Losing Their Religion:
State Banning of Religion, Social Norms, and Female Participation

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Abstract: This paper studies the relationship between economic prosperity and religion through the lens of social norms. In a social equilibrium framework, where a society is one realization of many possible equilibria, we model how the Albanian government increased female participation in education and employment by changing the social equilibrium through credibly committing to communist ideals. This shift was accomplished by declaring Albania the *First Atheist* country in the world in 1967 and the de-sanctification of its religious buildings, excluding those deemed national cultural monuments 20 years prior. Exploiting this unique natural experiment, we use this variation in spared buildings to measure the credibility of the government's commitment to female emancipation in each municipality. In doing so, our main focus is on citizens' faith in the state's commitment, rather than their faith in religion. Using forty years of hand-transcribed administrative data, we show that in the decades following the reform, municipalities in which all religious buildings were de-sanctified experienced higher growth in female schooling, labor market participation, and production. Supplementary analysis, exploiting the Demographic and Health Survey data on social norms, shows that the reform has had lasting improvement of female empowerment. We argue that the Albanian government changed social norms through the banning of religion to achieve their policy goals.

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I. Introduction

Historical as well as modern-day differences in economic fortunes and productivity across countries are frequently (and controversially) attributed to socio-cultural factors. An economic literature dating back at least to the 18th century, with influential work by Adam Smith and John Stuart Mill, has argued that culture is an important factor in explaining economic phenomena (Smith 1759, 1776; Mill, 1843). Later, since Weber's (1905) canonical work, religion has become one of the most prominent cultural factors in the debate surrounding economic success.

Religions have the capacity to impact culture and society in a multitude of ways, but potentially one of the most important ways is their influence on social norms. Religions not only impact the behaviors of followers through practices and beliefs, when such behavioral norms are aggregated up to a societal level, they shape social norms that affect less adherent and even non-believers. Consequently, religion-based social norms have the potential to affect the economic growth of the entire society. A prominent set of constraints to growth in many religious cultures relates to the role of women in society, often limiting their economic activity to housework and the upbringing of children.

This paper develops our understanding of the relationship between economic prosperity and religion through the lens of religious social norms (Benabou and Tirole 2011). We employ a social equilibrium framework, where a society is one realization of many possible social equilibria - for example, a society could function with high or low female participation in the labor market. Such equilibria are persistent as they would require a coordinated updating of actions to move to another social equilibrium (Belloc and Bowle 2013). A government that has preferences over social equilibria would have to make credible commitments, strong enough to ensure a coordinated shift of beliefs and consequently actions of its citizens. We argue that committing to changing the state religion - thus shifting away from religious social norms that inhibit female participation in the society - is one way for societies to switch, and thereby making culture an additional policy leaver.

We provide empirical evidence for this hypothesis by taking advantage of a unique natural experiment: Albania's decision in 1967 to declare itself the *First Atheist* country in the world and ban all forms of religious expression. At this time Albania was a country with strong conservative religious norms, having a mix of Muslim (Sunni, Bektashi Shia) and Christian (Catholic and Orthodox) faiths. Religious practices in pre-communist era had systematically

imposed the oppression and exploitation of women. Strict religious gender norms for all types of religion compelled women to stay within the household, since their only role in the society was 'by nature fitted for homework, and to promote the good upbringing of their children and the well-being of the family' (Pope Leo XIII, 1891).

Since the communist government took power in 1945, it had been attempting to increase female participation in the labor force and education, but emancipation policies to facilitate their entry had had limited success. Thus, in 1967 the state declared that religion was a "backward custom" and the primary reason for holding back the emancipation of women, and the country's further industrialization. Believing that eliminating the power of religious institutions by 'throwing away backward customs' would be the key to emancipate women, the state outlawed the practice of religion and de-sanctified all religious buildings. Most of these buildings were destroyed, of those that remained the majority were converted into warehouses, with the remaining typically used as theaters, barracks or simply abandoned. A handful of religious buildings were spared de-sanctification, these were buildings that were deemed to be of national historical and cultural value by the Institute of Architectural Preservation in 1948 and thus protected by law. These buildings, instead, were merely closed to the public.

We use this variation of the presence of these 'Monuments of Culture' across municipalities, as variation in the credibility of the government's commitment to these female emancipation reforms. We argue that in municipalities where the state fully committed to its expressed goals, the saliency of the policy greatly increased. Hence the population would be more likely to believe that the state will continue to support female emancipation, leading to a higher likelihood of a coordinated updating of behavioral response in terms of female participation. This will lead to a changing of social norms and arriving at a new social equilibrium, one in which there is higher female participation in the society. Critically, this paper is not concerned with Albanians' faith in religion, but their faith in the state.

We hand-transcribed, secret at the time, microfilm records from the National Archive of Albania and the National Statistics' Institute. Form this we construct a unique municipality-level panel dataset from 1956 through to 1988 with measures of female participation in primary and secondary education, participation in the labor force, and industrial productivity. Using this unique data we employ a difference-in-difference approach, with the presence of monuments as a measure of the reneging of the state's commitment to female emancipation

(or lack of signal of commitment). Municipalities in which all religious buildings were destroyed receive a stronger signal of the government's commitment, which we define as treated municipalities. Municipalities where some religious buildings were spared, due to their designation as a monument of culture, we define as control municipalities. During this period of communist rule, internal migration between municipalities was highly restricted, and so would limit the spread of information about the government's implementation of the policy across municipalities.

We find that, after the reform, treated municipalities experienced relatively larger increases in female participation, in both primary and secondary education. During the first five years post-reform, they also experienced faster growth in the female labor force, before reaching a new equilibrium where the growth in female participation, relative to 1966, remains 20 percentage points higher than the control municipalities for the remainder of the sample. Consistent with a larger labor force due to increased female participation, the treated municipalities also experienced higher growth in industrial production. The large magnitude of our estimates makes the alternative use of the religious building as a main driver of the effects highly improbable.

The key identifying assumption of the difference-in-difference approach is that the treated municipalities would have experienced the same growth rate as the control municipalities in the absence of treatment. While it is impossible to prove this assumption directly, we provide a series of robustness checks to establish that it is likely to hold; First, we show that the treated and untreated municipalities have common trends across a range of outcomes in the decade leading up to the reform; Second, we obtained from the Commission of State Planning Archival data the 1966 state's 5-Year Plans for industrial production. Employing this data is important as it allows us to show that the government planned for the treated and untreated municipalities to have the same growth rate post-reform. Consequently, we also provide evidence that the treated municipalities experienced higher than planned production, while the untreated remained largely below their targets.

We then implement a series of other robustness tests designed to explore if the results are consistent with our main hypothesis that the destruction of religious buildings is perceived as the government's commitment to emancipation. These include alternate metrics of the state's commitment to the reform and establishing that the presence of a religious building of any religion, regardless of which religion dominates in the municipality, results in relatively lower

growth. Albania has a very long history and was a multi-faith country, meaning that some of the monuments of culture represent religions that are not the predominant local religion. The intuition is that the presence of any religious building, whether of the local predominant religion or not, lowers female participation, providing reassurance that our results are driven by the strength of the government commitment.

Our analysis is supported by a second set of results based on data from the Demographic and Health Surveys (DHS). We use data from the 2008/9 DHS survey of Albania, which includes municipality of residence at the end of the communist regime, to assign treatment status to the respondents. Importantly, the DHS provides direct information on evaluating different aspects of gender norms such as: female power at home, wives' views on the acceptance of husband violence at home; female sex autonomy, and literacy rates, based on the answers of the survey female participants aged between 15-49. Comparing all these measures, for women born before and after the religion ban policy, we find that cohorts of women who grew up in treated municipalities with no religious buildings report increasing power at home compared to those residing in municipalities where religious buildings remained. Using the international component of the DHS, we also show that such trends are not common across the same cohorts of women in similar European countries of communist heritage.

This paper contributes to three distinct literatures: social norms, female participation and religion as a determinant of growth. First, to the best of our knowledge, our study is the first to show how a government can actively commit to policies in order to quickly change social norms (which otherwise are thought of to be persistent) to improve economic development. In doing so, our research contributes to a small but growing economics research on social norms. Prior research on culture and social norms has studied their persistence over time (Voigtlander and Voth, 2012, Fernandez, 2007, Giuliano, 2007, Algan and Cahuc, 2010, Alesina, Giuliano, and Nunn, 2013). While others have taken culture and social norms as persistent, and estimated their economic consequences (e.g., Banfield 1958; Putnam 1993; Tabellini 2008; Guiso et al. 2009; Acemoglu and Robinson 2012; Belloc and Bowles 2013; Hwang et al. 2014, Roland, 2005).

Little is known about factors that lead to changes of social norms, and even less about factors that can induce quick changes on a national scale. In our paper we, instead, argue that a state can actively shift society from one social equilibrium to another it favors, if its signal of commitment is strong enough. The Albanian government was using culture, and specifically

religion, as a policy tool. The communist nature of the Albanian government prevented it from other more common policy leavers such as discriminatory financial incentives targeted solely for women to participate in the labor force, which left it with few options apart from using culture as a policy leaver. Note also that while the state had a lot of control over the economy, it did not coerce females into participation: it did not impose laws to force women out of their homes into the labor market.

This paper also contributes to the literature on social norms and female participation (Goldin 1990, Becker and Woessmann 2008, Alesina, Giuliano and Nunn 2013, Giuliano 2020, Bursztyn et al. (2020) Miho et al, 2023). Our paper tests a basic premise of the social norms literature - that certain behaviors are not in fact expressions of deeply held beliefs, but rather the effect of social norms. The extent to which aggregate behavior represents social norms and can therefore be manipulated is ultimately an empirical question. Our experiment shows that these norms are therefore amenable to change, without necessarily having to change people's values or religious beliefs. The scale of the experiment speaks to the consequences of societal-wide changes in social norms over a long time horizon.

Finally, our study also contributes to the growing literature on the mechanisms through which religions impact economic prosperity. Religion is a complex social phenomenon, thus there may be numerous channels through which it affects economic growth. To date, many distinct mechanisms have been established; human capital (Becker and Woessmann 2009, Squicciarini 2020); religious practices (Campante and Yanagizawa-Drott 2015); allocation of capital (Ekelund et al. 2006); innovation (Bénabou et al 2015, Becker, Rubin and Woessmann 2023). We view religious social norms and the role of women in society as an additional mechanism.

This paper focuses on a government committing to banning religion with the goal of increasing female participation in public life, although we should highlight that this did come at a cost: grave penalties were imposed on policy violators: clergy or religious followers were persecuted, sent to labor camps, imprisoned or even killed if they didn't comply, in addition to the many historical buildings being de-sanctified or destroyed. Today Albania reports the lowest rates of religiosity in Southern Europe and one of the highest rate of female participation (the third rate of female participation after Spain and Portugal – see Appendix Figure 1). However, in the years since we have also seen examples of the opposite, where governments have actively reduced female participation through public commitments to religion (Afghanistan, Egypt, Iran, and Saudi Arabia, (CRS, 2021)).

The rest of the study is organized as follows: Section II provides a brief background of Albania's history, its communist institutional settings and religions. Section III develops a social equilibrium framework. Section IV describes the data and Section V the empirical strategy. Section VI presents the main results of the empirical analysis. Section VII employs a battery of robustness checks and Section VII concludes.

II. Background: Religion, Communism and Economic Growth

Albania was a multi-faith society when the Communists came to power. Being at the crossroads of civilizations, it has been part of Roman, Byzantine and Ottoman empires and the Venetian Republic which has influenced the type of religions it has embraced over time. By 1942, 68.9 percent of the population were Muslim (25 percent of which were Bektashi), 20.7 percent were Christian Orthodox and 10.3 percent Catholic. The religious social norms of these Abrahamic religions at this time were very similar in relation to their conservative view of women's role in the society: whether Christian or Muslim, Albanian women were equally oppressed, with men having exclusive rights of domination over them. Upon marriage, they were expected to stay at home, raise children and take care of the well-being of the family, with little other rights. As a result, their participation in the society was very low (Plasari, 1930).

After the end of the Second World War, when the communist government came to power, a new constitution was adopted in March 1946. The first Communist Constitution contained three features salient to this paper: the guaranteed freedom of religion; the secularization of education and equal rights between men and women. From the start, the Albanian communist government took a number of actions to limit the power of religion: it separated religions from the state, expelled all foreign clergy, banned religious political parties and charities, and removed religious communities' real estate ownership. Throughout the implementation of these reforms, the government claimed not to be targeting people's religious beliefs or the freedom of religion expression.[1]

In keeping with other communist powers of the time, the Albanian government prioritized industrial production, having a long-term objective to industrialize the country, reducing its

[1] Enver Hoxha, the communist leader, reinforced this 'freedom of worship' in his speech in 1949, "all of the propaganda of reaction, internal and external, and that of certain reactionary priests claim that we destroy churches and mosques, that we fight those who wish to believe in God, etc., is nothing but vile slander. We have never embarked on this way, and we never will".

dependence on agriculture (Kellici and Danaj, 2016). Post-war reconstruction policies proved to be successful, with industrial production trebling between 1950 and 1955. From the early 1960s, the country received large capital investments from China in the form of new industrial plants. Increasingly, there were concerns that large amounts of this new capital were being underutilized, and that there was a nationwide capital-labor imbalance. Consequently, the mobilizing of the female population for further industrialization was seen as critical to further growth (Kellici and Danaj, 2016). Women were seen as a 'reserve' force, much needed to push ahead with industrialization policies (AQSH, 1963). Since the communist government took to power, they had embarked on various policies to engage women more in the public and social life. Initially, these took the forms of speeches concerning the emancipation of women[2], and broadened to more practical policies to facilitate female participation including provision of nurseries and pre-school care even in the most remote areas of the country. However, despite these announcements and low commitment policies, there was little change in religious social norms: women were still largely 'confined' at home and female participation in education or the labor market remained stubbornly low. By 1966, only 40 percent of working age women were in employment, thus the state had not met its participation goals (AQSH 1967).

At this point, the government started to blame religion and 'its backward customs' directly as the main reason for holding women back from the public life and, consequently, slowing country's further economic development. That year in the Party Congress it was stated that religions 'singlehandedly were to blame for the secondary role women had in the Albanian society'. This became an important justification for the ban of all religions, with Hoxha declaring that the nation "should throw backward customs into the flames".[3] This was to be registered as the last year of 'freedom of worship', as the removal of religion and its customs became crucial for country's further economic development (Gjecovi et al. 2008).

In February 1967, Hoxha mobilized communists throughout the country to organize and close, de-sanctify or demolish all religious buildings. Soon after, the decree No. 4337 "On The Abrogation of Certain Decrees" legalized the ban of religious institutions, superseding the previous decrees that had legitimized them, and declared Albania the *First Atheist State* in the

[2] For example, in his speech at the Fourth Congress of Women's Union of Albania, Hoxha referred to women as 'the proletarian of men' who had previously had only one right, that of bearing children and slaving day and night" (Kellici and Danaj, 2016).

[3] Hoxha criticised religious 'patriarchal' practices: "Struggle was needed to create the personality of women. It could not be done just by decree. The women and girls had to win this through work, schooling and education" (Kellici and Danaj 2016).

world.[4] Most religious buildings were demolished or turned into cultural/youth centers, and warehouses.

A small number of religious buildings, however, were preserved and left untouched by the 1967 policy. In 1948, the Institute of Architectural Preservation determined the 'historical and architectural importance' of buildings across Albania. In that same year, the state passed the legislation of "Monuments of Albanian Cultural Heritage", which protected such buildings because of their historical, architectural and cultural significance to the country. Of the 2,169 religious buildings at the time, this legislation protected around 7 percent of them (157). Thus, the decision on the preservations of the religious buildings as monuments pre-dates the religion ban policy by almost twenty years. These buildings were left untouched, although they were closed to the public. We exploit this exogenous variation of the monuments preservation across the municipalities to evaluate the causal impact of the religion ban.

III. A Social Equilibrium Model: Conceptual Framework

We model society as one realized equilibrium from a set of multiple possible equilibria. The state may have preferences regarding these equilibria and may wish to shift society from one equilibrium to another. In the case of Albania, the state wanted to change the social equilibrium to increase female labor force participation and foster economic growth. To better understand this process, we propose a conceptual framework in which the actions of individuals are dependent upon the actions of others (stigma) and their beliefs regarding the returns to actions which depend on the state. Here, the abolition of religion is a large shock which generates a coordinated updates of beliefs (about the state's commitment to the emancipation of women) and consequently actions, to shift to a new stable social equilibrium. We will exploit variation in the state's commitment to their stated goals. In areas where the state strongly committed to female empowerment, the perceived returns to female participation will be higher. Given these increased returns, marginal women will participate in the labor market. This increased participation will reduce the stigma of female participation for non-participating women, inducing more to participate. Ultimately, these municipalities will stabilize at a new social equilibrium, with a different social norm regarding female emancipation.

[4] It is worth noting, that compared to other Eastern European communist countries, Albania's antireligious policies were much more extreme (Gallagher, 1997).

III.A. Model Setup

There is a continuum of size 1 of households indexed by $i \in [0,1]$. Each household can take one of two actions $a_i \in \{H, W\}$, where $a_i = H$ means that the woman in household i stays home and $a_i = W$ means that she works. Note, for simplicity we focus on a single female in the household participating in the labor market. The same reasoning can be applied to daughters participating in education. Define by x the share of households with women that participate in the labor market, that is:

$$x = \int_0^1 \mathbb{I}\,(a_i = W)di$$

Each household derives a household specific benefit θ_i from the labor market participation of its female household member. The population distribution of this preference parameter is characterized by the cumulative distribution function F and corresponding density f.

Households also face a cost from having its female household member work outside the home. This cost is the same across households and decreases in aggregate female participation x,

$$C(x) = c + s(x)\ with\ s'(x) < 0$$

c measures a cost component that is independent of other households' decision, e.g., transportation costs or opportunity cost of employment. A negative value for c would imply net benefits for female participation. The government can influence this opportunity cost, for example lowering it by increasing women's expected wages. $s(x)$ measures the strength of the social cost (stigma) of having a working female household member. The higher the aggregate female labor force participation, the smaller the stigma.[5]

The woman in household i works whenever the household's payoff from taking this action is bigger than the payoff from her staying home. We normalize the latter to 0. Then, the woman of household $i's$ participates whenever:

$$V(\theta_i, x) = \theta_i - c - s(x) \geq 0 \ \Rightarrow\ \theta_i \geq c + s(x)$$

One can consider c and θ_i to reflect the private costs and benefits of participation, and $s(x)$ as the social stigma of participation.

[5] A simple functional form for $s(x)$ is a linear function $s(x) = \delta - \beta x$. Here, β would measure the strength of the strategic complementarity in female participation. If $\beta x > \delta$ for some $x \leq 1$, then total cost becomes negative which would be driven by the stigma from having the woman not participating in the labor market.

III.B. Equilibrium participation

In equilibrium, female labor force participation x has to be consistent with the optimal choices of all households. The share of households for whom the private benefit from the woman working is big enough to offset the costs, that is $\theta_i \geq c + s(x)$, is $1 - F\big(c + s(x)\big)$. Thus, the equilibrium rate of female labor force participation, x, has to solve the equation:

$$x = 1 - F\big(c + s(x)\big)$$

For any level of labor force participation, there will be a marginal household whose marginal benefits from participation equal their marginal costs. Define $\theta(x)$ as the marginal household for a given female labor participation rate x, i.e.

$$\theta(x) = \ c + s(x)$$

The slope of the RHS of (1) can then be written as:

$$-s'(x)f\big(\theta(x)\big) \geq 0$$

This expression captures the strategic complementarities at a given level of x. If x is increased marginally, an additional measure $-s'(x)f\big(\theta(x)\big)$ of women work. The steeper this slope, the stronger are the complementarities at that level of participation. Intuitively, a small change dx pushes the marginal household from type $\theta(x)$ to type $\theta(x) - s'(x)dx > \theta(x)$ and, locally, the households affected by this change is given by the density in that area, $f\big(\theta(x)\big)$. Thus, the strategic complementary is stronger the more negative $s'(x)$, i.e., the bigger the effect on cost from a change in x, and the higher the share of household that are marginally affected by that cost shift, $f\big(\theta(x)\big)$. For example, if private household benefits from female participation, θ_i, was normally distributed, at very low levels of female participation, x, the share of the households that would be marginal, would be smaller than when half the households have females participating.

III.C. Simple Observations

1. If $1 - F\big(c + s(0)\big) = 1$*, that is the private benefit* θ_i *is lower than the cost of participating if no other woman works for all households, then* $x = 0$ *is always a solution. Likewise, if* $1 - F\big(c + s(1)\big) = 0$*, that is even the household with the lowest private benefit* θ_i *prefers its woman to work if all other women work, then* $x = 1$ *is always a solution of (1).*

2. If $1 - F\big(c + s(0)\big) < 1$*, then a valid solution always has some female participation, i.e.,* $x > 0$*. If* $1 - F\big(c + s(1)\big) > 0$*, then in any equilibrium some women do not work, i.e.,* $x < 0$*.*
3. A solution $x \in [0,1]$ *of (1) always exists. As F is a CDF,* $F\big(c + s(1)\big) \leq 1$ *and* $F\big(c + s(1)\big) \geq 0$*. Furthermore, we have assumed that the distribution is continuous, i.e., it does not have any mass points and its density f exists.*
4. Geometrically, a solution x^* *of (1) occurs at the intersection of the 45-degree line and the graph of* $1 - F\big(c + s(x)\big)$ *on* $x \in [0,1]$*. A solution* x^* *is stable if the slope of this graph at the intersection is smaller than* 1*, i.e., if* :

$$-s'(x^*)f\big(c + s(x^*)\big) < 1$$

Otherwise, the solution is unstable, i.e., small shocks to the equilibrium level of female labor force participation around x^* *will move* x *away from* x^**.*

III.D. Discussion

We model the social component of costs as a strategic complement where the benefits (reduced cost) of $a_i = W$ is increasing in x. This generates a key feature of social norms, in that they are self-reinforcing, and can be modelled as a super-modular game. Households will keep to the norm if they expect others to also do so, even if the private returns to the action appear high. In our setting, there may be high returns to female employment, but no single household takes this action, as no other household is prepared to do so.[6] This makes the social norm, and as a result the social equilibrium, very stable (Botticini and Eckstein (2005) and Guiso et al (2006)).

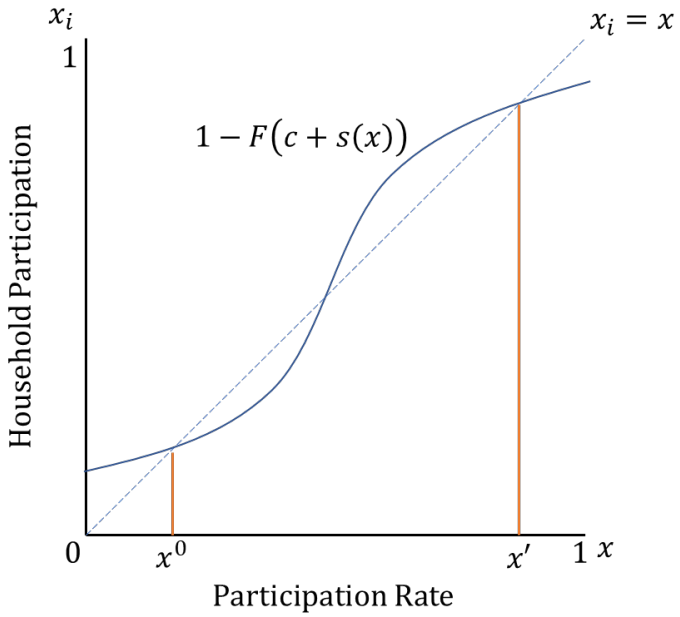
We apply this framework to our setting in Figure 1, which shows the participation of any given household against the female labor participation rate x. Any equilibrium must lay on the 45-degree line, where the female labor force participation x is consistent with the optimal choices of all households. The share of households for whom the private benefit from the woman working is big enough to offset the costs, is $1 - F\big(c + s(x)\big)$.

From the observation (3.) above, as F is a CDF, $F\big(c + s(1)\big) \leq 1$ and $F\big(c + s(1)\big) \geq 0$ a solution always exists, hence $1 - \mathrm{F}\big(\mathrm{c} + \mathrm{s}(\mathrm{x})\big)$ must cross the 45-degree line on $\mathrm{x} \in [0,1]$ at least once. Figure 1 shows two social equilibria x^0 and x', with low and high female

[6] This is akin to a simple 2x2 coordination game were the payoff for coordinating is larger than the private returns to female participation, which would result in two Nash equilibria (participate, participate) and (non-participate, non-participate)

participation. While both are possible, we argue that Albania was initially at x^0.[7] The shape of this function is dependent both on the stigma function, s(x), and the distribution of the household specific benefit from participation of its female household member, θ_i. The steeper the gradient, the more marginal households at that participation rate. The function in Figure 1 is consistent with normally distributed θ_i, at extreme levels of participation there are few marginal households.

Figure 1



Note: x_i represents female participation of a household, and x represents the labor market participation rate. x^0 represents a low participation equilibrium and x' represents a high participation rate.

The intersection of the curve and the y-axis represent the situation where some households gain so much benefit from female participation regardless of societal stigma that they would continue to have the female participate even if no other households would. This is not an equilibrium as these households contribute to the participation rate. Other marginal households, noticing that the participation rate is non-zero, would then also choose to participate. The process repeats itself and hence society moves up the curve until it reaches social equilibria x^0. At x^0, marginal non-participating households observing x would not choose to participate. If there was an exogenous shock which increased participation to $x + e > x^0$, where e is small,

[7] Note, without the state provision of facilities that facilitate female participation, such as nurseries, it could be the case that function only intersects with the 45-degree line once, with low female participation.

then the social stigma against participation would still be sufficient that marginal households would withdraw participation. A similar discussion can be made for x'. The middle intersection is not a stable equilibrium as any marginal deviation would cause further deviations until society reached one of the other equilibria.

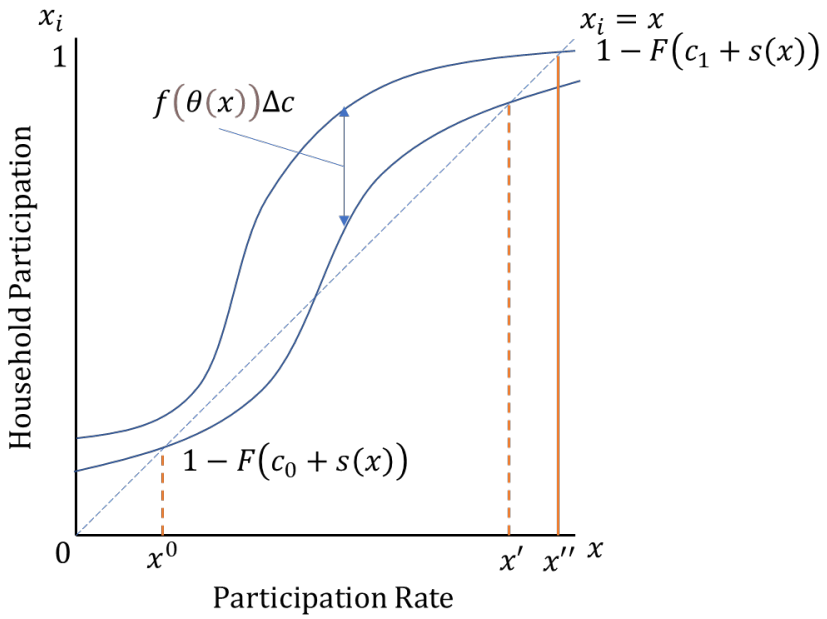
We are considering the role of government, who has preferences over social equilibria. If the government can credibly commit to reducing the private cost (increased expected returns) of female participation c by a sufficient amount, then it could ensure that there's only a unique high participation equilibrium. This would occur directly, through the change in c, and indirectly through the change in other households' actions x. Specifically, from $\theta(x) = c + s(x)$ we see that reductions in private cost of female participation shift the marginal household type "down", i.e., households with lower private benefits $\theta(x)$ will decide to participate for a given level of x. A decrease of c by $-\Delta c$ shifts the function $1 - \mathrm{F}\big(\mathrm{c} + \mathrm{s}(\mathrm{x})\big)$ up by:

$$-f\big(\theta(x)\big)\frac{d\theta(x)}{dc}(-\Delta c) = f\big(\theta(x)\big)\Delta c$$

at each x. Figure 2 shows this, where for given Δc the shift in the function will be larger when the gradient is steeper.

Figure 2 shows the situation where a reduction in exogenous private costs from c_0 to c_1 has resulted in a unique stable equilibrium is at x''. The implication is that even small Δc can lead to large changes in participation. The dynamics of this change, shown in Appendix Figure 2, are the following: 1) Initially, we are at x^0, where there is a shallow gradient, meaning there are few marginal households, so a change in c will cause small changes in household participation; 2) Then, as the share of households who participate increases, there are more marginal households, represented by the steeper slope. These small initial changes will then cause larger changes in participation rates; 3) Finally, as we near the new equilibrium (x''), there are again few marginal households. These remaining households are the ones with the most aversion to female participation. Even with the large changes in participation rate, few of these households will change their decision. Ultimately, we reach a new stable equilibrium (x'').

Figure 2



Note: x_i represents female participation of a household, and x represents the labor market participation rate. x^0 represents a low participation equilibrium and x' represents a high participation rate under c_0. x'' represents the unique equilibrium under c_1.

Moving between such equilibria is not easy for the government to achieve as no household will want to deviate from the current standard, due to the self-reinforcing nature of social norms. This has been tried through providing information about what actions others in society are performing (Allcott, 2011). However, there are also multiple reasons why citizens would not trust the commitment of the government to their stated policy (Dani, 1989).[8] In order to achieve a coordinated update of social norms and move to another equilibrium, governments will need to provide a credible signal of a decrease in c. We argue that the de-sanctification of religion buildings is a credible signal. Having a strong enough signal would lead households to believe c has decreased and, therefore, may lead to a shift in social equilibria. Note, this doesn't require households to change their religious beliefs overnight, only their beliefs in the state actions, and the actions of other households.

Applying this model to our setting: when the Albanian Communist government took to power after World War II, Albania was initially at a low female participation equilibrium, and

[8] Three reasons for the lack of trust are: inconsistency – the policy is inconsistent with contemporaneous policy goals; time inconstancy - optimal ex-post strategy may differ from its optimal ex-ante strategy; credibility – with incomplete or asymmetric information individuals may not be able to tell how serious the government really is about the reform process.

potentially there was only one equilibrium possible, given the lack of state support for female employment. Over the next couple of decades, the government attempted to increase female participation by providing state nurseries and other services to reduce women housework. This would raise the participation so that there could be a new stable equilibrium with high female participation x', but without a coordinated shift society would remain at x^0 (Figure 1). The government wants to increase female participation, and so publicly commits to raising returns to participation for women, c (Figure 2), by banning religion. However, in some municipalities the pre-existing rule of "monuments of culture" preservation prevented that commitment to be fully implemented, and so the population in these municipalities perceives that the government, despite its rhetoric, has not credibly committed, and so do not perceive a change in c and consequently no change in social equilibrium.

While through observing participation rates we are not able to separate the impact of a change in c from a change in s(x), this social norms' framework also provides specific predictions about how productivity would change as a result of moving to a new social equilibrium. This is shown graphically in Appendix Figure 2. First, there will be little differential growth in the first few years post-reform; Then, there will be a period where there are large gains in treated municipalities compared to untreated ones; Eventually, treated municipalities will reach a new equilibrium meaning that the production in the treated and control municipalities would again grow in parallel.

IV. Data and Descriptive Statistics

We use a combination of archival, administrative, and survey data to create a rich and unique historical record for Albania, covering each of its 26 municipalities (and 12 regions).

IV.A. Administrative Data

The archival administrative data was hand-transcribed from microfilm records in the National Archives of Albania. These records are labelled 'Secret' as they were used by the government to internally monitor production levels. The existence of files was only made public years after the fall of the communist government. As such, we believe the data to be very accurate. To the extent there is mis-reporting, it is more likely there are general inflation of production and participation, rather than particularly affecting our treated municipalities.[9] Using these data,

[9] However, we do use different data sources for production levels to address this concern and find that they match perfectly, which we discuss in some detail later in this paper.

we construct the following outcomes between 1945 and 1988: population, total labor force; industrial labor force; industrial production; agricultural production; industrial production per capita; total enrollment in primary, middle and secondary schools; and female enrollment in primary, middle and secondary schools.

These archives also contain detailed information on religion. For each municipality we obtained detailed information on the number of religious buildings, their type, number of clerics (priests and imams), the composition of municipalities' population by religious beliefs in 1945. Combining this with the administrative data, we constructed per-capita measures, as proxies for religiosity prior to the reform. Importantly for our identification strategy, we have detailed information on whether religious buildings were destroyed or de-sanctified in 1967, and information on the number and types of religious buildings that were left untouched and preserved as "Monuments of Cultural Heritage" as defined by the 1948 legislation.[10]

There were 2,169 religious buildings at the time of the reform and only 7 percent of them, classified as "monuments of culture'. We use the preservation of these buildings, which is against the stated goal of the party to remove religion, as a source of variation in the perceived commitment for female emancipation. Thus, we expect that in municipalities where the state destroyed/de-sanctified all religious buildings, the signal for commitment is stronger than in municipalities where some religious buildings were left as 'monuments of culture'.

Our main definition of *treatment* are those municipalities where all religious buildings were either destroyed or de-sanctified. The remaining of municipalities, where at least one religious building remains as a 'monument of culture' is, thus, our *control* group. In the robustness section we explore other definitions of treatment.

Table 1 presents pre-1967 treatment descriptive statistics of the main outcomes and religious characteristics for the treated and control groups.

[10] During the 1970s, there were some more buildings which were appointed as Monuments of Cultural Heritage, we do not include them in our count of monuments due to possible concerns regarding the endogeneity of these later decisions.

Table 1: Descriptive Statistics by Municipality Prior to Reform

	Control Municipalities		Treated Municipalities	
	Mean	Standard Deviation	Mean	Standard Deviation
Totals (000s)				
Population in 1946	51.96	26.09	26.53	13.95
Total Population	76.95	46.08	36.64	18.97
Labor Force	12.27	12.46	2.75	1.94
Female Labor Force	3.39	4.21	0.36	0.32
Primary Enrollment	13.52	8.93	5.69	3.19
Female Primary Enrollment	6.64	4.31	2.69	1.52
Secondary School Enrollment	1.76	2.72	0.24	0.22
Female High School Enrollment	0.67	1.09	0.04	0.03
Industrial Production Per Capita (Lek)	1.38	0.98	0.55	0.47
Religiosity in 1946				
Nr. Religious Buildings (per 1000)	2.34	1.9	2.15	1.1
Nr of clerics (per 1000)	1.56	0.74	1.49	0.58
Nr. National Monuments	7.65	8.22	0	0

Notes: Collected and transcribed from the National Archives of Albania and the National Statistics' Institute of Albania. Totals are the average over all observable years before 1967, in thousands of units.

As Table 1 shows, the treated municipalities are on average smaller; have lower industrial production per capita; and lower female participation. However, there are only marginal differences in terms of religiosity between treated and control municipalities, having very similar number of clerics and religious buildings per capita.

IV.B. 5-Year Plans Data

As a complement to these data, we also obtained and transcribed planned productivity measures from the 1966 government 5-YearPlan, which, at the time, were prepared by the State Planning Commission, and agreed upon at the Fifth Party Congress. Critically, these 5-Year-Plans data have detailed planned industrial production in 1967 and 1970 for each municipality in Albanian currency, Lek. We use these plans to establish that the treated and control municipalities have the same planned growth. Demonstrating that the treated and the control municipalities had the same expected growth, provides evidence in favor of our parallel counterfactual growth assumption. These plans also include data on two other metrics of

economic growth: 1) Circulation–- which measures the total income by selling goods and services in each municipality; 2) Consumption–- measuring total spending in each municipality on consumable goods. Establishing that treatment and control groups had similar planned growth for multiple metrics bolsters our confidence that the difference in difference assumptions are met.

The 5-YearPlan data also provides details of the actual productivity measures achieved in each municipality, both, already realized production (1965, 1966) and future production (1967, 1970) from the perspective of when the plans were written. We use the actual levels achieved for years prior to the religion ban reform to check the quality of our original data source on industrial production for 1965 and 1966. Appendix Figure 3 shows that the industrial productivity measures from this data source matches those from our original data source, which alleviates the concerns about inflating production data by the government and reaffirms the excellent quality of the main data we employ in this paper.

IV.C. International Demographic and Health Surveys

In addition to archival and administrative data, we also employ micro level dataset for Albania from the International Demographic and Health Surveys (DHS) data for the 2008-2009. This is a nationally representative study which provides information on individual demographic and health characteristics. Since this survey only interviews individuals aged 15-49, we employ this data to investigate whether there are any changes in women's emancipated activities or attitudes (social norms) for those born before and after the religion ban policy (1967) in the *treated* municipalities compared to women who lived in *control* municipalities. We employ different measures that capture different aspects of female empowerment: literacy rates; female household power at home in making household decisions; sex autonomy; and female views on whether 'husband's violence at home is justified'.

Although the survey is conducted in 2008-2009, this analysis is feasible as the respondents are asked about which municipality they resided in 1990, when Albania was still a communist country and internal migration was prohibited. Until 1991, Albania heavily restricted internal migration, in a way similar to the hukou system in China, whereby citizens could not migrate to other municipalities.[11] We use home residence in 1990 to assign treatment status throughout

[11] It was unlawful to move residence in Albania during communism without the permission of the authorities. Internal migrations were limited to a small number of officials permitted by the state. The state would only grant permission to internally migrate to only a small number of officials.

the period. To measure female literacy rate, we use information on women respondents on whether they can read the whole sentence. Other measures of 'emancipation' or 'women empowerment', which was a central objective of the communist government to banning religion and thus directly examines whether other aspects of social norms (s(x)) have changed as a result of the reform, are constructed as follows:''female household power' indicator is constructed based on female respondents' answers on who has the final say at home on: making large household purchases; making household purchases for daily needs; visits to family or relatives; food to be cooked each day; and on deciding what to do with the money husband earns. Answering affirmative "the respondent (woman) alone" has a value of 1, "the respondent and husband together" has a value of 0.5, and 0 when the power is with someone else in the household. Similarly, the 'sex autonomy' indicator is generated based on female respondents' answers on "whether they can refuse sex", or 'can ask partner to use condoms'. Answering an affirmative 'yes' has a value of 1, and undecided has a value of 0.5. Finally, the indicator on "justified violence towards wife" is constructed from the female respondents' answers on five questions on whether violence towards the wife is justified.[12] Answering in the affirmative has a value of 1, undecided has a value of 0.5, and dissent has a value of 0. Responses for each indicator are summed over individuals and then a mean for each birth cohort in treated and control municipalities is calculated. We compare changes in these social norms' indicators over birth cohorts born between eight years before and eight years after the reform. Using this independent data source, we can also show if there is any long-lasting impact of women 'emancipation' due to religion ban policy. Our sample of the DHS data has 7,584 observations, 1,269 from treated municipalities and 2,688 from control municipalities.

Finally, to gauge if the changes we observe in Albania are replicated in other similar countries that did not experience the reform but were similar in terms of being governed by communist governments for the same period as Albania, we use the DHS data from other ex-communist countries for the same cohorts and the same outcome measures. Although the DHS does not survey direct neighboring or other Balkan countries, it does have survey data for comparable cohorts in Moldova, Armenia, Azerbaijan and Ukraine which were part of the Soviet Union communist block during that time. This sample has 10,664 observations for Armenia, 3,682 from Moldova, 3,364 from Azerbaijan, and 2,669 in Ukraine. Descriptive statistics of the DHS

[12] Wife beating wife is justified if 1) she goes out without telling him; 2) neglects the children, 3) argues with him; 4) she refuses to have sex with him; or 5) she burns the food.

data are presented in Table 2, which shows the means and standard deviations of the outcome measures of Albania's treated and control municipalities, but also for Armenia, Azerbaijan, Moldova, and Ukraine for women born before 1967 and those born after 1967 (post-reform).

Table 2: DHS Descriptive Statistics by Country and Birth Cohort

	Born Pre-Reform		**Born Post Reform**	
	Mean	Standard Deviation	Mean	Standard Deviation
Treated Albania				
Accept Violence	0.55	0.48	0.74	0.82
Literate	0.89	0.16	0.91	0.12
Sexual Autonomy	3.18	2.1	2.59	1.53
Household Power	2.71	0.45	2.63	0.61
Observations	534		735	
Control Albania				
Accept Violence	1.42	1.23	1.21	0.91
Literate	0.87	0.16	0.9	0.14
Sexual Autonomy	2.44	1.54	3.39	2.67
Household Power	2.32	0.72	2.36	0.7
Observations	1,249		1,439	
Armenia				
Accept Violence	0.64	1.16	0.53	1.06
Household Power	2.28	0.96	2.04	0.92
Observations	4,750		5,914	
Azerbaijan				
Accept Violence	1.64	1.73	1.6	1.7
Household Power	2.21	1.17	1.99	1.22
Observations	1,783		1,581	
Moldova				
Accept Violence	0.44	0.95	0.38	0.92
Household Power	2.79	0.68	2.73	0.68
Observations	1,567		1,399	
Ukraine				
Accept Violence	0.13	0.52	0.13	0.49
Household Power	3.4	0.71	3.36	0.72
Observations	1,328		1,341	

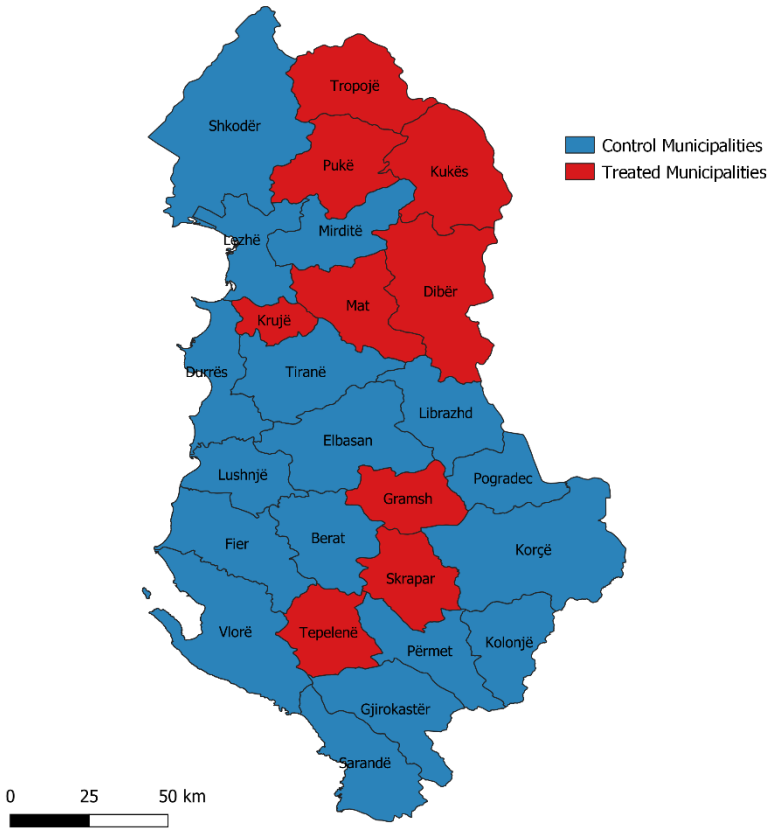
Notes: DHS surveys. Born pre-reform are those born up to 9 years before the reform. Born post-reform are those born up to 9 years after the reform.

V. Estimation Strategy

As highlighted earlier, our identification strategy exploits the fact that a number of religious buildings–- which were left untouched and classified as 'monuments of culture' by the government in 1967 when it legally banned religion–- will vary differentially across

municipalities. There is plausible exogenous variation in the buildings that survived the de-sanctification: this comes from legislation and the classification of a number of religious buildings as "monuments of culture" in 1948. These buildings were deemed to be national cultural monuments due to their historical rather than religious importance, and these classifications occurred at a time when the freedom of religion expression was not only allowed, but also celebrated and sanctioned in the Constitution. Thus, these 157 'monuments of culture' across municipalities were relatively unaffected by the government decision to outlaw religion 20 years later. Figure 3 shows a map highlighting the spread of municipalities where all religious buildings were de-sanctified relative to the ones where there was at least one building preserved as a 'monument of culture'.

Figure 3: Albania–- Treatment and Control Municipalities



Notes: Treated municipalities are those where all religious buildings were either destroyed or de-sanctified. Control municipalities are those where at least one religious building remains.

As can be seen on the map, there are nine municipalities that are 'treated', spread in different parts of the country. These are the municipalities where the commitment of the government on "women emancipation" is the strongest, as all the religious buildings were de-sanctified.

We employ a difference-in-difference strategy to causally identify the impact of this religions' ban policy on economic and female emancipation outcomes, estimating the following equation:

$$\ln(Y_{ct}) = \alpha + \beta TreatedXPost_{ct} + \gamma X_{ct} + \delta_t + \mu_c + \epsilon_{ct} \quad (1)$$

where Y_{ct} are the measures of outcomes in municipality c at time t.; $TreatedXPost_{ct}$ is our difference-in-difference term, and β captures the impact in municipalities where all religious buildings were de-sanctified, our true effect of treatment. ($Treated_c$, takes the value of 1 for municipalities where all religious buildings are de-sanctified and 0 otherwise; $Post_t$ takes the value of 1 for Year>1966, when the policy was introduced, and 0 for Year<=1966). Thus, β is our coefficient of interest. All specifications include the vector of parameters δ_t and μ_c which represent year and municipality fixed effects, respectively. Building on this parsimonious specification, we also present estimates that additionally conditions on time-varying municipality population,[13] and region-specific time trends (X_{ct}).[14]

The key identifying assumption here is that the treated municipalities have similar potential growth to the control municipalities, in the absence of the treatment. Our first approach to validate this assumption is to estimate event studies for each outcome, by implementing models of the following form:

$$\ln(Y_{ct}) = \beta_0 + \sum_{\tau=-10;(\tau\neq1966)}^{\tau=20} \beta_\tau 1(t-1966=\tau) Treated_c + \gamma X_{ct} + \delta_t + \mu_c + \epsilon_{ct} \quad (2)$$

where the indicator function 1(t–– 1966 = τ) equals one when the difference between the year (*t*) and 1966 (the year before the ban) equals τ. These dummies represent the distance in years from the year before the reform (1966) and are defined from -10 years before the ban up to +20 years after the religion ban, period for which we have data for most outcomes. Here, the parameters of interest are the coefficients βτ: they represent the impact of the ban on the treated municipalities relative to control municipalities at event time τ compared to 1966. The common inference from such results is that if these parameters pre-reform are not significantly different

[13] Note we only have access to total population, not working age population for this time period.
[14] Note, there are 12 regions and regions nest municipalities. Due to degrees of freedom we do not condition on municipality-specific time trends.

from zero, then the treated and control municipalities experienced common growth rates prior to the reform and would have continued to do so in the absence of the treatment.

Our second approach to establish the feasibility of common post treatment potential outcomes is to directly test differences in potential growth rates. Typically, this cannot be achieved as the counterfactual growth of the treated group cannot be observed. To address the issue of counterfactual growth we exploit the planned nature of the communist economy, as the state produced 5-Year Plans for each municipality. We employ data on the state's 1966 pre-reform 5-Year Plans for industrial production for each municipality. We take a municipality's planned growth as their counterfactual growth rate in the absence of the treatment and establish that the government planned for the treated and untreated municipalities to have the *same* growth rates post-reform, thus further alleviating these potential concerns.

To test our hypothesis of changing social equilibrium (from x^0 to x'' Figure 2), we carry out several other robustness checks. First, we re-estimate equation (1) using alternate definitions of treatment status, including a count of 'monuments of culture' rather than the 'treated' dummy, the proportion of buildings de-sanctified, and the municipality percentile of de-sanctification. Second, addressing concerns that our results may be driven by large municipalities, we re-estimate equation (1) by dropping large municipalities.

Third, to further reaffirm that it is the faith in the state rather than faith in their religion that is driving our results, we examine the type of religious buildings preserved. We explore how the religion of the building conserved (e.g., church or mosque) interacted with the predominant religion in each municipality. The intuition is that if our results are purely driven by the perception of the strength of the government commitment to emancipation, it would not matter what type of religious building was preserved in a municipality and what type of religion was predominant there. To test this, we categorize municipalities and the spared buildings by religion (Christian, Islam). We estimate equation (1) using only the main control group (municipalities with at least one 'monument of culture') and then redefine treatment status among these municipalities to be 'treated' if the predominant religion does not match that of the monument of culture (e.g., if a municipality is predominantly Muslim, but religious buildings preserved in this municipality are only church(es)). Our control group are then municipalities that have monuments of culture of the predominant religion (e.g., a predominant Christian municipality has only churches or monasteries as monuments of culture). So, if our results are driven by faith in the government, we would expect no relative difference in the

relative growth rates between the treated and control groups' outcomes. On the other hand, if it was different level of religiosity that matters, we would then expect that places where religious buildings of their more dominant religion survived would react less to the government signal.

Finally, we undertake another exercise to further reaffirm the commitment hypothesis: we estimate equation (1) with the same treatment group as above (preserved buildings not matching dominant religion), but the control group in this case are municipalities where all religious buildings are destroyed. Again, if this is purely a faith in religion story, we would expect that the treated municipalities would do worse than control municipalities. This is because in the control group municipalities where all buildings are de-sanctified, the government commitment to the policy is the strongest.

In all specifications that will be estimated, the standard errors will be clustered at the municipality (treatment) level. This allows for the possibility that the error term might be correlated with different observations within a municipality. As an additional robustness check, we also show the results with the wild-bootstrap standard errors, alleviating concerns that our inference is based on clusters of the 26 municipalities.[15] [16]

VI. Main Results

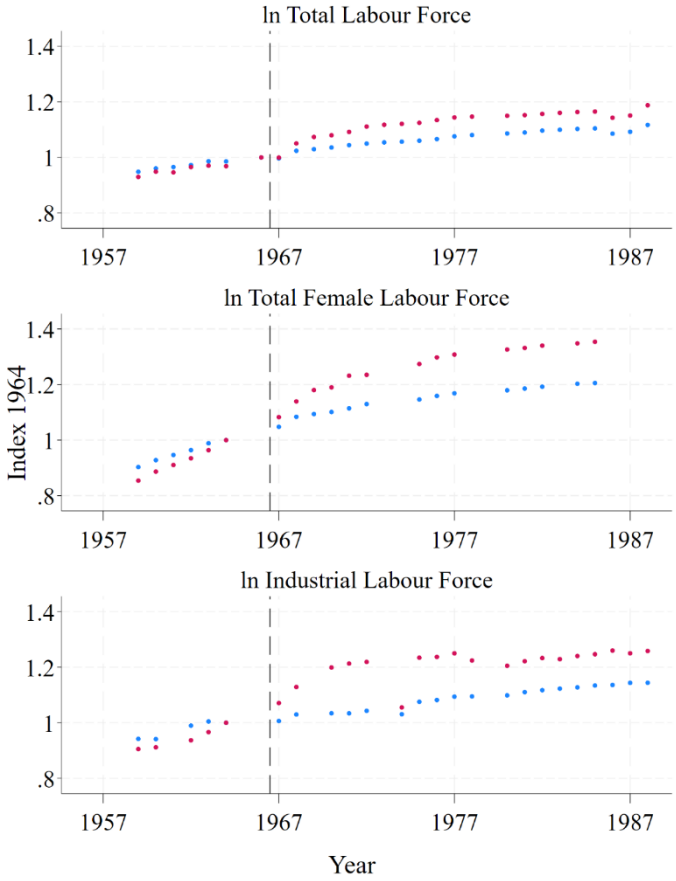
VI.A. Labor Force

Figure 4 presents raw plots of the indices of the overall and industrial labor force, overall and for just women, for the treated and control municipalities. All these measures are indexed to the first year prior to the reform for which the data is available, for the treated and control municipalities. The top graph presents the raw plots of the index of log total labor force. Prior to the reform, the control and treated municipalities experienced similar growth rates. However, as the graph shows, differences start to emerge soon after the religion ban is introduced in 1967, with treated municipalities manifesting a larger increase in total labor force.

[15] This setting does not have a staggered treatment implementation and the parallel trend assumptions hold even before conditioning on observed covariates. Thus, our identification, estimation and inference for the treatment effect are not affected by the issues of staggered difference-in-difference estimators recently discussed by Callaway and Saint' Anna (2020) and Borusyak et al. (2021).

[16] Given the small number of clusters we examine inference through wild-cluster bootstrap standard errors. The bootstrap p-values are shown in each results table.

Figure 4: Log Total, Female and Industrial Labor Force



Notes: Raw data from the National Archives of Albania 1945-1988. Top graph refers to total labor force; middle graph refers to total female labor force, and the bottom one refers to the industrial labor force. Indexed to the first year prior to the reform with data, for the treated and control municipalities. Red dots refer to treated municipalities and blue ones to control municipalities.

The middle graph of Figure 4 presents our measure of female labor force (log of total female participation index). Similar patterns emerge here as well: there are no clear differences between female labor participation in the treated and control groups before the policy took place, but differences start to show as soon as the ban is introduced, with a much higher increase of women participation in the labor force in the treated municipalities. This graph suggests that, indeed, treated municipalities were more successful in 'empowering' women, by increasing their participation in public life.

Finally, the bottom graph of Figure 4 presents the raw plots for the index of log industrial labor force. As in previous graphs, prior to the reform, the control and treated municipalities

experienced similar growth rates for this outcome too, but that changes after the ban is introduced. For the industrial labor force this difference is even more marked, suggesting that a large part of the increase in the labor force participation in these areas is driven by the increase of industrial labor force, which is consistent with the government's main decision behind the religions' ban.

In Table 3, we present the difference in difference estimates of equation (1), for the log total and female labor force, consistent with the indexed figures. The reference year is the latest year available in the data prior to the reform. As highlighted earlier, the government saw women as the 'reserve' labor force that was going to be key to its success of the second phase of industrialization of the country. Banning religion completely and de-sanctifying religious buildings was seen as the main way to emancipate women and encouraging them to participate in public life, as it would represent the government committing to lowering the opportunity cost of female employment and social stigma (s(x)). Thus, in areas where the commitment to this government policy was stronger, no exceptions for any religious building, the expectation of private returns are higher, which will result in higher female participation and a lowering of stigma costs, resulting in further increases in labor force growth driven by female participation in the labor market.

Panel A presents the difference-in-difference estimates for Total Labor Force. Columns 1 shows the difference-in-difference estimate of the impact of the religion ban on the overall labor force, controlling for municipality and year fixed effects only. The coefficient is positive and statistically significant (0.429), suggesting that treated municipalities have higher total labor force participation than control municipalities. Controlling for population growth (Column 2) does not change the results. Column 3 shows our preferred specification which additionally conditions on region-specific linear trends. This lowers the coefficient, but it remains significant both statistically and economically (coefficient of 0.314). Our interpretation of this coefficient is that the policy was significantly more successful in areas where the government commitment was stronger: municipalities where all religious buildings are de-sanctified increase labor force participation by about 36.8 percent (0.314 log points) more than municipalities where some religious buildings were left intact as national monuments.

Table 3: The Effects of the Ban on Log Total and Female Log Labor Force

	(1)	(2)	(3)
Panel A: Labor Force			
No-Monuments	0.429	0.410	0.314
Standard Error	0.129	0.126	0.130
Bootstrap P-Value	*0.006*	*0.006*	*0.084*
N	728	728	728
Panel B: Female Labor			
No-Monuments	0.648	0.610	0.453
Standard Error	0.117	0.123	0.109
Bootstrap P-Value	*0.000*	*0.000*	*0.004*
N	513	513	513
Panel C: Industrial Labor			
No-Monuments	0.675	0.676	0.703
Standard Error	0.279	0.288	0.335
Bootstrap P-Value	*0.016*	*0.016*	*0.07*
N	616	616	616
Fixed Effects	✓	✓	✓
Population		✓	✓
Regional Time Trends			✓

Notes: Raw data from the National Archives of Albania 1945-1988. Estimates from specification (1). Fixed effects are a set of municipality fixed effects and year fixed effects. Robust standard errors clustered at the municipality level. Wild-cluster bootstrap P-Values in italics.

Panel B presents the results of female labor force. As highlighted earlier, the main objective of the government outlawing religion was to encourage female participation in public life, especially in the labor market. As Columns 1-3 show, the policy has indeed done that: the growth in female labor force in municipalities with no religious buildings relative to those ones with at least one monument was significantly higher. Controlling for contemporaneous population and region-specific time trends (Columns 2 and 3) do not alter the estimates: coefficients are all statistically and economically significant ranging from 64.7 percent (Column 6) to 96.6 percent (Column 3).

Finally, Panel C in Table 3 presents the results of the industrial labor force. The main objective of the government was the further industrialization of the country and increasing the labor force in the industrial sector was central to achieve this objective. As Column 1 shows the policy has indeed done that: the growth in industrial labor in municipalities with no religious buildings relative to those ones with at least one monument was significantly higher: the

coefficients in all columns are positive and statistically and economically significant in Columns 1-3 (0.675, 0.676, 0.703 respectively).

It is worth noting that we have only 26 municipalities, thus one may worry that accounting for within group dependence by using cluster-robust standard errors (as we have done so far for our empirical analysis), is not sufficient in the presence of small number of clusters, because asymptotic tests may over-reject. To alleviate these concerns, we examine inference by estimating the difference-in-difference regressions using cluster-bootstrap standard errors. This exercise produces the same results, as bootstrap p-values, show in each panel of Table 3.

Finally, to ensure that the treatment and control municipalities were on similar labor force growth trajectories before the policy took place, in Figure 5 we present event study difference in-difference estimates of equation (2). We observe no pre-treatment differences in the growth rate between the treatment and control municipalities. After the implementation of the policy, the treatment municipalities have higher growth in total and female labor force than control municipalities. In contrast to the pre-treatment coefficients which are statistically insignificant, all yearly coefficients after the policy introduction are predominantly statistically significant.

The results in Figure 5 are consistent with the three predictions of our social-equilibrium model: at first, due to the reduction in common private costs from c_0 to c_1 there are only small differential changes in outcomes between treated and control municipalities as there are few marginal households, $f\big(\theta(x)\big)$ is small, gradually moving from equilibrium x^0 (as shown in Figure 2). Then, the share of households who participate increases, $f\big(\theta(x)\big)$, there are more marginal households who participate, and larger annual changes in outcomes emerge, shown by the steeper slope of the curve, this causes larger changes in social stigma $s(x)$. By the fifth year of post reform, the treated municipalities have reached a new social-equilibrium (x'') and so they begin to grow in parallel to the untreated municipalities.

Figure 5: Event Study Estimates: Total, Female and Industrial Labor Force

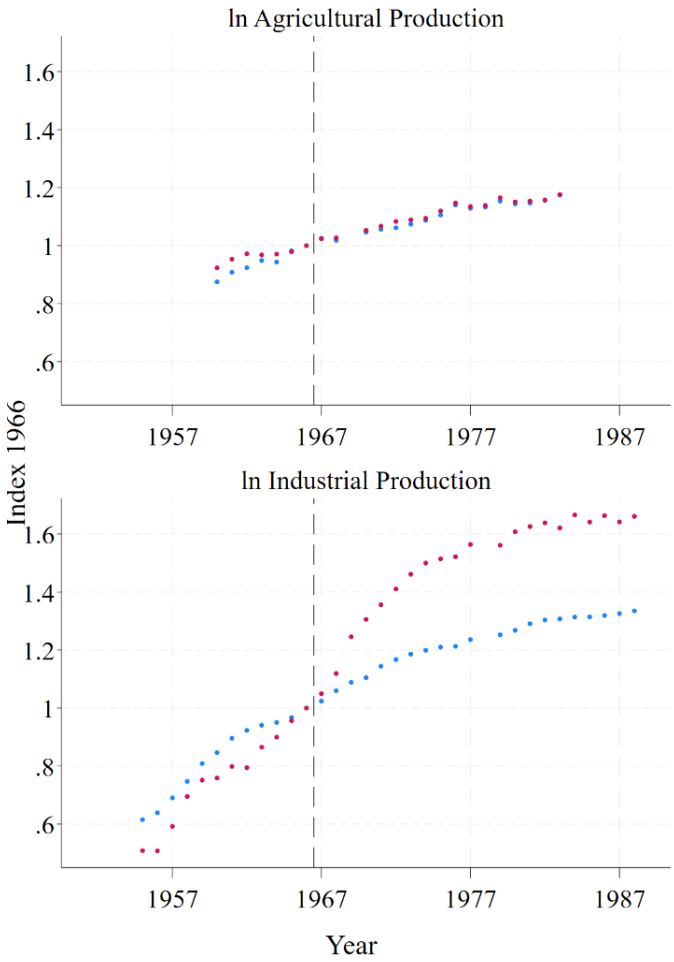


Notes: Source National Archives of Albania 1945-1988. Estimates from specification 2. Bars represent 95% confidence intervals based on robust standard errors clustered at the treatment municipality level.

VI.B. Economic Growth and Industrialization

We now examine whether the religion ban achieved its ultimate goal of reduced reliance on agriculture and the further industrialization of the country as measured by increased industrial production. To do so, we estimate the impact on agricultural and industrial production. As before, we start by showing, in Figure 6, the raw plots of these outcomes for treatment and control municipalities, both indexed in 1966, one year before the policy introduction.

Figure 6: Log Industrial and Agricultural Production



Notes: Raw data from the National Archives of Albania 1945-1988. Indexed to the first year prior to the reform with data, for the treated and control municipalities. Red dots refer to treated municipalities and blue ones to control ones.

Both panels show that there are no differential trends in outcomes before the religion ban was introduced. After the ban, a clear distinction starts to appear with treated municipalities experiencing faster growth of industrial production than the control municipalities. As expected, there are no post-policy increases in agricultural production, given the state's focus on industry. Table 4 presents the conditional counterpart of these figures.

Table 4: The Effects of the Ban on Industrial and Agriculture Production

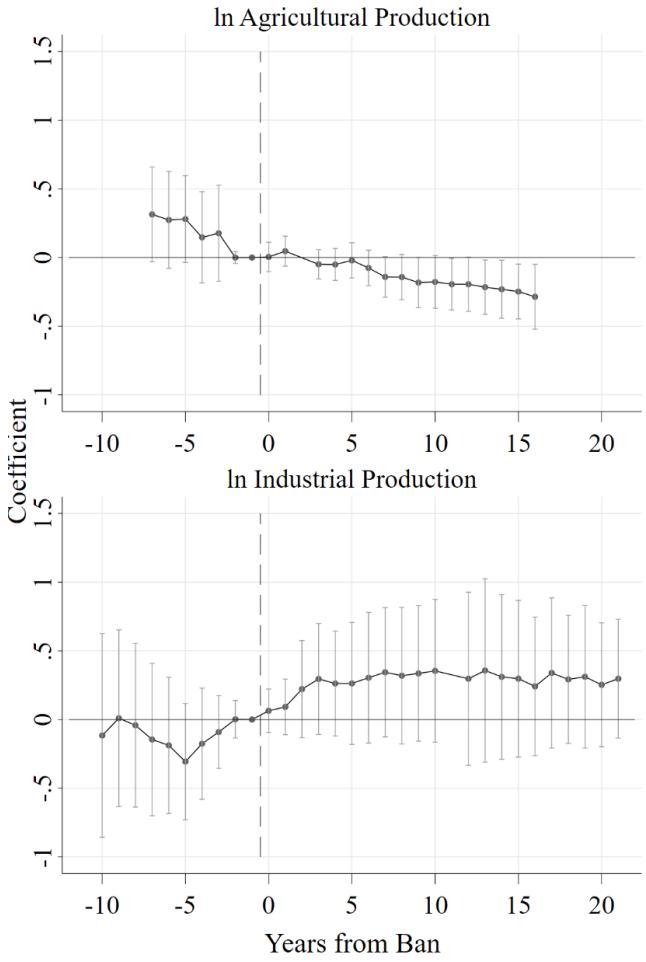
	Industrial Production			Agricultural Production		
	(1)	(2)	(3)	(4)	(5)	(6)
No-Monuments	0.426	0.390	0.248	-0.193	-0.297	-0.080
Standard Error	0.246	0.224	0.255	0.132	0.157	0.074
Bootstrap P-Value	*0.114*	*0.106*	*0.442*	*0.136*	*0.088*	*0.436*
N	858	848	848	598	598	598
Fixed Effects	✓	✓	✓	✓	✓	✓
Population Controls		✓	✓		✓	✓
Regional Time Trends			✓			✓

Notes: Raw data the National Archives of Albania 1945-1988. Estimates from specification 1. Fixed effects are a set of municipality fixed effects and year fixed effects. Robust standard errors clustered at the municipality level. Wild-cluster bootstrap P-Values in italics.

As we saw with the raw differences, treated municipalities experienced higher industrial growth than control municipalities post-reform, when controlling for municipality and year fixed effects (Column 1). These findings are maintained with the introduction of time varying population controls (Column 2) where we see that the growth in industrial production in municipalities where all religious buildings are de-sanctified is 47 percent (0.39 log points) higher than in control municipalities after the religion ban. The coefficients are statistically significant at 10 percent significance level. Column 3, which controls for region-specific time trends, produces a somewhat lower coefficient of 0.248, but still in the same range as the first two columns. Difference-in-difference results on agriculture are presented in Columns (4) (5) and (6). The coefficients are negative in all specifications, as one would expect, given that the treated municipalities had directed their workforce towards industrial production, although the size and statistical significance of the coefficients does vary.

Figure 7 presents event study estimates for these outcomes. For industrial production we observe no pre-treatment differences between the treatment and control groups. In the immediate years after the reform we observe little relative growth of the treatment group. Form 1969 we do observe a marked difference, with the treated municipalities experiencing a consistent 0.4 log points relatively higher industrial production growth compared to the control municipalities. However, due to the lack of power, we cannot reject the null of no impact for any individual year with 95 percent confidence intervals and clustered standard errors. For agricultural production, there appears to be a relative decline in production in the pre-treatment years, which continues a slow relative decline in agricultural production.

Figure 7: Industrial and Agricultural Production Event Studies

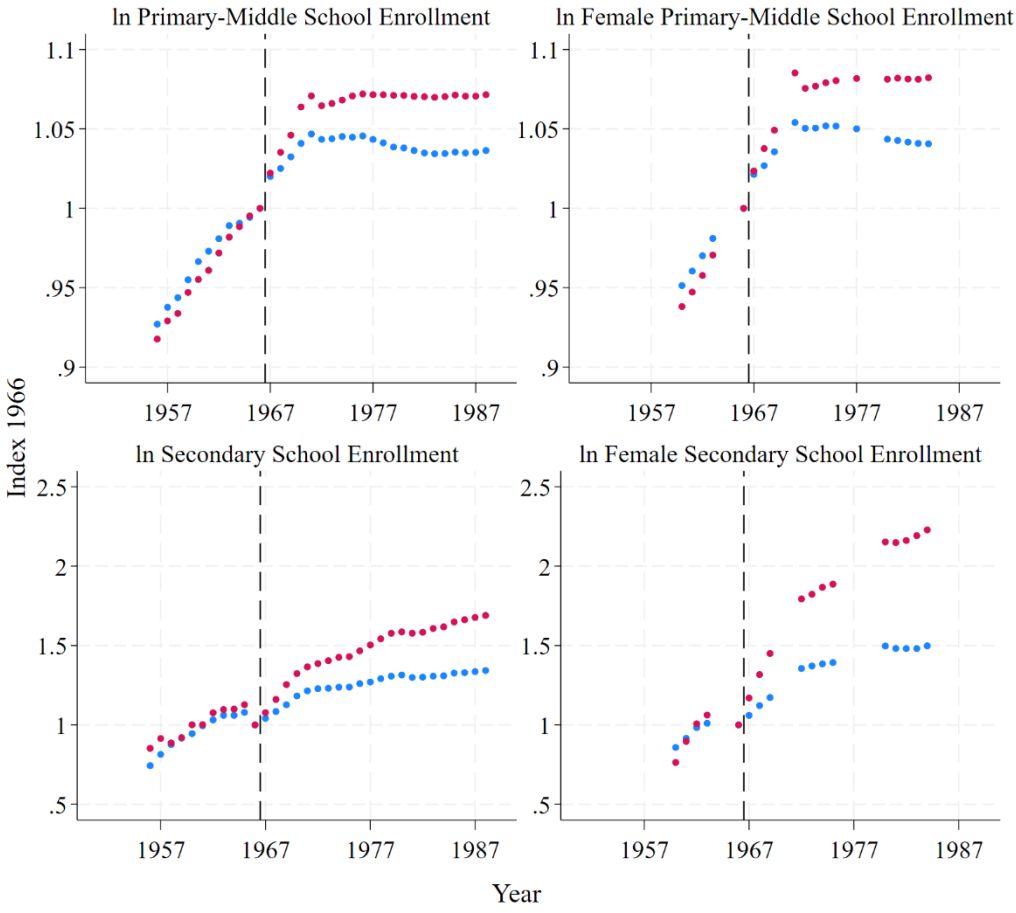


Notes: Source National Archives of Albania 1945-1988. Estimates from specification 2. Bars represent 95% confidence intervals based on robust standard errors clustered at the municipality level.

VI.C. Education

As argued earlier, government strong commitment towards female emancipation and participation in public life may also impact households' decision to send their daughters to school. Female education was seen by the state as a way to emancipate women and, importantly, contribute to country's further economic growth. The government committing to female emancipation will increase the perceived returns to education for women in the household. Thus, here we examine whether education enrollment and particularly female enrollment in primary, middle and secondary schools were affected by the religion ban policy. Figure 8 shows the raw differences in education enrollment outcomes for the treated and control municipalities.

Figure 8: Log Education Enrollment (Primary-Middle and Secondary Schools)



Notes: Raw data from the National Archives of Albania 1945-1988. Indexed to the first year prior to the reform with data, for the treated and control municipalities. Red dots refer to treated municipalities and blue ones to control ones.

We observe similar trends in primary-middle school and secondary school enrollment for treated and control municipalities prior to the reform (the left panels), but this changes after 1967 where treated municipalities experience higher growth than control municipalities. The same pattern emerges for female participation in primary-middle and secondary schools (right panels). Here, there is a larger increase in the number of females in secondary schools in the treated municipalities. This is to be expected as secondary school enrollment was not compulsory at the time, and it is here where the largest impact of the government commitment to empower women would be felt.

We continue the analysis in Table 5 by presenting the difference-in-difference estimations of the impact of the reform on female participation in education. Panel A presents difference-in-

difference results for the overall primary-middle school enrollment (Columns 1-3) and the female primary-middle school enrollment (Columns 4-6).

Table 5: The Effects of the Ban on Educational Enrollment

	Total Enrollment			Female Enrollment		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Primary & Middle						
No-Monuments	0.261	0.214	0.141	0.265	0.191	0.125
Standard Error	0.074	0.059	0.044	0.070	0.067	0.051
Bootstrap P-Value	0.002	0.000	0.018	0.002	0.01	0.06
N	858	848	848	494	494	494
Panel B: Secondary						
No-Monuments	0.602	0.528	0.352	0.931	0.854	0.517
Standard Error	0.148	0.164	0.127	0.222	0.249	0.215
Bootstrap P-Value	0	0.002	0.036	0	0.004	0.048
N	818	817	817	439	439	439
Fixed Effects	✓	✓	✓	✓	✓	✓
Pop Controls		✓	✓		✓	✓
Regional Trends			✓			✓

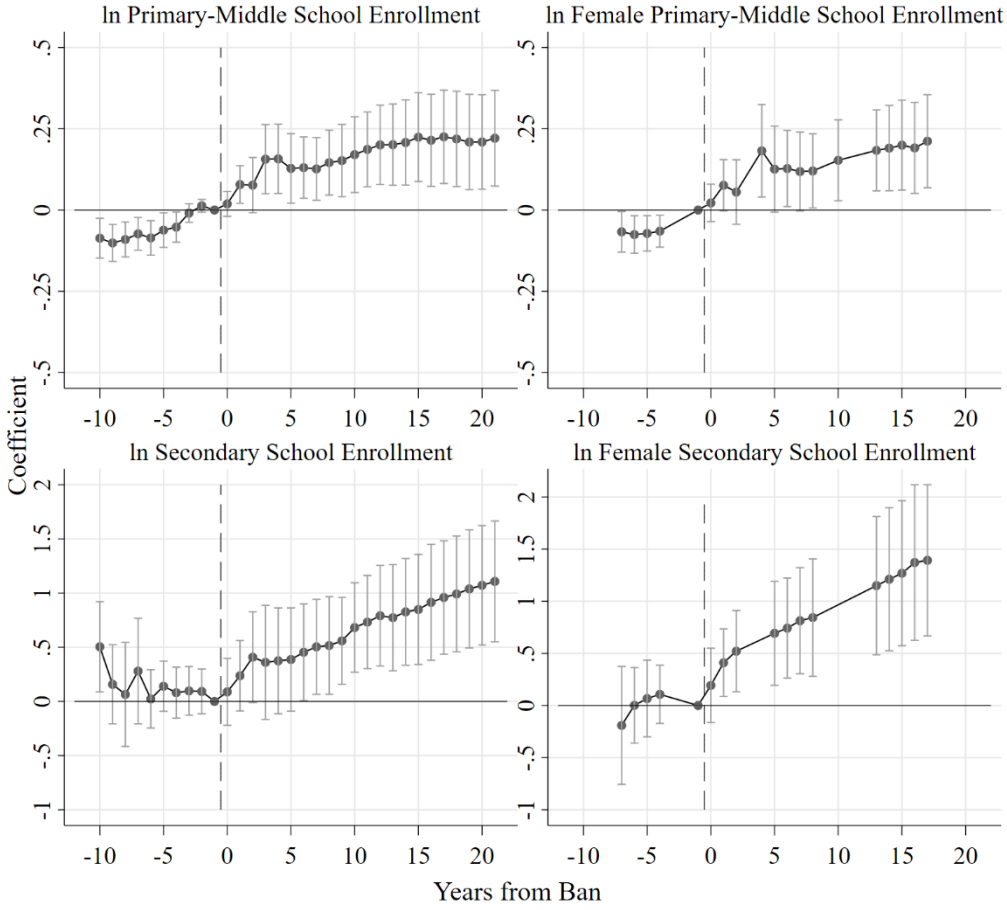
Notes: Raw data the National Archives of Albania 1945-1988. Estimates from specification 1. Fixed effects are a set of municipality fixed effects and year fixed effects. Robust standard errors clustered at the treatment (municipality) level. Wild-cluster bootstrap P-Values in italics.

The results in Column (1) and Column (4) in Panel A suggest that the effect of the policy was more effective in raising total and female primary-middle school enrollment in municipalities where all religious buildings were de-sanctified than other municipalities by about 29.8 percent (0.261 log points) and 30.3 percent (0.265 log points), respectively. Accounting for population changes over time in columns (2) and (5) does not alter the coefficients. Adding region specific fixed effects in Columns (3) and (6), to rule out the possibility that treatment and control areas are already on differential growth trajectories in school enrollment, does not qualitatively change the main message, although the coefficients are lower, with relative increases of treated municipalities reduced to 15 and 13 percent.

Panel B presents the corresponding estimates for secondary school enrollment. The coefficients in all specifications are statistically significant, and larger than those of primary-middle schools. This is expected as there is a larger margin for response in non-compulsory schooling, while only half of the primary-middle schooling years were compulsory at the time (schoolyears 1-4). The most basic specification (Column 1) suggests that in municipalities with no religious monuments, the overall secondary school enrollment increased by around 83

percent (0.602 log points) more than in municipalities with at least one national monument. The relative increase in female enrollment in treated municipalities is even higher, at 253 percent (0.93 log points) more than in control municipalities (Column 4). Conditioning on municipal population and regional time trends reduces the coefficients, but they are still statistically significant at 5 percent significance level, suggesting that policy ban causes a higher overall and female enrollment in treated municipalities by about 38.4 percent (0.352 log points) and 67.7 percent (0.51 log points) respectively (Columns 3 and 6). These results are echoed in Figure 9, which presents the event study estimates.

Figure 9: Event Study Estimates – Education



Notes: Source National Archive of Albania 1945-1988. Estimates from specification 1. Bars represent 95% confidence intervals based on robust standard errors clustered at the treatment (municipality) level.

Consistent with our previous outcomes, Figure 9 shows treated and control municipalities grew at similar rates prior to the reform. Post reform, there is a clear relative increase in all school enrollment outcomes for treated municipalities, with increases much higher in secondary school total and female enrollment.

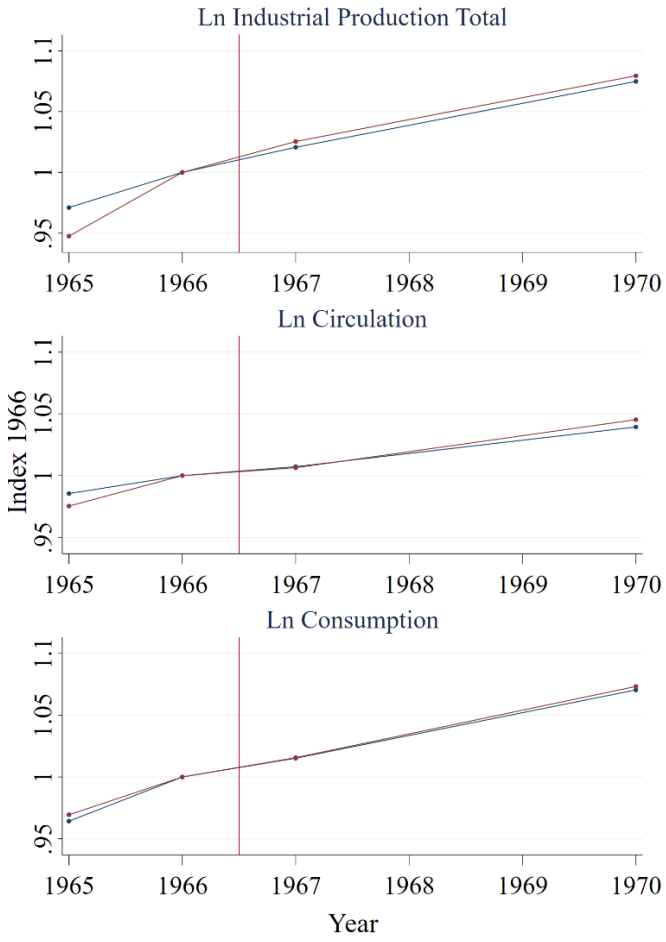
VII Robustness

VII.A. Planned Production

The key assumption with a difference-in-differences approach is that the counterfactual growth of the treated group would have matched the control group. Even though we have common trends in the pre-period, based on raw plots (Figures 4, 6, 8) and event study estimates (Figures 5, 7, 9), that does not necessarily mean common rates of growth would continue to hold post reform. One may be concerned that the municipalities which the government went through with the reform were the ones that government had already planned for higher growth rates in the future. Another concern is that our treated municipalities also had lower base levels of production and so they may also have more potential for growth. Either of these issues could make our control municipalities unhelpful in generating the counterfactual growth for our treatment group. To tackle these issues head-on, we use the planned nature of a command economy to show that the treated municipalities had the same planned growth as the control municipalities both before and after the reform.

Figure 10 shows two years (pre- and post-reform) based on the all of the 1966 5-Year-Plan data, averaged over the treatment and control municipalities. The pre-reform years of 1965 and 1966 had already been realized and these values are highly consistent with those from the national archives (Appendix Figure 3). The values for 1967 and 1970 are the planned outcomes for the municipalities set by the Fifth Party Congress in 1966, before the reform took place. We have three measures of economic prosperity; 1) Industrial Production–- measuring the value of industrial production in Lek in each municipality, which should be the same as our main outcome used in this study; 2) Circulation–- measuring total income generated in municipalities from selling goods and services; and 3) Consumption–- measuring total spending on consumable goods. For each of these measures, as Figure 10 shows, the planned growth relative to 1966 for the treated municipalities matches that of untreated municipalities, implying that the common counterfactual trends assumption holds.

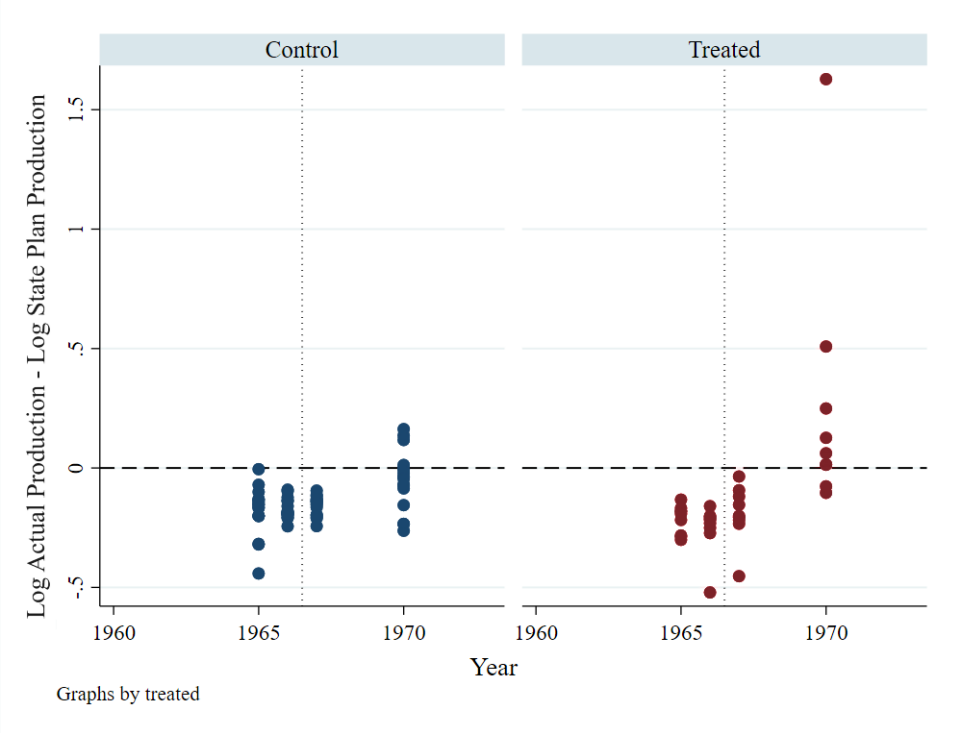
Figure 10 Planned Production



Notes: Source–- State Planning Commission 1965 5-Year Plans. Industrial Production–- total value of industrial production in Lek. Circulation–- total income from selling goods and services. Consumption – Total spending on consumable goods. All prices are in 1965 Lek. Red lines refer to treated municipalities and blue ones to control ones.

Figure 11 combines the planned with the realized productivity measures from the National Archives. We see that, prior to the reform, the production measures from the plans were slightly higher than realized production. In the first year post-reform, there is no change for the control municipalities, remaining below planned growth. In contrast, the treated regions are closer to achieving their targets, but all still fail to meet them. But, by 1970 the majority of treated municipalities are exceeding their targets while the majority of the control are still failing. The policy resulted in the majority of treated municipalities exceeding their Five-Year Plan targets.

Figure 11 – Planned Versus Realized Production



Notes: Source- State Planning Commission 1965 5-Year Plans and National Archive of Albania 1945-1988. Industrial Production–- total value of industrial production in Lek. All prices are in 1965 Lek. Red dots refer to treated municipalities and blue ones to control ones.

VII.B. Alternative Definitions of Treatment

Our main specification uses a binary indicator for whether there is a monument of culture present in the municipality. Our second set of robustness checks determines if alternate definitions of the treatment status produce results which are consistent with the model.

First, a continuous measure of the treatment is employed, using the number of monuments interacted with post-reform dummy. Here, a negative coefficient would reflect smaller relative growth in municipalities where there are more monuments. Table 6 presents the results with this continuous measure and shows that the more monuments a municipality has after the religion ban, the lower its relative growth is in all outcomes (total and industrial labor force; industrial production; primary-middle and secondary school enrollment; female participation in the labor force; and female primary-middle and secondary school enrollment rates). The only exception is agricultural production, coefficient of which is statistically insignificant, which is in line with our earlier findings.

Second, we allow for the number of monuments to have a non-linear effect on outcomes, by including the quadratic measure of monuments. Panel B of Table 6 shows that the marginal effect is decreasing in the number of monuments. This is consistent with our main hypothesis that any break with the state goals of emancipation would mean municipalities are less likely to shift to a new equilibrium. Any additional buildings continue to have an effect, but the first breaking of the commitment appears to be the most important.

Third, we allow for different critical points by re-defining the binary treatment using different proportions of buildings de-sanctified. We would expect that higher the proportion of buildings de-sanctified, the stronger the government commitment, and hence the higher change in female participation in the society (i.e. labor market and education). Specifically, we estimate whether a municipality falls at or above the 50^{th}, 75^{th} and 100^{th} percentile of proportion of buildings de-sanctified, consistent with 95, 98 and 100 percent of the religious buildings destroyed (i.e. the median municipality lost 95 percent of its religious buildings). Note, the main analysis is estimated on the basis of 100 percent of religious building destroyed. Results are presented in Table 7 and are consistent with the main hypothesis: the more religious buildings that remain, the lower is the growth of female participation in the labor force and education. Appendix Table 1 uses another alternate definition by splitting it by the proportion of buildings de-sanctified (at least 90%, 95% or 100%). Taken together, these results imply that any considerable deviation from full commitment results in the social equilibrium not changing.

Table 6: Robustness – Continuous Treatment Measure – Number of National Monuments

	Total Outcomes						Female Outcomes		
	Industrial Production	Agriculture Production	Labor Force	Industrial Labor Force	Primary Enrollment	Secondary Enrollment	Labor Force	Primary Enrollment	Secondary Enrollment
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A - Linear									
#Monuments	-0.023	0.007	-0.016	-0.027	-0.014	-0.026	-0.030	-0.013	-0.052
	0.007	0.005	0.005	0.011	0.002	0.006	0.007	0.003	0.011
Panel B - Quadratic									
#Monuments	-0.042	0.048	-0.007	-0.090	-0.040	-0.050	-0.111	-0.038	-0.151
	0.039	0.026	0.022	0.051	0.011	0.029	0.024	0.011	0.040
#Monuments Squared	0.001	-0.002	0.002	0.003	0.001	0.001	0.003	0.001	0.004
	0.001	0.001	0.001	0.002	0.000	0.001	0.001	0.000	0.001
N	728	616	848	598	848	817	513	317	494
Fixed Effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pop Controls	✓	✓	✓	✓	✓	✓	✓	✓	✓

Notes: Raw data the National Archives of Albania 1945-1988. Estimates from specification 1, replacing no-monuments with number of monuments. Fixed effects are a set of municipality fixed effects and year fixed effects. Robust standard errors clustered at the treatment (municipality) level.

Table 7: Robustness –Treatment by Percentile of Religious Buildings De-Sanctified

	Total Outcomes			Female Outcomes		
	Main (100%)	75%	50%	Main (100%)	75%	50%
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Primary & Middle						
No-Monuments	0.214	0.180	0.180	0.191	0.190	0.166
Standard Error	0.059	0.068	0.060	0.067	0.066	0.058
P-Value	0.001	0.013	0.006	0.008	0.008	0.009
N	848	848	848	494	494	494
Panel B: Secondary						
No-Monuments	0.528	0.453	0.077	0.854	0.783	0.509
Standard Error	0.164	0.153	0.204	0.249	0.219	0.274
P-Value	0.004	0.007	0.710	0.002	0.001	0.075
N	817	817	817	439	439	439
Panel C: Labor Force						
No-Monuments	0.410	0.253	0.106	0.610	0.473	0.296
Standard Error	0.126	0.154	0.125	0.123	0.111	0.152
P-Value	0.003	0.112	0.408	0.000	0.000	0.062
N	728	728	728	513	513	513
Fixed Effects	✓	✓	✓	✓	✓	✓
Pop Controls	✓	✓	✓	✓	✓	✓
Building De-Sanctified	100%	98%	95%	100%	98%	95%

Notes: Raw data the National Archives of Albania 1945-1988. Estimates from specification 1, replacing no-monuments with number of monuments. Fixed effects are a set of municipality fixed effects and year fixed effects. Robust standard errors clustered at the treatment (municipality) level. Columns re-define treatment status; Columns 1, 4 use main definition, 100% of buildings de-sanctified; Columns 2, 5 define treatment if in top 25th percentiles of destroyed buildings; Columns 3, 6 define treatment if in top 50th percentiles of destroyed buildings.

VII.C Alternative Samples

To address the concern that our results may be driven by large cities, we re-estimate equation (1) excluding the largest municipalities (top 15 percentiles). This includes the capital Tirana, Durres, Korca and Shkodra. Results are presented in Table 8 and do not meaningfully change the main findings. Although coefficients are smaller to those of Table 3, they are not significantly different, and the majority of the estimates remain significantly different from zero at conventional levels and are economically meaningful.

One concern is that our results may be picking up different levels of religiosity rather than the difference in strength of the government commitment. We test for this by estimating equation (1) for a sub-sample of the data where all municipalities have at least one 'monument of

culture' and define the treated group as municipalities where the predominant religion does not match that of the preserved religious building and control group if they do. The intuition behind this test is that if the effects are driven by faith in a specific religion rather than the government, then it should matter which types of buildings (churches or mosques) remain.

Table 9 presents estimates of equation (1) for all our outcomes of interest. Consistent with our hypothesis, none of the coefficients are statistically significant, suggesting that results are driven by lack of commitment by the government, rather different levels of religiosity. The growth rates of municipalities where the religious building preserved were of the predominant religion do not differ from the ones where the buildings preserved were not of the predominant religion.

Finally, to further reaffirm that it is the strength of the government commitment that drives our results and not different levels of religiosity across municipalities, we continue to define treated municipalities as those with a non-matching preserved religious building, while the control group is now municipalities where all religious buildings are destroyed. The intuition behind this additional test is to establish if the presence of a monument from religion that is not from the predominant religion in the municipality decreases female participation relative to municipalities with no-monuments. Given our definitions of treatment and control groups, the sign of this coefficient is reversed here from the rest of the paper. Thus, if it is the belief in the state that is playing a role here, we would expect coefficients to be negative, as the government commitment is stronger in areas with no monuments. Indeed, that is what the results of Table 10 show: municipalities with monuments from not the predominant religion still perform worse than those with no monuments. It should be noted that in this exercise we do lose almost half of the sample, meaning the power is greatly reduced, although the treatment and control groups are similar in size.

Table 8: Robustness -- Excluding Larger Municipalities

	Total Outcomes						Female Outcomes			
	Labor Force	Industrial Labor Force	Industrial Production	Agricultural Production	Primary & Middle Education	Secondary School Enrollment	Labor Force	Industrial Labor Force	Primary & Middle Education	Secondary School Enrollment
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
No-Monuments	0.352	0.658	0.261	- 0.127	0.182	0.312	0.483	0.337	0.139	0.573
Standard Error	0.123	0.296	0.218	0.050	0.066	0.128	0.110	0.340	0.064	0.223
N	616	521	716	506	716	685	434	266	317	371
Fixed Effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pop Controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Notes: Raw data the National Archive of Albania 1945-1988. Estimates from specification 1. Fixed effects are a set of municipality fixed effects and year fixed effects. Robust standard errors clustered at the treatment (municipality) level. The municipalities that are excluded are those from the top 15 percentiles of population - Tirana, Durres, Shkodra and Korca..

Table 9: Robustness – Monuments Not-Matching Predominant Religion Relative to Matching Religion

	Total Outcomes						Female Outcomes			
	Labor Force	Industrial Labor Force	Industrial Production	Agricultural Production	Primary & Middle Education	Secondary School Enrollment	Labor Force	Industrial Labor Force	Primary & Middle Education	Secondary School Enrollment
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Non-Matching	0.06	-0.02	0.205	- 0.104	0.036	0.276	0.083	0.319	0.047	0.346
Standard Error	0.08	0.120	0.168	0.123	0.096	0.218	0.180	0.486	0.108	0.403
N	476	404	554	391	554	547	338	214	323	289
Fixed Effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pop Controls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Notes: Data the National Archive of Albania 1945-1988. Estimates from specification 1. Fixed effects are a set of municipality fixed effects and year fixed effects. Robust standard errors clustered at the municipality level. Sample includes only municipalities with a monument of culture. Treated are those with a monument not matching the predominant religion.

Table 10: Robustness –Monuments Not-Matching Predominant Religion Relative to No Monuments

	Total Outcomes						Female Outcomes		
	Industrial Production	Agricultural Production	Labor Force	Industrial Labor Force	Primary & Middle Education	Secondary School Enrollment	Labor Force	Primary & Middle Education	Secondary School Enrollment
	(3)	(4)	(1)	(2)	(5)	(6)	(7)	(9)	(10)
Non-Matching	-0.208	0.156	-0.32	-0.685	-0.211	-0.237	-0.518	-0.166	-0.473
Standard Error	0.234	0.045	0.131	0.342	0.104	0.145	0.158	0.108	0.368
N	457	322	392	331	457	430	275	266	235
Fixed Effects	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pop Controls	✓	✓	✓	✓	✓	✓	✓	✓	✓

Notes: Data the National Archive of Albania 1945-1988. Estimates from specification 1. Fixed effects are a set of municipality fixed effects and year fixed effects. Robust standard errors clustered at the municipality level. Treated are those with a monument not matching the predominant religion, control are those with no-monuments. Negative signs would imply higher growth in municipalities without a monument of culture.

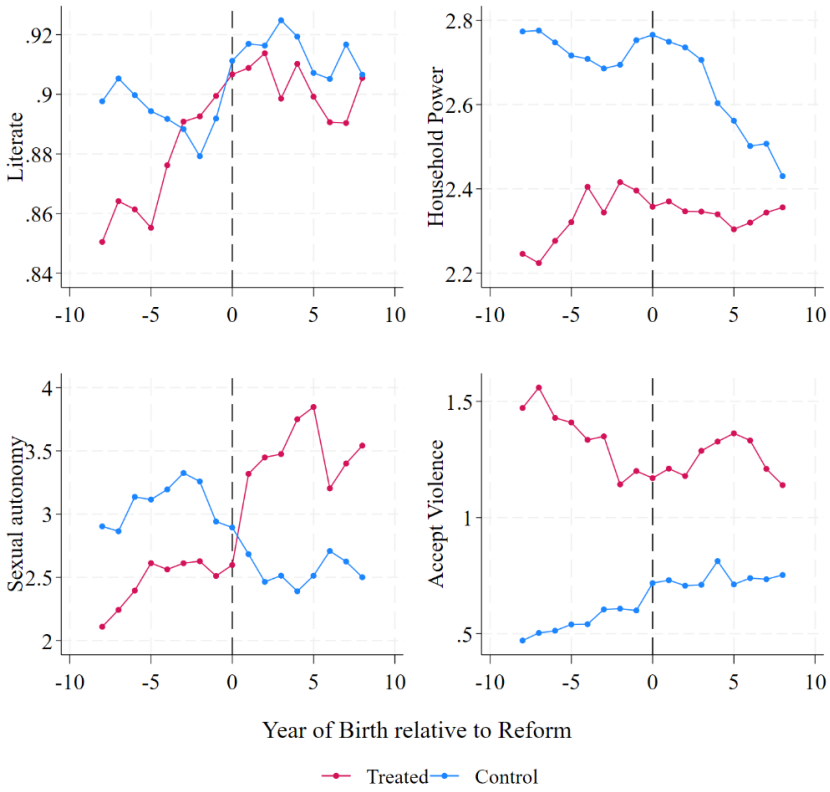
VII.D The Impact of Religion Ban on Other Aspects of Gender Social Norms

Employing the richness of the micro level data from the DHS dataset enables us not only to examine other aspects of female empowerment social norms, but also explore their long-lasting impact. As discussed earlier, this dataset not only provides information on female literacy, but also on female household power, sex autonomy and their perceptions on whether "husbands violence at home is acceptable", which are all proxies for the social norm of female emancipation. We compare the change in these outcomes for females living in the treatment and control municipalities after the implementation of the reform. Although we are only able to provide a descriptive analysis with the DHS data, as all the current outcomes of women in the treated areas will be impacted by the reform, it provides supportive evidence from a distinct data source.

Figure 10 presents 1) the female average literacy rate; 2) female household power; 3) female sex autonomy and 4) a measure of female acceptance of whether husband violence at home towards wife. We restrict the sample to females born within 9 years of the reform being enacted. Thus, the oldest women in the sample were born in 1958 and were 9 at the time of the reform and the youngest were born in 1976. The interviewees were part of the 2008-9 Albanian DHS, and so were between 50 and 32 years old. Having data on women's household residence in 1990 before the fall of communism enables us to precisely classify the treated and control municipalities.

The results are striking and reassuring. The female literacy graph on the top left of Figure 10, shows that although there was a gap in literacy rates between treated and control areas for females born in 1958 (90 percent versus 85 percent), that the gap narrows between the treated and control groups the more women are exposed to the religion ban policy, leading to a convergence for women born 9 years after the ban.

Figure 10: DHS Female Education and Attitudes Towards Domestic Violence



Notes: 2008-9 DHS Albania, female survey. Women aged 32-50 at the age of the survey assigned to treatment status according to their resident municipality in 1990. Red lines refer to treatment municipalities and blue ones to control municipalities.

Importantly, Figure 10 provides some additional descriptive evidence on the changing social norms. The top right panel presents a household power measure based on five questions regarding decision-making within the household, with higher values representing the women have more power. Among older women, those in the control municipalities have more household power, but younger generations report having less power. If this was reflective of a general trend of younger women having less power, then this same pattern would also occur in the treated municipalities. However, this is not the case here: in the treated municipalities, we see the closer they were born to the reform, the more power in the household women report.

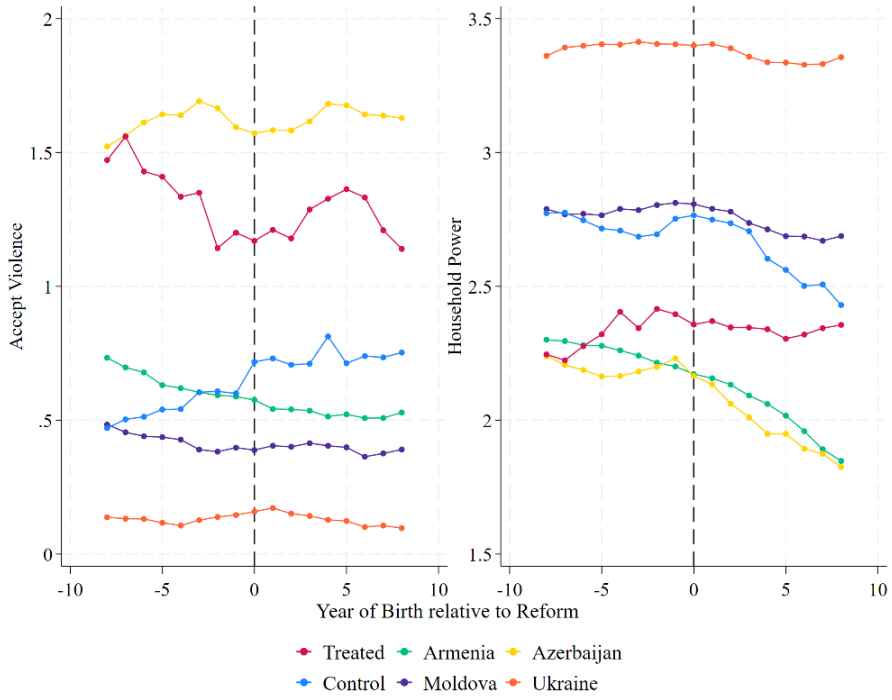
The bottom left panel plots the measure of sex autonomy, with higher values indicating females have more autonomy. Again here, females in treated municipalities in the older cohorts start with less sexual autonomy. However, this reverses for those born after the reform: women in treated municipalities born from 1967 onwards report more sexual autonomy than those in municipalities which kept religious buildings.

The final graph in the bottom right of Figure 10 shows women perceptions on whether husband violence against wives is justified. Here again we see that treated areas started with worse outcomes for women, but experience continual increases in female empowerment, with fewer agreeing on justified husband violence. In contrast, successive cohorts of women in the control municipalities became more accepting of violence.

VII.E The Impact of Religion Ban on Other Aspects of Religious Gender Social Norms: International Comparisons

Finally, to provide further evidence that this is only an Albanian story and not something that also happened in other Eastern European Communist Block countries, we provide some raw international comparisons between women born in the same year in Albania to other post-communist countries that have also participated in the DHS: Armenia, Azerbaijan, Moldova and the Ukraine. Figure 11 plots the series for household power and acceptance of violence for all five countries, with Albanian treated and control municipalities shown separately.

Figure 11: International Comparisons of Female Attitudes Towards Domestic Violence and Female Household Power



Notes: Albania 2008-9 DHS, Armenia 2015-16 DHS, Moldova 2005, Azerbaijan 2006, Ukraine 2007 female survey. Albanian women assigned to treatment status according to their resident municipality in 1990.

As Figure 11 (left graph) shows, there is a large range of acceptance of husband's violence at home across countries, with those form Azerbaijan being the most accepting, and Ukraine being the least. The older cohorts from Albania's treated municipalities report similar levels to Azerbaijan, but these norms dramatically change for younger cohorts. Two other countries also see a slight reduction, but no other country experiences such a dramatic change in acceptance of violence towards women across women aged between 32 to 50. Only Azerbaijan has an increased acceptance for younger cohorts, along with the control regions of Albania. With regards to female household power, most countries follow a similar pattern to the control municipalities of Albania with younger women reporting less power. The treated municipalities in Albania are the exception where younger women report having more power. We take both sets of results as supportive evidence that the large changes we observe in Albania were a result of their national religion ban policy and not a result wider communist block influence.

VIII. Conclusion

Our paper establishes causal evidence on the impact of a state ban of religion on economic prosperity. We employ a social equilibrium framework to model the Albanian government's attempt to increase female participation in education and employment by changing the social equilibrium. This required a coordinated updating of beliefs and actions, which was achieved in some parts of the country by credibly committing to communist ideals of emancipation. This was accomplished by declaring Albania the *First Atheist* country in the world in 1967 and the de-sanctification of its religious buildings, excluding those deemed national cultural monuments 20 years prior, in 1948.

Exploiting this unique natural experiment, we find evidence that the removal of religious buildings had a positive impact on a number of economic outcomes, specifically those related to female participation. Since the communist government blamed religion alone and condemned its 'backward' social norms for holding women back, the main aim of the policy was to increase female participation in the labor market, in the service of the country's further industrialization. The evidence supports the predictions of our model: our findings show that the policy was effective in increasing women participation in the labor market. We also observe faster increases in female participation in education in municipalities which removed all religious monuments. In addition, in these areas we observe larger changes in religious social norms and female

empowerment in the household, sex autonomy, literacy rates and a shift in views surrounding violence towards women across female cohorts born around the time of the reform.

These results are consistent with the Albanian government achieving its goals in areas where the government's commitment to reform was stronger. We do not condone governments restricting religious freedoms, or hostility to religions. The purpose of this paper is to highlight the importance of religion as a leaver to manipulate social norms and to establish that governments can use culture as a policy tool to move societies to a different social equilibrium.

These findings do not necessarily imply that religion slows the economic growth of a country, or that a policy of enforced secularization makes people abandon religion overnight. The point is more to emphasize the shift in social norms concerning women's role in society and their participation in education and the labor market. Our main focus is to examine whether/how these social norms can rapidly change as a result of governments actions, coupled with information on returns to engagement in the public life. In this context, our study provides new evidence on how governments can actively shift those deeply entrenched social norms and belief systems that have until now been considered persistent.

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Appendix Tables and Figures

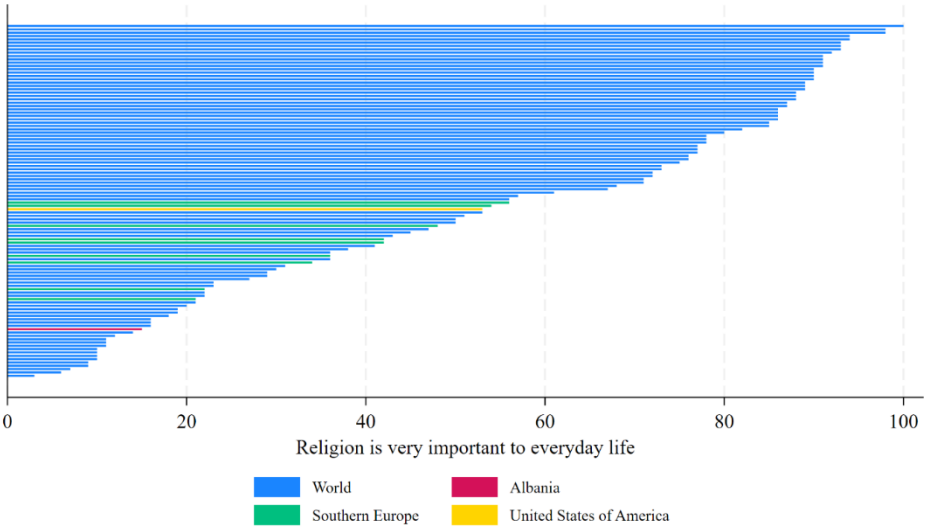
Appendix Table 1: Treatment by Proportion of Religious Buildings De-Sanctified

	Total			Female		
	Main	95%	90%	Main	95%	90%
Panel A: Primary & Middle	(1)	(2)	(3)	(4)	(5)	(6)
No-Monuments	0.214	0.189	0.101	0.191	0.174	0.119
Standard Error	0.059	0.061	0.066	0.067	0.059	0.064
P-Value	0.001	0.005	0.135	0.008	0.007	0.074
N	848	848	848	494	494	494
Panel B: Secondary						
No-Monuments	0.528	0.208	0.082	0.854	0.689	0.405
Standard Error	0.164	0.201	0.191	0.249	0.253	0.281
P-Value	0.004	0.309	0.673	0.002	0.012	0.161
N	817	817	817	439	439	439
Panel C: Labor Force						
No-Monuments	0.410	0.135	-0.002	0.610	0.376	0.141
Standard Error	0.126	0.125	0.137	0.123	0.143	0.173
P-Value	0.003	0.293	0.989	0.000	0.015	0.424
N	728	728	728	513	513	513
Municipalities Treated	15%	47%	66%	15%	47%	66%
Fixed Effects	✓	✓	✓	✓	✓	✓
Population Controls	✓	✓	✓	✓	✓	✓

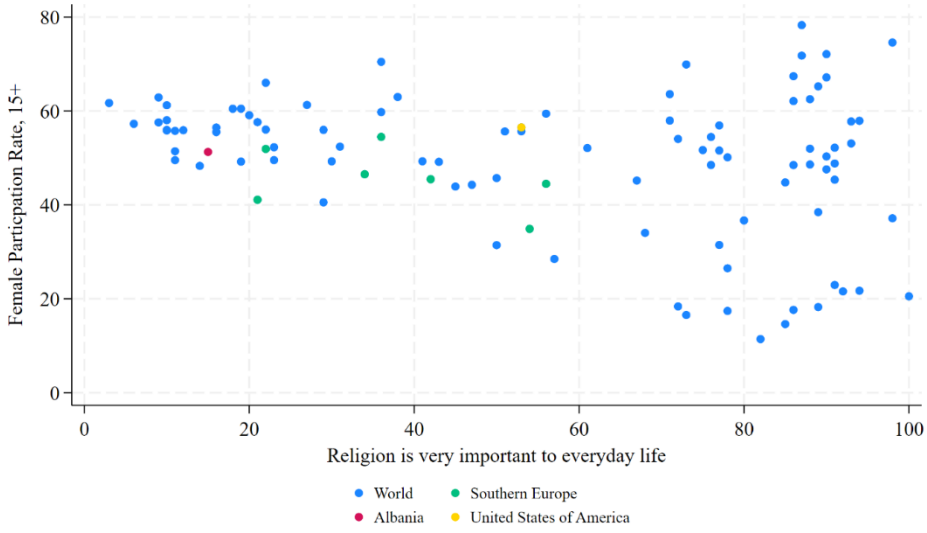
Notes: Raw data the National Archive of Albania 1945-1988. Estimates from specification 1, replacing no-monuments with number of monuments. Fixed effects are a set of municipality fixed effects and year fixed effects. Robust standard errors clustered at the treatment (municipality) level. Columns re-define treatment status; Columns 1, 4 use main definition, 100% of buildings de-sanctified; Columns 2, 5 define treatment if 95% or more religious buildings de-sanctified; Columns 3, 6 define treatment if 90% or more religious buildings de-sanctified.

Appendix Figure 1: Current International Comparisons

Panel A: Religiously

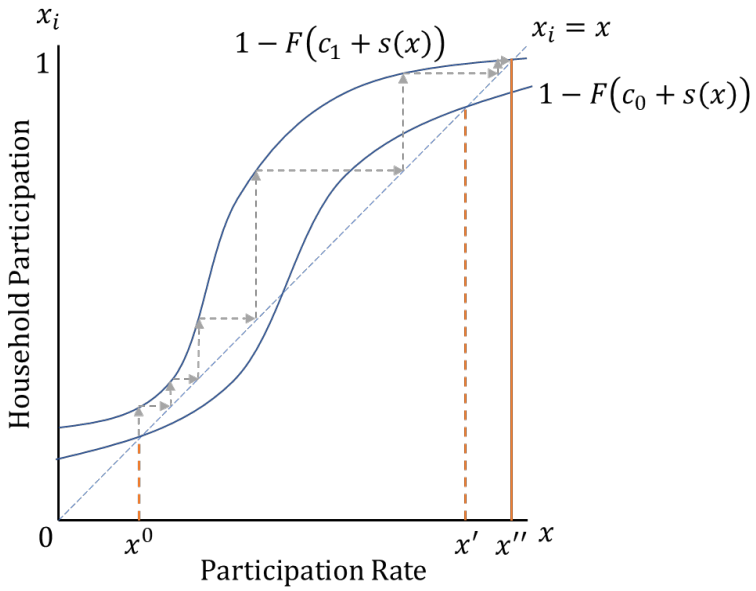


Panel A: Religiously versus Female Participation



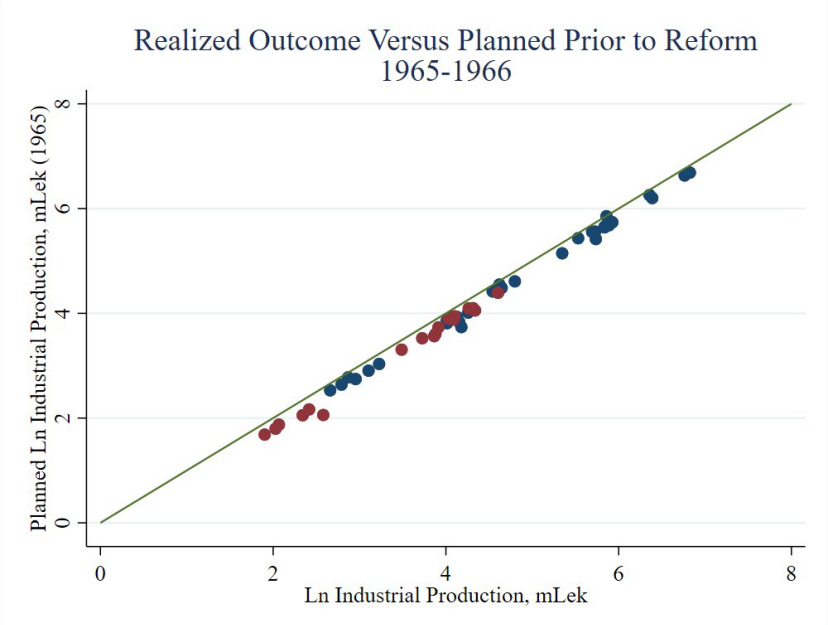
Notes: Source Pew Research Center 2018 "The Age Gap In Religion Around the World" Available at https://www.pewresearch.org/religion/wp-content/uploads/sites/7/2018/06/ReligiousCommitment-FULL-WEB.pdf. Female labor force participation rate, ages 15+, modelled International Labor Organization estimate, ("ILO Modelled Estimates and Projections database (ILOEST)"). ilostat.ilo.org/data. Sothern European countries as defined by International Organization for Standardization (ISO), ISO 3166-1. With the exception of Albania, in this dataset this consists of; Italy, Spain, Serbia, Portugal, Moldova, Croatia, Kosovo, Bosnia-Herzegovina, and Greece.

Appendix Figure 2: Dynamics of Changing Equilibrium



Note: x_i represents female participation of an individual, and x represents the labor market participation rate. x^0 represents a low participation equilibrium and x' represents a high participation rate under c_0. x'' represents the unique equilibrium under c_1.

Appendix Figure 3: comparison Of Industrial Production Measures



Notes: Sources 1965 5-Year Plans, and National Archive of Albania 1945-1988. Industrial Production - Total value of industrial production in Lek. All prices are in 1965 Lek.