

# DISCUSSION PAPER SERIES

DP11258

**RELIGIOUS SEDUCTION IN  
AUTOCRACY: A THEORY INSPIRED BY  
HISTORY**

Emmanuelle Auriol and Jean-Philippe Platteau

***DEVELOPMENT ECONOMICS***



# RELIGIOUS SEDUCTION IN AUTOCRACY: A THEORY INSPIRED BY HISTORY

*Emmanuelle Auriol and Jean-Philippe Platteau*

Discussion Paper 11258

Published 03 May 2016

Submitted 03 May 2016

Centre for Economic Policy Research  
33 Great Sutton Street, London EC1V 0DX, UK

Tel: +44 (0)20 7183 8801

[www.cepr.org](http://www.cepr.org)

This Discussion Paper is issued under the auspices of the Centre's research programme in **DEVELOPMENT ECONOMICS**. Any opinions expressed here are those of the author(s) and not those of the Centre for Economic Policy Research. Research disseminated by CEPR may include views on policy, but the Centre itself takes no institutional policy positions.

The Centre for Economic Policy Research was established in 1983 as an educational charity, to promote independent analysis and public discussion of open economies and the relations among them. It is pluralist and non-partisan, bringing economic research to bear on the analysis of medium- and long-run policy questions.

These Discussion Papers often represent preliminary or incomplete work, circulated to encourage discussion and comment. Citation and use of such a paper should take account of its provisional character.

Copyright: Emmanuelle Auriol and Jean-Philippe Platteau

# RELIGIOUS SEDUCTION IN AUTOCRACY: A THEORY INSPIRED BY HISTORY

## Abstract

The relationship between religion and politics is explored from a theoretical standpoint, assuming that religious clerics can be seduced by the ruler acting as an autocrat. The comparative effects of decentralized versus centralized religions on the optimal level of cooperation between the autocrat and the religious clerics, which itself impinges upon political stability, is analysed. The paper shows that the presence of a decentralized body of clerics makes autocratic regimes more unstable. It also shows that in time of stability, the level of reforms is larger with a centralized religion than with a decentralized one. When the autocrat in the decentralized case pushes more reforms than in the centralized one, he always does so at the cost of stability. Historical case studies are presented that serve to illustrate the main results.

JEL Classification: D02, D72, N40, O57, P48, Z12

Keywords: Autocracy, instrumentalization of religion, centralized and decentralized religion, Islam, economic development, reforms

Emmanuelle Auriol - emmanuelle.auriol@tse-fr.eu  
*Toulouse School of Economics and CEPR*

Jean-Philippe Platteau - jean-philippe.platteau@unamur.be  
*University of Namur*

# Religious Seduction in Autocracy: A Theory Inspired by History\*

Emmanuelle Auriol<sup>†</sup>  
Jean-Philippe Platteau<sup>‡</sup>

February 2016

## Abstract

The relationship between religion and politics is explored from a theoretical standpoint, assuming that religious clerics can be seduced by the ruler acting as an autocrat. The comparative effects of decentralized versus centralized religions on the optimal level of cooperation between the autocrat and the religious clerics, which itself impinges upon political stability, is analysed. The paper shows that the presence of a decentralized body of clerics makes autocratic regimes more unstable. It also shows that in time of stability, the level of reforms is larger with a centralized religion than with a decentralized one. When the autocrat in the decentralized case pushes more reforms than in the centralized one, he always does so at the cost of stability. Historical case studies are presented that serve to illustrate the main results.

**JEL Classification:** D02, D72, N40, O57, P48, Z12

**Keywords:** Autocracy, instrumentalization of religion, centralized and decentralized religion, Islam, economic development, reforms

---

\*We would like to thank Joan Esteban and Jean-Marie Baland for useful comments and detailed suggestions on an earlier version of the paper. Their inputs were key to improve the theoretical part of the paper. We also thank participants of the conference "Bringing history back in development economics", which was held in Moscow in October 2015, for their constructive critics and suggestions. All remaining errors are ours.

<sup>†</sup>Toulouse School of Economics, emmanuelle.auriol@tse-fr.eu

<sup>‡</sup>Université de Namur, jean-philippe.platteau@unamur.be

# 1 Introduction

The increasingly visible presence of religion, in developing countries especially, has aroused the interest of economists during the last decades. What is generally overlooked, however, is the relationship between religion and politics and, in particular, the possibility that the former is instrumentalized by the latter (see Aldashev and Platteau, 2013, for a recent survey). This is precisely the issue that this paper wants to address in the specific context of autocracy, a political regime commonly found in developing countries. Islam is a special concern and one of its defining characteristics is that it does not possess a centralized church structure. It is therefore important to understand the comparative effects of decentralized versus centralized religions on the (optimal) level of cooperation between the autocrat and the religious clerics, which itself impinges upon political stability.

The paper is therefore an exploration into the relationship between (autocratic) politics and religion in the context of non-secularized developing countries. It looks at the instrumentalization of religion by an autocratic ruler concerned with the stability of his hold on power as well as by reforms enriching him and his entourage. It compares two types of religious structure: centralized and decentralized. The exercise is mainly theoretical but it is inspired by history in the sense that the assumptions on which the theory is based and the analytical questions addressed are drawn from our knowledge of the relationship between politics and religion both in countries that are now advanced and in currently developing countries.

As current observation testifies, few developing countries turn out to be genuine democracies. This was more evident in the 1960s and 1970s than today, especially when attention is focused on Latin America and Africa. It nevertheless remains true in a large part of the developing world where political regimes prevail that lack some basic attributes of democracy. This is especially evident in Asia where India is standing almost alone in the democratic category and where many rapidly growing countries, such as Vietnam, Thailand, and China, are strong autocracies. It also bears emphasis that latecomers in the industrial revolution (Germany, Russia,

and Japan) during the 19th and beginning of the 20th centuries were not governed in a democratic way. Moreover, many old democracies of Western Europe, with the notable exception of the Netherlands, started as absolute monarchies. What all this evidence suggests, therefore, is that modern states tend to be non-democratic during the crucial phase of their formation and consolidation.

Since their legitimacy cannot rest on the principles of democracy, developing autocracies need to rely on other sources. Two such sources are available, and they can be used in combination: nationalism and religion. The first source has been amply used by today's developed countries in the stage of their consolidation, as is evident from the history of 17th century Europe, and from the role of nationalistic or communist ideology in Germany, Japan and Russia (see, e.g., Anderson, 2006). In these cases, dramatic efforts and sacrifices for achieving rapid development are typically represented as arising from the need to restore national dignity and protect national sovereignty in the face of outward pressures and challenges.

Because of its reference to the sacred sphere of life, religion provides a transcendental legitimacy which the autocrat may seek in support of his rule. This may be a particularly effective strategy in traditional societies where the influence of religion is pervasive due to low rates of urbanization and low education levels of the majority of people. The experience of Europe, most notably in the course of the 17th and 18th centuries, attests to the importance of a strategy based on a strong identification with a particular religion and on the ruling principle '*cuius regio eius religio*' according to which a citizen should have the same religion as the sovereign (Kaplan, 2007). Since the latter rule implies that not espousing the sovereign's faith is tantamount to betraying one's country, it is actually quite difficult to disentangle the two sources of legitimacy, at least in the case of modern Europe (both Western and Eastern). The same principle is still observed in a significant number of developing countries where members of the religious establishment believe it to be their duty to obey a secular ruler, however despotic and corrupt, provided that he proclaims official allegiance to their religion. This was particularly evident with Catholicism in many Latin

American countries during the 1960s and 1970s, with Islam in many Muslim countries, and even with Buddhism in times of crisis (e.g., during and after the Tamil rebellion in Sri Lanka).

In order to gain religious legitimacy, however, it is not actually sufficient that an autocrat officially proclaims his adherence to a particular religion. He must also strive toward seducing or co-opting religious clerics with the purpose of obtaining their support for his policies by means of legitimating statements or speeches. But, unlike the first component of the strategy, seduction involves a cost: religious clerics have to be bought into submission, implying that rewards and privileges must be granted to them in exchange for their cooperation. The ideal situation seems to be the one where the clerical body is unified under a centralized church structure headed by an undisputed authority, and where that authority is rather close to political power. This situation prevailed in many European countries in the 17-18th centuries (e.g., France, Spain, the Netherlands, Poland, Sweden, Hungary, Italy) while it has been deliberately created as the consequence of a schismatic break with a foreign church in some others (most notably, England during Henry VIII's reign). Completely different is the situation where there is no vertical chain of command but a decentralized clerical structure. Since clerics have different levels of attachment to the ethical values and moral principles inspired by their religion and, therefore, different tastes for the autocrat's policies, it is not a priori clear which fraction of them the autocrat is willing to co-opt.

The most striking example of a decentralized religion combined with political autocracy is, without doubt, Islam. The difference in centralization between Catholicism and Islam has deep historical roots: unlike the first Christians who built up a church structure to defend themselves against a state which oppressed them, the Muslims had no need to construct a centralised religious organisation because Muhammad, the founder of the religion, held political power as governor of Medina (Greif, 2006, p. 206; see also Lal, 1998, pp. 62-64; Lewis, 2002, pp. 113-15; Kepel, 2005, p. 237; Lilla, 2007, pp. 56-8, 318).<sup>1</sup> In all Muslim countries, except in Iran,

---

<sup>1</sup>Inside Christianity, Protestantism is quite decentralized compared to Catholicism

there is no hierarchy that exerts authority over the whole clerical profession. No church establishment exists and, as a result, the clerics operate in a rather decentralised way, pronouncing their own fatwas (juridical rulings or opinions based on the Islamic Law) as they deem fit. A fatwa issued by one cleric can therefore be followed by counter-fatwas issued by other clerics. Moreover, the impact of a fatwa depends mainly on the prestige of the cleric or the group of clerics who issue it, whether they occupy an official position or are self-appointed (Beloucif, 2003; Filiu, 2008).

There are two reasons why conservative or radical clerics may not like the autocrat's policies or actions. First, the autocrat may have carried out progressive reforms that violate, or are believed to violate, basic tenets of the faith. Think of reforms that liberalize divorce, allow gender mixing or reduce women's dependence upon male relatives or the husband, reforms whereby traditional religious courts are replaced by secular courts, and reforms that promote modern curricula at schools, place the whole system of religious education under the control of the state, or enlarge the scope of individual liberties. Second, the autocrat and his close circle may have indulged in corruption and all sorts of illegal enrichment practices, while simultaneously evincing cynical aloofness from ordinary people living in precarious conditions. In the former instance, religious dissenters are conservative and perhaps even puritan clerics while in the latter they are socially-minded clerics sensitive to the ideals of social justice and equality inherent in monotheist religions. In the Muslim world, legal and administrative reforms of the aforementioned types have been undertaken in countries such as Turkey, Syria, Egypt, Iraq, Indonesia, Morocco, and Tunisia. By contrast, Algeria, Sudan, Pakistan, and Saudi Arabia did not undertake them. On the other hand, in many countries (but not in Turkey under Mustapha Kemal Atatürk, not in Egypt under Gamal Abdel Nasser, and not in Iraq under Abdelkarim Qasim, three despotic modernizers), rulers and their inner circles were tainted by corruption, thereby causing deep-seated popular frustrations often echoed by Islamist movements and radical

---

and Eastern Orthodoxy, especially the strand of Protestantism encountered in the United States. It is noteworthy, however, that this strand tends to predominate in advanced democratic countries, which are beyond the scope of our study.

clerics (Platteau, 2015).

In our theory, when considering the possibility of introducing progressive reforms, a reformist autocrat is confronted with a trade-off between the extent of these reforms and political stability. More precisely, forsaking reforms may allow him to enlist more clerics in his support and thereby enhance the stability of his regime while, conversely, pushing forward with reforms may cost him the support of a fraction of the clerics with the attendant consequence of diminished political stability. The trade-off is most evident in the case of decentralized religions. The most uncompromising clerics are those who require the highest price to be 'seduced', hence the attention to the *marginal* cleric. In contrast, stability is easier to come by with a centralized religion since the autocrat negotiates directly with the head of the church. The centralized structure offers a solution to the collective action problem of the clerical body and, hence, the emphasis is on the *average* rather than the marginal cleric as is arguably the case in a decentralized religion. The trade-off also underpins any comparison of the achievements of autocracy under centralized and decentralized religions. A question of particular interest is whether an autocracy is more stable but less reformist under a centralized than under a decentralized religion.

The paper shows that the presence of a decentralized body of clerics makes autocratic regimes more unstable. It also shows that in time of stability, the level of reforms is larger with a centralized religion than with a decentralized one. The intuition for this result is that while in the former case the autocrat needs to buy the average cleric into submission, in the latter case it is the most radical cleric whom he must bribe in order to achieve the desired level of political stability. However the result can be upset if the autocrat chooses reforms over stability in the decentralized case. Equilibria indeed exist where the level of reforms is higher under a decentralized religion than under a centralized one, that is, the former regime is reformist and unstable whereas the latter is stable but more conservative. This means that under a decentralized religion, the autocrat chooses to seduce a smaller fraction of clerics, the most progressive ones, so that he can undertake enough reforms. Under the centralized religion,

this is not an option and, if the church is conservative (i.e., the average cleric is conservative), the path of reforms will be slow. On the other hand, comparative-static analysis shows that, in the decentralized case, when the clerics become more radical the optimal policy of the autocrat is to forego progressive reforms in order to enlist a larger clerical support and mitigate the risk of regime collapse. By contrast, in response to a change that increases the return to reforms, he might optimally choose to push reforms at the risk of a higher political instability. The last part of the paper contains a good amount of empirical evidence, but rather than constituting a rigorous empirical test of the theory, which in any case would be extremely hard to come by, it provides rich case study material aimed at motivating the analysis.

The paper is constructed as follows. In Section 2, we review the related literature. Section 3 is the central part of the paper where our theory is expounded and its results are derived. Section 4 presents illustrative evidence by the way of historical case studies. Section 5 concludes.

## 2 Related literature

Our theory is comprised of three components: (1) there is an autocrat who maximizes his expected surplus in conditions of uncertainty caused by the risk of political rebellion; (2) in order to mitigate that risk, the autocrat resorts to seduction or co-optation of potential leaders of a rebellion; and (3) the leaders to be tamed are religious clerics.

The point of departure given by (1) echoes a long tradition initiated by Gordon Tullock (1987), who claimed that dictators primarily seek to remain in office, and often face a high risk of being overthrown. It is therefore natural that many political scientists and political economists have subsequently examined the strategies which rulers use to stay in office, ranging from loyalty and repression (Wintrobe, 1998), to divide-and-rule strategies (e.g., Verdier et al., 2004; De Luca et al., 2014), power-sharing and bargaining (e.g., Lizzeri and Persico, 2004; Morelli and Rohner, 2014), and even optimal succession rules (Konrad and Skaperdas, 2007; 2015). The

two classical instruments of authoritarian control are repression and co-optation, and a few authors have explicitly studied the trade-off between these two strategies. Among them are Desai et al. (2009) who have labeled such a trade-off "the authoritarian bargain", or Bove and Rivera (2015) who analyze it as a balancing act between vertical repression of the population and horizontal repression of the elites (see also Koga, 2015). These elites, whom De Mesquita et al. (2005) call the "selectorate", are generally considered as the most serious threat to the dictators' power.

One common motive of the elites for deposing a dictator is the hope of occupying power themselves (Acemoglu et al. , 2010; Konrad and Skaperdas, 2007, 2015), or of obtaining more favours under another dictator (Sekeris, 2011). Evidence shows that elites tend, indeed, to control the fates of dictators, and statistically most dictators were overthrown by members of their inner circle rather than as a result of genuine popular uprisings. By one estimate (i.e., Svoboda, 2009), out of 303 authoritarian rulers, 205 (68 percent) were deposed by a coup between 1945 and 2002.

In this paper, as pointed out under (2), we focus attention on the co-optation strategy of the autocrat. The people whom he seeks to co-opt are members of the elite because they can potentially organize and lead people into open confrontation with the ruling clique. We thus depart from political economy models in which a dictator makes transfer payments directly to the population or to a subgroup (say, an ethnic group) in order to stay in power and generate personal rents (Acemoglu and Robinson, 2001; 2006; Padro i Miquel, 2007; Sekeris, 2011; Hodler, 2012).

The third ingredient of our theory, as reported under (3), is the religious nature of the elites considered as a target for favours by the autocrat. Religious clerics have two special features that distinguish them from other elites: first, they hold values regarding social justice and human rights, or regarding proper behavior as prescribed by their religion; second, as representatives of the supernatural world and as wise men possessing deep knowledge (theological and philosophical, in particular), they have a natural prestige and exert great influence on the population. Because of these two traits, the clerics are susceptible of playing a role as political actors.

However, they are also susceptible of being 'bought' off by the autocrat, yet the price to be paid increases with the distance between the values they hold and the autocrat's policies or practices. Since there is a continuum of values that differentiate the clerics, with a decentralized religion the autocrat chooses the mass of religious clerics that he wants to 'seduce' or co-opt. Those who are excluded form the category of non-official or self-appointed clerics who stand beyond the autocrat's control and therefore represent a threat to the regime's stability. This is because they are able to express socio-economic and cultural grievances "in the only way familiar to most people, a religious idiom arraying the forces of good against the forces of evil and promising to bring justice to the oppressed" (Keddie, 2003: 3). In the centralized case, on the contrary, the autocrat bargains directly with the hierarchy of the church as represented by a pope, a patriarch or a governing council.

It bears emphasis that, although the clerics may have economic interests of their own -otherwise, they would not be seducible-, they do not seek power to achieve political or economic ends. What drives their political actions is their adherence to a view of social order and the common good that is inspired by their beliefs about social justice and/or the preservation of traditional values and institutions in which they occupy key functions. As they see it, their role is not to govern a country but to watch whether the autocrat's policies do not diverge too much from the moral and institutional culture which they stand for.

There is ample evidence to the effect that, in its relationship to the sovereign, the religious officialdom (the co-opted clerics) tends to sacrifice values to the altar of personal interests. In the Ottoman empire, for example, "the entire religious establishment held office at the pleasure of the sultan" (Cleveland, 2004: 48). The "cozy relationship" between the religious clerics (meaning not only the ulama but also the Sufi orders) and the sultan "translated into significant economic and political privileges" for the former (Malik, 2012: 8). Offices typically involved lucrative functions which included revenue generation and the administration of religious endowments that controlled vast tracts of land. Religious appointments were

all the more coveted as the associated incomes were exempt from taxes. It is therefore not surprising that religious families possessing long-standing honourable ancestries competed for religious offices, titles and tax farms and, when successful, became a core component of the Ottoman nobility and a linchpin of provincial administration (Hourani, 1991: 224-25; 1993; Malik, 2012: 8; Coulson, 1964).<sup>2</sup>

The same observation applies to the Mamluk state in which many ulama served not only as religious functionaries but also as administrators and full-edged members of the state bureaucracy. In particular, the qadis (Islamic judges) were commonly employed by the Sultan in his private secretarial service, in his private treasury, and in the military bureaus. Some even became viziers and, in many cases, "the post of qadi was itself the culmination of an official rather than a religious career" (Lapidus, 1984:137-8). As figures of power and influence, they "acted like other politicians, participating in patronage, control of resources and factional struggles, but with the advantage of being able to invoke religious sanction" (Zubeida, 2011: 15). Since they were thus subservient to the interests of the ruler and his clique, their religious autonomy was seriously compromised and they would always be able to formulate legal justifications for whatever decision the ruler wished to make. To quote Roy (1990): "Public order, which is a prerequisite of all what is socially desirable in society (maslahat), has always seemed to the ulama preferable to the demands that politics should be completely open to the promptings of religion" (p. 49). In the same line, Coulson (1964: 83) reached the conclusion that "Might, in fact, was right, and this was eventually recognised by the scholars in their denuncia-

---

<sup>2</sup>The following excerpt from the monumental work of Lapidus speaks of itself: "The biographies of scholars show that, with the elaboration of a bureaucratic hierarchy, interest in careers outweighed genuine piety and learning. The influence of entrenched families enabled them to promote their children into the higher grades of the educational and judicial hierarchies without having reached the proper preliminary levels, while theological students who could not find patronage were excluded. In the course of the eighteenth century the ulama became a powerful conservative pressure group. As servants of the state the ulama no longer represented the interests of the people, nor protected them from the abuses of political power. No longer did they represent a transcendental Islamic ideal opposed to worldly corruption. Their integration into the Ottoman empire made them simply the spokesmen of Ottoman legitimacy" (Lapidus, 2002: 268).

tion of civil disobedience even when the political authority was in no sense properly constituted" (see also Hourani, 1991: 144; Lapidus, 2002: 260).

In Catholic Christianity, too, priests were discouraged from expressing dissent against even tyrannical governments. It is St. Augustine who established the key principle in this matter. According to him, despite all its imperfections and the "sinful" behaviour of those who govern it, the "earthly city" exists for the sake of protecting the "city of God", and its role is therefore vital for people's salvation. To oppose worldly rulers amounts to opposing God's plan and Roman Catholic believers should avoid attempting to overthrow governments even if they turn out to be tyrannical (O'Daly, 2004). This belief in the God-given authority of monarchs was central to the Roman Catholic vision of governance in the Middle Ages, Renaissance and the Ancien Regime. Thus, for example, the kings and emperors of medieval Christendom had always invoked divine blessing on their rule, and by the 14th and 15th centuries the parish clergy were called to disseminate news of military victories and lead prayers requiring God's help for further success (Gunn, 2001: 124). As will be emphasised in Section 3.2, even tighter intermeshing of politics and religion occurred after the Reformation and Counter-Reformation led to the emergence of truly 'national' religions. Secular and ecclesiastical bureaucracies then expanded in parallel and became intertwined in such a way that changes enacted from the top of the state could reach every subject down to the parish level.

The same characterization applies to an even greater extent to Eastern Christianity. In Russia, for example, the Orthodox Church has almost always performed the role of a subordinate partner under autocratic authority. This means that its strict hierarchy obeyed the Holy Synod, a bureaucratic body controlled by the government and established by Peter the Great. In the words of Obolonsky (2003: 109): "All the traditions and customs of the official church, at least since the beginning of the seventeenth century, worked not for its spiritual independence but, on the contrary, in favor of complete submission of the church to the needs of the state". This attitude of submissiveness to temporal power is becoming again glaringly

evident under post-communism, under President Putin in particular.<sup>3</sup>

To our knowledge, our paper represents the first effort to model religious seduction under autocracy. Special attention will be paid to the impact of the heterogeneity of the clerics (in terms of their preferences) and consequent willingness to compromise with the autocrat's policies. Because of this central concern, we ignore other dimensions of autocratic power, such as the use of coercion and military or police repression.

### 3 The model

We consider an economy with an autocrat and a clerical body. This body is composed of a continuum of individuals with different levels of conviction and commitment to the faith. We assume that each member of the clerical class is characterized by a parameter  $\theta \in [0, 1]$ , which is distributed according to the continuous density  $f(\theta)$  and cumulative distribution  $F(\theta)$  functions. The mean value of  $\theta$  is  $E\theta$ . We compare two types of religions: centralized and decentralized.

#### 3.1 Decentralized religion

In the decentralized religion each cleric has to choose whether to support the autocrat, and hence compromise himself with the current political power, or to stay in the religious/spiritual sphere with no involvement in politics. In the latter case the change of utility of the cleric is 0 (the status quo utility). If he chooses to support the autocrat, the utility of the cleric depends on his type  $\theta \in [0, 1]$ , on the probability that the autocrat stays in power,  $p \geq 0$ , on the monetary transfer or compensation which he obtains from the autocrat,  $w \geq 0$ , and on the extent of reforms implemented by the same,  $\alpha \geq 0$ . That is,

$$U(\theta, w, \alpha, p) = pw - \theta V(\alpha) \tag{1}$$

where  $V(0) = 0$  and  $V'(\alpha) > 0$  and  $V''(\alpha) \geq 0$ .

---

<sup>3</sup>Thus, in October 2015, the highest authority of the Russian Orthodox Church declared the military intervention in Syria decided by Putin to be 'a holy war'.

The situation we have in mind is that of a reformist autocrat who tries to seduce a traditionalist cleric.<sup>4</sup> Term  $\alpha$  represents the degree of (legal/economic/social) reforms implemented by the ruler, such as, for example, the creation of a secular school system, the rationalisation of the national bureaucracy, the introduction of modern law codes dealing with administrative, criminal, commercial, or personal status matters, the establishment of a modern judiciary system with wide-ranging competencies, including on subjects traditionally covered by religious courts.<sup>5</sup> Religious leaders generally stand for traditional values and order from which they derive power, prestige and a sense of mission. If the cleric is very traditionalist, he will severely suffer (i.e., in term of reputation, prestige, authority, ideology) by supporting the autocrat's reforms, while if he is moderate, such support will be much less costly. In the model, a low value of  $\theta$  signals an individual who is a moderate, while a large  $\theta$  signals someone who is a zealot or a fundamentalist.

An important point is that the benefit of supporting the current political regime depends on the autocrat staying in power, while the loss is incurred by the mere action of supporting the regime. The moral stain of supporting the autocrat will stick, whether the later stays in power or is overthrown, while the benefit will hold only if he stays in power. So the probability,  $p$ , that the autocrat stays in power is pivotal to the clerics' decision to support him or not.

### 3.1.1 Stability of the autocracy with a decentralized religion

The probability that the autocrat stays in power depends on the proportion of clerics that supports him. To be more specific, let  $\theta^d \in [0, 1]$  be the

---

<sup>4</sup>However, the model is also consistent with a situation where the autocrat is an extremist and the cleric is more moderate. And, more generally, any model where the distance in ideology between a cleric and the autocrat can be measured by a parameter  $\theta \geq 0$

<sup>5</sup>Another interpretation of the model is that  $\alpha$  represents the fraction of the national wealth the autocrat extracts from the economy. Religious leaders will then find it more difficult to support the autocrat when he is more greedy, especially so if they are highly sensitive to social injustice or strongly averse to inequality and corruption (that is, if they have a high  $\theta$ ). In both cases the utility of the cleric decreases with  $\alpha$ , and the disutility of the reforms/extraction is larger when  $\theta$ , the ideological bias of the religious leader, increases.

marginal cleric (i.e., the cleric who is indifferent between endorsing the regime and not endorsing it). The probability that the autocrat stays in power is:

$$p = \int_0^{\theta^d} f(\theta) d\theta = F(\theta^d). \quad (2)$$

As is evident, this expression increases with the fraction of religious leaders that support the autocrat. Substituting  $p$  by its value from (2) yields in (1):

$$U(\theta, w, \alpha, p) = F(\theta^d)w - \theta V(\alpha). \quad (3)$$

We deduce that, if an interior solution exists,  $\theta^d$  is so that:

$$F(\theta^d) \frac{w}{V(\alpha)} = \theta^d. \quad (4)$$

Differentiating (4) yields:

$$\frac{\partial \theta^d}{\partial w} = \frac{F(\theta^d)}{V(\alpha) - f(\theta^d)w} \geq 0 \quad (5)$$

$$\frac{\partial \theta^d}{\partial \alpha} = \frac{-V'(\alpha)\theta^d}{V(\alpha) - f(\theta^d)w} \leq 0 \quad (6)$$

as long as  $V(\alpha) > f(\theta^d)w$ . We will show later that this condition always holds in equilibrium. Everything else being equal, increasing the monetary transfer to the clerics raises the support to the autocrat (i.e., it increases  $\theta^d$ ), while increasing the level of reforms decreases it.

There are generally multiple equilibria to the above-defined static coordination game of the clerics. First of all, there always is the Nash equilibrium where nobody endorses the autocrat's policies, so that  $\theta^d = 0$ . Next, depending on the value of the ratio  $\frac{w}{V(\alpha)}$ , and on the shape of  $F(\theta)$ , there will be, zero, one, two or several additional equilibria. The figures 1-3 represent some of the different possibilities for classical density functions. They represent the identity function  $\theta$  and the function  $\frac{w}{V(\alpha)}F(\theta)$ . The intersection of the two functions represents an internal equilibrium (i.e., an equilibrium so that  $\theta = \frac{w}{V(\alpha)}F(\theta) \in [0, 1]$ ). If at  $\theta = 1$  we have  $1 < \frac{w}{V(\alpha)}$ , there is another equilibrium, which is  $\theta^d = 1$  (i.e., corner solution).

The multiplicity of pure Nash equilibria in the static coordination game implies a selection issue. Which one is going to be played? This question lies at the core of the literature on evolutionary game theory and social learning, the aim of which is to study equilibrium selection in games that have multiple equilibria.<sup>6</sup> Here the agent needs to decide whether to join the network of the autocrat's supporters or not, his utility depending on how many clerical members make the same decision. This problem is similar to the problem of adoption of standards in the presence of network externalities.<sup>7</sup> Adding some dynamic/noise into such coordination game helps with the selection issue. Auriol and Benaim (2000) show that only the stable equilibria of the Ordinary Differential Equation (ODE),  $\frac{d\theta^d}{dt} = F(\theta^d)w - \theta^d V(\alpha)$ , can be an equilibrium of this type of coordination game. We deduce the following definition.<sup>8</sup>

**Definition 1** *An equilibrium  $\theta^d \in [0, 1]$  of the static coordination game is stable if and only if  $f(\theta^d)w - V(\alpha) < 0$ .*

In what follows, we focus on the stable equilibria of the coordination game. As it will become clear when we solve the autocrat's optimization problem, this is done without loss of generality (i.e., only stable equilibria are compatible with the autocrat having a positive payoff). The shape of the density function is obviously crucial in determining which equilibrium is stable. Figures 1-3 represent the function  $F(\theta)\frac{w}{V(\alpha)}$ , which varies between 0 when  $\theta = 0$  and  $\frac{w}{V(\alpha)}$  when  $\theta = 1$ . The shape of this function depends on the shape of the cumulative distribution function  $F(\theta)$ . The intersection between the bisectrix and the function corresponds to the marginal cleric according to (4) (i.e., a cleric who is indifferent between supporting the autocrat or not supporting him). The clerics of type  $\theta$  so that  $F(\theta)\frac{w}{V(\alpha)}$  is greater than the bisectrix are those who support the autocrat. And,

---

<sup>6</sup>See Weibull (1996) for a primer on evolutionary game theory.

<sup>7</sup>In this literature the utility of an agent when she chooses to join a network or adopt a standard depends on the fraction/number of other agents who make the same decision. For a survey on standardization in presence of network externalities, see Park (2006).

<sup>8</sup>Let  $\frac{dx}{dt} = g(x)$  be an autonomous differential equation. Suppose  $x(t) = x^*$  is an equilibrium, i.e.,  $g(x^*) = 0$ . Then if  $g'(x^*) < 0$ , the equilibrium  $x(t) = x^*$  is stable, and if  $g'(x^*) > 0$ , the equilibrium  $x(t) = x^*$  is unstable. For more on selection of equilibria in dynamic coordination games, see Auriol and Benaim (2000, 2001).

symmetrically, the clerics for whom  $F(\theta) \frac{w}{V(\alpha)}$  is below the bisectrix do not support him.

Figure 1 illustrates a case where the density function  $f(\theta)$  is U-shaped (i.e., convex), which implies that  $F(\theta)$  is first concave and next convex. It represents a distribution of clerics which tends to put more weight at the extremes. If we think of Islam, at the lower extreme are located the representatives of 'high Islam' who typically come from well-to-do family dynasties and are well connected to power circles. At the higher extreme are clerics from the 'low Islam' who are typically residing in rural areas or poor urban neighbourhoods, and belong to mystical fraternities such as Sufi orders.<sup>9</sup> With such a heterogeneous, polarized clerical group, the internal equilibrium, when it exists, is stable: a fraction  $F(\theta^d)$  (the high Islam) supports the autocrat, while a fraction  $1 - F(\theta^d)$  (the low Islam) does not. Any random perturbation around the equilibrium (say, caused by the death of some cleric, who is then replaced by a new draw) will bring back the system to the internal equilibrium. This is intuitive when the clerics are thus polarized (see the quotation from Lapidus, 2002, in Section 2; see also Platteau, 2015: Chap. 5).

Figure 2 illustrates a case where the density function  $f(\theta)$  is single-peaked with the peak at 0. It represents a distribution of clerics where the majority is close to the autocrat. As will become clearer in the empirical part, this case aptly describes the state-religion relationships as they obtained in Iran under the Safavids. Then, indeed, the rulers managed to create a fairly supportive clerical body which had the appearance of a national church although Shi'ism cannot be regarded as a centralized brand of Islam. The Iranian form of Shi'ite Islam is the closest to centralisation that we can find in the whole Islamic world. In this case, the internal equilibrium is stable and the process to reach it is smooth: the autocrat

---

<sup>9</sup>According to Nielsen (2012), Muslim clerics tend to avoid extremist positions if their career prospects are good. However, those who have relatively few connections with the religious establishment and do not have access to prestigious training or prominent teachers may be tempted to make careers outside of the state system by appealing to lay audiences directly. These clerics can credibly signal independence from state elites by openly espousing Jihadi ideology, making it a risky but potentially high-payoff way to advance their clerical careers.

can easily enroll the fraction of the clerics that he wants by fine-tuning the favours distributed to them.

Finally, Figure 3 illustrates a case where the density function  $f(\theta)$  is single-peaked with the peak at 1. It corresponds to an antagonistic cleric who is opposed to the autocratic ruler. In this case, the internal equilibrium, when it exists, is unstable. The two stable equilibria are either nobody supports the autocrat, or everybody supports him. It implies that if he starts from scratch, it is very hard for the autocrat to get the support of the clerics. In particular, small efforts will inevitably fail and the system will go back to zero support from the clerics. A big initial push will be required to make the jump from the zero support equilibrium to a large support one. The situation that this last case depicts is one in which there is a strong opposition to the autocrat from the clerical body, such as could be observed in Iran after the collapse of the Safavid regime, particularly under the Qajar dynasty. A radical change had indeed occurred in the distribution of the clerics during the chaotic period between the Safavid and the Qajar regimes.

### 3.1.2 The autocrat's optimal policy with a decentralized religion

The autocrat needs to set  $\alpha \geq 0$  and  $w \geq 0$ . He maximizes his expected payoff. If he climbs and stays in power, which occurs with probability  $F(\theta^d)$ , he gets the gross benefit  $G(\alpha)$ , which is a strictly increasing and concave function of  $\alpha$ :  $G(0) = 0$ ,  $G'(\alpha) > 0$  and  $G''(\alpha) \leq 0$ . He must also pay  $w$  to the fraction  $F(\theta^d)$  of clerics that supports him.

The timing of the seduction game with a decentralized clerical body is the following.

1. The autocrat announces  $\alpha$  and  $w$ .
2. A fraction  $\theta^d \in [0, 1]$  of the clerics chooses to support the autocrat where  $\theta^d$  is a stable equilibrium of the coordination game.
3. The autocrat pays the wage  $w$  to the supportive clerics and implements  $\alpha$ .

4. The autocrat is overthrown with probability  $1 - F(\theta^d)$ , in which case he does not get  $G(\alpha)$  and the supportive clerics lose  $w$ . If the autocrat stays in power, he gets  $G(\alpha)$  and the supportive clerics keep  $w$ .

If he is not able to climb in power, the autocrat gets his status quo utility normalized to 0. If he is overthrown, he also gets 0 as he loses everything he acquired while in power. Being self-interested, he focuses exclusively on his own payoff which is related to his ability to stay in power. In other words, he does not care about what happens to the rest of the economy if he is removed. The objective function of the autocrat is therefore:

$$U^p(\theta^d, w, \alpha) = F(\theta^d)(G(\alpha) - w), \quad (7)$$

There are three possibilities.

If the autocrat chooses the corner solution  $\theta^d = 0$ , his utility is 0. If he chooses the corner solution 1, the autocrat solves:  $\max G(\alpha) - w$  so that  $\frac{w}{V(\alpha)} \geq a \geq 1$ . He then chooses the minimum value of  $w$  compatible with the constraint  $w = aV(\alpha)$ , where  $a$  is the minimum value so that the corner solution holds. The optimal solution, then, is  $\alpha_a^*$  so that  $\frac{G'(\alpha)}{V'(\alpha)} = a \geq 1$ . The minimum value ensuring that the corner solution holds,  $a$ , depends on the resolution of the stable interior solution case (see the examples below). Let us now look at interior solutions.

Let  $\theta^d \in (0, 1)$  be such that  $F(\theta^d)\frac{w}{V(\alpha)} = \theta^d$ . The autocrat solves:

$$\begin{aligned} \max_{w, \alpha} U^p(w, \alpha) &= F(\theta^d)(G(\alpha) - w), \\ \text{s.t.} \quad F(\theta^d)\frac{w}{V(\alpha)} &= \theta^d \end{aligned} \quad (8)$$

Equivalently, after replacing  $w$  by its value from the constraint,  $w = \frac{\theta^d V(\alpha)}{F(\theta^d)}$ , we optimize the objective function with respect to  $(\theta, \alpha)$ . The autocrat's optimization problem becomes for  $\theta \in [0, 1]$ :

$$\max_{\theta, \alpha} U^p(\theta, \alpha) = F(\theta)G(\alpha) - \theta V(\alpha) \quad (9)$$

Optimizing (9) with respect to  $\theta$  and  $\alpha$  yields the first-order conditions:

$$\frac{\partial U^p}{\partial \theta} = f(\theta)G(\alpha) - V(\alpha) = 0 \quad (10)$$

$$\frac{\partial U^p}{\partial \alpha} = F(\theta)G'(\alpha) - \theta V'(\alpha) = 0 \quad (11)$$

From (10), we deduce that at the optimum

$$V(\alpha) = f(\theta^d)G(\alpha). \quad (12)$$

The condition  $V(\alpha) > f(\theta^d)w$ , which is necessary for conditions (5) and (6) to hold and for the equilibrium to be stable (see definition 1), is thus equivalent to  $G(\alpha) > w$ : this is a necessary condition for the autocrat to obtain a positive payoff. In other words, when the autocrat is willing to participate to the seduction game (i.e., when he makes a positive payoff), it is necessarily true that  $\frac{d\theta^d}{dw} \geq 0$  and  $\frac{d\theta^d}{d\alpha} \leq 0$  and that the equilibrium is stable. On the other hand, equation (11) implies that  $\frac{F(\theta^d)}{\theta^d} = \frac{V'(\alpha)}{G'(\alpha)}$ , while (4) implies that  $\frac{F(\theta^d)}{\theta^d} = \frac{V(\alpha)}{w}$ . Both equations yield  $w = G'(\alpha)V(\alpha)/V'(\alpha)$ . We can now deduce the result stated in Proposition 1.

**Proposition 1** *The autocrat who wants to implement a level  $\alpha^d > 0$  of reforms offers to decentralized clerics a wage equal to:*

$$w^d = \frac{V(\alpha)}{V'(\alpha)}G'(\alpha). \quad (13)$$

**Proof.** See Appendix 6.1. ■

Proposition 1 holds whether the autocrat chooses the corner solution ( $\theta^d = 1$ ) or the interior one ( $\theta^d < 1$ ). At this stage, it is useful to conduct some comparative-static analysis. First, starting from the interior equilibrium, if the autocrat wants to increase the level of reforms, he will necessarily lose the support of some clerics:  $\frac{d\theta^d}{d\alpha} \leq 0$  (for the proof see appendix 6.2). This is an intuitive result.

Second, it seems also intuitive that an autocrat who wants to implement more reforms will wish to raise the level of compensation offered to the clerics. This is not necessarily the case, however. To see this point, we differentiate  $w$  with respect to  $\alpha$  in (13). This yields:

$$\frac{dw^d}{d\alpha} = \frac{(V'(\alpha))^2 - V''(\alpha)V(\alpha)}{(V'(\alpha))^2}G'(\alpha) + \frac{G''(\alpha)V(\alpha)}{V'(\alpha)}. \quad (14)$$

Since  $G(\alpha)$  is increasing and concave, a *necessary* (but not sufficient) condition for the wage of the clerics to increase when the level of reform is raised is that the first term is strictly positive, which requires  $V(\alpha)$  to be log-concave. For instance, this condition holds if  $V(\alpha) = W \frac{\alpha^v}{v}$ , with  $W > 0$  and  $0 < 1 \leq v$ . By contrast, if  $V(\alpha)$  is log-convex (e.g.,  $V(\alpha) = \exp(\alpha^2) - 1$ ), the wage of the clerics necessarily *decreases* with the level of reforms, which is rather counter-intuitive.

There is another way to see this counter-intuitive result. To interpret equation (13) in economic terms, let us rewrite it as:

$$\frac{w^d}{G(\alpha)} = \frac{\epsilon_{G,\alpha}}{\epsilon_{V,\alpha}}, \quad (15)$$

where  $\epsilon_{G,\alpha}$  denotes the elasticity to reforms of the payoff received by the government, and  $\epsilon_{V,\alpha}$  the elasticity to reforms of the clerics' disutility. The autocrat can increase stability either by decreasing the pace of reform,  $\alpha$ , or by increasing the bribe to the clerics,  $w^d$ . Equation (15) shows that the optimal combination between reform and bribe is such that the ratio of the bribe to the autocrat's benefit from the reform (i.e., the share of the windfalls of the reform that is awarded to the clerics) is equal to the ratio of the reform-elasticity of the autocrat's payoff to the reform-elasticity of the clerics' disutility. This equation is a reminiscence of the Dorfman-Steiner (1954) condition which, in the industrial organization literature, describes the optimal advertising/sale ratio. Here, what we derive is the optimal bribe/payoff ratio. The implication in our context is therefore the following: the higher the sensitivity of the autocrat's payoff  $G(\alpha)$  to the reform effort, or the lower the sensitivity of the clerics' disutility to the same, the higher the share of the reform gain that will accrue to the clerics.

The analysis of this section is quite general and it is not clear which solution, corner or interior, will dominate in practice. We prove below that both solutions can be optimal depending on the cost and benefit of the reforms and on the distribution of the clerics. To make this point, it is sufficient to consider an example. We assume that  $G(\alpha) = K \frac{\alpha^g}{g}$ , and  $V(\alpha) = W \frac{\alpha^v}{v}$ , with  $K, W > 0$  and  $v > 1 > g > 0$ . We moreover focus on two types of distribution, which are particularly relevant to our historical

examples.

The first type is obtained when the density function,  $f(\theta)$ , is U-shaped, so that  $F(\theta)$  is first concave and then convex. It corresponds to the aforementioned distinction between high and low Muslims.

The second example corresponds to a case of convergence of values and purpose between political power and religion, as it occurred in Safavid Iran (see section 4.3.3). It is represented formally by a decreasing density function (i.e., the preference of the clerical members are close to the preference of the autocrat). In this case,  $F(\theta)$  is concave.

**Proposition 2** *Assume that  $G(\alpha) = K\frac{\alpha^g}{g}$ , and  $V(\alpha) = W\frac{\alpha^v}{v}$ , with  $v > 1 > g > 0$  and  $K, W > 0$ . Assume the density function  $f(\theta)$  is either decreasing or symmetrical U-shaped on  $[0, 1]$ . Then, there exists a threshold value  $\nu_f > 0$  so that the autocrat chooses the interior equilibrium if and only if  $v < (1 + \nu_f)g$ .*

**Proof.** See the appendix 6.3. ■

In the above examples, when  $v$  is much larger than  $g$ , the autocrat prefers stability to reforms (he picks the corner equilibrium), while when the difference between  $v$  and  $g$  is small, he prefers reforms over stability (he picks the interior equilibrium). This implies that an increase in the return of the reforms, for instance an increase in  $g$  resulting from technological progress, will tend to cause more political instability.<sup>10</sup> Symmetrically, a radicalization of the clerics in the form of an increase in  $v$  (i.e., an increase of the marginal cost imposed on them by the reforms) will tend to lead to more inertia and cause a sharp decrease in reforms: the autocrat adopts conservative policies and stability increases. This result may seem intuitive but it is not: it means that the autocrat never chooses to make up for a higher cost or a smaller benefit of reforms by raising the material privileges of the clerics to such an extent that more reforms are adopted. In fact, he may even choose to decrease these privileges at the new equilibrium.

---

<sup>10</sup>For instance with the U-shape density  $f(\theta) = 2 - 6\theta + 6\theta^2$ , an increase in  $g$  from  $0.5v$  to  $0.9v$  implies that the autocrat will push more reforms and will lose half of the clerical support in the process (see Appendix 6.3.1).

Finally, it is worth noticing that the transition between the stable and the reformist equilibrium is never smooth: at the threshold, a marginal increase in  $g$  implies a jump from the full support equilibrium to the interior equilibrium, and symmetrically for a marginal increase in  $v$  (i.e., a jump from a reformist equilibrium to a conservative one).

Another relevant example for our empirical investigation is when the clerics' preference tends to be far from the preference of the autocrat, thereby creating a lot of tension between secular and religious powers. In this case,  $F(\theta)$  is convex (as in Figure 3). If  $\frac{w}{V(\alpha)} \leq 1$ , the only stable equilibrium is 0. If  $\frac{w}{V(\alpha)} > 1$ , there are two stable equilibria 0 and 1, and an unstable interior equilibrium. If the autocrat starts with a very low base of supporters, he will never be able to get the support of the hierarchy. This is a situation where he needs a big push to move from equilibrium 0 to equilibrium 1. The maximum amount the autocrat is willing to pay to make the jump to full clerical support is his total rent:  $\bar{w} = G(\alpha)$ . If he wants to maximize the support from the centralized clerical body, he will have to maximize  $\bar{w} - V(\alpha) = G(\alpha) - V(\alpha)$ . From there, we easily deduce the next proposition.

**Proposition 3** *Assume the distribution of the clerics,  $f(\theta)$  is strictly increasing. The autocrat chooses  $\alpha^*$  so that  $\frac{G'(\alpha)}{V'(\alpha)} = 1$  and  $w^* = G(\alpha^*)$ .*

In other words, an autocrat who is confronted with a powerful antagonistic clerical body will simply surrender its power to it. He will implement the reforms and monetary transfers that maximize the welfare of the most radical cleric in whose hands real power rests.

We now turn to the study of a centralized religion.

## 3.2 Centralized religion

In the centralized religion, there is a hierarchy, and a chain of command. The clerics belong to a "church" and have to be obedient to their hierarchy. In the Russian orthodox church, for example, 'aloofness', which denotes an attitude of distance from the Church's authority, was considered to be a severe sin: only submission to religious authority was acceptable,

and this applied not only to the priests but also to the parishioners who were dissuaded from reading the Bible (Obolonsky, 2003: 109). We denote the cleric who is at the head of the church by  $\theta^c \in [0, 1]$ . He is the one to decide whether the church supports the autocrat or not. If the leader chooses to support the autocrat, he will also have to compensate the clerics who belong to the church and dislike the reforms implemented. This is to ensure that in equilibrium they all get a positive utility. Such fine tuning of compensation is possible because each member of the religious organization is scrutinized and trained by the church hierarchy before he/she is allowed to join. For instance, Catholic priests go through a lengthy formation process before their ordination. During this process, they live in closed communities and learn a great deal about each other. They are also obliged to confess their sins and controversial thoughts on a regular basis. In this type of organization, which stresses the importance of obedience and rely on confession, members cannot easily conceal their preferences and values. Possessing such a knowledge, the church is in a position to fine tune a transfer scheme such that the church's members behave in a consistent way and fully support the autocrat, if this is the decision made by the hierarchy. In other words, the centralized structure helps the members of the clerical body to overcome their collective action problem.<sup>11</sup>

What the above implies is that, with a centralized church, the autocrat will have to give away in rents a minimum of  $\underline{w} = E\theta V(\alpha)$ . This minimum ensures that all the church members can be compensated for the disutility of the reforms, but it does not guarantee that the head of the church will be willing to himself support the autocrat. As a matter of fact, the head of the church and the autocrat bargain over the rents generated by the reforms, and they are both selfish. We focus on the Nash bargaining solution.<sup>12</sup> The bargaining power of the church's leader, denoted by  $c \in [0, 1]$ , is assumed to be exogenously given. The power of the autocrat is  $1 - c \in [0, 1]$ . In case of disagreement, the autocrat and the church's head get their status

---

<sup>11</sup>We are grateful to Joan Esteban and Jean-Marie Baland for helping us to clarify this important point.

<sup>12</sup>The bargaining model presented by Nash (1950) can be formulated as a Nash Bargaining Product (see Binmore et al. 1986).

quo utility: their disagreement point is 0.<sup>13</sup> The problem to be solved is, therefore, the following:

$$\begin{aligned} \max_{w, \alpha} & \left( G(\alpha) - w \right)^{1-c} \left( w - \theta^c V(\alpha) \right)^c \\ \text{s.t.} & \quad w \geq E\theta V(\alpha) \end{aligned} \quad (16)$$

Solving this problem, we are able to establish the following result.

**Proposition 4** *Let  $\theta^c \in [0, 1]$  be the head of the organization representing the centralized religion. The level of reforms,  $\alpha^c$ , and the monetary transfers,  $w^c$ , received by the religious organisation are*

1.  $\alpha^c$  so that  $G'(\alpha) = \theta^c V'(\alpha)$  and  $w^c = (1 - c)\theta^c V(\alpha^c) + cG(\alpha^c)$  if  $E\theta < c \frac{G(\alpha^c)}{V(\alpha^c)} + (1 - c) \frac{G'(\alpha^c)}{V'(\alpha^c)}$
2.  $\alpha^c$  so that  $c \frac{G(\alpha)}{V(\alpha)} + (1 - c) \frac{G'(\alpha)}{V'(\alpha)} = E\theta$  and  $w^c = E\theta V(\alpha^c)$  otherwise.

**Proof.** See Appendix 6.4. ■

Condition 1 holds when  $\theta^c$  is relatively large (i.e., when the head of the church is hostile to the autocrat). In this case (Case 1), the autocrat has to abandon large rents to the church in order to win its support. The monetary transfer is large so that the individual rationality constraint of the members of the church is easily met (i.e.,  $w^c \geq E\theta V(\alpha^c)$  so that the constraint is not binding). Condition 2 holds when the head of the church is close to the autocrat so that  $\theta^c$  is small. In this case (Case 2), the problem of the autocrat is to transfer enough resources to the church to be able to buy the support of all the clerical members (i.e., the individual rationality constraint of the clerical body is binding). It is straightforward to check that the level of reforms decreases with  $\theta^c$  in the first case and with  $E\theta$  in the second case. It implies that the autocrat would like to control the nomination process of the head of the church.

---

<sup>13</sup>In our simple bargaining problem, the disagreement payoffs are the outside options of the parties. However, there are many other relevant economic situations where the disagreement game is richer. For an analysis of how endogenously determined threat points in the disagreement game impact the equilibrium, see Esteban and Sakovics (2008).

If we consider the example of  $G(\alpha) = K \frac{\alpha^g}{g}$ , and  $V(\alpha) = W \frac{\alpha^v}{v}$ , with  $v > 1 > g > 0$  and  $K, W > 0$  then

$$\alpha^c = \left( \frac{K}{W} \frac{1}{\theta^c} \right)^{\frac{1}{v-g}} \quad \text{if} \quad E\theta < \left( 1 + c \frac{v-g}{g} \right) \theta^c$$

$$\alpha^c = \left( \frac{K}{W} \frac{1 + c \frac{v-g}{g}}{E\theta} \right)^{\frac{1}{v-g}} \quad \text{otherwise}$$

Case 1 corresponds to the medieval struggle between secular and religious powers that came to a climax in the 14th century with the rise of nationalism and the increased prominence of lawyers, both royalist and canon. Great controversies ensued and the papacy finally met with disaster when the Great Schism occurred. The situation of proximity between the autocrat and the church, which was a phenomenon of early modern Europe rather than of the Middle Ages, is well captured by Case 2. To move from case 1 to case 2 the autocrat is willing to pay up to the difference of its rents.

With national churches, the autocrat's decisions tend to be driven by the *average* cleric. By contrast, in the case of a decentralized religion, they are driven by the *marginal* cleric whom we earlier characterized as the most radical one. As we will see next, this difference matters a great deal.

### 3.3 Comparison of centralized vs decentralized religions: reforms and stability

In this section, we would like to compare how the optimal mix of reforms and bribes chosen by the autocrat to maximise his utility differs depending on whether the religion is centralized or decentralized. In particular, is one structure more conducive to reforms than the other? The next, related issue is which structure leads to more political stability. In order to conduct our comparisons of equilibria, we start from a situation where the only difference between the two autocracies is the structure of their religion. In other words, the cost and benefit of the reforms and the distribution of the clerical body are the same in the different economies.

Let us first compare the stability of the two regimes. With a centralized religion, the autocrat negotiates directly with the head of the church. He

needs to transfer enough resources not only to seduce him personally but also to compensate the church's members for the reforms to be undertaken. In exchange of these rents, he gets the support of the hierarchy and the full clerical body as well. In equilibrium, therefore, the system is fairly stable. By contrast, under a decentralized religion, the autocrat has to gain the support of each cleric individually. Since it is costly to enroll the whole clerical body (i.e., the transfer must be large enough to seduce the most radical type), the autocrat often chooses to co-opt only a fraction of them. In equilibrium, the fraction of religious clerics who support the autocrat is thus generally smaller under a decentralized religion than under a centralized one. The next proposition collects this result.

**Proposition 5** *Everything else being equal, centralized religions lead to more stability than decentralized religions.*

A prediction of the theory is therefore that, everything else being equal, the tenure of autocrats in Catholic countries, for example, should be on average longer than the tenure of autocrats in Muslim countries.

We next aim to compare the level of reforms implemented by the autocrat in periods of political stability. Toward that purpose, we compare the level of reforms chosen by the autocrat under a decentralized religion when he chooses stability with the level implemented under a centralized religion. As analyzed in Section 3.1, cases indeed exist where the autocrat chooses  $\theta^d = 1$  under a decentralized religion.<sup>14</sup>

**Proposition 6** *In conditions of political stability, the level of reforms with a decentralized religion,  $\alpha^d$ , is always smaller than the level of reforms with a centralized one,  $\alpha^c$ .*

$$\theta^d = 1 \Leftrightarrow \alpha^d \leq \alpha^c \tag{17}$$

**Proof.** See Appendix 6.5 ■

---

<sup>14</sup>For instance, when  $G(\alpha) = K \frac{\alpha^g}{g}$ , and  $V(\alpha) = W \frac{\alpha^v}{v}$ , with  $K, W > 0$ ,  $g \in (0, 1)$  and  $v = 2g$ , the autocrat will choose the equilibrium  $\theta^d = 1$  both with density  $f(\theta) = 2 - 6\theta + 6\theta^2$  and  $f(\theta) = \frac{2}{(\theta+1)^2}$  (see appendix 6.3.1 and 6.3.2 respectively).

It bears emphasis that Proposition 6 is quite general. It does not depend on the specific shape of  $G(\alpha)$  or  $V(\alpha)$ , nor  $F(\theta)$ . It shows that in conditions of political stability (i.e., when all the clerics are seduced or co-opted by the autocrat under both types of religious organization), centralized religions lead to more reforms than decentralized ones. This result seems intuitive when the religious authority is close to the autocrat. More surprisingly, however, it is also true when the clerical authority is antagonistic to the monarch. As a matter of fact, buying stability in the presence of a decentralized clerical body is comparatively costly because the autocrat must seduce the most radical cleric, while under a centralized religion, he must only convince the head of the church and transfer enough resources to buy the average cleric. Since the compensation unambiguously increases with the level of reforms, stability comes with a lot of reform inertia when the religion is decentralized. The structural heterogeneity of the clerical body is then an obstacle to reforms because, in order to gain the full support of the religious clerics, the autocrat must adopt more conservative policies than he would need to do if he could deal with a centralized religious authority. In the latter circumstance, having everybody on board is cheaper and easier.

If we relax the assumption of political stability, is it still true that a decentralized religion hampers reforms? The answer is not necessarily: there are equilibria where, everything else being equal except the type of religious organization, the decentralized religion yields a higher level of reforms but at the cost of greater instability. To prove this result, it is sufficient to find an example where it is indeed the case.

Let  $G(\alpha) = K \frac{\alpha^g}{g}$ , and  $V(\alpha) = W \frac{\alpha^v}{v}$ , with  $2g > v \geq 1 > g > 0$  and  $K, W > 0$ . Let  $f(\theta) = \frac{2}{(1+\theta)^2}$  for  $\theta \in [0, 1]$ . Let  $v$  and  $g$  to be close so that in the decentralized case the autocrat prefers the interior equilibrium (see the proof of Proposition 2 in the appendix 6.3 for the exact condition). We deduce that  $\alpha^d = \left(\frac{K}{W} \frac{2g}{v}\right)^{\frac{1}{v-g}}$ . Let  $\theta^c$  be large so that condition 1 in proposition 4 holds. We deduce that  $\alpha^c = \left(\frac{K}{W} \frac{1}{\theta^c}\right)^{\frac{1}{v-g}}$ . Comparing  $\alpha^d$  and  $\alpha^c$ , it is straightforward to check that  $\alpha^d > \alpha^c \Leftrightarrow \theta^c > \frac{v}{2g}$ . There is a whole range of parameter values such that this condition holds. In

other words, in some cases the autocrat operating under the decentralized religious organization will conduct more reforms than the same autocrat under the centralized organization. To achieve this relatively high level of reforms, he will disregard a fraction of the clerics. This is not an option with a centralized organization, which is inclusive by nature. If the church is dominated by fairly conservative clerics, the reform path will be slow.

## 4 Illustrative Examples

Our model yields two distinct sets of interesting results: the predictions derived from the comparison between centralized and decentralized religions, and comparative-static results obtained under each system. To rigorously test these results is an extremely arduous task because data requirements are quite stringent and some variables, such as the level of reforms and the distribution of clerics according to their degree of aversion to them, are not easy to measure. The difficulty is obviously compounded by the fact that we are dealing with historical events. In the following, we will therefore pursue the more modest objective of using country case study material that contains qualitative evidence illustrating our central propositions. Before we embark upon this task, however, we refer to three recent papers that provide evidence consistent with the predictions of our theory. While two of these papers look at the contrasted effects of centralized and decentralized religions, the third one highlights the trade-off between political stability and institutional reforms that lies at the heart of our theoretical approach. We therefore begin our discussion with that paper.

### 4.1 The trade-off between political stability and institutional reforms

The invention of the printing press (1450) proved to be a major technological breakthrough with dramatic institutional consequences for the countries that adopted it. If adoption was quick in many European countries, opposition against it for three centuries prevented the Ottoman Empire from reaping the benefits of rapid diffusion of scientific, technical and other types

of knowledge that it made possible (Van Zanden, 2009: 178-87). For Davis Landes (1998), this refusal of the printing press, which was seen as a potential instrument of sacrilege and heresy was Islam's greatest mistake, the major factor contributing to cutting Muslims off from the mainstream of knowledge (401-2). In a recent paper, however, Cosgel et al. (2012) propose a more articulate explanation of the Ottoman puzzle that can be considered as a direct application of our theory. According to them, the Ottomans regulated the printing press heavily to prevent the loss it would have caused to the ruler's net revenue by undermining the legitimacy provided by religious authorities. This is because accepting the press would have antagonised the Islamic clerics whose support for the ruler was important to keep the cost of collecting taxes to a minimum. As a matter of fact, mass printing would have altered the technology of transmitting knowledge, providing knowledge directly from books or from literate individuals not necessarily affiliated with religious authorities. Hence the latter's opposition to the printing press. If this innovation had been introduced, the loss of support from these authorities would have caused substantial damage to the ruler to the extent that they conferred legitimacy through loyalty, which encouraged citizens to believe that the Ottoman sultan had the right to rule and the power to provide protection and other public goods and services. Political stability and the ability to condone the state's fiscal prerogatives were thus preserved at the cost of innovation adoption and long-term economic growth. Why was the situation different in Europe? The answer supplied by Cosgel et al. is that the state's legitimising function of religious authorities was dented over a century prior to the invention of the press so that European rulers had little reason to stop its diffusion. In this regard, it is revealing that the Ottomans eventually sanctioned printing in Arabic script in the 18th century after alternative sources of legitimacy had emerged.

## **4.2 Centralized versus decentralized religions**

To begin with, Blaydes and Chaney (2013) show that, under conditions of autocracy, a centralized religion (Catholicism) was historically associated with greater political stability than a decentralized one (Islam). Study-

ing the durations of rulers in the Christian West and Islamic Worlds from 800 to 1600, they find that on average the former had significantly longer tenure than the latter, and the duration gap is widening as time elapses. Duration for Catholic kings was the longest when they started to create national churches and move towards absolutism. This finding is entirely consistent with our theory, yet the information available does not permit to establish causality and to identify the mechanism underlying the relationship. It is revealing that our explanation differs from that proposed by these authors for whom the reason behind the difference lies in the military sphere (mercenary armies in the lands of Islam versus loyal armies in the Catholic lands). The two stories, it may be noted, can possibly complement each other.

The second study, by Blaydes and Platas Izama (2015), brings evidence of an association between the degree of centralization of religion and the level of progressive reforms (rather than political stability) in Egypt today. More specifically, it seeks to uncover the factors responsible for the contrast observed between the perceptible decrease of the practice of female genital mutilation among the Christian Copts and the rather unchanged situation among the Muslims in spite of the fact that the practice is forbidden by Egyptian law. The authors tentatively explain this contrasted evolution by the different religious authority structures prevailing in the two communities: whereas a hierarchical order prevails among the Copts, the Muslims are used to live in a much more decentralized organization. In other words, there exists a centralized Coptic Church that exerts a significant influence on the believers and its leaders have chosen to take a clear stand against the cutting of girls. Muslims, on the other hand, go to mosques that are run by different imams who hold varying opinions about the practice. It bears emphasis that, in the case of this study, not only the fact established by the authors is entirely consistent with the prediction of our theory, but the information provided strongly suggests that the causal mechanism underlying it is effectively at work. Our theory can actually be considered as offering a rigorous formalization of Blaydes and Platas Izama's argument.

The above two papers are especially relevant because they deal with

the different performances of centralized and decentralized religions, which form a core aspect of our theory. There are other results that deserve to be illustrated, however. Just consider the following question: if he could choose the shape of the distribution of the clerics within the constraint of a given religious organization (centralized or decentralized), what choice would an autocrat make? The two answers suggested by our theory are as follows. First, under the constraint of a centralized religion, an autocrat would prefer to have a national rather than a foreign centralized church because the former would be closer to his own preference and therefore less antagonistic than the latter. He would also like to choose the head of the church, preferably among his inner circle of supporters. Second, under a decentralized religion, a unimodal distribution of the clerics with the peak close to zero (that is, a decreasing density function) would be preferred by the autocrat to any other distribution, for example, a U-shaped distribution or an increasing density function. In the preferred cases, the autocrat earns a larger rent and reforms are better guaranteed in the sense of achieving a better mix of reforms and political stability. From a theoretical point of view, this implies that the autocrat is willing to pay up to the difference in utility he gets in both cases to allow switching to the more favorable setting. In the ensuing discussion, we illustrate the first preferred choice with the examples of the emergence of national churches in Christianity with a special focus on England, and the second one with the example of Iran. In both cases, evidence takes us back a few centuries, to the reign of Henry VIII for England, and to Safavid times for Iran. When turning to Iran, we describe two situations corresponding to rather opposite types of state-religion relationships: one arising from the presence of compliant clerics (under the Safavids), and the other arising from the presence of a large number of antagonistic clerics (under the Qajars).

## 4.3 Shaping the distribution of clerics in centralized and decentralized religions

### 4.3.1 National Churches in Christianity

The history of state-church relations in the Christian world has not followed a linear path. In particular, depending on specific circumstances, the relative power of the state was more or less strong. In earlier times, it was probably strongest in Eastern Christianity. Thus, in Byzantium, especially during the period spanning the 7th to early 11th centuries, the emperor could intervene in the internal affairs of the church by appointing members of the clergy, and establishing court offices that dealt with ecclesiastical matters and were staffed by clerics directly accountable to him (Macrides, 1999, pp. 71-81). A similar type of state interventionism was also observed in Kievan Rus and Muscovy even though it is only during the Petrine reforms of 1721 that the Church was transformed into an administration subject to the direct authority of the tsar (Plokhy, 2006: Chap. 1).<sup>15</sup> Before Peter the Great, the Orthodox church was "distinct from the state and had not been dependent on it for its very existence, structure, and life" (Schmemmann, 2003: 332).

In Western Christianity, Hungary was an exception to the rule because it possessed a relatively favourable bargaining position which it used to maximum advantage. It was indeed wedged between the eastern and the western empires, and it faced a papacy feuding with the German emperors. Hungarian rulers were therefore able to extract from the Pope concessions that had been granted to few occidental monarchs. In particular, in the course of negotiations that preceded his conversion (early 11th century), the future king of Hungary and his successors were given 'apostolic rights' which included, among others, the right of veto over all ecclesiastic appointments, and the right of refusing to promulgate any of the papal bulls" (Janos, 1982: 11-12). Elsewhere, the outcome of the contest remained more undecided till modern times. The medieval struggle between secular and religious powers

---

<sup>15</sup>The first Russian state, a federation of Slavs centered on Kiev, emerged in the late 9th century. It is in 988 that the Kievan Rus became Christian, adopting the Eastern Orthodox faith. At the start of the Mongols' invasion (in 1223), power had shifted eastwards, first to Vladimir and Suzdal and, later, to Moscow (Warnes, 1999:8).

came to a climax in the 14th century. In the 16th century, the central power of Rome was replaced by national churches which began to resist the claims of the pope in favor of supporting their own monarchies.<sup>16</sup> Moreover, as a result of the Reformation, Protestant churches emerged in some European countries such as England, Sweden and German states. This process of power concentration culminated in the 17-18th centuries with the age of absolutism. National religions were important vehicles of legitimacy for the rising modern states of Europe, as reflected in the famous principle 'cuius regio eius religio' (see Section 1). Consistent with the theory, absolutism was a period of intense reforms: ending of feudal partitioning, consolidation of power in the hands of the monarch, rise of the state along with its professional standing army and rationalized bureaucracy, codification of state laws, and emergence of ideologies justifying absolutist monarchies.

#### **4.3.2 Case study 1: England**

In England, paradoxically, the Protestant Reformation was initially a conservative movement driven by a despotic king, Henry VIII (1491-1547), in order to satisfy his sexual lusts and dynastic desires. As pointed out by William Naphy (2007), "had the king Henry VIII been able to gain some measure of direct national control of the Catholic Church within his realms, as had the kings of France and Spain, and the rulers of many Italian states, there would not have been a Reformation" (92-93). The special adviser of the king, the reform-bended Thomas Cromwell, succeeded in making the parliament pass the Act of Supremacy (1534), which made the king Supreme Head of the newly established Church of England, and repudiated papal supremacy. The break with Rome was sealed, and secular legal sovereignty over ecclesiastical affairs was established. This implied, for example, that the ordination of priests was replaced by a government-controlled system of appointments, and that iconoclasm was almost always sanctioned if not orchestrated by the state (98-99).

It is important to stress that it had never been Henry's intention to

---

<sup>16</sup>In the high nobility, the eldest son would inherit the family land and the associated title while younger siblings often found careers in the church. Many bishops and abbots were themselves part of the ruling nobility and hence very close to the autocrat.

found a Protestant church: its major objective was just to reverse the historic increase of power that the Catholic pope in Rome exerted over the secular rulers in England since the early 13th century when Angevin King John (better known as Landless John) was twice humiliated by pope Innocent III. He was thus "deeply conscious of the traditional French argument that England was subject to the pope, whereas the crown of France was subject to no one" (Simms, 2013: 18). If there were antecedents of this reaction <sup>17</sup>, it is only under the son of Henry VIII, Edward, that "a true princely Reformation" occurred, which was to be subsequently strengthened under Elizabeth who permitted the Church of England to take a more explicitly Protestant line. The active involvement of Spain and the pope in various attempts to remove the queen from power in order to re-establish Catholicism, albeit unsuccessful, had the effect of linking Anglicanism with the identity of the English nation: 'popery' soon became the imagined foe against which the country defined itself as a nation. Fear of Catholicism has, therefore, to be seen in the context of the continuous threat posed by the country's inveterate enemies, Spain or France, which were identified with that particular religion. There prevailed a constant fear, real or imagined, of a Catholic restoration, at least as long as people suspected their own king of Catholicism (and as long as there lived in the country a Catholic Stuart with a claim to the throne). Revealingly, religious violence tended to erupt in times of specific crises which always coincided with threats of foreign invasion (Kaplan, 2007: 115-18; Naphy, 2007: 102-3; Vallance, 2007; Harris, 2007).

The Anglican schism entailed considerable damages for England which became involved in costly wars of religion from the sixteenth to the eighteenth centuries. At the same time, it allowed the country to gradually construct its nationhood. When, after having been provoked into war by James II (a Stuart king strongly contested by the parliament),<sup>18</sup> the (for-

---

<sup>17</sup>These antecedents can actually be traced back to Edward I who acceded to the throne in 1272: conscious of the corporate and national feelings of his country, he was determined to channel these attitudes toward the reconstruction of royal authority both vis-à-vis the pope and the local magnates (Cantor, 1993: 422-3, 452-7; see also Duby, 1987)

<sup>18</sup>James II, strongly influenced by the French model of Louis XIV and Colbert, took

eign) dynasty of Orange came to occupy the supreme power position on the occasion of the Glorious Revolution of 1688-1689, it could safely rely on the Anglican Church. The latter, indeed, acted as a loyal and true supporter of the new Protestant king, William of Orange, who came from a nation (the Netherlands) which was all the more easily considered as a friend of the English nation as it was threatened by the same main enemy (France). In the words of Steve Pincus (2009):

”The Revolution of 1688-89 was ... a Protestant revolution in the sense that the English national religion was explicitly defended and celebrated as one of the elements -arguably one of the most important elements- of English national identity threatened by James. It was not, however, a war of religion, a war in defense of universal religious truth... The English -including William’s own propagandists- understood the war against France as a war to protect national integrities against an aspiring universal monarch, not as a war of religion” (338-39).

William, who was a remarkably progressive ruler, could then proceed with important reforms, foremost among which was the establishment of a sound parliamentary regime, which later turned out to be decisive for the long-term economic development of England (North and Weingast, 1989). The revolution, which involved a wide spectrum of English society, aimed at transforming England into a commercial society based on free trade. It condoned the growing role of urban middle classes, urban culture and the associated view that labor, not land, creates property and value, and that manufactures, not land, was the key to wealth and power. It was also to be based on civil and political rights, implying the existence of an effective parliamentary system. The economic legislation in the House of Commons was dramatically increased and the influence of merchant associations on parliamentary activity was considerable, in any event much more important than what the proportion of merchants in the general population could suggest (Pincus, 2009: 371, 485). New institutions emerged, such as the

---

an absolutist path to modernization that was characteristic of many countries during those times. He thus believed that the best way to achieve the modernization of England was ”through a more monarchical and bureaucratic form of governance” (Simms, 2013: 60).

Bank of England (1694) and money markets, which would exert a major influence on the long-term economic destiny of the country. In short, once the country was rid of the tensions and conflicts inherent in the open meddling of a foreign Church in internal political affairs, and when rulers supportive of foreign ideologies were removed, the crown was freer to adopt policies more consonant with the deep aspirations and preferences of the most dynamic elements of English society.

### 4.3.3 Case study 2: Iran

In addressing the case of Iran, we need to distinguish between two periods characterized by radically different distributions of the clerics. Under the Safavid dynasty, a great mass of clerics were close to the ruler, giving rise to a successful cooperation between state and religion and thereby facilitating the emergence of a strong, modern centralised state in the country. Under the Qajars, by contrast, the opposite situation prevailed: a great mass of the clerics were antagonistic to the state, which created acute tensions between the two agencies. The significant change in the distribution of Iranian clerics was the consequence of a prolonged period of quasi-anarchy and state vacuum following the demise of the Safavids.

#### *Successful cooperation between state and religion during the Safavid rule*

The Safavids (1501-1722) largely succeeded in building a strong and centralized state that created political stability and economic prosperity in a country where a large part of the population was made of nomadic tribes equipped with powerful militia. One important feature of the Safavid rule was that religion was made subservient to the objective of building and consolidating a strong, prosperous state.

In a striking parallel with what happened in 17th century Europe, Shi'ism in its present form (Twelver Shi'ism, in particular) was largely conceived by Iranian rulers as a convenient ideology of nation-building vis-à-vis the rival Ottoman Empire. From Abbasid times and up until the beginning of the Safavid dynasty, Twelvers had by and large cooperated politically with the Sunnis, and numerous religious movements actually combined Shi'i and Sunni ideas, expressing popular grievances, and pro-

viding justification for peasant or nomad revolts.<sup>19</sup> Yet, soon after they conquered power in Tabriz, the Safavid rulers began to turn their doctrine "from one suitable for popular, enthusiastic, egalitarian revolt and conquest into one suitable for stable, conservative rule", and concomitantly ignoring their tribal followers, justifiably considered to be too anarchic (Keddie, 2003: 10).

In reality, the Safavids were keen to enlist members of the old Persian-speaking bureaucracy who had gained a lot of experience in administration and tax collection under the previous dynasties, as well as Persian landlords and merchants. At the same time, they decided to import some official Twelver theologians from nearby Arabic-speaking lands. Having few ties with the local population and benefiting from the financial and political largesse of the ruler (they received ample material privileges), these learned men quickly became a central pillar of political support for the new regime with which they were strongly identified. Muslim associations were simultaneously turned into "virtual departments of the state" (Lapidus, 1988: 882). As a consequence of such strategic choices, the egalitarianism of their early tribal followers was gradually abandoned, and extremist ideas were banned to leave room for a strictly enforced Shia Twelver orthodoxy. As part of this ideology, the Safavids cursed the first three caliphs considered holy by the Sunnis, and they claimed descent from the Seventh imam which gave them impeccable religious credentials (Keddie, 2003: 10-15).

As pointed out by Keddie (2003), one of the main reasons why Isma'il and his followers chose to cause a split between Sunnis and Twelver Shi'is was to endow Iran with a specific ideological distinction and national identity vis-à-vis its (Sunni) military-political enemies, the Ottoman Empire and, for a time, the Central Asian Uzbeks (p. 11). In the words of Robert Lee (2014), "Political decisions and opportunities have recast a version of Islam (Twelver Shiism) from a passivist, minority stance into a badge

---

<sup>19</sup>Interestingly, the Safavids were originally a quietist Sunni order from Azerbaijan, and it is only after they travelled among the Anatolian nomadic tribes that they became militant warriors following a kind of Twelver Shi'ism in the mid-fifteenth century. Their brand of Shi'ism was radical, reminiscent of Shias of the earliest times: believing in divine reincarnation, they considered their leaders to be divine, and their egalitarianism was strong (Keddie, 2003, pp. 10, 13).

of national identity, a religious establishment like no other in the Muslim world, ... and an authoritarian effort to promote religion” (169). The consequences of the split between two main strands of Islam now viewed by each other as heretics and enemies, have been carried over into the present time.

If the emergence of the Safavid state owed much to the military prowess of the Qizilbash tribesmen, its consolidation was critically helped by the creation of a standing royal army and of a loyal ulama establishment, both directly financed by the shah.

*The post-Safavid collapse of state-religion cooperation*

After more than two centuries of stable Safavid rule, for a variety of complex reasons the Safavid state suddenly collapsed. In the aftermath, while chaos predominated owing to continuous warfare between contending tribal confederations, the ulama fell from their previous position of privilege and wealth mainly because their religious endowments (tax-free grants of wealth and land to mosques, religious schools and shrines) were often confiscated or plundered. As a consequence, many of them emigrated to southern Iraq and India or elsewhere (Axworthy, 2013: 20), causing a significant shift in the distribution of the clerics. This marked the end of the unrestricted cooperation between the Iranian autocrats and the religious authorities.

The Qajar dynasty was eventually consolidated (1794) to remain (nominally) in power until the 1920s (Katouzian, 2009: Chap. 6). During the times of the Qajars, a modicum of order had been re-established yet the Qajar Shahs never succeeded in recreating a strong centralised state as the Safavids had done (Katouzian, 2009: 129; Cleveland, 2004: 55). Administrative instability, insecurity and low legitimacy resulting from widespread corruption and little concern for the people’s welfare were the hallmarks of most of their rule.<sup>20</sup> When the Qajar rulers decided to bring reforms, these reached only a small elite but did not touch the mass of the popu-

---

<sup>20</sup>A particular problem arose out of the important powers (including prerogatives in matters of foreign policy) wielded by provincial governors: recruited from the Qajar nobility, they acted as great potentates who resisted all efforts to strengthen the central government at the expense of the provinces (Yapp, 1987, p. 170).

lation. Moreover, in many instances the reforms were simply ineffective, inadequate for the centralisation of state power, and insufficient to oppose foreign encroachment (Lapidus, 1988: 575).

It is in this specific context that the ulama began to function independently of the government. Backed by a population which granted them extensive authority in religious and legal matters, they constituted a powerful force of support of, or opposition to, the policies of the shahs. The higher-level ulamas, the mujtahids, gained increasing influence and authority, and "there was now a clear doctrinal basis for appeals to the ulama over the head of a ruler, and for claims by the leading mujtahid to make political decisions, provided they touched on Islamic principles, independently of temporal rulers" (Keddie, 2003: 20; see also Axworthy, 2013: 21). These powers were increasingly used from the early nineteenth century onwards.

Several unfortunate acts of foreign economic policy gave the ulama the opportunity to act as effective leaders of the opposition against an unpopular regime. The first event came in 1872 when the reformist government of Mirza Hosain Khan granted to a British baron, Julius De Reuter, an extensive concession involving exclusive rights for an impressive array of economic activities.<sup>21</sup> This concession was granted in return of a modest royalty, but the prime minister Khan personally profited from it. Following protests by a mixed group of patriotic officials, ulama, and economic agents hurt by Khan's reforms, the shah felt eventually compelled to annul the Reuter concession and to dismiss his prime minister.<sup>22</sup>

In 1890 the corrupt and inefficient government of Nasir al-Din awarded a British capitalist (G.F. Talbot) the exclusive right to produce, sell and export the country's entire tobacco crop. Since tobacco was such a vital commodity in the economy, this decision immediately aroused tumultuous mass protests (Keddie, 1966; Rodinson, 1966: 166; Lapidus, 1988: 576-77;

---

<sup>21</sup>Lord Curzon called it "the most complete and extraordinary surrender of the entire industrial resources of a kingdom into foreign hands that had probably ever been dreamed of" (cited from Keddie, 2003, p. 54).

<sup>22</sup>However, a new series of economic concessions of a similar kind were soon to follow, testifying that Iran continued to fall prey to British and Russian interests. Since they brought only small returns to the government, while bribes to the shah and officials to promote them were quite large, tensions between the state and society remained high.

Cleveland, 2004; Gleave, 2005; Katouzian, 2009: 163-64). A noteworthy feature of the popular demonstrations is that they were organized by members of the Shi'a ulama who "urged the population to join them in preserving the dignity of Islam in the face of growing foreign influences; they portrayed the shah's concession as a transgression of the laws of Islam and used their independent power base to denounce the government" (Cleveland, 2004: 115). This was a significant moment in modern Iran's history not only because the Tobacco Protest was the first successful mass protest against government policy, but also because it rested on the coordinated actions of ulama, secular or modernist reformers, bazaaris (especially merchants), and ordinary townspeople.<sup>23</sup> What Keddie (2003) calls "the religious-radical alliance" had shown its potential for changing the course of Iranian policy (61-62). It was to remain effective during the subsequent decades and even during the following century (Mottahedeh, 2000: 35-37).

Two remarks are in order. First, from the above account, it is not clear that progressive reforms were the single cause of the clerics's meddling in politics and of their strong popularity. The corruption of the political elite, their blatantly iniquitous and ineffective policies, as well as the despotic arbitrariness of the regime, contributed a great deal to the rise of religious power. In other words, to understand the case of Iran in the light of our model,  $\alpha$  is better interpreted as a measure of perceived corruption and aloofness of the ruling clique than as an indicator of reforms. Second, although the religious officialdom in Iran looks like a vertical hierarchy evoking the Catholic Church, the reality is different. Indeed, the reunion of the clerics around their central authority figure, when it happens, appears as the endogenous outcome of the surrounding political environment rather than as a structural trait fixed at the beginning. It is moreover revealing that clerics did not necessarily behave in the same way when conflict situations arose: some expressed clearly more radical views than others (see Hodgson, 1974: 303-16).

---

<sup>23</sup>Whereas before most secularist reformists, typically educated people influenced by Western ideas, had been rather hostile to the ulama, -which contrasts with the traditionally close ties between ulama and the bazaar classes-, from 1890 onwards they started to reconcile with the clerics willing to fight against the regime's policies, particularly against the sale of Iran's resources to foreigners.

## 4.4 Varying key parameters in the context of decentralized religions

In the following, we are concerned with the effects of critical parameters of our model on reforms and political stability in the context of decentralized religions. All the examples are drawn from the Muslim world which supplies us with many cases of strong and persisting autocracies. There are other decentralized religions than Islam, such as Judaism, American Protestantism, Hinduism, and Buddhism. However, we do not observe a combination of autocracy and decentralized clerics in the case of the three former religions whereas, for Buddhism, Myanmar and Sri Lanka (and, perhaps, Thailand) are pertinent country cases yet poorly documented in the available literature.<sup>24</sup>

### 4.4.1 Case study 3: Saudi Arabia

One polar case suggested by our model arises when the structure of the economy is such that economic performance is hardly affected by reform efforts. The clearest example is provided by rent-based economies whose prosperity is almost entirely based on the exploitation of abundant and highly priced natural resources. In these conditions, it is reasonable to assume that the function  $G(\alpha)$  has a weak slope (e.g.,  $g$  is small). When this is the case, a simple look at the ruler's objective function (7) shows that, since reform efforts are unproductive while they will cause a loss of clerical support (for a given value of  $w$ ),  $\alpha$  will be set to zero. As for  $w$ , it will be small because clerics are not antagonistic to a ruler when he does not undertake reforms. In spite of the relatively low  $w$ , the entire clerical class can therefore be mobilized in support of the ruler with the direct consequence that the probability of the ruler's survival is one (survival is certain).

One example that comes to mind is Saudi Arabia, a country blessed with huge oil resources and led by a clique of authoritarian rent-earners (the Saud family) who rule over a deeply conservative society. These huge resources have been widely redistributed inside the native population under

---

<sup>24</sup>The interested reader will find insights in Platteau, 2016, Chap. 6.

the form of lavish benefits, cushy government jobs, subsidies, pay rises and bonuses. But this is not the only way the rulers have followed to maintain a loyal citizenry. Their close alliance with religious clerics forms the second arm of their pampering strategy. Regarding the latter, it bears emphasis that the religious establishment of Wahhabite Sunnis is entirely allied with the Saud regime and has been so since the foundation of the modern Saudi state. The founder of the creed, Muhammad Ibn Abd al-Wahhab (1703-1792), had developed a puritanical and ultra-conservative doctrine which rejected all that could be regarded as illegitimate innovations, including reverence to dead saints as intercessors with God, and the special devotion of the Sufi orders. It gained significant influence only when the Saud tribe decided to espouse it as the national ideology of their newly formed kingdom in 1932 (Hourani, 1991: 257-58; Al-Rasheed, 1996, 2002, 2006; Nevo, 1998; Feldman, 2008: 93-4; Saint-Prot, 2008: 271-316). Wahhabism was a state ideology that delivered to the ruler and his clique "undisputed authority, social mobilization and a legitimizing discourse" (Filiu, 2015: 39).

Whenever in difficulty, the king called on the leading ulama to vindicate his actions. Just to cite one example, at the request of Ibn Saud, these ulama eventually sanctioned (in 1928) the use of arms against the subordinate Ikhwan (the Brothers) whom they deemed "overly zealous in proclaiming jihad without the permission of the emir" (Lee, 2014: 243). Their repression was somewhat delicate because they were religious Bedouins who had helped the Saudis in conquering the Arab peninsula in the name of the faith, and they wanted to pursue the conquest by subordinating Transjordan, Iraq, and the shaykhdoms of the Persian Gulf (something that the British colonial power was firmly opposed to). This illustrates another feature of Wahhabism which, although strongly puritanical, proclaimed that, in order to avoid chaos and anarchy, all Muslims should obey a secular ruler, even if demonstrably corrupt. This attitude has been dutifully followed by the Wahhabite clerics who always supported the Saudi regime across all winds. This unconditional support is what matters most for the Saudis who, in exchange, may give in to the ulamas' puritanical opposition

against innovations. Because economic growth can be achieved with little or no major reform, or because the country is immensely rich owing to its abundant oil resources, efficiency costs are not perceived as important.<sup>25</sup>

#### 4.4.2 Case study 4: Kemalist Turkey

Our second example, which is in complete contrast to the first one, is obtained when political power belongs to a dynamic ruler who is eager to reform the country's institutions and to promote modern economic growth. In terms of our model, this means that the ruler derives a high utility, or a large rent,  $G(\alpha)$  from a given level of reform  $\alpha$  (e.g., the constant  $K$  is large). Under reasonable conditions, accession to power of a more reformist leader is predicted not only to yield more reforms at equilibrium, but also to increase political instability as a result of a reduced mass of co-opted clerics. The Kemalist republic of Turkey provides an apt illustration of this case. The movement of the Young Turks and the regime of Atatürk were determined to bring radical reforms with a view to modernizing the country. In retrospect, these reforms marked a major turning point in the modern history of Turkey, ending her relative stagnation vis-à-vis the Western world and laying the basis for long-term economic growth (Kuran, 2011). Thus, unlike the Tanzimat reforms of the late Ottoman Empire which resulted in the coexistence of secular and Islamic schools, courts, and laws, institutional change under Kemalism ended up suppressing autonomous Islamic institutions.

---

<sup>25</sup>In fact, whenever an innovation is deemed necessary by the regime, acquiescence of the religious clerics can be obtained after the required justifications, however far-fetched, have been found. Thus, it is upon the request of king Abdul Aziz that ulama close to him had to exert themselves to find in the sacred texts a proper justification for an innovation as fundamental as photography. This innovation was eventually accepted, despite the idolatry of pictorial art, on the ground that it brings together light and shadow, which are both divine creations (Nomani and Rahnema, 1994, p. 139). Similar efforts were deployed to allow the introduction of the wireless into the kingdom (Feldman, 2008, p. 97). By contrast, the prohibitions originating in the deep-rooted patriarchal values of the Bedouin society, such as the prohibition of driving for women, face much more resistance against change in spite of the heavy cost they impose on the country's economy (the husbands are forced to spend hours every day ferrying wives to and from work and, when this is not feasible, drivers must be hired for the purpose). It is only very recently (February 2012) that a royal order stipulated that women who drive should not be prosecuted by the courts (Economist, March 3-9, 2012: 56).

Even before the proclamation of the Republic of Turkey in October 1923, major changes had been brought to key institutions. Most noticeably, in spite of the strong resistance of the ulama, the role of Islam had been limited almost exclusively to the realm of family law. When the Swiss civil code and the Italian penal code were eventually adopted in 1926, this restricted domain of the law was taken away from the jurisdiction of the ulama, and religious associations were banned.

Under the presidency of Mustapha Kemal, the educational system became completely secularised in 1924, implying the abolition of the madrasas, or religious colleges. Also abolished was the Ministry of Religious Affairs and Pious Foundations which was replaced by two directorates, one for religious affairs (the Diyanet) and the other for pious foundations (the Evkaf), both attached directly to the prime minister's office. All imams and muftis became civil servants while the Diyanet was given sole responsibility for religious guidance. This implied that the contents of Friday sermons (preaches before Friday prayer and sermons during the prayer) became centrally determined and that muftis received precise instructions about how to advise believers. Moreover, the state would define the contents of mandatory religious instruction in public schools and of the Imam-Hatip schools created for the purpose of training imams. Also, organised prayer was forbidden in public or private schools. These changes amounted to the greatest transformation of the state bureaucracy brought under the Kemalist republic (Zürcher, 2004: 187; 2010: 145, 279-80; Kuru, 2009: 165-67, 205-211, 220; Inalcik, 1964).

Also noticeable as a dramatic step taken by the regime to bring religion under control was the outright suppression in 1925 of the dervish (Sufi) orders, or mystical fraternities (the tarikats), and the widespread network of convents and shrines associated with them (Zürcher, 2004: 191-92; 2010: 136; Göle, 2004; Kinross, 2001: 397-404). Based on closed and secretive networks, these religious fraternities were perceived as the hallmark of a traditional and obscurantist culture, and as loci of local power lying beyond the reach of a centralized government (Kinross, 2001: 397-404). Being excluded from the administrative integration process, the Sufi masters were

far away from the official ulama who traded-off their economic security inside the state apparatus against their silence on all the frontal attacks against erstwhile religious institutions. The dual nature of the religious body was therefore reinforced and institutionalized by the modernization process imposed by Mustapha Kemal.

To sum up, the Kemalist regime succeeded in subjugating urban, educated religious clerics and pushing through radical reforms conducive to long-term economic growth. At the same time, it created the ground for more political instability since, albeit officially suppressed, religious voices were not dead and popular Islam turned into a vehicle for opposition (Zürcher, 2004: 192). When the regime started to democratize, the opposition came into the open and won a landslide victory. Indeed, after several renewed attempts to organize democratic elections under the close watch of the army (particularly during the 1950s, attempts themselves punctuated by state coups, a genuinely free democratic election took place for the first time in March 1994.

The resounding success of the Islamic Welfare Party (WP) of Erbakan at these elections marked a turning point in the history of the republic of Turkey. The WP's success resulted not only from its emphasis on issues like social justice, unemployment, poverty, social security, and corruption in high circles, but also from its respect for the more conservative lifestyle of the masses. Regarding the latter aspect, its main role was to have opened the way for a 'Muslim cultural renaissance' that dares express itself publicly, and for a restored dignity of the Black Turks in the face of senior military officers and traditional Republican elites entrenched in state institutions and monopolies (White, 2013, p. 47). The regime made several attempts to ban the Welfare Party which was succeeded by the Virtue Party, itself banned in June 2001. The leader of the reformist faction of the Virtue Party, Recep Tayyip Erdogan, then founded the Justice and Development Party (AKP) which in no time shed its Islamic identity and styled itself as a conservative democratic party. Its success was immediate: in the 2007 elections, AKP did well in every region of the country, and it won 47 percent of the votes overall. It thus received a stunning mandate to run Turkey

along entirely new lines (Kuru, 2009: 187).

#### 4.4.3 Case study 5: Iraq

An interesting static-comparative result obtained with our theory concerns the evolution of the autocrat's policy when the clerics become harder to seduce. As a result of a shock, an upward shift of the function  $V(\alpha)$  (e.g., a rise of the parameters  $W$  or  $v$ ) occurs, implying that the clerics become more expensive to co-opt and the probability for the autocrat to stay in power decreases. The theory predicts that the autocrat will reduce the pace of reforms to the effect that the fraction of clerics supporting him becomes higher. It is even possible (e.g., if  $v$  becomes sufficiently large relative to  $g$ ), that his response to radicalization is to co-opt the whole clerical body. Reforms are sacrificed in the name of political stability.

We look at the evolution of a specific country hit by a shock and assess its consequences in the light of the theory. This country is modern Iraq where a series of dramatic consecutive shocks occurred that increased people's frustrations and dissatisfaction with the regime, inducing the religious clerics to become more critical of the autocratic ruler. The ruler reacted by compromising with the men of religion and adopting regressive policies intended to placate them.

##### *The initial situation*

Post-independent Iraq quickly adopted an authoritarian model of governance justified by a romantic view of pan-Arabic unity and a sort of socialist approach to development (Makiya, 1998: 208-9). General Abd al-Karim Qasim, who led the 1958 revolution against the Hashemite monarchy established by the British colonial power, imposed state control over all the Islamic institutions in the country. This meant keeping the ulama out of politics, and Islam out of regime ideology and, as much as possible, out of state education, culture, the legal system, and state symbolism (Baram, 2014: 47). In order to persuade the religious establishment to lend religious legitimacy to the regime's policies when such support was necessary, some limited and unavoidable concessions were nevertheless made that allowed the Baath party and the regime to avoid head-on confrontation with pub-

lic religiosity. A genuinely progressive leader, Qasim introduced a Law of Personal Status that, while based on the sharia for the most part, drew inspiration from the European law on some key aspects (polygamy was banned and complete gender equality was proclaimed in respect of inheritance). He did not bend in front of the pressures exerted by the highest religious authority.

Under Saddam Husayn, who seized power through brutal force, the regime oscillated between progressive moves and reactionary steps.<sup>26</sup> Saddam was eager not to antagonise the official clergy and, besides appointing to positions of responsibility Shi'i clerics whom he wanted to draw into the network of his patronage, he paid lip service to Islamic values whenever the opportunity arose (Tripp, 2000: 209-11).

*The shocks and its aftermath*

An important turning point was reached toward the end of the seventies and the early eighties when major changes occurred in the international environment of the country, namely the rise of Ayatollah Khomeini to power in Iran (1979), the stirrings of a Shi'i revolt in Iraq, Saddam's catastrophic miscalculation in the war with Iran, and the invasion of Kuwait. In terms of our model, the first two events caused a radicalisation of the clerics, while the latter two undermined the effectiveness of the reforms. Some of the disasters that hit the country were clearly of Saddam's own making and were therefore endogenous to the regime's choice behaviour. Other disasters, however, were largely exogenous. Moreover, there is strong evidence that Saddam badly anticipated the effects of the choices he himself made.<sup>27</sup>

His response to the above circumstances is what Baram (2014) calls "a revised, 'Shi'ified' version of his earlier blood-and-soil nationalism adapted

---

<sup>26</sup>An example of a progressive measure was the introduction in the Law of Personal status of a new provision forbidding forced marriage. An example of a reactionary measure was the lowering of the minimum age of marriage from sixteen to fifteen years in order to placate the conservative (mainly tribal) circles (Baram, 2014: 57).

<sup>27</sup>He was thus persuaded that Iran had been considerably weakened by the revolution of the ayatollahs and its army would therefore be easily quashed in a head-on confrontation with the well-trained and well-equipped Iraqi army. He also thought erroneously (probably because he was lured into a trap) that the United States would not react to the invasion of Kuwait by the Iraqi troops, and he did not expect the harsh embargo that Western powers would impose on his country in retaliation for his adventurous expansionism in the region and the way he crushed Kurdish rebellions at home.

to the political necessity of the time” (63). A major step in Saddam’s about-face coincided with the 9th Congress of the Regional Command of the Bath (1982) on the occasion of which the significance of religion, together with the primacy of Iraq, was stressed with special vigour (Tripp, 2000: 228). In January 1991, in an act that was clearly unconstitutional, he requested that the words Allah Akbar (‘God is great’) be written on the Iraqi flag, and publicly declared that the Iraqi flag had become ”the banner of jihad and faith ... against the infidel horde” (Baram, 2014: 207-208). His seductive tactics was especially geared toward the Shi’ites who form the bulk of his conscript army. It included the rebuilding of Shi’i mosques and places of pilgrimage, the declaring of Iraqi territory as sacred because it contained the soil of Najaf and Karbala (the two Shi’i holy cities), the imposition of the birthday of the fourth caliph, the imam Ali, as a national holiday, and the extravagant proclamation that he, Saddam, was a descendant of this central figure for all Shi’i Muslim believers (Tripp, 2000: 238; Polk, 2005: 12; Baram, 2014: 63; Benraad, 2015: 76-77).

New laws sometimes providing for barbaric penalties were also enacted. Thus, in March 1992, the regime cracked down on nightclubs and discothèques, imposed Ramadan fasting, outlawed prostitution (punishable by death) and banned public alcohol consumption, allowing only non-Muslims to sell spirits. More ominously, as per RCC Decree N<sup>o</sup> 59 of June 4, 1994, amputation of the hand at the wrist was introduced to punish theft and robbery -which had become widespread as a result of the deepening economic crisis-, and amputation of the left foot at the ankle was to sanction second offenses. Subsequent decrees enlarged the definition of theft and robbery to make the draconic punishments applicable to unauthorised money changers, forgers of official documents, merchants, and profiteering bakers (Dawisha, 2009: 238; Baram, 2014: 265-67, 321).

The Islamisation of the regime’s rhetoric gradually intensified and culminated in the so-called ”campaign for the faith” (1993-2003) which did seriously affect the legal and educational system. In the first stage of his faith campaign, Saddam embarked upon a massive educational effort to impose the study of the Quran and the Hadith, starting from the first grade

of primary school and doubling or tripling the amount of time devoted to it in all Iraqi schools. Concomitantly, separation between boys and girls at school was imposed from the same first grade. Saddam even forced the senior party members to take Quran classes lasting up to two years, and he gave the reciting of the Quran a dominant place in the educational system (Baram, 2014: 220-1, 254-58). Finally, women's status, which had improved remarkably during the first decades of the Ba'ath revolution (especially under Quasim), suffered a frontal attack at the height of the faith campaign: they were thus prohibited from travelling abroad unless accompanied by a male relative from the paternal side of their immediate family.

All these steps, which amounted to a repudiation of the values of modernism and secularism, had the calculated advantage of pleasing senior Sunni and less senior Shi'i clerics whose prestige and material status were given a major boost. In the words of Baram (2014): "by upgrading their socioeconomic status, he [Saddam] could hope to buy off the clerics, and through them gain much-needed public support. In light of his expressed dislike of any and all clerics, this policy can only be seen as a cynical step..." (257; see also 323).<sup>28</sup>

Under conditions of severe crisis, people increasingly turned to religion, and religious clerics became more sensitive to their ordeals and less reluctant to assert their views, including criticisms against the regime. To this rising threat, Saddam's response was in conformity with the prediction of the model. He paid utmost attention to the stability of his regime to the point of betraying his identity. In complete contradiction with his 1977 declaration that the sharia was irrelevant to modern life, and with his early commitment to the ideal of a national, secular, united Arab mega-state, he agreed that Islam, rather than Arabism and the Arab culture, could be the cement holding the future state together. He thus increased his ef-

---

<sup>28</sup>Note that the regime's persisting suspicion of all clerics was reflected in the tight monitoring of all religious activities and the systematic spying on religious functionaries. Not only were all Friday sermons in all mosques carefully screened, but every appointment by the Ministry of Endowments to any religious institution had to be approved by the Ba'ath party's security men. As usual, seduction was mixed with intimidation to tame opposition, and people deemed to be harsh opponents, particularly Islamists, were banned, arrested, tortured, and killed (319).

forts to seduce the clerics and to posture himself as an absolute leader with strong religious credentials.<sup>29</sup> On the policy level, he adopted regressive measures that, given his previous commitment to the Baathist ideology with its emphasis on secularism and Arabism rather than Islam, appear almost unthinkable.

## 5 Conclusion

Whether religion can stand in the way of progressive reforms and slow down long-term economic development is a question of considerable importance as attested by the present-day re-assertion of religious values and identity in parts of the developing world and the growing interest in religion among social scientists. To this date, and except through a few cross-country regression studies, economists have not investigated the relationship between religion and politics. This is regrettable since economic theory is susceptible of shedding light on the way religious clerics interact with men in power. This paper is a pioneer attempt to fill up this gap. It is based on the idea that religious clerics have special attributes which, in the context of traditional societies, may transform them into effectivel organizers of popular rebellion. At the same time, however, they are vulnerable to seduction by autocrats preoccupied by the duration of their rule. We study the trade-off between the level of progressive reforms and political stability under an autocratic regime when clerics are heterogeneous in terms of their income-ideology preferences. These preferences reflect the intensity of the clerics' attachment to moral principles and institutions associated with their religion or, equivalently, they indicate the amount of (material) compensation they require to forsake (or betray) their values.

---

<sup>29</sup>To justify the annexation of Kuwait, defeat the (mainly Shi'i) Islamist opposition and other religious activists inside Iraq, as well as legitimate his increasing reliance on his cousins at the expense of the party's old-timers within his close circle of power, Saddam reinvented himself as the supreme religious authority -the only one able to interpret God's will- for all Sunni Iraqis, and later for the entire Sunni Muslim world. He was "the Commander of the Congregation of the Believers", and did not hesitate to claim a Prophetic pedigree (Baram, 2014: 221, 261, 329). Adopting the language of Islamists, he even called for a jihad against the infidels (the kuffar) and the hypocrites (the munafiqun) who try to "extinguish the flames of Islam" (220).

How the level of progressive reforms and the degree of political stability are influenced by the presence of heterogeneous clerics critically depends not only on the shape of the clerics' distribution but also on whether their religion is centralized or decentralized. Two important results deserve special mention. First, given a decentralized religion, a reform-minded autocrat may choose to co-opt only a fraction of the clerical body so as not to sacrifice too many reforms. This is more likely to happen if the clerics' aversion to reforms is not too high compared to the return of reform efforts from the autocrat's standpoint. In the opposite case, the autocrat prefers political stability to reforms. Second, in conditions of political stability, an autocrat will choose a higher level of reforms under a centralized than under a decentralized religion. If, under a decentralized religion, he chooses incomplete co-optation of the clerics so that political stability is not guaranteed, he may well opt for a larger amount of reforms under that organizational arrangement than under the centralized form.

Comparative-static results offer interesting insights, particularly under conditions of a decentralized organization of religion. The role of Saudi Arabia in the modern Islamic world thus appears to be especially pernicious in the light of our model. On the one hand, by causing a low return of reforms, the abundance of oil resources has prompted the Saudi rulers to privilege political stability and forge a strong alliance with a very conservative brand of Islam (Wahhabism). On the other hand, thanks to their immense wealth, these rulers have actively disseminated the Wahhabite doctrine throughout the Muslim world, seeing in it a potent vehicle of their geopolitical influence. As a result, religious clerics in the host Sunnite countries have become more radicalized and harder to seduce. Such a change has led their autocratic rulers to reduce the pace of reforms or even adopt regressive steps in order to placate the men of religion. To sum up, the coexistence of oil wealth and a puritan religion in Saudi Arabia has given rise to conservative policies not only in that country itself but also in a large number of other countries where it extended its influence. The reality is, of course, more complex since other forces have been at work, yet it cannot be denied that the mechanism highlighted by the model, which

goes through the political economics channel, has played a non-negligible role.

## References

- [1] Acemoglu, D., and J.A. Robinson, 2001. "A Theory of Political Transitions", *American Economic Review*, Vol. 91, N° 4, pp. 938-963.
- [2] Acemoglu, D., D. Ticchi, and A. Vindigni, 2010. "A Theory of Military Dictatorships", *American Economic Journal. Macroeconomics*, Vol. 2, N° 1, pp. 1-42.
- [3] Aldashev, G., and J.P. Platteau, 2013, "Religion, Culture and Development". In: V. Ginsburgh and D. Throsby (Eds.), *Handbook of the Economics of Art and Culture*, Vol. 2, Elsevier and North-Holland, Chap. 21, pp. 587-631.
- [4] Al-Rasheed, M., 1996. "God, the King and the Nation: Political Rhetoric in Saudi Arabia in the 1900s", *The Middle East Journal*, Vol. 50, pp. 359-371.
- [5] Al-Rasheed, M., 2002. *A History of Saudi Arabia*. Cambridge University Press, Cambridge.
- [6] Al-Rasheed, M., 2006. *Contesting the Saudi State: Islamic Voices from a New Generation*. Cambridge University Press, Cambridge.
- [7] Anderson, B., 2006. *Imagined Communities -Reflections on the Origin and Spread of Nationalism*. Verso, London & New York.
- [8] An-Na'im, A.A.. 2008. *Islam and the Secular State. Negotiating the Future of Shari'a*. Harvard University Press, Cambridge Msstts& London.
- [9] Armstrong, K., 2014. *Fields of Blood ?Religion and the History of Violence*, The Bodley Head, London.

- [10] Auriol, E. and M. Benaim, 2000, "Standardization in Decentralized Economies", *American economic Review*, Vol 90, 3, pp 550-570.
- [11] Auriol, E. and M. Benaim, 2001, "Convergence and Oscillation in Standardization Games", *European Journal of Economic and Social System*, 15 (1), 39-55.
- [12] Axworthy, M., 2013. *Revolutionary Iran ?A History of the Islamic Republic*. Allen Lane, London.
- [13] Baam, A., 2014. *Saddam Husayn and Islam, 1968-2003 -Ba'thi Iraq from Secularism to Faith*, Baltimore: Johns Hopkins University Press.
- [14] Beloucif, S., 2003. "L'Islam entre l'individu et le citoyen ", in : Ferenczi, T. (Ed.). *Religion et politique : Une liaison dangereuse ?*, Editions Complexe, Le Mans, pp. 145-155.
- [15] Benraad, M., 2015. *Irak : de Babylone à l'Etat Islamique*, Paris : Editions La Cavalier Bleu.
- [16] Binmore, K., Rubinstein, A. and Wolinsky, A. 1986. The Nash Bargaining Solution in Economic Modelling. *RAND Journal of Economics*. 17:176-188.
- [17] Blaydes, L., and E. Chaney, 2013. "The Feudal Revolution and Europe's Rise: Political Divergence of the Christian and Muslim Worlds before 1500 CE", *American Political Science Review*, Vol. 107, N. 1, pp. 16-34.
- [18] Blaydes, L., and M. Platas Izama, 2015. "Religion, Patriarchy and the Perpetuation of Harmful Social Conventions: The Case of Female Genital Cutting in Egypt", Mimeo, University of Stanford.
- [19] Bonney, R., 1991. *The European Dynastic States 1494-1660*. Oxford University Press, Oxford.
- [20] Bove, V., and M. Rivera, 2015. "Elite Co-optation, Repression, and Coups in Autocracies", *International Interactions: Empirical and Theoretical Research in International Relations*, Vol. 41, N. 3, pp. 453-479.

- [21] Cantor, N.F., 1993, *The Civilization of the Middle Ages*, Harper Perennial, New York (Revised and expanded edition of *Medieval History ?The Life and Death of a Civilization*).
- [22] Cleveland, W.L., 2004. *A History of the Modern Middle East*, Westview Press, Oxford.
- [23] Cosgel, M.M., T.J. Miceli, and J. Rubin, 2012. "The Political Economy of Mass Printing: Legitimacy and Technological Change in the Ottoman Empire", *Journal of Comparative Economics*, Vol. 40, pp. 357-371.
- [24] Coulson, N.J., 1964, *A History of Islamic Law*, Edinburgh: Edinburgh University Press.
- [25] Dawisha, A., 2009. *Iraq ?A Political History*, Princeton University Press, Princeton NJ.
- [26] De Luca, G., P. Sekeris, and J. Vargas, 2014. "Beyond Divide and Rule: Weak Dictators, Natural Resources, and Civil Conflict", University of Portsmouth, mimeo.
- [27] De Mesquita, B. B., A. Smith, R.M. Siverson, and J.D. Morrow, 2005. *The Logic of Political Survival*. MIT Press Books.
- [28] Desai, R. M, A. Olofsgard, and T.M. Yousef, 2009. "The Logic of Authoritarian Bargains", *Economics and Politics*, Vol. 21, N<sup>o</sup> 1, pp. 93-125.
- [29] Dorfman, R., and P. O. Steiner. (1954) Optimal Advertising and Optimal Quality. *American Economic Review* 44, 826-36.
- [30] Duby, G., 1987. *Le Moyen-Age*. Hachette, Paris.
- [31] *Economist*, 2012, March 3-9, "Out of the Comfort Zone", pp. 55-56.
- [32] Esteban, J. and J. Sakovics, 2008. A theory of agreements in the shadow of conflict: The genesis of bargaining power, *Theory and Decision*, 65, pp. 227-252.

- [33] Feldman, N., 2008. *The Fall and Rise of the Islamic State*. Princeton: Princeton University Press.
- [34] Filiu, J-P., 2015. *From Deep State to Islamic State: The Arab Counter-Revolution and its Jihadi Legacy*, London: Hurst and Company.
- [35] Galtung J (1969) *Theory and methods of social research*. Universitetsforlaget, Oslo ISBN 0043000177
- [36] Gleave, R., (Ed.), 2005. *Religion and society in Qajar Iran*, Routledge Curzon, New York.
- [37] Göle, N., 2004. "Islam as Ideology". In Seligman, A.B. (Ed.), *Modest Claims: Dialogues and Essays on Tolerance and Tradition*. University of Notre-Dame Press, Notre-Dame, IN.
- [38] Greif, A., 2006. *Institutions and the Path to Modern Economy ?Lessons from Medieval Trade*, Cambridge University Press, Cambridge.
- [39] Gunn, S., 1999. "War, Religion, and the State". In: Cameron, E. (Ed.), *Early Modern Europe. An Oxford History*, Oxford University Press, Oxford, pp. 102-33.
- [40] Hodgson, M.G.S., 1974. *The Venture of Islam ÖÇöConscience and History in a World Civilization, Vol. 3: The Gunpowder Empires and Modern Times*, The University of Chicago Press, Chicago and London.
- [41] Hodler, R., 2012. "The Political Economics of the Arab Spring", CE-Sifo Working Paper N° 4023.
- [42] Hourani, A., 1991. *A History of the Arab Peoples*. The Belknap Press of the Harvard University Press, Cambridge, Mass.
- [43] Inalcik, H., 1964. "The Nature of Traditional Society: Turkey". In Ward, R.E., and D.A. Rustow (Eds), *Political Modernization in Japan and Turkey*, Princeton University Press, Princeton, New Jersey, pp. 42-63.

- [44] Janos, A.C., 1982. *The Politics of Backwardness in Hungary, 1825-1945*. Princeton University Press, Princeton, N.J.
- [45] Kaplan, B.J., 2007. *Divided by Faith -Religious Conflict and the Practice of Toleration in Early Modern Europe*. The Belknap Press of Harvard University Press, Cambridge, Masstts.
- [46] Katouzian, H., 2009. *The Persians –Ancient, Mediaeval and Modern Iran*. Yale University Press, New Haven and London.
- [47] Kepel, G., 2005, *The Roots of Radical Islam*. Saqi Books, London (Originally published as *Le prophète et le pharaon*. Editions La Découverte, Paris, 1984).
- [48] Keddie, N., 1966. *Religion and Rebellion in Iran: The Tobacco Protest of 1891-1892*. Frank Cass, London.
- [49] Keddie, N., 2003, *Modern Iran –Roots and Results of Revolution*, Yale University Press, New Haven& London.
- [50] Kinross, P., 2001. *Atatürk –The Rebirth of a Nation*, Phoenix, London.
- [51] Koga, J., 2015. "Strategic Logic of Elite Purges in Dictatorships", University of Strathclyde, mimeo.
- [52] Konrad, K., and S. Skaperdas, 2007. "Succession Rules and Leadership Rents", *Journal of Conflict Resolution*, Vol. 51, N° 4, pp. 622-645.
- [53] Konrad, K., and S. Skaperdas, 2015. "The Prince - or Better No Prince? The Strategic Value of Appointing a Successor", Working Paper.
- [54] Kuran, T., 2011. *The Long Divergence –How Islamic Law Held Back the Middle East*, Princeton University Press, Princeton, New Jersey.
- [55] Kuru, A., 2009. *Secularism and State Policies Toward Religion: The United States, France, and Turkey*. Cambridge, Cambridge University Press.

- [56] Lal, D., 1998, *Unintended Consequences. The Impact of Factor Endowments, Culture and Politics on Long-Run Economic Performances*, The MIT Press, Cambridge, Massachusetts, & London.
- [57] Landes, D., 1998, *The Wealth and Poverty of Nations*. Little, Brown and Co, London.
- [58] Lapidus, I., 1984. *Muslim Cities in the Later Middle Age*. Cambridge: Cambridge University Press (second edition).
- [59] Lapidus, I., 1988, *A History of Islamic Societies*, Cambridge University Press, Cambridge.
- [60] Lapidus, I., 2002, *A History of Islamic Societies*, Cambridge University Press, Cambridge (second edition).
- [61] Lee, R.D., 2014. *Religion and Politics in the Middle East ?Identity, Ideology, Institutions, and Attitudes*. Boulder, CO : Westview Press (second edition).
- [62] Lewis, B., 2002. *What Went Wrong? Western Impact and Middle Eastern Response*. Phoenix, London.
- [63] Lilla, M., 2007. *The Stillborn God. Religion, Politics, and the Modern West*. New York: Vintage Books.
- [64] Lizzeri, A., and N. Persico, 2004. "Why Did the Elites Extend the Suffrage? Democracy and the Scope of Government, with an Application to Britain's Age of Reform", *The Quarterly Journal of Economics*, Vol. 119, N° 2, pp. 707-765.
- [65] Macrides, R.J., 1999. *Νóμoς and Kanon in Paper and in Court*. In *Kinship and Justice in Byzantium, 11th-15th Centuries*, *Variorum Collected Studies Series*.
- [66] Makiya, K., 1998. *Republic of Fear –The Politics of Modern Iraq*. University of California Press, Berkeley, Los Angeles & London.

- [67] Malik, A., 2012. Was the Middle East's Economic Descent a Legal or Political Failure? Debating the Islamic Law Matters Thesis, CSAE Working Paper WPS/2012-08, Centre for the Study of African Economies, University of Oxford.
- [68] Morelli, M., and D. Rohner, 2014. "Resource Concentration and Civil Wars", NBER Working Paper 20129.
- [69] Mottahedeh, R., 2000. The Mantle of the Prophet -Religion and Politics in Iran. Oneworld, Oxford.
- [70] Nash, J. F., 1950. "The Bargaining Problem". *Econometrica*, 18. 155-162.
- [71] Naphy, W.G., 2007. The Protestant Revolution -From Martin Luther to Martin Luther King Jr. BBC Books.
- [72] Nevo, J., 1998. Religion and national identity in Saudi Arabia. *Middle Eastern Studies*, Vol. 34, pp. 34-53.
- [73] Nielsen, R., 2012. "Adoption of Jihadi Ideology by Islamic Clerics", Department of Government, Harvard University.
- [74] Nomani, F., and A. Rahnema, 1994. *Islamic Economic Systems*, Zed Books, London & New Jersey.
- [75] North, D.C. and B.R. Weingast, 1989, "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England", *Journal of Economic History*, Vol. XLIX, N<sup>o</sup> 4, pp. 803-832.
- [76] Obolonsky, V. 2003. *The Drama of Russian Political History* *ÔÇô*System Against Individuality, Austin: Texas A & M University Press.
- [77] O'Daly, G., 2004. *Augustine's City of God: A Reader's Guide*, Oxford: Oxford University Press.

- [78] Park, S., 2006, "Standardization and Network Externalities", Chapter XIV, in *Advanced Topics in Information Technology Standards and Standardization Research*, Volume 1, Edited by Joakobs Kai.
- [79] Padro i Miquel, G., 2007. "The Control of Politicians in Divided Societies: The Politics of Fear", *Review of Economic Studies*, Vol. 74, N° 4, pp. 1259-1274.
- [80] Pincus, S., 2009. *1688 -The First Modern Revolution*. Yale University Press, New Haven& London.
- [81] Platteau, J.P., 2015. *Is Islam a Special Problem? Exploring the Link Between Religion, Politics, and Development*, Cambridge University Press, Cambridge.
- [82] Plokhy, S., 2006. *The Origins of the Slavic Nations – Premodern Identities in Russia, Ukraine, and Belarus*, Cambridge University Press, Cambridge.
- [83] Polk, W.R., 2005. *Understanding Iraq*. Harper Perennial, New York& London.
- [84] Robinson, J.A, and D. Acemoglu, 2006. *Economic Origins of Dictatorship and Democracy*. Cambridge University Press, Cambridge.
- [85] Rodinson, M., 1966. *Islam et Capitalisme*. Editions du Seuil, Paris (English translation: *Islam and Capitalism*, Saqi Essentials, London, 2007).
- [86] Saint-Prot, C., 2008, *Islam –L’avenir de la tradition entre révolution et occidentalisation*, Paris : Editions du Rocher.
- [87] Schmemmann, A., 2003. *The Historical Road of Eastern Orthodoxy*, St Vladimir’s Seminary Press, Crestwood, New York.
- [88] Sekeris, P.G, 2011. "Endogenous Elites: Power Structure and Patron-Client Relationships", *Economics of Governance*, Vol. 12, pp. 237-258.

- [89] Simms, B., 2013. *Europe -The Struggle for Supremacy, 1453 to the Present*, London: Allen Lane.
- [90] Svobik, M.W., 2009. "Power Sharing and Leadership Dynamics in Authoritarian Regimes", *American Journal of Political Science*, Vol. 53, N° 2, pp. 477-494.
- [91] Tamzali, W., 2007. *Une éducation algérienne -De la révolution à la décennie noire*, Paris : Gallimard.
- [92] Tripp, C. 2000. *A History of Iraq*. Cambridge: Cambridge University Press.
- [93] Tullock, G., 1987. *Autocracy*. Hingham MA: Kluwer Academic Publishers.
- [94] Vallance, E., 2007. *The Glorious Revolution: 1688 -Britain's Fight for Liberty*, Abacus, London.
- [95] Van Zanden, J.L., 2009. *The Long Road to the Industrial Revolution* *ÔÇôThe European Economy in a Global Perspective, 1000-1800*, Brill, Leiden and Boston.
- [96] Verdier, T., D. Acemoglu, and J.A. Robinson, 2004. "Kleptocracy and Divide-and-Rule: A Model of Personal Rule", *Journal of the European Economic Association*, Vol. 2, N° 2-3, pp. 162-192.
- [97] Warnes, D., 1999. *Chronicle of the Russian Tsars -The Reign-by-Reign Record of the Rulers of Imperial Russia*. Thames & Hudson, London.
- [98] Weibull, J. 1996, "Evolutionary Game Theory", The MIT Press Cambridge, Massachusetts London, England Second printing.
- [99] Wintrobe, R., 1998. *The Political Economy of Dictatorship*, Cambridge University Press, Cambridge.
- [100] Yapp, M.E., 1987. *The Making of the Modern Near East, 1792-1923*. Longman, Harlow (England).

- [101] Zubeida, S., 2011. *Beyond Islam: A New Understanding of the Middle East*, London: I.B. Tauris.
- [102] Zürcher, E., 2012. *The Young Turk Legacy and Nation Building: From the Ottoman Empire to Atatürk's Turkey*, I.B. Tauris, London.
- [103] Zürcher, E., 2004. *Turkey –A Modern History*, I.B. Tauris, London (first edition 1993).

## 6 Appendix

### 6.1 Proof of Proposition 1

If the autocrat chooses the corner solution  $\theta^d = 1$ , he maximizes  $\max G(\alpha) - aV(\alpha)$  with respect to  $\alpha$ , where  $a \geq 1$ . Since  $V''(\alpha) \geq 0$  and  $G''(\alpha) \leq 0$  the autocrat's objective function is concave. The first-order condition is therefore sufficient. The optimal solution, then, is  $\alpha_a^*$  so that  $\frac{G'(\alpha)}{V'(\alpha)} = \frac{1}{a}$ , where  $a$  is the minimum value of  $w/V(\alpha)$  ensuring that the corner solution holds. We deduce that  $w = \frac{V(\alpha)}{V'(\alpha)}G'(\alpha)$ , which is identical to (13). In words, the autocrat chooses the same structure of wage whether he decides to enlist the full or the partial support of the clerical class.

Let us now look at the interior solution, where  $\alpha$  is conjointly determined with  $\theta$  in (10) and (11). We need to check the second-order conditions in order to prove the result. Deriving  $\frac{\partial U^p}{\partial \alpha}$  in (11) with respect to  $\alpha$  yields:

$$\frac{\partial^2 U^p}{\partial \alpha^2} = F(\theta^d)G''(\alpha) - V''(\alpha)\theta^d \quad (18)$$

Since  $G(\alpha)$  is concave and  $V(\alpha)$  convex, we deduce that  $\frac{\partial^2 U^p}{\partial \alpha^2} \leq 0$ .

Deriving  $\frac{\partial U^p}{\partial \theta}$  in (10) with respect to  $\theta$  yields:

$$\frac{\partial^2 U^p}{\partial \theta^2} = G(\alpha)f'(\theta^d). \quad (19)$$

The local second-order condition holds if and only if  $f'(\theta^d) \leq 0$ . With a decreasing density function, this is always true. With a U-shaped density function, we will have  $\frac{\partial^2 U^p}{\partial \theta^2} \leq 0$  as long as  $\theta^d \leq \underline{\theta}$ , where  $\underline{\theta}$  is the minimum point of  $f(\theta)$  (i.e.,  $\underline{\theta}$  is such that  $f'(\theta) = 0$ ). On the other hand, it is

straightforward that, with an increasing density function, the condition will never hold. With such a density, the interior equilibrium is always unstable: this is a case where the autocrat tries to get the support of the whole clerical group. The relevant equilibrium is the corner one.

Finally, in order to get an interior solution, we also need to check that  $w < G(\alpha)$ , which is equivalent to  $\frac{V(\alpha)}{V'(\alpha)} < \frac{G(\alpha)}{G'(\alpha)}$ . For instance this condition holds if  $G(\alpha) = K\frac{\alpha^g}{g}$ , and  $V(\alpha) = W\frac{\alpha^v}{v}$ , with  $K, W > 0$  and  $0 < g < 1 \leq v$ .

## 6.2 Comparative Statics

We next show that  $\frac{d\theta^d}{d\alpha} \leq 0$ . To prove this result note that  $\theta^d$  defined in (4) is such that  $\frac{V(\alpha)}{w}F(\theta) = \theta$ . Then  $\frac{d\theta^d}{d\alpha} = \frac{-\frac{d(\frac{V(\alpha)}{w})}{d\alpha}}{f(\theta)\frac{V(\alpha)}{w}-1}$ . The way  $\theta^d$  evolves in equilibrium as  $\alpha$  increases thus depends on the sign of  $\frac{d(\frac{V(\alpha)}{w})}{d\alpha}$ . By virtue of Proposition 1, we know that  $\frac{V(\alpha)}{w} = \frac{V'(\alpha)}{G'(\alpha)}$ , which implies:

$$\frac{d(\frac{V(\alpha)}{w})}{d\alpha} = \frac{V''(\alpha)}{G'(\alpha)} - \frac{G''(\alpha)V'(\alpha)}{(V'(\alpha))^2} \geq 0. \quad (20)$$

We deduce that  $\frac{d\theta^d}{d\alpha} \leq 0$ . For instance, if  $G(\alpha) = K\frac{\alpha^g}{g}$ , and  $V(\alpha) = W\frac{\alpha^v}{v}$ , with  $K, W > 0$  and  $0 < g < 1 \leq v$ , then  $\frac{V(\alpha)}{w} = \frac{W\alpha^{v-g}}{K}$ , which increases in  $\alpha$  as  $v - g > 0$ .

## 6.3 Proof of Proposition 2

Assume that  $G(\alpha) = K\frac{\alpha^g}{g}$ , and  $V(\alpha) = W\frac{\alpha^v}{v}$ , with  $v \geq 1 > g > 0$  and  $K, W > 0$ . We deduce that (13) is equivalent to

$$w = \frac{K}{v}\alpha^g. \quad (21)$$

Substituting this value as well as the value of  $G(\alpha)$  in the autocrat's utility function yields

$$U^P = F(\theta^d)\frac{v-g}{vg}K\alpha^g. \quad (22)$$

The autocrat needs to choose  $\alpha$  so as to optimize his utility function. He needs to compare different regimes. In the first one, he chooses a relatively low level of reform so that stability is maximal,  $\theta^d = 1$ . In the second regime, he chooses to implement more reforms (a larger level of  $\alpha$ ) at the

cost of higher instability:  $\theta^d < 1$ . We next show that we can get an interior solution or a corner solution depending on the values of the parameters  $v$  and  $g$ .

### 6.3.1 Symmetrical U-shaped distributions

We first prove the result for a symmetrical U-shaped density function. The density function has two peaks for  $\theta \in [0, 1]$ , one at  $\theta = 0$  and the other one at  $\theta = 1$ , and it reaches its minimum value at  $\theta = 0.5$ .

Let focus first on the corner solution. There is a threshold value  $a > 1$  so that the only stable equilibrium is  $\theta^d = 1$  whenever  $\frac{w}{V(\alpha)} \geq a$ . For instance with the density function  $f(\theta) = 2 - 6\theta + 6\theta^2$  defined over  $\theta \in [0, 1]$  and c.d.f.  $F(\theta) = 2\theta - 3\theta^2 + 2\theta^3$ , the threshold is  $a = \frac{8}{7}$ . In the general case, the optimal solution  $\alpha_{\theta^d=1}$  is such that  $\frac{G'(\alpha)}{V'(\alpha)} = a$ . We deduce that  $\alpha_{\theta^d=1} = \left(\frac{1}{a} \frac{K}{W}\right)^{\frac{1}{v-g}}$  and

$$U_{\theta^d=1}^P = \frac{v-g}{vg} K \left(\frac{1}{a} \frac{K}{W}\right)^{\frac{g}{v-g}}. \quad (23)$$

Second, the autocrat might choose  $\alpha$  so that he obtains an interior solution for  $\theta^d \in [0, 1)$ , and  $F(\theta^d) \in [0, 1)$ . The principal will accept a lower probability of staying in power only if it comes with a higher payoff. That is, he chooses the interior over the corner solution only if the payoff  $G(\alpha) - w = \frac{v-g}{vg} K \alpha^g$  is higher under the former regime. Since it is impossible to find closed-form solutions of the autocrat's optimization problem, we show that for some value of the parameters, an arbitrarily chosen interior value  $\underline{\theta} \in (0, 1)$  so that  $\underline{\theta} = F(\underline{\theta})$  dominates the corner solution.<sup>30</sup> It implies that, when the principal actually optimizes, he will do better than for  $\underline{\theta}$ , and hence will always prefer the interior solution.

If the autocrat wants to seduce  $F(\underline{\theta})$  of the clerics, he must offer a ratio "cost of reform/wage" equal to  $\frac{V(\alpha)}{w} = 1$ . The solution  $\alpha^{**}$  to this constrained problem is such that  $\frac{G'(\alpha)}{V'(\alpha)} = 1$ . We deduce that  $\alpha^{**} = \left(\frac{K}{W}\right)^{\frac{1}{v-g}}$  and

$$U_{\underline{\theta}}^P = F(\underline{\theta}) \frac{v-g}{vg} K \left(\frac{K}{W}\right)^{\frac{g}{v-g}}. \quad (24)$$

---

<sup>30</sup>With symmetrical U-shaped density, we have  $\underline{\theta} = 0.5$ . However this part of the proof is independent of the symmetry of the distribution (i.e., it holds even if  $\underline{\theta} \neq 0.5$ ).

Comparing (23) and (24), it is easy to check that

$$U_{\underline{\theta}}^P > U_{\theta^d=1}^P \Leftrightarrow F(\underline{\theta})^{\frac{v-g}{g}} > \frac{1}{a}. \quad (25)$$

Condition (25) is equivalent to  $\frac{v}{g} < 1 + \frac{\ln a}{-\ln(F(\underline{\theta}))}$ . Since  $\frac{\ln a}{-\ln(F(\underline{\theta}))} > 0$  (i.e.,  $a > 1$  and  $F(\underline{\theta}) \leq 1$ ), this inequality holds if  $g$  is sufficiently close to  $v$  so that  $0 < g < 1 \leq v$ . We deduce that, for  $g$  and  $v$  sufficiently close to each other, the interior solution dominates the corner solution. For instance, with the density function  $f(\theta) = 2 - 6\theta + 6\theta^2$  condition (25) is equivalent to  $\frac{1}{2} > \left(\frac{7}{8}\right)^{\frac{g}{v-g}}$ , which holds if  $g = 0.9$  and  $v = 1$ , for example.

To complete the analysis, we need to show that the corner solution may dominate the interior solution. We focus on the case where  $\theta^d = \frac{3 - \sqrt{8\frac{V(\alpha^*)}{w^*} - 7}}{4} = \frac{3 - \sqrt{8\frac{V'(\alpha^*)}{G'(\alpha^*)} - 7}}{4} = \frac{1}{2}$ , is actually the optimal interior solution. This requires that  $\alpha^*$  is such that  $\frac{V'(\alpha^*)}{G'(\alpha^*)} = 1$ , implying from (13) that  $w^* = V(\alpha^*)$ . Moreover, since the density function is symmetrical U-shaped, if  $\theta^d = 0.5$  then  $F(\theta^d) = f(\theta^d) = 0.5$ . From (6), we can infer that  $\frac{d\theta^d}{d\alpha} = -\frac{V'(\alpha^*)}{V(\alpha^*)}$ .<sup>31</sup> We deduce that, if  $\theta^d = 0.5$  is to be the optimal interior solution, it must be the case that  $G(\alpha^*) = 2V(\alpha^*)$  from (12), and that  $V'(\alpha^*) = G'(\alpha^*)$ . Using the explicit functions chosen and solving these two equations simultaneously, we get that  $v = 2g \geq 1$  and that  $\alpha^* = \left(\frac{K}{W}\right)^{\frac{1}{g}}$ . Therefore,  $w^* = \frac{K^2}{vW}$ .

We then need to compare the autocrat's utility at the interior solution  $\theta^{d*} = 0.5$  with his utility at the corner solution  $\theta^{d*} = 1$  defined in (23) for  $v = 2g$ , that is,  $U_{\theta^d=1}^* = K \left(\frac{7}{8}\frac{K}{W}\right)^{\frac{g}{v-g}} \frac{v-g}{vg} = \frac{7K^2}{8vW}$ . One can easily check that  $U_{\theta^d=1}^* = \frac{7K^2}{8vW} > \frac{K^2}{4vW} = U_{\theta^d=\frac{1}{2}}^*$ .

### 6.3.2 Decreasing distribution

With decreasing density,  $F(\theta)$  is concave and there are at most two equilibria and only one of them is stable. If  $f(0)\frac{w}{V(\alpha)} < 1$ , so that the slope of the  $F(\theta)w/V(\alpha)$  function is smaller than that of the identity function at  $\theta = 0$  and, a fortiori, everywhere (since  $F(\theta)$  is concave), the only equilibrium is 0 and it is stable. If  $\frac{w}{V(\alpha)} \geq 1$ , so that the slope of the  $F(\theta)w/V(\alpha)$

<sup>31</sup>Indeed we have  $\frac{d\theta^d}{d\alpha} = \frac{-V'(\alpha^*)\theta^d}{V(\alpha^*) - f(\theta^d)w^*} = \frac{-V'(\alpha^*)0.5}{V(\alpha^*) - 0.5V(\alpha^*)} = -\frac{V'(\alpha^*)}{V(\alpha^*)}$ .

function exceeds that of the identity function at  $\theta = 1$  and, a fortiori, everywhere (since  $F(\theta)$  is concave), the only stable equilibrium is 1 (and 0 is unstable). The optimal level of reforms for the autocrat,  $\alpha_1^*$ , is then such that  $G'(\alpha) = V'(\alpha)$ , and the optimal wage for the clerics is  $w_1^* = V(\alpha_1^*)$  by virtue of (13). If  $\frac{1}{f(0)} \leq \frac{w}{V(\alpha)} < 1$ , so that the slope of the  $F(\theta)w/V(\alpha)$  function is first larger, and then smaller than that of the identity function, the only stable equilibrium is the interior one:  $F(\theta^d)\frac{w}{V(\alpha)} = \theta^d$ .

If the autocrat chooses the corner solution, the threshold value  $a$  so that the only stable equilibrium is  $\theta^d = 1$  whenever  $\frac{w}{V(\alpha)} \geq a$  is  $a = 1$ . Indeed with a decreasing density the c.d.f.  $F(\theta)$  is increasing and concave. We deduce that  $\alpha_{\theta^d=1}^* = \left(\frac{K}{W}\right)^{\frac{1}{v-g}}$  and  $w_{\theta^d=1}^* = \frac{W}{v} \left(\frac{K}{W}\right)^{\frac{v}{v-g}}$ , so that the autocrat's utility is  $U_{\theta^d=1}^{p*} = \frac{v-g}{vg} W \left(\frac{K}{W}\right)^{\frac{v}{v-g}}$ .

If the autocrat picks up the interior solution, equations (10) and (11) are equivalent to  $f(\theta) = \frac{gW}{vK}\alpha^{v-g}$  and  $\frac{F(\theta)}{\theta} = \frac{W}{K}\alpha^{v-g}$ . There is an interior solution to this problem if and only if the  $\tilde{\theta}$  solution to  $\frac{F(\theta)}{\theta f(\theta)} = \frac{v}{g}$  is such that  $\tilde{\theta} \in (0, 1)$ . The corner solution is the only possibility otherwise. For instance, if  $F(\theta) = \frac{2\theta}{\theta+1}$  for  $\theta \in [0, 1]$  so that  $f(\theta) = \frac{2}{(\theta+1)^2}$ , then  $\frac{2}{(1+\theta)^2} = \frac{gW}{vK}\alpha^{v-g}$  and  $\frac{2}{1+\theta} = \frac{W}{K}\alpha^{v-g}$ . In this case,  $\tilde{\theta} = \frac{v-g}{g}$  so that there is an interior solution in  $\theta$  if and only if  $g < v \leq 2g$ . Let us focus on cases where there is an interior solution  $\theta^d = \tilde{\theta} \in (0, 1)$  so that  $\alpha_{\theta^d}^* = \left(\frac{F(\theta^d)K}{\theta^d W}\right)^{\frac{1}{v-g}}$ . Substituting this value in the principal's objective function yields  $U_{\theta^d < 1}^{p*} = \frac{F(\theta^d)^v}{(\theta^d)^g} \frac{v-g}{vg} W \left(\frac{K}{W}\right)^{\frac{v}{v-g}}$ . Comparing the latter with the utility of the autocrat when he chooses the corner solution, one can check that  $U_{\theta^d < 1}^{p*} > U_{\theta^d=1}^{p*} \Leftrightarrow \frac{F(\theta^d)^v}{(\theta^d)^g} > 1$ . Since  $F(\theta)$  is increasing and concave, and since  $F(0) = 0$  and  $F(1) = 1$ , then for all  $\theta \in (0, 1)$ , it is the case that  $1 > F(\theta) > \theta > 0$ . We deduce that if  $v$  is sufficiently close to  $g$ , we have that  $\frac{(F(\theta^d))^v}{(\theta^d)^g} > 1$ . On the other hand, if  $v$  becomes very large,  $(F(\theta^d))^v$  becomes very small, and converges to 0 when  $v$  goes to infinity. In this case,  $\frac{(F(\theta^d))^v}{(\theta^d)^g} < 1$ . This proves the result.

For instance, if  $F(\theta) = \frac{2\theta}{\theta+1}$  for  $\theta \in [0, 1]$  so that  $f(\theta) = \frac{2}{(\theta+1)^2}$  and both the interior and the corner solutions are available (i.e., when  $v \leq 2g$ ), one can check that  $U_{\theta^d = \frac{v-g}{g}}^{p*} > U_{\theta^d=1}^{p*} \Leftrightarrow (2g-v) \left(\frac{2g}{v}\right)^{\frac{v}{v-g}} > v-g$ . This inequality is equivalent to  $\left(\frac{1}{\nu} - 1\right)^{\frac{\nu}{1+\nu}} > \frac{\nu+1}{2}$  where  $v = (1+\nu)g$  and  $\nu \in (0, 1]$ . The

left-hand side is decreasing in  $\nu$  and the right-hand side is increasing in  $\nu$ . Moreover, the left-hand side goes to infinity when  $\nu$  goes to 0 while the right-hand side is then equal to 0.5. Finally, the left-hand side is equal to 0 when  $\nu = 1$  while the right-hand side is then equal to 1. We conclude that the functions  $\left(\frac{1}{\nu} - 1\right)^{\frac{\nu}{1+\nu}}$  and  $\frac{\nu+1}{2}$  cross once and only once when  $\nu \in (0, 1]$ . We deduce the result.

## 6.4 Proof of Proposition 4

We need to solve

$$\begin{aligned} \max_{w, \alpha} & \left(G(\alpha) - w\right)^{1-c} \left(w - \theta^c V(\alpha)\right)^c \\ \text{s.t.} & \quad w \geq E\theta V(\alpha) \end{aligned}$$

The Lagrangian associated to this problem is

$$L = \left(G(\alpha) - w\right)^{1-c} \left(w - \theta^c V(\alpha)\right)^c + \lambda \left(w - E\theta V(\alpha)\right)$$

It yields

$$\frac{\partial L}{\partial \alpha} = (1-c)G'(\alpha) \left(\frac{w - \theta^c V(\alpha)}{G(\alpha) - w}\right)^c - c\theta^c V'(\alpha) \left(\frac{G(\alpha) - w}{w - \theta^c V(\alpha)}\right)^{1-c} - \lambda E\theta V'(\alpha) = 0$$

$$\frac{\partial L}{\partial w} = -(1-c) \left(\frac{w - \theta^c V(\alpha)}{G(\alpha) - w}\right)^c + c \left(\frac{G(\alpha) - w}{w - \theta^c V(\alpha)}\right)^{1-c} + \lambda = 0$$

Moreover, we have that  $\lambda(w - E\theta V(\alpha)) = 0$ . Two cases are possible.

1. If  $w > E\theta V(\alpha)$ , it follows that  $\lambda = 0$  so that the solution to this problem is  $w^c = (1-c)\theta^c V(\alpha) + cG(\alpha)$  and  $\alpha^c$  such that  $G'(\alpha) = \theta^c V'(\alpha)$ . The condition  $w > E\theta V(\alpha)$  is then equivalent to  $(1-c)\theta^c V(\alpha^c) + cG(\alpha^c) > E\theta V(\alpha^c)$ . Substituting  $\theta^c = \frac{G'(\alpha)}{V'(\alpha)}$  and dividing right and left by  $V(\alpha^c)$  yields  $E\theta < c\frac{G(\alpha^c)}{V(\alpha^c)} + (1-c)\frac{G'(\alpha^c)}{V'(\alpha^c)}$ . We deduce condition 1.
2. If  $\lambda > 0$ , we have that  $w = E\theta V(\alpha)$ . We deduce from  $\frac{\partial L}{\partial w} = 0$  that  $\lambda = (1-c) \left(\frac{(E\theta - \theta^c)V(\alpha)}{G(\alpha) - E\theta V(\alpha)}\right)^c - c \left(\frac{G(\alpha) - E\theta V(\alpha)}{(E\theta - \theta^c)V(\alpha)}\right)^{1-c}$ . Substituting this value in  $\frac{\partial L}{\partial \alpha} = 0$  yields  $(1-c)(G'(\alpha) - E\theta V'(\alpha)) + cV'(\alpha) \frac{G(\alpha) - E\theta V(\alpha)}{V(\alpha)} = 0$ . Dividing right and left by  $V'(\alpha)$  and simplifying yields condition 2.

## 6.5 Proof of Proposition 6

The autocrat who wants to obtain the full support of the clerical body in the decentralized case will implement a level of reforms  $\alpha^d = \alpha_a^*$  so that  $\frac{G'(\alpha)}{V'(\alpha)} = a$ , where  $a > 1$  is the minimum value such that the corner solution holds.

Under a centralized religion, according to Proposition 4, two cases are possible. In Case 1, the head of the church is quite antagonist to the autocrat (i.e.,  $\theta^c \in [0, 1]$  is relatively high), and  $\alpha^c$  must satisfy  $G'(\alpha) = \theta^c V'(\alpha)$ . Since, under the assumptions that  $G(\alpha)$  is concave and  $V(\alpha)$  is convex, the function  $\frac{G'(\alpha)}{V'(\alpha)}$  is decreasing in  $\alpha$ , and since  $a > 1 \geq \theta^c$ , we deduce that  $\alpha^c > \alpha_a^*$ .

Under Case 2,  $\theta^c$  is relatively small (i.e., the head of the church is relatively close to the autocrat) and the participation constraint of the average cleric is binding:  $\alpha^c$  is such that  $c \frac{G(\alpha)}{V(\alpha)} + (1 - c) \frac{G'(\alpha)}{V'(\alpha)} = E\theta$ . Since in this case,  $w^c = E\theta V(\alpha^c) < G(\alpha^c)$ , it follows that  $\frac{G(\alpha^c)}{V(\alpha^c)} > E\theta$ . We deduce that, necessarily,  $\frac{G'(\alpha^c)}{V'(\alpha^c)} < E\theta$  since the convex combination of two numbers larger than  $E\theta$  cannot be equal to  $E\theta$ . By the same reasoning as before, and since  $E\theta < 1$ , we have that  $\alpha^c > \alpha_a^*$ .

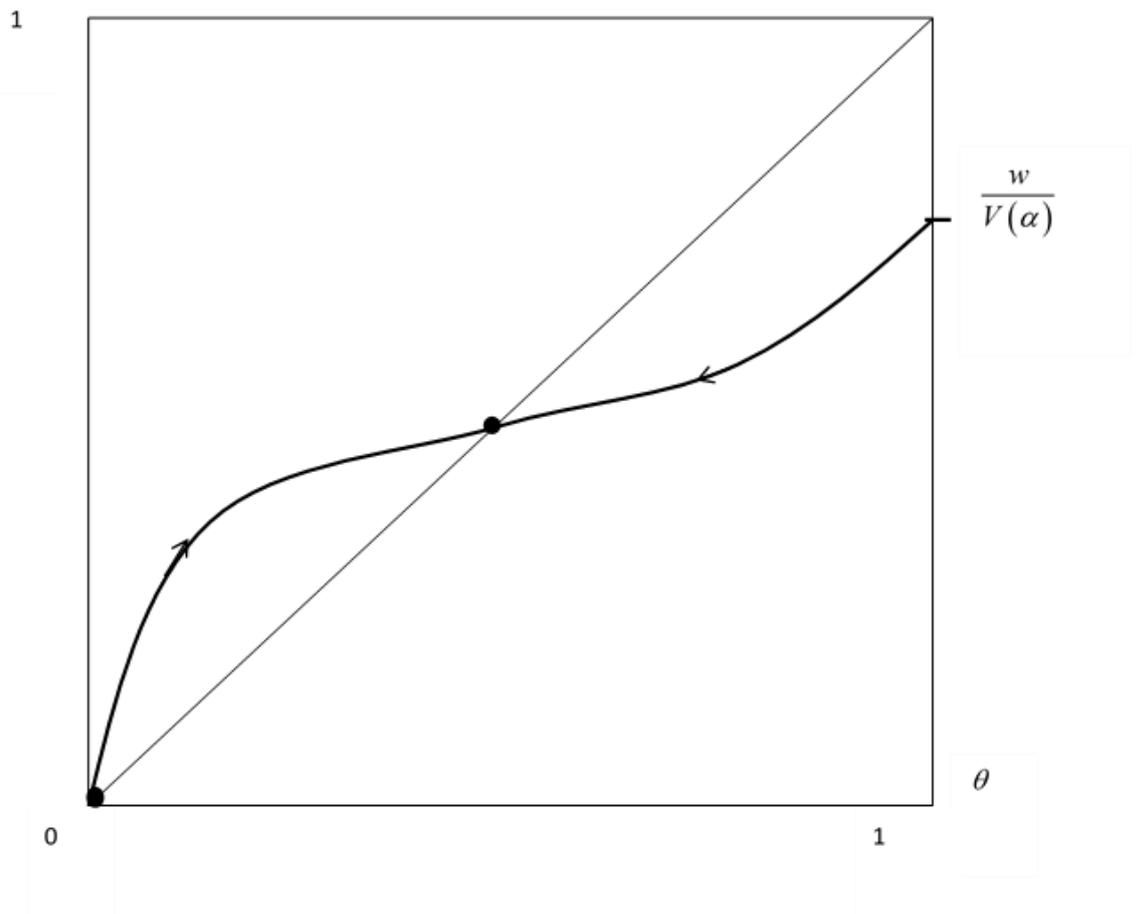


Figure 1: Decentralized religion U-shaped density

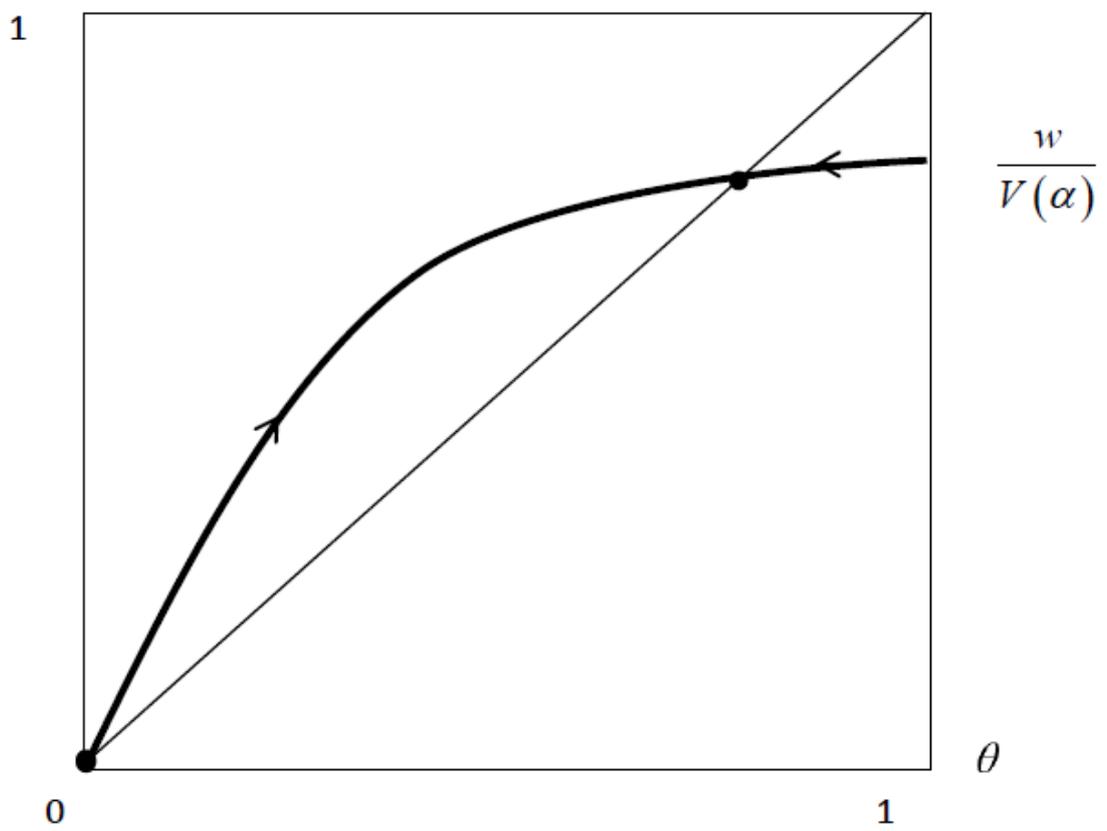


Figure 2: Decentralized religion Decreasing density

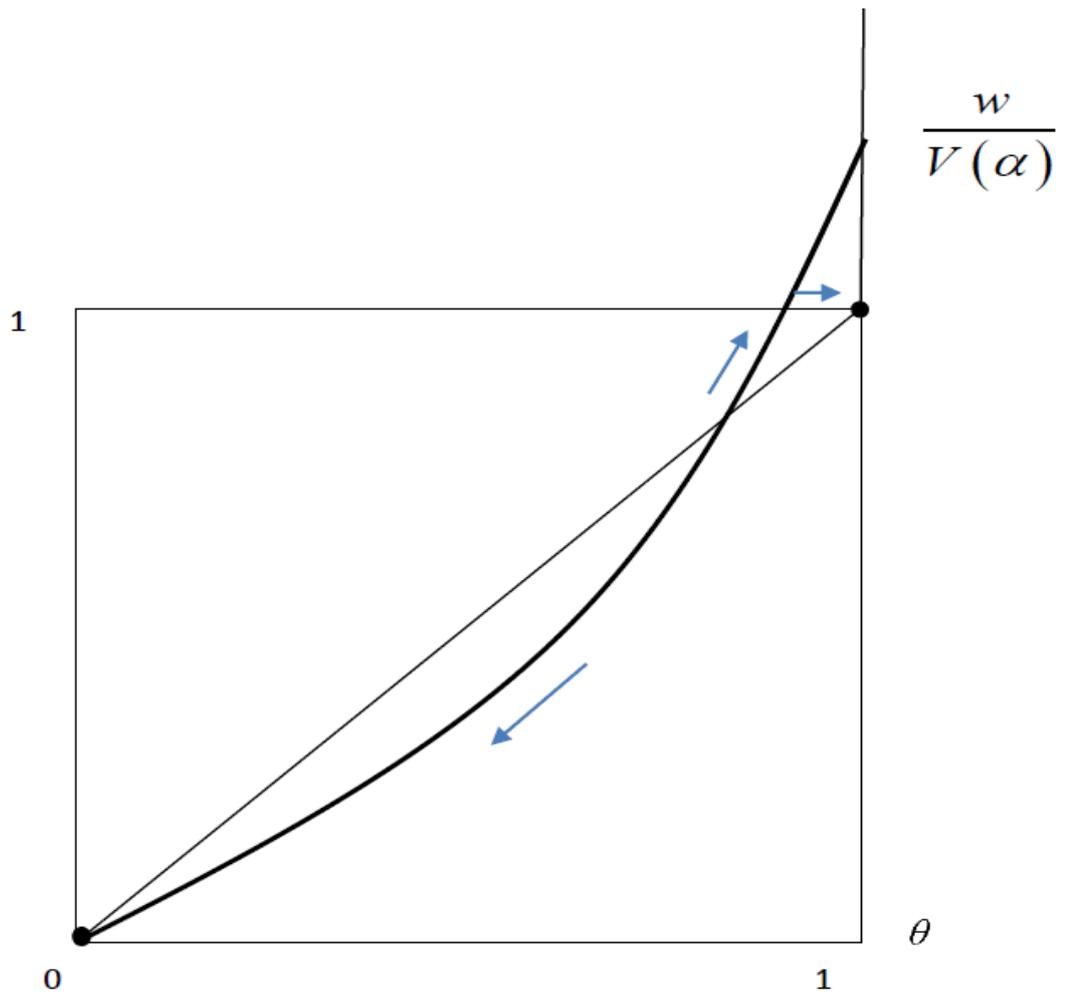


Figure 3: Decentralized religion Increasing density