of status.

<sup>38</sup> Clerics: *aziz*, *baba*, *dede*, *deriş*, *efendi*, *hafız*, *halife*, *hoca*, *mevlana*, *molla*, *seyyid*, *sufi*, *papa*, *şeyh*, *veli*.

<sup>39</sup> Military low-elites: *beşe*, *çavuş*, *gazi*, *kaptan*.

<sup>40</sup> Economic elites: *çelebi*, *reis*, *hacı*, *elhaj*. Prior to 1453, the title *çelebi* was used for the ruler’s sons. *Hacı* or *elhaj* was a signifier of piety earned by pilgrims to Mecca. In premodern times, only merchants could undertake the arduous and expensive roundtrip between Istanbul and Arabia as an extension of their professional functions; accordingly, they were substantially overrepresented among pilgrims (Miller 2006, pp. 196-99; Faroqhi 1994, pp. 7, 73, 170). The paper’s findings are robust to excluding pilgrims from the economic elite category.

<sup>41</sup> Male high-elites: *ağa*, *bey*, *sultan*, *paşa*. Female high-elites: *sultan*. The last title saw use for both genders. Its female holders were the (male) Sultan’s wives, daughters, and grand-daughters.

virtue of their closeness to the Sultan and presence in the palace (Pierce 1993, chaps. 4-9; Iyigun 2013; Özgüleş 2017, chap. 1; Argıt 2020, chaps. 2, 4-6).<sup>42</sup>

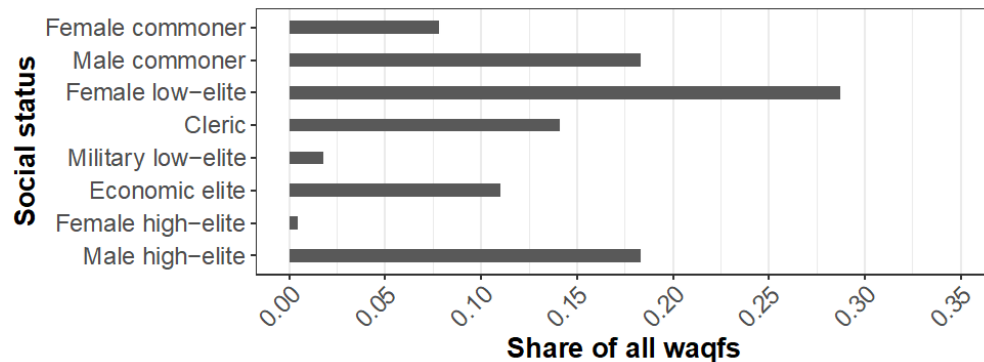


Fig. 7. Distribution of regular waqf founders by social status, 1453-1923. Data sources: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

Turning now to the distribution across our eight status categories, we see that commoners constituted one-quarter of all founders (females 7.8%, males 18.3%). At 28.7%, female low-elites formed the largest category. Collectively, male low-elites (clerics, military low-elites, and economic elites) formed 26.9% of all waqfs; about half were clerics (14.1%). Male high-elites, well under 1% of Istanbul's population, established a highly disproportionate share of all regular waqfs (18.3%).<sup>43</sup> One reason is that they tended to be very rich. Another was the norm that required people of high privilege to endow social services. Still another is that the Sultan rewarded members of his inner circle, including female relatives, through land grants. The recipients were expected to reciprocate by helping to legitimate his rule through benevolent waqfs. Remember that our data set includes only regular waqfs. State waqfs were established exclusively by high elites, which makes their heavy presence among the founders of regular waqfs especially remarkable.<sup>44</sup>

<sup>42</sup> For individuals with multiple honorific titles, we used the more prestigious one.

<sup>43</sup> No estimates exist of the share of high elites, to say nothing of its evolution. But studies of the Ottoman administration, military, and religious administration suggest that even in major cities, including Istanbul, it was well under 1% (Akyıldız, 1993; İnalçık 1973, chaps. 11-12).

<sup>44</sup> In the Ottoman state tradition, clerics, high civilian officials of the sultan, and military officials formed a tax-exempt ruling class (*askeri sınıf*) (Imber 2009, pp. 244-48). In the present classification, the ruling class is the union of male high-elites, military elites, and clerics, which represents 34.2% of all founders. This is within the range of two quantitative studies with small samples: 38.4% (Yediyıldız 1990, table 8) and 28.3% (Öztürk 1995, 28.3%). These earlier studies do not distinguish between state waqfs and the much larger number of regular waqfs, our focus here.

## 7. Statistical Analysis of Founders and Functions

The discussed distributions quantify intergroup differences with respect to waqf founders and functions. But interpreting variations across status groups and functions reliably requires multivariate statistical analysis that controls for possible confounders. The deeds were registered over a half-millennium and in 27 courts spread across Istanbul. Hence, the observed differences in financed functions could be concealing time trends, court-associated particularities, intertemporal variations in economic and political uncertainty, and periods of heightened religiosity. Moreover, the identities of founders and their choices could have varied across Istanbul's neighborhoods, depending on heterogeneity in status and/or faith.

To investigate the extent to which waqfs engaged in philanthropy, or specifically in charity, and to explore variations according to the demographic characteristics of their founders, we use a multi-pronged empirical strategy. Having decided to establish either a classic waqf or a cash waqf, founders made a binary choice for each of the eight possible functions. They either included it within their waqf's scope of service or they did not. As a first step, then, we explore what functions founders selected and how selections varied according to founder categories, conditional on their decisions to establish a classic or cash waqf, and with controls for possible confounders. Ordinary Least Squares is suitable to identifying the likelihoods of inclusion.<sup>45</sup>

It is of interest to determine, in addition to the chosen combination of functions, how founders distributed resources across the functions. In principle, a function fulfilled by a small share of all waqfs could absorb the lion's share of aggregate waqf resources. For one thing, waqfs could differ greatly in endowment income. For another, charity could be the preserve of waqfs with the biggest endowments. But comparing waqf functions according to spending poses a special challenge. It is feasible only for cash waqfs, whose revenue and expenditure flows are computable through their liquid endowments and the stipulations recorded in their deeds. For classic waqfs, we lack reliable information on either revenue or spending. Their deeds list real estate placed into the endowment without stating size or condition, let alone market value or expected revenue flows. Given this limitation, the second prong of our empirical strategy is to analyze, just for cash waqfs, the composition of expenses. Specifically, we shall measure, by founder type, the absolute amounts reserved for benevolence. As shown in Appendix B, cash

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<sup>45</sup> Results are substantively similar when logistic regressions are used instead.

waqfs were used disproportionately to finance benevolence. Hence, it is particularly significant that we find, in Section 9, that their main functions excluded benevolence.

Earlier we suggested that the tendency to use the waqf as a wealth shelter should have been pronounced especially among economically and socially vulnerable groups. So our initial sets of regressions estimate, for each of two outcome variables, self-support and worldly social services, the roles of various status groups. These groups are the eight featured in Figure 7. The OLS models take the form

$$y_{ijt} = \alpha' \text{status}_{ijt} + \psi \text{convert}_{ijt} + \beta' \mathbf{X}_{ijt} + \Psi' \mathbf{Z}_{ijt} + \gamma_j + \theta_t + \epsilon_{ijt}, \quad (1)$$

where the dependent variable  $y_{ijt}$  is waqf  $i$  registered in court  $j$  at time  $t$ . On the right-hand side,  $\text{status}_{ijt}$  is a categorical variable for title-based status groups;  $\alpha'$  is a vector of coefficients corresponding to each status group, with male commoner serving as the reference category;  $\psi \text{convert}_{ijt}$  is a dummy variable that equals 1 if the founder is a convert;<sup>46</sup>  $\mathbf{X}_{ijt}$  is a vector of motivational control variables;  $\beta'$  is a vector of corresponding coefficients;  $\mathbf{Z}$  is a vector of geographic control variables;  $\Psi'$  is a vector of associated coefficients;  $\gamma_j$  and  $\theta_t$  represent data source fixed-effects and year fixed-effects, respectively; and, finally,  $\epsilon_{ijt}$  is the error term.

The data sources are neighborhoods for 1453-1599 and court registers for 1600-1923. Following Abadie, Athey, Imbens, and Wooldridge (2023), standard errors are clustered at the level of the data source. Controls shall be described and justified as they enter the analysis.

Table 1 presents specifications of (1) that estimate the predictors of using the waqf for self-support.<sup>47</sup> It shows that all demographic groups sheltered wealth, but also that there were intergroup variations. Vulnerable founders—female commoners, female low-elites, converts—were indeed more likely than male commoners to endow wealth for their own economic security, though for female commoners significance drops in the more demanding specifications. The magnitudes are not trivial. Of our reference group, male commoners, 50.5% sheltered wealth for themselves.

<sup>46</sup> By convention, every convert was registered figuratively as “son of Abdullah” or “daughter of Abdullah.” Our data set contains 722 such founders (30.2%). Converts are indistinguishable from Muslim-born people with a father genuinely named Abdullah.

<sup>47</sup> None of the shown specifications uses geographic controls because there is no theoretical reason for expecting them to matter for self-support. In any case, their inclusion does not affect results.

**Table 1**  
**Determinants of making self-support a primary waqf function, 1453-1923**

VARIABLES	1	2	3	4	5	6	7	8
Female commoner	0.115*** (0.044)	0.099** (0.044)	0.084** (0.041)	0.087* (0.049)	0.074 (0.049)	0.072 (0.049)	0.085 (0.052)	0.089* (0.052)
Female low-elite	0.117*** (0.036)	0.119*** (0.035)	0.103*** (0.036)	0.147*** (0.035)	0.101*** (0.037)	0.099*** (0.038)	0.096** (0.038)	0.102*** (0.039)
Cleric	-0.015 (0.037)	0.007 (0.038)	0.169*** (0.050)	0.118** (0.053)	0.146** (0.063)	0.145** (0.064)	0.091 (0.069)	0.109 (0.068)
Military low-elite	0.043 (0.087)	0.044 (0.087)	0.095 (0.068)	0.058 (0.084)	0.090 (0.080)	0.088 (0.080)	0.091 (0.081)	0.093 (0.080)
Economic elite	0.034 (0.044)	0.050 (0.045)	0.085* (0.047)	0.059 (0.047)	0.059 (0.055)	0.056 (0.056)	0.038 (0.057)	0.043 (0.057)
Female high-elite	-0.414*** (0.093)	-0.385*** (0.094)	-0.216 (0.206)	-0.344*** (0.123)	-0.243 (0.220)	-0.252 (0.215)	-0.269 (0.218)	-0.262 (0.218)
Male high-elite	0.010 (0.041)	0.016 (0.041)	-0.008 (0.038)	0.068 (0.042)	-0.007 (0.046)	-0.008 (0.047)	-0.016 (0.047)	-0.015 (0.047)
Convert		0.077*** (0.025)	0.060** (0.025)	0.095*** (0.026)	0.076*** (0.029)	0.076*** (0.029)	0.065** (0.029)	0.070** (0.030)
Ramadan founding						0.035 (0.045)	0.013 (0.046)	0.012 (0.047)
War year							-0.208 (0.137)	-0.206 (0.136)
Revolt year							0.241 (0.330)	0.460 (0.286)
Price variability								-0.806 (1.166)
Observations	2394	2394	2155	2394	2155	2148	2025	1988
R <sup>2</sup>	0.016	0.021	0.311	0.371	0.540	0.540	0.549	0.546
Adjusted R <sup>2</sup>	0.013	0.017	0.148	0.145	0.118	0.116	0.105	0.105
Year fixed-effects	No	No	Yes	No	Yes	Yes	Yes	Yes
Data source fixed-effects	No	No	No	Yes	Yes	Yes	Yes	Yes

Omitted independent variable: Male commoner.

Standard errors in parentheses.

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

Data: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

In our eight specifications, the predicted probability of sheltering wealth for oneself ranges between 58% and 86% for a female commoner, and between 60% and 87% for a female low-elite, while holding other variables at their central tendencies. Except perhaps for female high-elites, other groups behave like male commoners. The negative coefficients for female high-elites are quite large, suggesting that they felt less need for self-support. But caution is in order, as they founded only 11 of the 2394 waqfs in our core sample. A plausible reason is that, in expropriating high-ranking men, sultans allowed left the victims' female kin enough property for a comfortable life (Yüksel 1992, pp 410, 404-5; Akyılmaz 2008, pp. 411-14). The implied economic security would have tapered the economic vulnerability of female high-elites.

The foregoing results hold up under various controls. Year and/or data source fixed-effects are included in specifications 3-8.<sup>48</sup> Specifications 6-8 show that Ramadan, during which

<sup>48</sup> We distinguish among four court categories. The first consists of pre-1600 cases from the waqf census, which omits information on court of registration. The other three are all for 1600-1923, according to location: areas within

dawn-to-dusk fasting heightens religiosity (Campante and Yanagizawa-Drott 2015, Al-Ississ 2015), had no significant impact on wealth sheltering. The reason is probably that establishing a waqf required long planning for a lifetime financial commitment. Unlike giving small sums in the form of alms (*ṣadaqa*), which was especially common on holy days, it did not lend itself to spontaneity (Singer 2008, pp. 67-90). War years increased the Sultan's revenue needs, raising his incentive to expropriate private property. Hence, one might expect wars to have generated a substitution effect, heightening the inclination to establish a waqf. But insofar as average personal incomes fell because of war-induced economic strains, such as more men drafted into the military, there would have been a negative income effect on waqf foundings.<sup>49</sup> Specifications 6-8 indicate that the two effects offset each other. Revolts against the Sultan could have spurred conversions of private property into waqfs, except that they ended in a matter of weeks. Indeed, the "revolt year" coefficient is consistently insignificant.<sup>50</sup> Price variability, a proxy for economic uncertainty, is also insignificant (specification 8).<sup>51</sup> In sum, the robust results of the first two specifications, except that for female high-elites, survive under a battery of statistical controls. Whatever its source, social vulnerability incentivized the use of waqfs for material security.

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the walls of Istanbul or that Turks settled right after the 1453 conquest, the rest of European Istanbul, and Asiatic neighborhoods. The periods are 1453-1599, 1600-99, 1700-99, and 1800-1923.

<sup>49</sup> 1720 waqfs in our sample (72.1%) were founded in war years: 1457, 1461-65, 1467, 1473-76, 1478-80, 1483, 1485, 1491, 1493, 1497, 1499, 1514-17, 1521-68, 1570-73, 1578-1600, 1601-1612, 1614-21, 1623-38, 1645-69, 1671-81, 1683-1700, 1710-11, 1714-18, 1722-27, 1730-39, 1743-47, 1768-79, 1787-92, 1798-1800, 1801, 1804-18, 1820-37, 1839-43, 1848, 1851-56, 1858-59, 1861-62, 1866-67, 1870-72, 1875-78, 1890-92, 1895-97, 1903-06, 1908-1922. In each case, the "war year" variable includes the preceding year as well, because war preparations began and military spending rose before the start of fighting.

<sup>50</sup> Start date of Istanbul revolts: 18 May 1622, 15 June 1623, 7 February 1632, 8 August 1648, 13 June 1651, 8 May 1655, 28 February 1656, 5 September 1687, 17 July 1703, 28 September 1730, 15 September 1731, 6 June 1740, 25 May 1807, 16 November 1808, 16 June 1826. Years are from Yıldız (2017, table 1.1) and the start days from online histories. A "revolt year" consists of the period starting one year before the revolt's start and ending a year later. A wide window captures the possible effects of rising social tensions prior to a revolt and unusual political uncertainty in its aftermath. Statistically, the results survive when the window is narrowed by half.

<sup>51</sup> Price variability for 1453-1861 is computed from the silver-based consumer price index in Özmucur and Pamuk (2002); for 1862-1923, we switched to their asper-based consumer price index, because it has better coverage. For any given year, our measure of price uncertainty is the coefficient of variation of the price index within a ten-year window surrounding the year. Because our time span saw alternating periods of deflation and inflation, we computed this rolling coefficient of variation using a linear transformation of each price index. For 1453-1861, this was  $P+54.96$ , where  $P$  is the price level and 54.96 the highest observed annual deflation rate. For 1862-1923, the analogous transformation was  $P+33.65$ . The transformations made all observations of the price index positive, enabling their use as a measure of price variability. Over 1453-1923, the standard deviation of the coefficient of variation is 0.17. By this measure, then, a one standard deviation in price variability increased wealth sheltering by  $0.17 \times 0.224 = 3.8$  percentage points.

Appendix A contains specifications that estimate the determinants of making self-support a primary function separately for classic and cash waqfs. Regardless of controls, they indicate that vulnerable groups sought material security through classic waqfs. This finding is unsurprising in view of the relatively greater durability of classic waqfs. Although in principle all waqfs were formed in perpetuity, in practice cash waqfs were more fragile than classic waqfs, whose endowment consisted instead of real estate. Whereas land was indestructible, a cash endowment could erode through nonperforming loans. It was also more conducive to embezzlement. Accordingly, most cash waqfs disappeared within a century of their founding (Çizakça 1995, pp. 317-20). Classic waqfs could also fall onto hard times because of unanticipated economic shocks, natural disasters, mismanagement, or simply corruption. But the visibility of real estate made them easier to monitor. Besides, their endowment generally retained some value.

Table 2 repeats the exercise with non-religious philanthropy, a composite of poor support and other non-religious social services, as the dependent variable of equation (1). The probability of male commoners, the reference group, financing non-religious philanthropy was 10.4%. One robust finding stands out: as waqf founders, male high-elites were significantly more inclined to endow non-religious services such as a fountain, tax assistance, or a library. Depending on the control set, the likelihood of male high-elites financing at least one non-religious social service as a primary function is 7 to 11 percentage points higher than that of male commoners. In no specification are female founders, regardless of social status, more likely than male commoners to endow worldly social services. This pattern is notable in view of the literature's emphasis on female-founded charitable waqfs. The most famous ones were founded as state waqfs by women of the sultan's household. One is a public kitchen founded in Jerusalem by Hürrem (1505-1558), the Ukrainian-born wife of Süleyman the Magnificent and better known in the West as Roxelana (Singer 2002). Evidently, such state waqfs are unrepresentative of waqfs endowed by female high-elites, to say nothing of female-founded waqfs generally.

**Table 2**  
**Determinants of making non-religious philanthropy a primary waqf function, 1453-1923**

VARIABLES	1	2	3	4	5	6	7	8
Female commoner	-0.043* (0.022)	-0.039* (0.022)	-0.030 (0.027)	-0.030 (0.027)	-0.028 (0.027)	-0.025 (0.029)	-0.025 (0.029)	-0.025 (0.029)
Female low-elite	-0.006 (0.019)	-0.007 (0.019)	-0.014 (0.026)	-0.014 (0.026)	-0.012 (0.027)	-0.006 (0.027)	-0.007 (0.027)	-0.007 (0.027)
Cleric	0.184*** (0.031)	0.179*** (0.032)	0.056 (0.057)	0.056 (0.057)	0.059 (0.057)	0.046 (0.059)	0.045 (0.060)	0.045 (0.060)
Military low-elite	0.015 (0.053)	0.014 (0.054)	0.022 (0.075)	0.022 (0.075)	0.025 (0.076)	0.027 (0.070)	0.029 (0.070)	0.029 (0.070)
Economic elite	0.056* (0.030)	0.052* (0.031)	0.057 (0.039)	0.057 (0.039)	0.062 (0.039)	0.069* (0.040)	0.069* (0.040)	0.069* (0.040)
Female high-elite	0.078 (0.125)	0.070 (0.125)	0.179 (0.297)	0.179 (0.297)	0.179 (0.298)	0.161 (0.299)	0.159 (0.300)	0.159 (0.300)
Male high-elite	0.130*** (0.026)	0.129*** (0.027)	0.097*** (0.037)	0.097*** (0.037)	0.099*** (0.038)	0.107*** (0.036)	0.108*** (0.037)	0.108*** (0.037)
Convert		-0.019 (0.017)	-0.018 (0.024)	-0.018 (0.024)	-0.017 (0.025)	-0.025 (0.025)	-0.027 (0.025)	-0.027 (0.025)
Ramadan founding					0.012 (0.031)	0.014 (0.032)	0.015 (0.032)	0.015 (0.032)
War year						0.026 (0.104)	0.027 (0.103)	0.027 (0.103)
Revolt year						-0.164 (0.222)	-0.204 (0.296)	-0.204 (0.296)
Price variability							0.798 (0.573)	0.798 (0.573)
Observations	2394	2394	2155	2155	2148	2025	1988	1988
R <sup>2</sup>	0.044	0.045	0.552	0.552	0.552	0.563	0.557	0.557
Adjusted R <sup>2</sup>	0.041	0.041	0.142	0.142	0.140	0.133	0.128	0.128
Year fixed-effects	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Data source fixed-effects	No	No	Yes	Yes	Yes	Yes	Yes	Yes

Omitted independent variable: Male commoner.

Standard errors in parentheses.

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

Data: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

Given claims that religiosity motivated benevolence through waqfs, it is particularly intriguing that Ramadan does not stimulate waqf founding. This null result challenges the notion that waqf founding expressed religiosity. It accords, though, with the waqf's apparent original purpose, which was to bestow on high officials constrained property rights, not to promote religion.<sup>52</sup>

A controversy in scholarship on social services concerns the relationship between ethnic fractionalization and their provision; the literature is inconclusive (Alesina, Baqir, and Easterly 1999, Wimmer 2016). Information is lacking on the ethnic or sectarian fractionalization of Istanbul's neighborhoods. What is measurable is status heterogeneity by neighborhood. To determine whether it influences waqf location, we construct a "status fractionalization index." This index represents the probability, for each neighborhood with at least ten waqfs, that a

<sup>52</sup> An unreported specification replaces Ramadan founding with founding in the preceding month, Shaban. The logic is that anticipation of the holy month might have induced waqf founding. The Shaban effect, too, is negligible.

randomly selected pair of waqf founders belong to different status groups. Adding this index to the last specification in Table 2 leaves the main result unaffected.

The founders of cash waqfs were significantly more likely to include non-religious services among their stipulated functions (30.8% vs. 8.5%,  $p < 0.001$ ). Appendix B contains regressions analogous to those of Table 2 for classic and cash waqfs separately. They show that among the founders of cash waqfs, elites of various stripes were more likely than commoners to fund social services. Evidently, it is cash waqfs that drive the patterns in Table 2. The preference for cash waqfs in this context suggests that founders wanted to give their caretakers discretion in investment decisions. The cash waqf would have served this purpose because adjusting its portfolio required only the redirection of loans across sectors or borrower types. The suppliers of social services targeted mainly at non-kin may also have been relatively unconcerned about the durability of their waqfs.

## 8. Investments in Afterlife

The analysis thus far points to systematic variations among status groups with respect to pursuing economic security for themselves and their kin. Insofar as Istanbul's waqf founders were genuinely religious, their worries about the future would have stretched beyond their lifetimes. Islam teaches that every person has an afterlife consisting of two stages. There is an intermediate stage (*barzakh*), which is experienced as a form of sleep that varies in comfort depending on the person's temporal record: peaceful for someone who was basically good, painful for a perpetual sinner. The intermediate stage will end on Judgment Day, when all the dead will be resurrected to begin an eternal existence in either heaven or hell.<sup>53</sup> Accordingly, Istanbul's waqf founders would have fretted also about their afterlives. Perceptions of vulnerability in afterlife need not have matched those of temporal vulnerability. People knew that at their death they would part ways with their worldly possessions. Insofar as they were religious, they also believed that their temporal privileges would not follow them to the otherworld; only their records of good and bad deeds would stay with them. Hence, Istanbul's elites might have felt as insecure as its commoners about what awaited them after death.<sup>54</sup>

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<sup>53</sup> This basic description of the two stages has abundant variants (Tesei 2015; Smith and Haddad 2002, chap. 2).

<sup>54</sup> Reasons for insecurity about one's afterlife could have varied. For example, a top state official could fear divine retribution for his acts of corruption, and a pauper for failing to earn enough to feed his family adequately.

Like older Abrahamic religions, Islam allows the extirpation of sins through acts pleasing to God. One such act is to endow prayers, and another to have others say prayers for oneself. Accordingly, an endower of prayers improved his or her salvation prospects through the endowment itself and, additionally if the prayers were for his or her benefit. When an endower named one or more beneficiaries, he or she was not necessarily included. The deed could require the prayer reader to credit persons other than the endower. As we already know, waqf deeds commonly financed prayers in the form of Quran readings for the benefit of one or more person's souls. These readings were expected to serve the same function as medieval European endowments established to finance worship services for the souls of the founder and anyone else he or she named (Richardson and McBride 2009, sects. 1-2; Saul 2017, chap. 7; White 1988, chap. 2). In both religions, prayers for a named person amounted to an investment in improving that person's afterlife and securing a good outcome for him or her on Judgment Day.

Of the waqfs in our sample of deeds, 670 (28.0%) financed prayers as primary functions, and 1102 (46.0%) did so as either primary or contingent functions.<sup>55</sup> The waqf founder was always a beneficiary by virtue of being the founder, and three-fifths of all prayer endowments named one or more beneficiaries. Among the named beneficiaries, the most prevalent is the founder himself or herself, followed by one or more of the founder's relatives. "The poor" appears as a named beneficiary in a negligible number of cases. Evidently, waqf founders were far more concerned about their own and their family's afterlives than in those of the poor.

The third largest subcategory in Table 3, "one or more prophets," requires explanation. The Quran names 25 prophets: Muhammad, Jesus, Moses, Abraham, and 21 other men extolled also in the Bible. "Prayers for the prophets" was a common stipulation, which was understood to cover all 25. According to Islamic teachings, prophets were God's exemplary servants; as such, they await Judgment Day, when they are certain to enter heaven, in an exquisite pleasure garden; moreover, they will stand on God's side as he judges each dead person (Segal 1989, pp. 654-60). Precisely because prophets are guaranteed places in heaven, it is puzzling that waqf founders devoted scarce resources to their afterlives. One might expect prayers to be more productive when credited to people, dead or alive, who seem destined for hell.

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<sup>55</sup> In this context, it makes sense to combine primary and contingent stipulations, because the relevant contingency was the founder's death, an event certain to happen.

**Table 3**  
**Deceased beneficiaries of endowed prayers**

Beneficiaries	Number of waqfs	Percentage of	
		all waqfs	waqfs endowing prayers
Founder (through the act of endowing prayers)	1102	46.0	100
Founder (by naming himself or herself)	580	24.2	52.6
Founder's family	210	8.8	19.1
One or more prophets	201	8.4	18.2
Non-relatives without intercession power	119	5.0	10.8
Prophet Muhammad's companions and/or relatives	84	3.5	7.6
Ottoman sultan	10	0.4	0.9
Religious elites	24	1.0	2.2
Other elites	10	0.4	0.9
Waqf's caretaker	4	0.2	0.4
Commoners	8	0.3	0.7
The poor	3	0.1	0.3

The table's primary categories add up to 1113. This differs from 1102 because, on the one hand, some deeds name no beneficiary specifically and, on the other hand, many other deeds name beneficiaries in multiple categories.

Data: Aydin et al. (2015), Canatar (2004), and court registers listed in note 23.

Prophets have the right of intercession with God (*shafā'a*), Muslims believe.<sup>56</sup> On Judgment Day, each prophet will intercede on behalf of sinners who had prayed for him (Hagen 2022, p. 35; Schimmel 1997; Doi 1987, pp. 298-99). Hence, in financing prayers for prophets, waqf founders enhanced their own chances of a favorable outcome. In effect, having purchased afterlife insurance through prayer endowments themselves, they augmented their insurance benefits by accrediting one or more prophets. Prayers for prophets were functionally equivalent, then, to Quran readings for the founders themselves. In both cases, founders expected to receive an extra reward consisting of higher probability of a comfortable afterlife.

In Table 3, the union of the top three types of “named persons” thus represents the afterlife analog of material support for the founder and/or the founder's kin. Figure 8 compares this union with otherworldly support for the poor. Evidently, regular waqf founders, all wealthy people, sought to extend temporal inequalities to the afterworld. Though visually striking, the

<sup>56</sup> As the “seal of the prophets,” Muhammad's advice will carry extra weight, Muslims also believe. Accordingly, when a waqf founder stipulated prayers for one or more named prophets, Muhammad was never excluded.

contrast is unsurprising from the standpoint of self- and family-focused welfare maximation. According to Muslim beliefs, a dead pauper was of no use to a dead tycoon. Apart from God and angels, only a prophet could confer afterlife privileges.

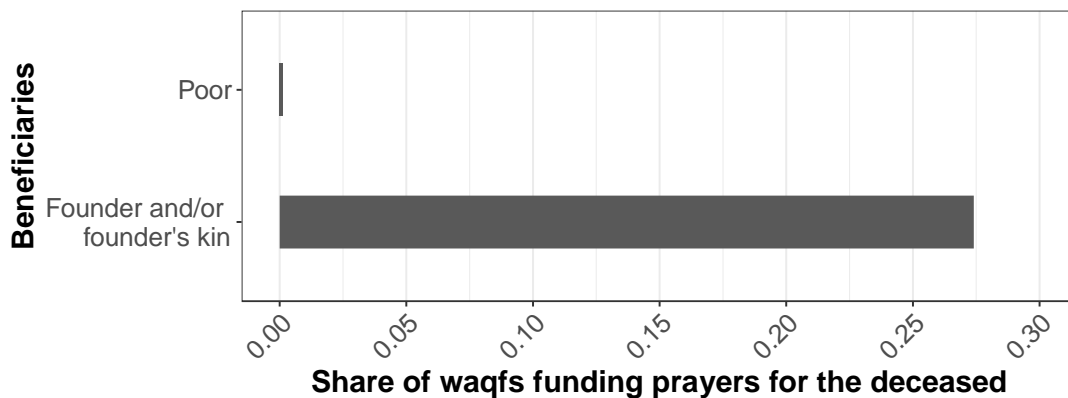


Fig. 8. Shares of regular waqfs providing afterlife support to the poor and to the founder's self and/or kin, 1453-1923. Data sources: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

Did founders differ systematically in their propensity to invest in their own afterlives? And did any variations match those observed with respect to self-serving temporal investments? Perceptions of afterlife vulnerability constitute one possible source of variation. Another is differences in religiosity, and still another is the opportunity cost of investing in afterlife, which would have correlated negatively with social status. A factor counteracting differences in opportunity cost is that, being richer, high-status groups had relatively greater capacity to expiate their sins in ways other than endowing prayers. For example, they could provide direct temporal assistance to downtrodden people in their own milieus. How such factors played out is an empirical matter.

Table 4 contains eight estimations of equation (1), with the dependent variable  $y_{ijt}$  representing prayers for oneself, either directly by naming oneself as a beneficiary or indirectly by crediting prophets. Its results concerning otherworldly self-support mirror the patterns observed with respect to temporal self-support (Table 1). Recall that female commoners and low-elites were significantly more likely to use the waqf for temporal self-support. Now we see that, relative to male commoners, these two economically vulnerable groups were relatively more likely to invest in prayers as well. This new outcome may have been driven partly by the relatively higher religiosity of women relative to men, which is a nearly universal pattern in the

modern world (Trzebiatowska and Bruce 2012). Indeed, on the whole female waqf founders were more likely than males to endow prayers ( $p < 0.001$ ).<sup>57</sup> A complementary possibility is that women, because of constraints on their mobility and social interactions, were more motivated to endow prayers as a means of cultivating a temporal reputation for piety and generosity. Indeed, Ottoman women sought wealth and social prestige through whatever means were available to them, one being endowing a waqf (Ianeva 2016, pp. 72-89). We already know that women established about 37.6% of Istanbul's regular waqfs. A benefactor of prayers was mentioned periodically at mosque services and other religious events. The marginal reputational benefit of the invocations would have been greater for women than for men, whose professional activities and social ties furnished a far broader set of options for gaining status.

**Table 4**  
**Determinants of endowing prayers for personal benefit, 1453-1923**

VARIABLES	1	2	3	4	5	6	7	8
Female commoner	0.142*** (0.040)	0.140*** (0.040)	0.123*** (0.045)	0.151*** (0.044)	0.151*** (0.048)	0.153*** (0.049)	0.136*** (0.049)	0.137*** (0.049)
Female low-elite	0.185*** (0.028)	0.185*** (0.028)	0.134*** (0.034)	0.079*** (0.026)	0.089*** (0.034)	0.091*** (0.035)	0.095*** (0.035)	0.094*** (0.036)
Cleric	0.200*** (0.038)	0.202*** (0.038)	0.116*** (0.044)	0.063 (0.047)	0.071 (0.058)	0.073 (0.058)	0.068 (0.059)	0.063 (0.060)
Military low-elite	0.124* (0.071)	0.125* (0.071)	0.078 (0.087)	0.094 (0.075)	0.108 (0.081)	0.110 (0.082)	0.093 (0.083)	0.097 (0.082)
Economic elite	0.089*** (0.032)	0.091*** (0.032)	0.101** (0.042)	0.048 (0.034)	0.075* (0.044)	0.076* (0.045)	0.074 (0.049)	0.075 (0.049)
Female high-elite	0.226* (0.126)	0.229* (0.126)	0.446** (0.180)	0.186 (0.126)	0.527* (0.311)	0.528* (0.312)	0.506 (0.316)	0.506 (0.314)
Male high-elite	0.115*** (0.026)	0.116*** (0.026)	0.048 (0.034)	0.036 (0.029)	0.030 (0.037)	0.034 (0.037)	0.013 (0.040)	0.017 (0.041)
Convert		0.008 (0.020)	0.028 (0.023)	-0.008 (0.020)	-0.014 (0.026)	-0.017 (0.026)	-0.016 (0.027)	-0.019 (0.027)
Ramadan founding						0.003 (0.041)	0.014 (0.042)	0.016 (0.043)
War year							-0.130 (0.101)	-0.130 (0.101)
Revolt year							0.500*** (0.193)	0.492** (0.237)
Price variability								0.411 (0.742)
Observations	2394	2394	2155	2394	2155	2148	2025	1988
R <sup>2</sup>	0.025	0.025	0.296	0.393	0.540	0.540	0.553	0.553
Adjusted R <sup>2</sup>	0.022	0.021	0.130	0.174	0.117	0.116	0.112	0.119
Year fixed-effects	No	No	Yes	No	Yes	Yes	Yes	Yes
Data source fixed-effects	No	No	No	Yes	Yes	Yes	Yes	Yes

Omitted independent variable: Male commoner.

Standard errors in parentheses.

\*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

Data: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

<sup>57</sup> Of female founders, 29.6% stipulated prayers, as against 21.0% of the males.

Though one cannot disentangle empirically the temporal and otherworldly incentives for endowing prayers, qualitative studies indicate that they were both important. European medieval history gives further reasons to expect both motivations to have been powerful. The benefactors of perpetual gifts to monasteries were honored at each regular church service and, after their passing, at special worship services held on their death anniversaries. According to Christian teachings, they benefited in afterlife from the intercession of saints, who were God's friends, and from the monastic subordinates of saints. The benefactors of perpetual gifts thus lightened their posthumous punishments and raised their chances of eventual heavenly bliss. Monastic benefactors received temporal benefits, too. Church officials became their political allies. With each recitation of their names at a church service, they gained prestige as people worthy of remembrance. Their kin enjoyed priority in acceptance to church choirs, monasteries, and the priesthood (Bijsterveld 2001, pp. 126-43; White 1988, pp. 25-39). The parallels to prayers financed through waqfs are unmistakable. Though the agents of intercession differed—prophets vs. saints—the benefactors of perpetual prayers expected returns both before and after death. Before death, they received recognition as benefactors of mosque services and Quran readings. They also cultivated relationships with clerics entrusted to say the prayers.

Appendix C contains two additional sets of regressions. Table 4A repeats the exercise of Table 4, but with prayers for “personal benefit” restricted to those explicitly stipulated as being for the founder's benefit. The results are essentially identical. Regardless of social status, women are more likely than male commoners to endow prayers for personal benefit. Table 4B also repeats the exercise of Table 4, but separately for cash waqfs and classic waqfs. Prayers for personal gain are twice as likely to be financed through a cash waqf than through a classic waqf (39.3% vs. 20.5%,  $p < 0.001$ ). The added information is that whereas female commoners and low-elites stand out as particularly likely to endow self-serving prayers with classic waqfs, female high-elites do so with respect to cash waqfs.

## 9. Functional Distribution of Cash Waqf Expenditures

For the cash waqfs in our sample of waqf deeds, it is possible to check whether the sums that founders allocated to various functions mirrored the frequency distributions discussed in earlier sections. Recall that whereas the classic variant of the regular waqf was used primarily as a wealth shelter for the founder and his or her family, the cash variant was used disproportionately

to provide social services, whether religious or non-religious. If waqf founders directed substantial resources to the poor, or to philanthropy generally, the evidence would probably be present in the functional distribution of cash waqf expenditures.

Figure 9 shows how the founders of cash waqfs divided the endowment income, measured consistently in 1469 aspers, among our seven functional categories. Three things jump out. In the aggregate, almost three-quarters of all expenditures financed prayers. Support for the founder and his or her family absorbed an additional one-sixth. And less than 2% of all expenditures supported poverty alleviation. Evidently, the main purpose of Istanbul's cash waqfs, which earned returns through interest-bearing loans, was investment in the afterworld.

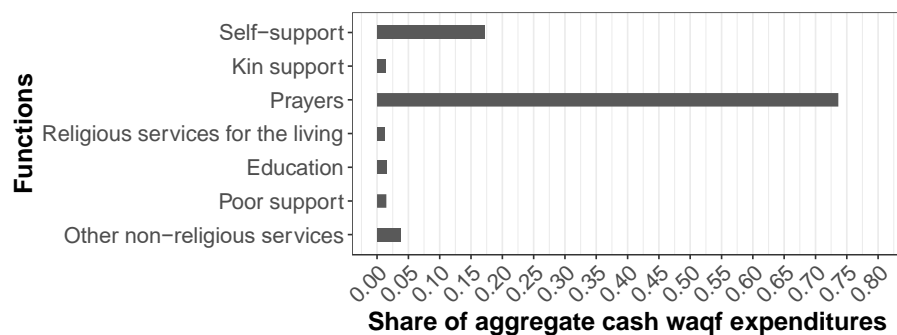


Fig. 9. Allocation of cash waqf expenditures among seven functions. The shares sum to 1.0. Data sources: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

In Section 7, we found male high-elites to have been especially likely to include non-religious services among their waqfs' functions. Given that cash waqfs were used disproportionately to finance social services, one might expect, depending on the specification, male high-elites to have stood out in terms of resources placed in cash waqfs. Table 5 shows that new cash waqfs founded by male high-elites were 0.33 to 0.64 of a standard deviation larger in endowment size relative to those founded by male commoners, the reference group. Strikingly, female high-elites tended to found even bigger cash waqfs; their endowments were 2.80 to 5.78 standard deviations larger than those of male commoners. The most vulnerable status groups, female commoners and converts, formed the smallest waqfs, though in the former case the negative coefficient lacks statistical significance.

**Table 5**  
**Total spending on cash waqfs, 1453-1923**

Dependent variable: log total spending in 1469 aspers								
VARIABLES	1	2	3	4	5	6	7	8
Female commoner	-0.319 (0.276)	-0.271 (0.275)	-0.058 (0.294)	-0.255 (0.356)	-0.270 (0.342)	-0.296 (0.334)	-0.342 (0.347)	-0.367 (0.339)
Female low-elite	0.100 (0.223)	0.080 (0.225)	0.662*** (0.216)	0.277 (0.248)	0.199 (0.237)	0.178 (0.236)	0.311 (0.243)	0.294 (0.244)
Cleric	0.146 (0.248)	0.089 (0.251)	0.948*** (0.266)	0.439 (0.325)	0.357 (0.313)	0.329 (0.306)	0.411 (0.310)	0.438 (0.316)
Military low-elite	0.330 (0.574)	0.287 (0.569)	0.333 (0.589)	1.412** (0.570)	1.361** (0.578)	1.335** (0.585)	1.415** (0.566)	1.442** (0.597)
Economic elite	0.774*** (0.233)	0.723*** (0.238)	0.739*** (0.236)	0.464 (0.294)	0.467 (0.293)	0.450 (0.293)	0.372 (0.308)	0.354 (0.312)
Female high-elite	9.895*** (0.187)	9.816*** (0.202)	9.730*** (0.295)	5.117*** (0.266)	5.037*** (0.270)	5.016*** (0.265)	5.062*** (0.275)	4.781*** (0.499)
Male high-elite	0.733*** (0.220)	0.698*** (0.227)	1.092*** (0.236)	0.667** (0.266)	0.587** (0.270)	0.565** (0.265)	0.612** (0.275)	0.598** (0.275)
Convert		-0.182 (0.148)	-0.272* (0.141)	-0.447*** (0.162)	-0.398** (0.157)	-0.397** (0.157)	-0.392** (0.157)	-0.398** (0.162)
Ramadan founding						-0.161 (0.290)	-0.170 (0.282)	-0.143 (0.285)
War year							0.502** (0.251)	0.508* (0.265)
Revolt year							-0.593 (1.811)	-0.053 (1.943)
Price variability								-0.750 (1.098)
Observations	689	689	679	689	679	677	645	641
R <sup>2</sup>	0.084	0.086	0.188	0.676	0.682	0.685	0.705	0.706
Adjusted R <sup>2</sup>	0.074	0.075	0.168	0.295	0.295	0.296	0.333	0.328
RMSE	1.64	1.64	1.54	0.97	0.97	0.96	0.93	0.93
Fifty-year fixed-effects	No	No	Yes	No	Yes	Yes	Yes	Yes
Data source fixed-effects	No	No	No	Yes	Yes	Yes	Yes	Yes

Omitted independent variable: Male commoner.

Standard errors in parentheses.

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

Data: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

In view of scholarship that treats the Middle East's Western-inspired institutional reforms as a cause of the Islamic waqf's degeneration, it is worth checking whether cash waqfs, used disproportionately for poverty alleviation, varied over time in the shares they allocated to the poor and to non-religious services. Figure 10 provides the time trend of new endowments that stipulated support for the poor. If anything, it suggests, the likelihood of new waqfs providing for the poor rose during the Ottoman Westernization drive. Ottoman interest in European styles began during the Tulip Era (1718-30), and Western-inspired social, economic, and political reforms gained momentum through the Gülhane Edict of 1839 and the Reform Edict of 1856. The time-trend in Figure 10 thus refutes the narrative that Westernization turned a once-charitable institution into a vehicle for personal privilege. Recall that Koçi Bey, the mid-seventeenth century Ottoman bureaucrat, lamented the waqf's transformation from an instrument

of charity to a vehicle for wealth sheltering. During his lifetime, waqfs did indeed become less charitable toward the poor. But subsequently, starting around the Tulip Era (1718-30), when Istanbul's elites began to embrace Western lifestyles, and continuing during the Westernizing economic and political reforms of the 1800s, the share of waqfs stipulating poor support rose.<sup>58</sup>

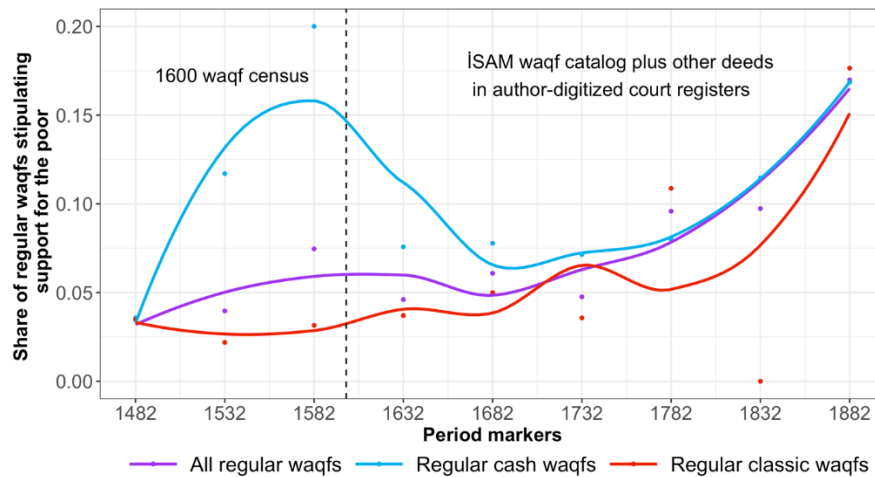


Fig. 10. Share of waqfs that stipulated assistance to the poor, 1453-1923. The observations represent the midpoint of periods centered around the given year (except for 1482, which is for 1453-1508, and 1882, which spans 1858-1923). The smoothing function is LOESS.

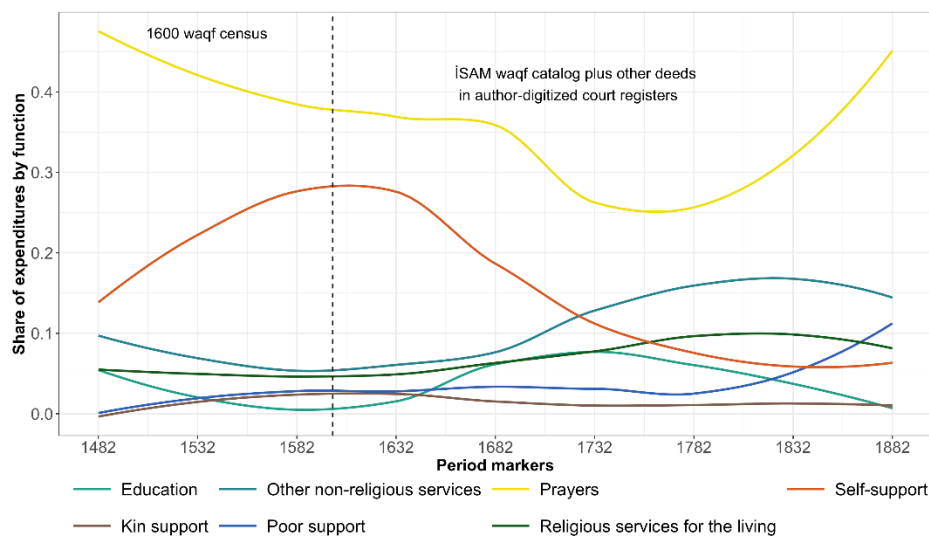


Fig. 11. Functional distribution of the expenditures of cash waqfs, 1453-1923. The shares need not add up to 1, because some deeds stipulated reinvestment of part of the annual income. The observations represent the midpoint of periods centered around the given year (except for 1482, which is for 1453-1508, and 1882, which spans 1858-1923). The smoothing function is LOESS.

<sup>58</sup> A graph of the share of waqfs stipulating non-religious philanthropy shows an upward trend throughout the 1700s and 1800s.

For cash waqfs, we can check whether aggregate expenditures targeted at the poor followed a similar pattern. In Figure 11, the blue curve shows that it did. Before the 1800s, the share of cash waqf expenditures targeted at the poor remained under 4%. But by the end of that century, it reached 11.5%. This time-trend, too, thus refutes the claim that Westernization made the waqfs less charitable. Throughout the 1453-1923 period, the figure also shows, endowed prayers claimed the lion's share of all cash waqf expenses.

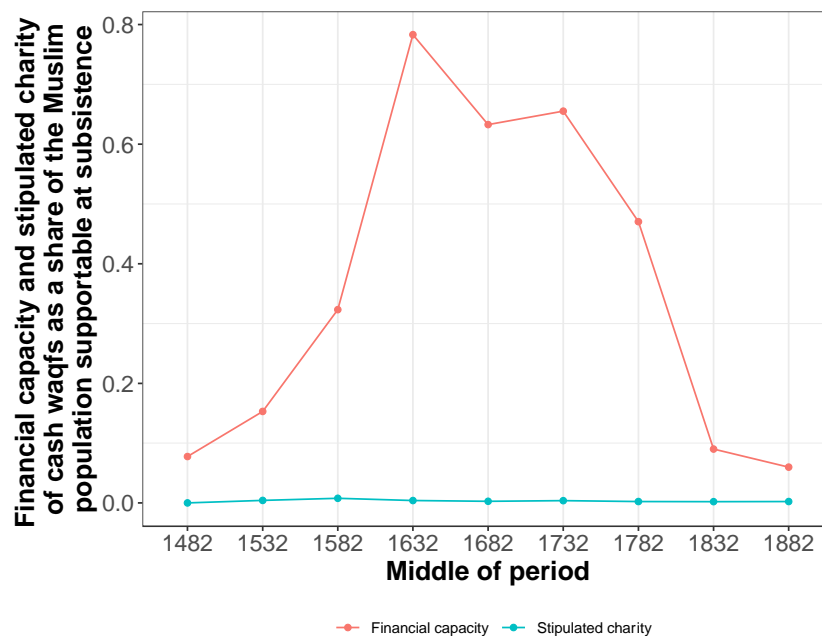


Fig. 12. Financial capacity and stipulated charity of Istanbul's cash waqfs, measured as a share of Istanbul's Muslims who could be fed at subsistence. The years on the horizontal axis are the midpoints of 50-year periods. For each period, population data comes from Toprak (1994).

Depending on the size of aggregate expenditure, even a small share of it could lower poverty substantially. To rule out this possibility, Figure 12 tracks the aggregate expenditure of all cash waqfs (financial capacity, in red) and aggregate stipulated charity (in blue), in each case measured as the share of Istanbul's Muslim population that could be fed at subsistence.<sup>59</sup> The calculations presume that all cash waqfs lent their capital at 20% per annum, that all loans were repaid fully without transaction costs, that capital was never idle, that caretakers tried earnestly

<sup>59</sup> Estimates for Istanbul's population are drawn from Toprak (1994), with interpolations where necessary. Based on this source, along with Koç (2010, 2013), the Muslim share is assumed to be 60% throughout.

to maximize returns, and that they all survived until 1923, the end of our period.<sup>60</sup> Even under these assumptions that are highly favorable assumptions, the share of Istanbul's Muslims supportable by cash waqfs never tops 0.8%. In other words, cash waqfs would be able cover the subsistence of at most one out of every 125 Muslim residents of Istanbul.

Because the deeds of classic waqfs omit information on the value of the real estate in their endowments, an analogous exercise for classic waqfs is infeasible. Recall, though, that classic waqfs were less likely than cash waqfs to deliver support for the poor. Just 3.7% of all the classic waqfs in our sample stipulated poor support, as opposed to 11.5% of the cash waqfs. It is worth remembering, too, the clerics who controlled Istanbul's judiciary interpreted "poor" to include their own profession. Accordingly, case studies suggest that clerics commonly appropriated endowment revenues assigned to the poor (Peri 1992). In principle, classic waqfs could maintain the real value of their real estate by adjusting rents to compensate for inflation. But, as noted earlier, uncompensated nationalizations targeted classic waqfs almost exclusively, leaving cash waqfs essentially unaffected. Jointly, all these factors make it extremely unlikely that classic waqfs gave even as much as cash waqfs to Istanbul's poor. This claim accords with the lack of evidence in historical studies of Middle East poverty of waqf-financed charity.

A possible objection to the foregoing interpretations is that Istanbul's Muslims might have preferred assisting the poor through Islamic institutions other than the waqf. Indeed, zakat, a transfer system mandated by the Qur'an, and voluntary almsgiving were alternative vehicles of charity. Almsgiving involved tiny amounts; it was never meant to be a source of significant redistribution. As for zakat, after Islam's initial few decades no Muslim-governed state enforced the requirement, and the Ottoman Empire is no exception. Accordingly, it hardly gets mentioned in studies of charity, philanthropy, poverty, and redistribution in Middle Eastern history (Fallas 2023; Kuran 2020). Precisely because neither almsgiving nor zakat played any critical role in Middle Eastern economic history, the literature on the history of Middle Eastern charity focuses on the waqf. The above-reported findings suggest, then, that in terms of magnitudes of charitable transfers, premodern Istanbul did not depart from the Western European pattern. The private

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<sup>60</sup> Between 1602 and 1799, the real interest rate in Istanbul's private credit markets was around 19% (Kuran and Rubin 2018). The other assumptions are all unrealistic. For example, a share of all loans would have been written off as losses. Hence, the presented stipulated charity computations should be viewed as upper bounds.

“third way” of the Islamic Middle East does not provide a counterexample to the pattern of premodern private charity Western Europe.

## **10. Conclusions and Further Implications**

The West’s impact on the world’s cultures has been a potent topic of inquiry ever since Europeans started colonizing the world and societies took to modernizing their institutions defensively, generally according to Western templates. The costs and benefits of Western influences remain in dispute. Among the alleged harms of Westernization is the erosion of philanthropy and charity through the expansion of market relations. Literatures that fall under such rubrics as anti-colonial and sub-altern studies hold that colonial policies eroded norms of social cohesion and generosity (Crotty 2001, Chakrabarty 2000, Achebe 1986, Césaire 1955/2000).

Variants of this argument appear in historiography of the Middle East. One of them holds that the Islamic waqf, a form of trust, got corrupted through Westernization. In its heyday, so goes the argument, the waqf served as an instrument of benevolence. Reducing inequalities, the waqfs of wealthy individuals delivered abundant social services to rich and poor alike. They thus enabled equalizing transfers through private initiatives, without state planning or administration.<sup>61</sup> If validated empirically, the implied redistribution would contrast with the minor role that private charity and philanthropy played in premodern Western Europe. It would also lend credence to the claim that Westernization attenuated Middle Eastern incentives to fund social services.

But the popular impression that waqfs redistributed wealth is open to challenge. Before the age of modernization, Ottoman waqfs supplying major social services were endowed mostly by the empire’s highest elites, often the Sultan, members of his dynasty, and his top officials. Through state waqfs, these elites supplied state-legitimizing services that in premodern Western Europe fell mainly to local governments and churches organized as corporations. By the same token, very few regular Islamic waqfs—waqfs established overwhelmingly by people outside the Sultan’s close circle—provided services of analogous import. Lesser high-elites in Ottoman Istanbul, males more readily than females, financed modest social services. Most commonly,

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<sup>61</sup> Downplaying the material incentives for founding a waqf, some confuse scripture counseling generosity with observed Muslim behaviors (Hoexter 2002, pp. 120-21; Sabit 2018).

they funded education, mosque supplies, and water fountains. None of the great mosques or charitable complexes of Ottoman Istanbul was financed by a regular waqf. Each was funded by a state waqf established by the Sultan or a member of his inner circle.

No systematic research exists on how state waqfs impacted material inequalities. Some of their services, such as mosques and urban water lines, benefited people from all walks of life. Others, including hospitals and even public kitchens, served primarily elites and the well-connected; favoring the privileged, they perpetuated entitlements. Here we have shown that regular Islamic waqfs, too, reproduced inequalities. In Ottoman Istanbul, for much of 1453-1923 the Eastern Mediterranean region's commercially leading and politically most powerful city, the main functions of regular waqfs were wealth sheltering and investment in the hereafter. Poverty alleviation was at best a minor concern. Even endowments meant to enhance afterlife served the privileged very disproportionately. The intended beneficiaries of investments in afterlife were mainly founders and their relatives. Very rarely did waqfs finance prayers explicitly for the souls of the poor. Evidently, waqf-financed prayers were meant to extend temporal inequalities into the hereafter.

The deed of a regular waqf might mention the poor generally, or a specific impoverished constituency, as contingent beneficiaries. Many deeds stipulated that if the founder's family line were to expire, resources would be redirected to the poor. Besides, in principle, "the poor of Medina" were every waqf's ultimate beneficiaries—default recipients of its income in the event its designated functions could no longer be met. But such contingencies were understood to be very unlikely. Strikingly few waqfs were designed for immediate poor relief. A mere 0.1% of those in Ottoman Istanbul were exclusively for the poor. And at most 6.2% included the poor, which the legal establishment defined as encompassing clerics. For cash waqfs, the share of expenditures set aside for non-religious social services, including poverty relief, was 15.1%. These magnitudes should lay to rest the common impression that charity and philanthropy were the Islamic waqf's main functions. If the charitable functions of state waqfs have been exaggerated, those of regular waqfs are largely fictional. And by no means were their philanthropic functions paramount. Revealingly, the shares of new waqfs delivering support to the poor rose, not fell, during the Middle East's modernization drive, which gained steam in the 1800s.

A waqf founder's returns went beyond material security. All founders earned prestige and respect, which produced material returns themselves. For contributing to the Sultan's strategic objectives, private financiers of social services also earned the right to be left alone. Philanthropic founders benefited disproportionately from certain social services, most often by locating them in personally convenient places. On all these grounds, the regular Islamic waqf's distributional role may be characterized as preserving the status quo.

The waqf is central to historical narratives that treat Islam as a religion that puts great emphasis on charity. Yet we lack cross-religious historical comparisons of charity that draw on comparable data sets. This paper suggests that, although Islamic teachings counsel the wealthy to be responsive to social needs, as a matter of practice Islam's main premodern instrument of private charity was not particularly beneficial to the poor. Counterexamples to the general pattern are easily found. But cherry-picked cases can mislead. So can religious ideals, which do not necessarily shape or reflect actual behaviors.

That women were conspicuous as waqf founders has been a popular theme in waqf studies. But the literature's emphasis has been on huge complexes founded by women of the Palace. As with state waqfs, women founded a substantial share of regular waqfs. However, below top rungs of the social hierarchy, women were under-represented among the suppliers of social services. They were disproportionately likely to have their waqfs provide economic security for themselves. The reason, we propose here, is that they were socially, legally, and economically handicapped relative to men. The waqf-founding patterns of another vulnerable group, converts to Islam, matched those of women situated below the highest status level.

The regular Islamic waqf had two variants: the classic waqf, whose endowment consisted of real estate, and the cash waqf. The founding of classic waqfs peaked around the 1650s and steadily declined thereafter. Cash waqfs rose in popularity to about 1800 and then went into decline. Since classic waqfs were more conducive to wealth sheltering, their trajectory suggests that, at least for people outside the Sultan's high administration, property rights strengthened after the mid-1600s. We offer this as a hypothesis testable through a broader array of longitudinal data. As for cash waqfs, which yielded income through interest-bearing loans, their trajectory was undoubtedly driven by interest rates. Cash waqfs gained popularity during centuries of very expensive credit. Their eclipse coincided with the emergence of new financial instruments through either local innovation or transplants from abroad.

Istanbul's status as the largest Muslim-governed city and its economic interactions with Europe must have affected its patterns of philanthropy and charity. Analogous studies on other cities are needed to show where Istanbul led the broader region and where it moved in unison. But with respect to the functions and founders of regular waqfs, there is no reason to think that Ottoman Istanbul's residents were unusual. The patterns reported here are probably representative of Ottoman Turkey, the broader Ottoman Empire, the Eastern Mediterranean, and even the Muslim world at large. If Istanbul's waqf founders were somehow less charitable than those of other places governed under Islamic law, that remains to be demonstrated empirically, using comparably representative archival samples.

In premodern European history, charity and philanthropy were the preserve mostly of organizations that could outlive their individual founders, employees, members, and beneficiaries. Private giving transferred relatively small sums from wealthy benefactors to entire communities. In the premodern Middle East, charity and philanthropy took place largely through indefinitely living entities founded by lone individuals. Of the private wealth placed in waqf endowments, considerably more than one percent financed philanthropy of one sort or another. This does not mean, though, that the premodern Islamic economic system supported more private giving than the premodern Western economy did. Only a small fraction of Istanbul's waqf-held wealth, not yet estimated but undoubtedly above one-third of the city's real estate, was in the hands of regular waqfs, as opposed to waqfs serving state priorities. Regular waqfs served primarily to protect private assets, pass them onto descendants of the founders, and bolster the salvation of founders and their kin.

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## Appendix A

**Table 1A**  
**Determinants of making self-support a primary function of classic waqfs and cash waqfs, 1453-1923**

VARIABLES	Classic				Cash			
	1	2	3	4	5	6	7	8
Female commoner	0.077 (0.049)	0.074 (0.049)	0.091* (0.052)	0.092* (0.053)	-0.053 (0.145)	-0.053 (0.145)	-0.057 (0.147)	-0.049 (0.149)
Female low-elite	0.146*** (0.040)	0.143*** (0.041)	0.138*** (0.041)	0.141*** (0.041)	-0.022 (0.081)	-0.023 (0.082)	-0.040 (0.081)	-0.025 (0.086)
Cleric	0.108* (0.058)	0.100* (0.058)	0.063 (0.064)	0.070 (0.065)	0.141 (0.110)	0.141 (0.111)	0.098 (0.122)	0.116 (0.124)
Military low-elite	0.090 (0.078)	0.087 (0.078)	0.070 (0.079)	0.070 (0.079)	-0.133 (0.129)	-0.133 (0.133)	-0.134 (0.132)	-0.116 (0.125)
Economic elite	0.059 (0.053)	0.056 (0.055)	0.045 (0.057)	0.052 (0.056)	0.085 (0.103)	0.085 (0.104)	0.042 (0.107)	0.066 (0.109)
Female high-elite	-0.353** (0.152)	-0.357** (0.152)	-0.377** (0.155)	-0.379** (0.154)	-0.021 (0.094)	-0.023 (0.095)	-0.020 (0.096)	-0.051 (0.154)
Male high-elite	0.070 (0.052)	0.066 (0.052)	0.053 (0.054)	0.049 (0.053)	-0.021 (0.094)	-0.023 (0.095)	-0.020 (0.096)	-0.008 (0.098)
Convert	0.063** (0.025)	0.062** (0.025)	0.058** (0.027)	0.071** (0.028)	0.098 (0.078)	0.098 (0.078)	0.089 (0.078)	0.090 (0.078)
Ramadan founding		-0.005 (0.045)	-0.018 (0.048)	-0.010 (0.048)		0.024 (0.088)	0.019 (0.088)	0.031 (0.092)
War year			0.005 (0.043)	-0.008 (0.042)			0.094 (0.085)	0.069 (0.079)
Revolt year			0.073 (0.062)	0.033 (0.057)			-0.003 (0.303)	0.056 (0.421)
Price variability				0.254* (0.133)				-0.119 (0.331)
Intercept	0.077 (0.049)	0.074 (0.049)	0.091* (0.052)	0.092* (0.053)	-0.053 (0.145)	-0.053 (0.145)	-0.057 (0.147)	-0.049 (0.149)
Observations	1441	1436	1347	1325	700	698	665	661
R <sup>2</sup>	0.451	0.451	0.451	0.455	0.588	0.590	0.591	0.592
Adjusted R <sup>2</sup>	0.227	0.226	0.218	0.219	0.097	0.096	0.088	0.081
Data source fixed-effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fifty year fixed-effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Omitted independent variable: Male commoner.

Standard errors in parentheses.

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

Data: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

## Appendix B

**Table 2A**  
**Determinants of making non-religious social services a primary function of classic and cash waqfs, 1453-1923**

VARIABLES	Classic				Cash			
	1	2	3	4	5	6	7	8
Female commoner	-0.03 (0.02)	-0.03 (0.02)	-0.03 (0.02)	-0.03 (0.02)	-0.02 (0.13)	-0.01 (0.13)	-0.01 (0.14)	0.01 (0.13)
Female low-elite	-0.02 (0.02)	-0.03 (0.02)	-0.02 (0.02)	-0.03 (0.02)	0.00 (0.11)	0.02 (0.11)	0.03 (0.12)	0.04 (0.12)
Cleric	-0.02 (0.05)	-0.02 (0.05)	-0.02 (0.06)	-0.02 (0.06)	0.27** (0.13)	0.29** (0.13)	0.28** (0.13)	0.30** (0.13)
Military low-elite	-0.07** (0.03)	-0.07** (0.03)	-0.06** (0.03)	-0.06** (0.03)	0.50** (0.23)	0.51** (0.22)	0.53** (0.22)	0.52** (0.21)
Economic elite	0.00 (0.03)	0.00 (0.03)	0.01 (0.03)	0.01 (0.03)	0.24** (0.12)	0.26** (0.12)	0.23* (0.12)	0.26** (0.12)
Female high-elite	-0.01 (0.19)	-0.02 (0.19)	-0.00 (0.18)	-0.01 (0.18)	1.16*** (0.10)	1.17*** (0.10)	1.21*** (0.11)	1.40*** (0.13)
Male high-elite	0.03 (0.03)	0.03 (0.03)	0.03 (0.03)	0.02 (0.02)	0.16 (0.10)	0.17* (0.10)	0.21* (0.11)	0.21** (0.11)
Convert	-0.00 (0.02)	-0.00 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.06)	-0.01 (0.06)	0.00 (0.06)	0.01 (0.06)
Ramadan founding		0.04 (0.03)	0.04 (0.03)	0.04 (0.03)		0.03 (0.07)	0.02 (0.07)	0.01 (0.06)
War year			0.01 (0.02)	0.00 (0.02)			0.24*** (0.09)	0.21** (0.09)
Revolt year			-0.05 (0.03)	-0.03 (0.04)			0.05 (0.31)	0.16 (0.38)
Price variability				-0.14 (0.10)				0.52* (0.27)
Observations	1441	1436	1347	1325	700	698	665	661
R <sup>2</sup>	0.486	0.484	0.485	0.494	0.576	0.583	0.589	0.595
Adjusted R <sup>2</sup>	0.276	0.272	0.267	0.275	0.071	0.080	0.083	0.087
Fifty-year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Data source fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Omitted independent variable: Male commoner.

Standard errors in parentheses.

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

Data: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

## Appendix C

**Table 4A**  
**Determinants of endowing prayers for personal benefit, 1453-1923**  
**(personal benefit restricted to prayers for founder's soul)**

VARIABLES	1	2	3	4	5	6	7	8
Female commoner	0.139*** (0.040)	0.138*** (0.040)	0.126*** (0.046)	0.147*** (0.044)	0.147*** (0.049)	0.150*** (0.049)	0.133*** (0.049)	0.133*** (0.049)
Female low-elite	0.167*** (0.027)	0.167*** (0.027)	0.123*** (0.034)	0.070*** (0.026)	0.081** (0.034)	0.083** (0.034)	0.080** (0.035)	0.078** (0.036)
Cleric	0.145*** (0.034)	0.146*** (0.034)	0.068 (0.044)	0.002 (0.047)	0.022 (0.057)	0.024 (0.057)	0.016 (0.058)	0.010 (0.059)
Military low-elite	0.127* (0.071)	0.127* (0.071)	0.104 (0.085)	0.083 (0.073)	0.088 (0.082)	0.091 (0.082)	0.069 (0.083)	0.073 (0.083)
Economic elite	0.077** (0.031)	0.078** (0.032)	0.086** (0.039)	0.027 (0.033)	0.053 (0.041)	0.055 (0.042)	0.045 (0.046)	0.045 (0.045)
Female high-elite	0.138 (0.114)	0.140 (0.114)	0.321* (0.180)	0.148 (0.106)	0.527*** (0.190)	0.526*** (0.190)	0.502** (0.196)	0.501*** (0.194)
Male high-elite	0.090*** (0.026)	0.091*** (0.026)	0.028 (0.033)	0.008 (0.027)	0.012 (0.035)	0.015 (0.036)	-0.008 (0.040)	-0.003 (0.040)
Convert		0.005 (0.019)	0.020 (0.022)	-0.013 (0.019)	-0.023 (0.024)	-0.026 (0.024)	-0.026 (0.025)	-0.029 (0.025)
Ramadan founding						0.015 (0.040)	0.016 (0.042)	0.018 (0.043)
War year							-0.096 (0.105)	-0.095 (0.105)
Revolt year							0.532*** (0.186)	0.525** (0.227)
Price variability								0.819 (0.655)
Observations	2394	2394	2155	2394	2155	2148	2025	1988
R <sup>2</sup>	0.019	0.019	0.290	0.387	0.536	0.537	0.548	0.549
Adjusted R <sup>2</sup>	0.016	0.016	0.122	0.167	0.112	0.111	0.104	0.113
Year fixed-effects	No	No	Yes	No	Yes	Yes	Yes	Yes
Data source fixed-effects	No	No	No	Yes	Yes	Yes	Yes	Yes

Omitted independent variable: Male commoner.

Standard errors in parentheses.

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

Data: Aydın et al. (2015), Canatar (2004), and court registers listed in note 23.

24.2% of the entire sample of waqf deeds stipulate prayers for deceased people. For the deeds of waqfs founded by male commoners (the reference group), the share was 13.5%.

**Table 4B**  
**Determinants of endowing prayers for personal benefit through classic and cash waqfs, 1453-1923**

VARIABLES	Classic				Cash			
	1	2	3	4	5	6	7	8
Female commoner	0.16*** (0.05)	0.16*** (0.05)	0.15*** (0.05)	0.14*** (0.05)	0.13 (0.11)	0.12 (0.11)	0.11 (0.11)	0.14 (0.10)
Female low-elite	0.07** (0.03)	0.07** (0.03)	0.06* (0.03)	0.05 (0.03)	0.10 (0.08)	0.09 (0.08)	0.08 (0.08)	0.11 (0.08)
Cleric	0.05 (0.06)	0.05 (0.06)	0.04 (0.06)	0.04 (0.06)	0.10 (0.11)	0.09 (0.11)	0.09 (0.11)	0.11 (0.11)
Military low-elite	0.12 (0.11)	0.13 (0.11)	0.09 (0.10)	0.09 (0.11)	-0.13* (0.08)	-0.15* (0.08)	-0.11 (0.08)	-0.12 (0.10)
Economic elite	0.04 (0.04)	0.05 (0.04)	0.04 (0.04)	0.04 (0.04)	0.12 (0.13)	0.12 (0.12)	0.10 (0.12)	0.14 (0.12)
Female high-elite	0.22 (0.17)	0.22 (0.17)	0.20 (0.17)	0.20 (0.17)	1.00*** (0.08)	1.00*** (0.08)	0.98*** (0.08)	1.20*** (0.16)
Male high-elite	0.01 (0.04)	0.01 (0.04)	-0.01 (0.04)	-0.00 (0.04)	0.00 (0.08)	-0.00 (0.08)	-0.02 (0.08)	0.00 (0.08)
Convert	-0.03 (0.02)	-0.03 (0.02)	-0.03 (0.03)	-0.03 (0.03)	0.01 (0.06)	0.01 (0.06)	0.01 (0.06)	0.01 (0.06)
Ramadan founding		0.02 (0.05)	0.03 (0.05)	0.03 (0.05)		-0.17*** (0.06)	-0.16*** (0.06)	-0.17** (0.07)
War year			0.04 (0.03)	0.05 (0.03)			0.05 (0.09)	0.03 (0.09)
Revolt year			0.27*** (0.05)	0.28*** (0.05)			0.30** (0.14)	0.21* (0.11)
Price variability				-0.13 (0.12)				0.55 (0.38)
Observations	1441	1436	1347	1325	700	698	665	661
R <sup>2</sup>	0.391	0.390	0.401	0.405	0.628	0.630	0.629	0.633
Adjusted R <sup>2</sup>	0.142	0.141	0.148	0.148	0.184	0.184	0.172	0.173
Fifty-year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Data source fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Omitted independent variable: Male commoner.

Standard errors in parentheses.

\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

Data: Aydın et al. (2015), Canatar (2004), and court registers listed in note 21.