

Religious Conversion and Economic Incentives: Evidence from Ottoman Bosnia

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Abstract

While economic historians have invested a great deal of effort into understanding the economic consequences of religion, they have invested relatively little effort into understanding the determinants of religious affiliation. This paper examines the determinants of conversion to Islam in the Ottoman Bosnia and beyond. Employing village-level data constructed from the Ottoman tax registers of 1468 and 1604, we find that households in the initially poorer villages were more likely to convert to Islam. This finding is consistent with the notion that the poll-tax that non-Muslims had to pay stimulated the poorer Christians to convert to Islam. Using a stream of population censuses, we also find that our results hold after the end of the Ottoman rule and its discriminatory tax in 1878. We hypothesize that one reason for this persistence is that religious identity became embedded into the rising national consciousness during the nineteenth century, increasing the cost of changing religion.

A growing body of theoretical literature argues that norms and beliefs influence the behavior of individuals, and thus their welfare (Bisin & Verdier, 2001; Doepke & Zilibotti, 2008; Tabellini, 2008). Empirical literature has demonstrated that norms and beliefs today can depend on events and institutional arrangements in the distant past (Nunn & Wantchekon, 2011; Voigtländer & Voth, 2012). Historically, religion has greatly shaped individual behavior and the social environment. For that matter, the importance of religion has long been recognized in social sciences (Smith, 1776; Weber, 1958). Yet, it is only recently that a new generation of economists began to apply the tools of their field to the study of religion (Iyer, 2016). These researchers have devoted a great deal of effort into understanding the economic consequences of religion (Barro & McCleary, 2003; Becker & Woessmann, 2009; Cantoni, 2015; Kersting, Wohnsiedler, & Wolf, 2020), including that of Islam (Campante & Yanagizawa-Drott, 2015; Kuran, 2010; Rubin, 2017). They have devoted comparatively little effort, however, into understanding why some religions are more successful than others in attracting believers (Becker, Pfaff, & Rubin, 2016; Becker, Rubin, & Woessmann, 2021). More broadly, understanding when norms and beliefs persist, and when they are malleable, remains a key challenge in the economics of culture.

This paper examines the determinants of conversion to Islam in the Ottoman Bosnia, as well as the subsequent persistence of Islam in that region. Bosnia emerges as a particularly interesting case to study religious change and persistence for two reasons. First, conversion to Islam left a long-lasting legacy in Bosnia. The region today is extremely ethnically and religiously diverse. It is composed of Bosniaks, Croats and Serbs, which share a similar Slavic origin and language, yet practice different religions; Islam, Catholicism, and Orthodox Christianity, respectively. Second, converts to Islam were the ordinary subjects (peasants and serfs), unlike in the other Balkan regions where they were mostly the elite members of society (Lopasic, 1994). Moreover, the conversion process started as early as the fifteenth century (Kırmızıaltın, 2007). These facts on Bosnia are not only historically interesting, but are also empirically useful. They allow us to track the determinants of mass conversion over the centuries, stretching from medieval to modern times.

In the main part of the paper, we use the village-level data constructed from the Ottoman tax registers of 1468 (soon after the conquest of Bosnia in 1463) and 1604 (the zenith of conversions). Controlling for a host of socio-economic variables, the OLS estimates suggest that households in the initially poorer villages were more likely to convert to Islam during the peak of the conversion process. This finding is aligned with the poll-tax hypothesis proposed by

some researchers (İnalçık, 1997; Moaçanin, 1999; Saleh, 2018). By converting to Islam, the argument goes, non-Muslims could avoid paying the *jizya*, i.e., the Ottoman poll tax levied from non-Muslim subjects.

This hypothesis is not uncontroversial. For that matter, it triggered a fierce debate among the historians. Many argue that the poll-tax was small and economically insignificant, incapable of stimulating mass conversion (Imamović, 1997; Malcolm, 1994; Minkov, 2004). A counterclaim to this argument points to the regressive nature of the *jizya* (Moačanin, 1999). Given its lump-sum feature, the poll-tax placed a higher relative burden on the poorer members of the society. Based on its regressive nature, Saleh (2018) argues that the poll-tax stimulated the poorer Christians to convert to Islam in Egypt, leading the remaining Christians to shrink into a better-off minority.

If the poll-tax stimulated the poorer Christians to convert to Islam, then one would expect a negative association between income and conversions, which is exactly what we find. Of course, there are many other theories on the Islamization process, which we elaborate upon later. They are, however, either inconsistent with the negative relationship between income and conversions, or they are explicitly controlled for in our empirical analysis. Our results, therefore, lend some credence to the poll-tax hypothesis, and are complementary to Saleh (2018).

One threat to our OLS results, however, is endogenous selection - Christians migrating to richer villages. To establish causality, we instrument income per household by agricultural suitability of land. The plausibility of the instrument is based on the notion that, in medieval and pre-modern Bosnia, agriculture was the most important source of income for the majority of households (Moačanin, 1999). The IV specification results are consistent with the OLS ones - households in the initially poorer villages were more likely to convert to Islam. The IV estimates are robust to wide violations of the exclusion restriction, following the method of Conley, Hansen, & Rossi (2012).

In the second part of the paper, we match the pre-modern Ottoman tax registers with the modern population censuses of the nineteenth and twentieth centuries (1879, 1910, 1991, and 2013). Using this dataset, we analyze whether our results hold over time, i.e., after the end of the Ottoman rule in 1878. We find that they do; the initially poorer villages (as of 1468) had a larger share of Muslims during the Austro-Hungarian and Yugoslav rule of Bosnia, as well as in the contemporary Bosnia and Herzegovina. We hypothesize that one reason for this persistence is

that religious identity became embedded into the rising national consciousness during the nineteenth century. That is, in Bosnia, national identities emerged along religious lines (Banac, 1984; Imamović, 1997; Malcolm, 1994). Despite the end of the discriminatory Ottoman poll-tax in 1878, switching religious identity became costlier, because now it also implied a change in national identity. By extension, patterns of religious affiliation persisted over time. Although we cannot marshal much direct evidence to support our argument, we believe that history and theory support it.

Our paper is closely linked to a number of empirical studies on religious conversions in history. These studies have found that the printing press (Rubin, 2014), the threat of the Ottoman invasion (Iyigun, 2008), strategic neighborhood interactions (Cantoni, 2012), network effects under Martin Luther (Becker, Hsiao, Pfaff, & Rubin, 2020; Kim & Pfaff, 2012), and the taste for education (Botticini & Eckstein, 2005, 2007), have influenced religious affiliation. Our results suggest that religious affiliation may have also been shaped by income and taxes.

We are, however, not the first ones to make this argument. In a closely related, and already mentioned, paper, Saleh (2018) demonstrates that the introduction of the poll-tax into Egypt after the Arab conquest stimulated conversion to Islam. Drawing on the same evidence from the early Islamic era, Saleh & Tirole (2021) construct a theoretical model under which Muslim rulers impose high tax rates to motivate conversion to Islam, despite the sub-optimal revenue generation that this policy can imply. As argued by Becker et al. (2021), the insights of this literature have yet to be extended beyond Egypt. The present article steps in by studying Bosnia - the heartland of the Islamization process in the Balkans, and one of the most important provinces of the Ottoman Empire due to its frontier status and proximity to Vienna (İnalçık, 1973).

By focusing on Bosnia, this paper also contributes to the centuries-long debate about the spread of Islam in the Balkans under the Ottomans. Minkov (2004) contends that it was the elites who were more eager to convert to Islam, with the aim of maintaining their higher social status. Another hypothesis puts the emphasis on the role of missionaries propagating Islam (Zhel-yazkova, 2002). Other explanations point to trade and Muslim merchants stimulating conversions (Michalopoulos, Naghavi, & Prarolo, 2018), or to urbanization and towns that took an Islamic form (Aličić, 1991; Filipović, 1976). Some also contend that it was Islam's theological appeal that attracted the converts (Imamović, 1997).

Yet another explanation, specific to Bosnia, begins with the observation that the region was a “no-man's land between the faiths” (Handžić, 1991; Husić, 2011). Before the arrival of the

Ottomans, Bosnia was under the influence of the Catholic Church, Orthodox Christianity, and the Church of Bosnia – a sect of Christianity marginalized and persecuted by the Catholic Church (Malcolm, 1994). Debilitated by the fierce competition over the religious affiliation of the Bosnians, the argument goes, none of these churches were strong enough to resist the spread of Islam (Handžić, 1991; Husić, 2011).

We contribute to this voluminous historiography with the first systematic empirical treatment of religious change in the Balkans, and in the Ottoman Empire in general. Although our results point to income and taxes as of primary importance in stimulating conversions to Islam, this does not mean that the other explanations are irrelevant. They are rather of second-order importance in understanding conversions.

Finally, our paper also sheds some light on the roots of religious diversity in the Balkans. Although Yugoslavia as a union of South Slavic nations attempted to create a supranational identity in the twentieth century that would bind the ethnic groups that composed the country, religious and ethnic divisions were at the center of the conflicts that characterised the region during the 1990s (Lampe, 1996; Wachtel, 1998). Our paper will hopefully stimulate other empirical work and foster the understanding of the formation and persistence of these divisions.

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