The Political Economy of Theocracy

Edited by

Mario Ferrero and Ronald Wintrobe

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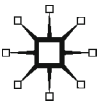

THE POLITICAL ECONOMY OF THEOCRACY

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Introduction

Mario Ferrero and Ronald Wintrobe

Even though the institution of theocracy is about as old as recorded human history, it has unexpectedly come under the limelight of public discussion and scholarly interest in the wake of the recent, spectacular rise of Islamic fundamentalism on the world stage. In one widespread view, Western capitalist democracy is pitted against forces and regimes, such as Iran and the Taliban in Afghanistan, whose goal is to establish the rule of Islamic law. In another view, the influence of religion on politics is on the rise not only in the Muslim world but also in the democratic West and especially in the United States; some critics, such as Kevin Philips (2006), go so far as to speak of an American theocracy. In either view, even if the theocracy label is sensibly restricted to apply only to an extreme case of relationship between religion and politics, the subject is surely set for a prominent place in the political and cultural agenda of the twenty-first century.

This book is not directly concerned with current politics but with the nature of theocratic rule as a system of government, and many of the contributors have looked to historical examples such as the Papal States or the regime of Calvin in Geneva to try to understand it. The theocratic form of government is particularly difficult to understand, partly because the word can be taken to mean so many different things and also because the regimes which can be labeled theocratic in one sense or another appear so different. Is theocracy a form of dictatorship? The noted American political scientist Nikki Keddie, in her standard work on the Iranian regime asserts that contemporary Iran is definitely not a dictatorship (Keddie, 2006). Is theocracy necessarily religious? Some scholars like to point out close affinities between regimes with a clear religious base like that in Iran and assuredly godless Communism. How do theocratic regimes work, since the central source of authority is not usually visible? Even sticking to regimes strictly based on formal religion, can they be meaningfully classified together as a regime type, that is, can the modern Iranian regime be expected to behave

like the Papal States, the world's longest lasting theocracy, or the Calvinist regime of the sixteenth century? What are the implications of theocratic rule for the functioning of the economy and economic development?

Despite the timeliness and relevance of the issue, there is virtually nothing in the scholarly literature on political economy on the subject of theocracy. Therefore we invited a number of scholars who work in the "rational choice" tradition to prepare a paper on theocracy, and to present it at a conference. The conference was held at the University of Antwerp in June 2007 and was funded and organized by the University Centre Saint–Ignatius Antwerp (UCSIA). These papers, revised and enriched by the lively discussion at the conference, are now assembled in this volume. In the remainder of this introduction we direct the reader's attention to the most important issues aired at the conference and taken up in the following chapters.

1. What is a theocracy? In its literal meaning, theocracy is rule by God. But of course God does not rule directly, and here definitions diverge. A workable definition that takes the middle ground is "a government grounded and constrained by a religious theology," as suggested by Allen. However, depending on the focus of interest, definitions may be wider or narrower than that. In the widest definitions, ostensibly nonreligious systems may qualify as theocracies. Thus, in Wittman's definition, "a priestly class from a recognized religion rules the country directly or indirectly through puppet political leaders," but he goes on to say that former communist countries can also be seen as theocracies in that they had an overarching ideology embodied in sacred texts, interpreted by a priestly class (the communist party), taught in schools, and supported by a large set of believers (at least initially). Another type of definition that is wide but in a different sense is "the social implementation of divine prescriptions," with church and king competing or cooperating on implementation (Salmon). On the other hand Wintrobe and Padovano define a theocracy as government organized and directed by the priesthood, but in all other respects simply as another form of dictatorship. In Ferrero's chapter, theocracy is a government in which the priests could actually govern themselves, but sometimes choose to contract out the running of the government to secular authorities. Finally, rather than focusing on the regime's objectives or on the nature of the ruling class, Glazer sees theocracy as a system of constraints on which views to accept and which to reject.
2. Is theocracy necessarily polarizing or divisive? Wittman argues that it is, on the ground that "religions typically claim some kind of universality, but politics inevitably divides. (…) Some people must win and others must lose even if all are members of the same religion and in the eyes of the religion they are equal." Some of this polarization can be observed in contemporary Iran, as Pryor's study of the Iranian case confirms with its emphasis on a parallel set of political and economic institutions. On the other hand, Allen sees theocracy as a device that screens for trusting individuals when monitoring the performance of public officials is difficult, the alternative device being the aristocratic screen; to the extent that it succeeds, the theocracy screens out the less committed or less reliable types and therefore produces a more unified government. Furthermore, Giuriato sees the development of succession rules for top Catholic clergy, and above all the Papacy, as a continued and

largely successful effort to minimize outside interference, control internal conflict, and stabilize the autocracy. Finally, Nonneman notes that in the special, possibly unique context of the Guarani Indians mission system, the Jesuit regime was smoothly run with a minimum of overt repression, implying a broad consensus by their subjects.

3. Is theocracy necessarily anti-women? Paldam argues that at least the Muslim version is, and that this is the main reason why Islam is backward. And, as the varied list of historical theocracies surveyed by Ferrero shows, theocracy features only male ruling classes: Catholic clergy, Israelite priesthood, Buddhist monkhood, Protestant congregations of "saints," and the Muslim caliphate and sects.
4. The theocratic economy. Does theocracy bias the regime against innovation, as Glazer argues? Is theocracy anti–private property? Pryor shows that the share of GDP controlled by the government, or by a shadowy third sector controlled by clerics, increased as the Iranian theocracy got into power. Another issue is the role of religious restrictions on economic activity, discussed by both these writers and also by Wintrobe and Padovano. Wintrobe and Padovano also note a famous argument to the contrary, namely Max Weber's thesis in his celebrated book *The Protestant Ethic and the Spirit of Capitalism* (1905), that the ethic of Protestantism was highly conducive to the development of capitalism. Thus, one of the historically most important theocracies, Calvin's Geneva, gave birth to commercial capitalism. On the other hand, the "socialist" theocracy of the Jesuits in Paraguay, studied by Nonneman, was in a sense a forerunner of the centrally planned, command economy of the Soviet type, but which, unlike its modern counterparts, appears to have been able to deal successfully with the problem of economic incentives. One could mention here another successful theocratic system run as a command economy: the Mormon regime in Utah prior to statehood, based on pervasive Church ownership and control (Arrington, 1958; Grossman, 2000). Thus the relationship between theocracy and the economy is truly complex.
5. Is there something special about Muslim theocracy? For example, Paldam argues that there is, and he finds the root of that uniqueness in that Islam is anti women, and that this biases it against economic development. On the other hand, Pryor finds little in either the economic institutions or the economic policies of the Iranian regime that is distinctively Islamic. On a different level, Salmon gives a rigorous foundation to the common perception of a unique Muslim relationship of church and state: in his view they are perfect substitutes in God's service according to Islamic theology.
6. Does theocracy drive out other forms of spiritual life? For example, communism and fascism brought us socialist realism and futurism, glorification of the state over the individual. The Papacy sponsored numerous works of art which glorified God at the expense of individuals, who are seen to achieve a higher form of life only when basking in the appropriate form of religion. Thus Wintrobe and Padovano's concept of theocracy as a form of "spiritual monopoly."
7. The life cycle of theocracy. On the face of it, theocracies have historically been rare but once established, they have tended to be remarkably long-lasting. Why so? Ferrero takes these twin stylized facts at face value and suggests, as an explanation, that the environmental conditions that make theocracy

superior to secular government (a deadly threat to the survival of the religion, but one which is fairly unlikely to materialize) tend to occur infrequently. But the two questions can be taken up separately. As to the question of rarity, Allen views theocracy as a pre-modern arrangement, which loses its purpose when the effort of government officials becomes readily measurable so that it can be entrusted to a bureaucracy—which, however, does not address the modern surge of Islamic theocracy. On the other hand, an established theocracy may owe its permanence to a surprising degree of flexibility: Wintrobe and Padovano find that the popes could take on the role of all the types of dictators (totalitarians, timocrats, tinpots, tyrants, as modeled in Wintrobe, 1998) as circumstances dictated. In a similar vein, Giuriato also emphasizes the ability of the papal autocracy to fashion legal rules that promote long-run stability.

At another level, however, we may be dealing with a serious sample bias: those long-lasting theocracies are so few because the system is inherently unstable and tends to beget, or evolve into, a different regime very early in its life, or even at the stage of its planning. Wittman suggests just that, arguing that theocracies tend to breed division, division invites repression, and repression spells the undoing of the religious justification of the regime. On the other hand, in his model of theocracy in the European Middle Ages, Salmon posits that some degree of coercion for "good" purposes is acceptable to the community. O'Leary goes further in this line of thought. He argues that monotheistic theocracies, initiated perhaps by charismatic founders, inevitably become institutionalized, which involves a separation of powers for the polity to function at all. Such a separation weakens clerical power and favors the emergence, or reemergence, of a more secular and more liberal order. Constitutionalism, ironically, may have some of its roots in the inevitable separation of powers within attempted theocracies. As the opening chapter of the book, O'Leary's sets forth a broad conceptual perspective to which the following chapters contribute different aspects.

* * *

The book is divided into four parts, all of which combine in different degrees theoretical perspective and empirical applications. In the first part, theocracy is presented as a divided form of government, in which there are two centers of power, the religious and the secular, which may compete, contract, or conflict with each other. In the second part, theocracy is just another form of dictatorship. Its three chapters employ different models of dictatorship or autocracy to understand the workings of historical theocracies. In the third part the connection between theocracy and morals or trustworthiness is explored: it is shown that this connection has deep implications for the success or failure, and hence ultimately the fate, of theocracies. The fourth part looks at the connections between theocracy as a form of political system and various aspects of economic development. The particular connection to Islam, where this issue has been raised with the most force, is explored in detail in these chapters.

We leave it to the readers to probe the contents of the chapters. We surely do not expect them to come away with any firmly established conclusions

but with an array of puzzling, perhaps disquieting, questions that await answer. If this is the case, it will be a most satisfactory reward for our efforts as well as an invitation to further research.

In closing this introduction, we want to emphasize that the joint work that made the Antwerp conference—and hence this book—a reality would not have been possible without the warm, friendly, efficient cooperation of the whole UCSIA team, and especially its director, Walter Nonneman, and the scientific coordinator of this particular project, Barbara Segaert. To these people we owe the largest debt.

References

Arrington, Leonard. *Great Basin Kingdom. An Economic History of the Latter-Day Saints 1830–1900*. Cambridge, MA: Harvard University Press, 1958.

Grossman, Gregory. "Central Planning and Transition in the American Desert: Latter-Day Saints in Present-Day Sight." *Economic Systems* 24, 2000: 35–41.

Keddie, Nikki. *Modern Iran: Roots and Results of Revolution*. New Haven: Yale University Press, 2006.

Philips, Kevin. *American Theocracy*. New York: Viking, 2006.

Weber, Max. *The Protestant Ethic and the Spirit of Capitalism*. 1st ed. New York: Penguin, (1905) 2002.

Wintrobe, Ronald. *The Political Economy of Dictatorship*. New York: Cambridge University Press, 1998.

1

Theocracy as a Divided Regime

1

Theocracy and the Separation of Powers

Brendan O'Leary

Geen ketter sonder letter
(No heretics without a text)

—Flemish proverb quoted by Spinoza

1.1 Why Theocracy Is Being Discussed

The revival of the concept of theocracy in the English language arguably flows from three major phenomena of the past thirty years. The first is the Iranian Revolution of 1979, in which a regime that calls itself an Islamic republic was established, and which formally respects the "guardianship of the jurisprudent" (*vilayat-i-faqih*) in its constitution, and practice, the notion of Ayatollah Ruhollah Khomeini, originally presented in a lecture series in 1971.[1] This regime is regularly described as a theocracy, sometimes as a "populist theocracy."[2] Some of its ruling clerics attempted to transform the Shia *ulema* into a monolithic institution under a single spiritual leader simultaneously considered (by some) as the head of state and (by some) as the functional equivalent of a contemporary pope. Khomeini's many new titles included *Na'eb-e Imam* (deputy to [the twelfth] imam). Secular educational arrangements were disbanded in schools and universities; the sexes were publicly segregated; and moral police enforced an Islamic dress code.[3] Iran's current president, Mahmoud Ahmadinejad, insists that the real ruler of Iran is the twelfth imam, and has instructed his cabinet to pledge its loyalty to that occultating entity. Western and "indecent" music were banned from state-run TV and radio stations in December 2005, though women have been allowed into major sporting events for the first time since 1979.[4] Among Ahmadinejad's many international provocations is Holocaust-denial. Fears remain among some American and European policymakers

that Iran's regime is bent on a program analogous to Trotskyism, that is, exporting Khomeini's revolution, especially to Iraq, Syria, Lebanon and the Gulf states, that is, in the so-called "Shia crescent," which parallels rich oil deposits.

The second major source of the revival of the concept of theocracy is the rise of Sunni Islamist fundamentalism in the lands of Islam, and where Muslim immigrants have become more numerous since European and Soviet de-colonization. Beginning in the early 1970s, Islamist militants revolted against incumbent regimes in Muslim majority countries, and exacerbated major conflicts in Algeria, Egypt, Sudan, Palestine, Lebanon, Afghanistan, Pakistan, Iraq, and Malaysia to name a few sites of attempted *jihad*.[5] They revolted in the name of their religion and with the goal of establishing an Islamic state, sometimes described, notably by Osama bin Laden, as the restoration of the caliphate. Their activities have spread into post-Soviet successor states. The massacres of 9/11 in the United States, executed by mainly Saudi Sunni jihadists, and follow-up massacres in European cities, executed by recent immigrants or second generation Sunni Muslim citizens, explain well-founded fears of theocratic preferences among some Muslims, and explain but do not excuse more hysterical reactions.[6] Attendant debates over the "clash of civilizations" predicted by Bernard Lewis, a trope elaborated into a famous article and book by Samuel P. Huntington[7], are staples of occidental universities. Danish cartoons laughing at pious Muslim beliefs have revived old debates over blasphemy and freedom of political and religious opinion that some had hoped were settled.[8]

The third source of revival of the term theocracy is the alleged de-secularization of some Western liberal states, or the re-fundamentalizing and re-politicization of Christian and Jewish believers in the settled democracies. The phenomenon is also called "de-Enlightenment." In the United States fears of the influence of the Christian religious Right, peaking with the appointment of a majority of apparent conservative judges to the U.S. Supreme Court, have helped books such as *American Theocracy* reach the bestseller lists for nonfiction.[9] In the United States there have been significant efforts to outlaw or prevent abortion, to illegalize any form of euthanasia, to stop teaching Darwinian evolutionism in schools, to block stem-cell research, and to "theify" science-funding. It is likely that all the books ever published on rational choice (and political economy) are outsold by Tim LaHaye's *Left Behind* series, in which the end times, rapture, and Armageddon are recycled to those who find it difficult to read the *Book of Revelation*, and those who just find it difficult to read.[10] In Israel and Palestine the prospects for a two-state resolution of that ninety-year-old quarrel, if we date it from the Balfour declaration, are weakened not just by Islamist fundamentalism in the ranks of Hamas, but also by Jewish fundamentalism that has re-sacralized the national and territorial conflict with Palestinians, and threatens the amity of secular and observant Jews.[11] Some fear that the conjunction of Muslim immigrants' higher birth-rates and Christian revivalist movements threaten Europe's political secularism.

(Fears about European and American democracies are not isolated to the Occident. Many liberals fear religious revivalism in the Asian democracies, notably in India and Sri Lanka).[12]

These three partly related phenomena explain the atmosphere in which this book on the political economy of theocracy is conceived. Here it will be suggested that global theocratic threats, stemming from these three specified sources, may be exaggerated, though they should not be dismissed. After a conceptual discussion, and an excursus in the history of ideas driven by a reading of Spinoza, it will be argued that theocracies have been historically rare, and that there are good reasons why that is so. Reassurance may also be obtained from Alfred Stepan's essay on the "twin tolerations."[13] I also suggest that theocracies based on monotheistic creeds, with sacred laws, should not be modeled as subsets of totalitarian political systems, that is, as monistic, all-pervasive and unreformable "totalizing" regimes. Such textualist hierocracies are likely to generate a separation of powers after their institutionalization. After such a separation clerical or priestly power is weakened, and a more secular and more liberal order may emerge, or reemerge. Benedict Spinoza and Ernest Gellner, a disguised atheist and an overt atheist respectively, inspire the arguments proposed here. The twist is to suggest that we may have, unintentionally, collectively benefited from the theocracies of the past. This argument is not a request for the return of the Spanish Inquisition, an alibi for the Wahhabist or Shia moral police, or an apologia for the blood sacrifices of the Mayans. Instead it suggests that philosophical and methodological atheism may, albeit on occasions, share with Brian of Nazareth the conviction that there is a bright side of religiosity.[14]

1.2 Exaggerated Theophobia?

First, let me suggest, that the significant expansion of the Khomeini-inspired model of "the guardianship of the jurist" beyond the borders of Iran will not happen. Indeed, its home exemplar is not stable. Domestically the Iranian regime is insecure. The current President, who is not the type of executive President found in Western democracies, is arguably less representative of his public than any of his predecessors. Iran's guardians are afloat on a sea of oil revenues, but their regime is economically incompetent and corrupt; and their oil infrastructure is in such disrepair that Iran is importing refined petroleum products. Prospective nuclear weapons, even with the hallmark of the Twelfth Imam, are no use in managing the internal tensions of a multinational control regime. Iran's Persian Staatsvolk is a bare majority of its people, and partly incorporates but profoundly discriminates against Azeris, Kurds, Baluchis, Turkmen, Talysh, Qashqai, Lurs, Gilaki, and Mazandarani, as well as Sunni Arabs in Khuzestan, and Sunnis in Tehran (where in a spirit of true compassion they are not permitted to build a mosque). Edward Luttwak was injudicious to argue that Iran's nationality questions should be manipulated by Washington, but like

Kori Schake characterizes the regime as "not immune to ethnic and sectarian divisions that could be exploited."[15] The Kurds of Iran are repressed and will demand autonomy or independence if the regime loses its grip. It has already lost some of its grip on its public's behavior. The life practices of Tehran's urban public notoriously diverge from what the theo-police are mandated to extinguish. Iran's Persians are more likely to be liberals than their fellow citizens, precisely because they are more urbanized, educated and "Westoxified"; indeed, by repute, they popularly call their government an "Arab government," which suggests they regard Khomeini's system as a deviant Sunni Arab import, rather than an efflorescence of their own culture.[16] When Iran's voters have had their choices of legislators significantly free from screening by their clerical guardians, they have voted for reform and reformers: advocates of de-theocratization, the liberalization of the polity, the economy, and of sexual life. Iran's guardians sit in offices made from eggshells. That they will be able to extend their regime type to Iraq, Syria, Lebanon, and the Gulf States, in a much-feared Shia crescent, is one of the lower probability futures ahead of us.

Theo-revolutionary Iran did not defeat Saddam's Iraq, though hundreds of thousands volunteered to die in defense of the new republic—or were conscripted to do so. Eventually Khomeini swallowed, as he said, the bitter poison of making peace with Saddam. It was the United States and its allies that overthrew Saddam's regime, to the partial delight of its former Iranian adversary, in two separate Gulf Wars, in 1991 and 2003. The beneficiaries of democratic regime change in Iraq include Shia religious parties and movements—and, so far, the secular Kurds of Iraq. But, the major Shia parties of Iraq have not sought, so far, to create a formally theocratic government or constitution, and if they intend to do so they have shown restraint. The leaders of the United Iraqi Alliance, especially the DAWA ("Call") party and the Supreme Council for the Islamic Revolution in Iraq (SCIRI), negotiated a new constitution for Iraq, mostly with the secular political leaders of Kurdistan. That constitution makes the reconstructed state a federal and pluralist democracy, at least on paper. Islam is recognized as the official religion, and Shia jurists will be eligible to sit on the federal Supreme Court, but these new constitutional facts do not make Iraq a theocracy for reasons I shall elaborate later. SCIRI renamed itself in May 2007 as ISCI (The Islamic Supreme Council of Iraq). Its spokesmen explained that the name change recognized that the relevant revolution had happened, that is, Saddam's Baathist regime was gone. The name-change indicates some efforts to distance the party from its origins in Khomeini's sponsorship, and his political program of institutionalizing clerical rule. There are, in any case, significant divisions among the Shia Arabs of Iraq. There are secularists, notably the transitional Prime Minister Ayad Allawi. There are more numerous religious parties, and militias, notably ISCI's Badr Brigades and Moqtada al-Sadr's Mahdi Army. All take care to emphasize their Arab or Iraqi identities, and realize that being seen as Tehran's poodles, as Persians, does not go down well with their

constituents. Those Shia who spent their exile in Iran are not all enamored of "the guardianship of the jurist."

Lebanon's Hezbollah enjoys Iran's patronage, both financial and military, but it is increasingly the local champion of Lebanese Shia interests rather than an international Islamist revolutionary agency, rhetoric to the contrary, and recent events notwithstanding.[17] Hezbollah cannot create a theocracy throughout Lebanon, except over the dead bodies of most Maronites, Sunni Arabs, and Druze. The Allawi dominated Syrian regime is arguably Shia in social origins, on an ecumenical reading of Shiism, but the regime's Baathist formation and practices suggests that fears of a politically unified Shia crescent are overdone. The specter of the crescent is a Jordanian Hashemite appeal to the Americans not to help the Shia of Iraq, not a sound empirical analysis of regional developments. The Shia of the Gulf states are often in situations analogous to that of their Iraqi coreligionists before 2003, that is, a local religious majority tyrannized over by Sunni Arab rulers and people, but it does not follow that they want or are able to emulate the Iranian constitution.

Let us now turn attention, briefly, to the global jihadists. Though they are a profound and bloody public nuisance, and though they are profoundly vicious toward their enemies—especially the Shia in Iraq—they have no viable prospect of creating a new Sunni theocratic state. And that is despite the fact that the bacillus of their ideology is fertilized by Saudi oil financing, a subject worthy of a political economy treatment.[18] The Taliban regime in Afghanistan was overthrown with comparative ease. To the extent that its leaders and cadres survive as a guerilla movement they do so partly as a movement of deposed Pashtuns. Somalia's Islamic Courts in Mogadishu, fears to the contrary, were not likely to become the vehicles of a new Taliban regime, but they have been unceremoniously booted out of the city by Somalia's federalists and the Ethiopian army. The Sudanese government deposed its leading Islamist, and while genocidal and brutal, the regime will fall if it tries to impose the *sharia* throughout the country. The corrupt and patrimonial regimes of Algeria and Egypt have ruthlessly crushed their local jihadists, which is partly why some of al-Qaeda's leaders advocate attacking "the far enemy" rather than "the near enemy." Jordan and Syria have been just as tough. Turkey's military, balking at tolerating soft, democratic and pro–European Union Islamic conservatives, have no comparable patience with the real Muhammads. Pakistan is always unstable but calls for a theocratic government are minority tastes, both among voters, and among its major ethnicities. Bangladesh now has a military government, but no thinker of note has predicted theocratic transformations. Indonesia, the world's most populous Muslim majority state, has, thus far, had a surprisingly successful democratic transition. Many current Muslim minority rebellions, on scrutiny, turn out to be normal ethno-nationalist or ethno-linguistic rebellions, and not Islamist rebellions, even when the Islamic theme is present.[19] Sunni Islamist jihadism is less extensive, less pervasive, and less unifying than alarmists suggest.

It should not be appeased, but a realistic appraisal should be made of its violent capacities.

Neo-Caliphate aspirations are, in any case, ambiguous among the jihadists. The Ottoman caliphate, abolished by Kemal Atatürk, was arguably never a theocracy, let alone at the moment of its dissolution.[20] The "ruling institution" was separated from the *ulema*; politics was separated from the clergy; and even if the political and the religious were not vigorously functionally separated a modern legal code was paramount over the *sharia*. The same would likely quickly become true of any so-called Islamic state. The Salafists who wish to return to the ideals of the earliest Muslim polities, those of Muhammad and the "four rightly guided caliphs," have the same problems as the ancient ancestors they wish to emulate. Should the caliphate descend through the Prophet's family, and if so, from which branch? Or, should he—no one suggests a she—be chosen by consensus of the community, through "democracy?" Or should the selection of the caliph be determined by the jurists? If so, which ones?

The third source of anxiety about theocracy is not new. America has long been felt by Europeans to take God too seriously. America's apparent exceptionalism to secularization among its peoples of European origin is, arguably, a long established rather than a recent phenomenon, and its causation is a subject of too much controversy to be addressed here. But what can be suggested is that in the United States the political mobilization of the Christian Right has produced a countermobilization of both secular movements and scientifically enlightened Christians, and that the electoral leverage the Republicans enjoyed from harvesting fundamentalist votes may have exhausted its utility. Likewise in Europe and near-Europe (Israel and Turkey), secular and enlightened religious people are sufficiently stirred that they may be able to block any deep encroachments of traditional religious agendas into law or policy. India has both avoided major Salafist movements and, so far, stemmed the tide of Hindu revivalism—which has a distinctly anti-Muslim animus, and the Sri Lanka conflict is rooted in national and territorial questions rather than religion.

This "threat-assessment" of the theocrats in our midst will be subject to the usual fate of intelligence assessments. Some will maintain that it is too relaxed, others that it gives too much credibility to the violent jihadists. These assessments will certainly not put an end to forecasts of global religious warfare, or of centuries-long wars of religion within Islam, or between Islamists and Hindus, or Islamists and the West, or Muslims and Jews, but they may help calm some of those who fear a rash of theocracies.

1.3 The Concept of Theocracy

Flavius Josephus, a Jewish priest who favored the rule of priests, and best known as the historian of the Jewish wars during the Roman Empire, coined the concept of "theocracy." He is coded as a Jewish collaborator with Rome, a non-Zionist before his time one might say.[21] He coined the

term in contrast to the standard ancient Greek classifications of political regimes, namely, democracy, aristocracy, and monarchy. Etymologically, the term suggests the rule of "theos" (God, or gods), as opposed to the demos, the best, or the one (king). His claim was that the ancient Hebrews regarded God as their ruler.

A standard dictionary explicates theocracy as "government of a state by immediate divine guidance."[22] The trouble with this operationalization is that it immediately codes far too many elected politicians who claim to believe in God, or to pray for inspiration, as theocrats, or aspirant theocrats, and not just George W. Bush and Anthony Blair. "Government by immediate divine guidance," and the related notion, of government by persons who claim to be human incarnations of God (or the gods), presents a serious epistemic difficulty. If there is no God, or no gods, then theocracy cannot exist. *Nil Theo; ergo nil theocracy.* Custom and reflection suggest we should treat theocracy as any political system in which there is a political formula in which rulers are deemed to be gods, or ordained of God. But present rulers genuinely deemed to be gods do not exist, at least not in abundance. The King of Nepal has just had his palaces nationalized, and the Nepalese Constituent Assembly has just established a republic. There remain significant numbers of monarchies that claim divine authorization, but they remain monarchies. To call them theocracies, without further institutional data, is unhelpful. That is why, perhaps, theocracy has usually been understood in English as the rule of priests, as "sacerdotal government under divine guidance," or, as the dictionary referenced earlier puts it, "government by officials of a state who are believed to be divinely guided."[23]

This understanding should lead us to question whether theocracy is a different form of government to those specified in classical Greek typifications. Aristotle's typology distinguished regimes on two dimensions: the degree of participation in government, and the interests served by the government. On the first dimension he distinguished government by the one, the few and the many. On the second he distinguished right rule (in the common interest) from deviant rule (in the interest of the rulers). Right rule is kingship, aristocracy or polity; the deviant form of each of these, respectively, is tyranny, oligarchy and democracy.[24] The deviant type characterizes despotic conduct by rulers. Aristotle sometimes considered a distinct form of government, Asian despotism that appeared to sit outside his sixfold typology, thus inaugurating a long tradition in occidental political thought.[25] But otherwise he and his successors indicated no other form of rule was possible. They did, however, consider "mixed types" feasible.[26] The definitional question is whether, *pace* Josephus, theocracy is a distinct regime, wholly outside of Aristotle's sixfold classification.

A monarchy, whether hereditary or elective, which claims to be divinely ordained is, in principle, just a monarchy, and therefore not a deviation from the classical typology of forms of government, but rather a subtype of one of them. A status group or class that claims to be the best fitted for

government is in principle an aristocracy, albeit an oligarchy if the merit or conduct is not well-regarded by others. Priests, rabbis, or *ulema* who claim to be the best suited to rule are therefore, in principle, groups claiming aristocratic political status, though not necessarily hereditary status. Sacerdotal government can therefore be seen as merely a subtype of aristocratic or oligarchic government; just as we may treat meritocracy and technocracy as modernized names of aristocratic strata. Lastly, a people which governs itself, and which claims to be divinely mandated, beloved of the gods, or chosen by God to fulfill some mission, or simply blessed by God, is, in principle, just a people which governs itself, that is, a democracy. The Protestant priesthood of all believers, of Calvin's Geneva, or the Muslim *umma*, have been conceptualized as types of self-governing democracies. These cases are, again, not obvious deviations from the classical typology, but rather subtypes of one of them. Likewise, if one thinks of the internal government of religious communities we might wish to use the Greek typifications. Papacies and Dalai Lamas are (elected or "selected") kings; *ulema* and priests are aristocrats recognized for their elite attributes, such as sacred knowledge; and Quakers, Mennonites and other ultra-Congregationalists are democratic or even isocratic (rule is by no one) in their internal governance.

Perhaps Josephus's terminological innovation deserved to remain obscure. Sacerdotal government is rare, and is best seen as a subtype of aristocratic or oligarchic government. But for empirical evidence we may turn to Finer's *The History of Government*,[27] and for conceptual history we should reread Spinoza's *Theological-Political Treatise*.[28]

1.4 Finer's Arguments

Finer suggests that "Examples are truly hard to find" of a polity in which the priesthood wholly or closely directs or controls the activities of a monarch. "Priest-kings are common enough [in history]; but these are either kings who are legitimated by the fact that they control the cult, or vice versa—whoever controls the cult is regarded as king."[29] This he calls a palace-polity (a monarchy). Equally, he suggests that instances of a polity exclusively ruled by a church with "no admixture of other élite elements are rare in the extreme."[30] He could think only of Tibet between 1642 and 1949 and the Vatican state. In his historical survey he found the clearest examples of mixed regimes that combined monarchical and church government to be those of medieval Latin Europe and the Byzantine Empire. The former was a case of rough balance between temporal and spiritual power, while the latter fusion favored the emperor, who was never a priest, though head of the church.

Not surprisingly in a three-volume study that was not fully edited by the author before his death, there were tensions in Finer's position. In his one other express citation of "theocracy" he began a discussion of the modern

state as follows, "The twin principles of nationalism and popular sovereignty carry certain negative implications of the utmost importance…'Popular government'…is not compatible with theocracy—the principle that for so long held the Ottoman Empire together and also provided a justification and method for the government of non-Muslims."[31] Given the status of the Ottoman Empire in long-lived historical regimes, and its extensive treatment in his own volumes, this might appear a major denial of the exceptionality of theocracies. Yet in his substantive historiographical survey Finer made it plain that Sultanic absolutism was scarcely checked by the *sharia*. Though a Sultan would usually obtain a compliant *fatwa* from the *Sheikh-ul-Islam*, whom he appointed, the "supremacy of the *Kanun* [from the Greek canon, that is, sultanic decrees that were laws], generally speaking, over religious objections was the normal state of affairs."[32] Though God was the nominal sovereign in the Ottoman Empire, the Sunni clerics did not govern. A nominal theocracy was in fact a palace regime.

1.5 Spinoza's Use of Theocracy, and Learning from Spinoza and Stepan

We may owe the revival of the term theocracy in the modern era not to the direct transmission of the works of Josephus, but rather to Spinoza, the central figure in the Dutch Enlightenment. Spinoza's *Theological-Political Treatise* caused an intellectual storm in early modernity. Published anonymously it was condemned and banned by the Pope and the King of France as an evil and atheist tract. Spinoza's justification for using the concept remains of key importance. In Chapter 17 of his *Treatise* Spinoza discusses, as part of the title puts it, "the character of the Hebrew state in the time of Moses, and in the period after his death before the appointment of the kings; on its excellence, and on the reasons why this divine state could perish, and why it could scarcely exist without sedition."[33]

Spinoza revived the expression "theocracy" with no attribution to Flavius Josephus.[34] This was probably no accident given Spinoza's distinctive "spin." He begins by emphasizing that under Moses, and after the covenant had been made, "God was aptly called also king of the Hebrews. Hence, the enemies of this state were the enemies of God, citizens who attempted to usurp power were guilty of treason against God's majesty and the laws of the state were the laws and commands of god. For this reason, civil law in this state and religion (which as we have shown consists solely in obedience to God) were one and the same thing. That is religious dogmas were not doctrines but rather laws and decrees, piety being regarded as justice, and impiety as crime and injustice…no distinction was made between civil law and religion."

Spinoza becomes much more interesting when he switches to describing Hebrew government *after* Moses. Citing biblical sources (*Numbers* 27.21), in our idiom he argues that the Hebrew system of government cannot be called democratic, aristocratic, or monarchical because of its vertical

separation of executive and judicial powers, and because of its further division of military powers among the tribal commanders of Israel, "For the right to interpret the laws and communicate God's responses was assigned to one man [the high priest] while the right and power of administering government according to the laws interpreted by the first and the responses he communicated was given to another." It was "theocratic government," first, because "the palace of the government was the Temple," rather than a court; and it "was by virtue of the temple that all the tribes were fellow citizens." The temple was paid for by all, and one tribe, the Levites, became its officials, and were dependent upon support from their fellow citizens, and did not own land. Second, because "all the citizens had to swear allegiance to God as their supreme judge, and promised to obey him alone in all things absolutely"; and third, and finally, "the supreme commander of them all, *when one was needed* [*my emphases*, the temporary dictator or general in chief], was chosen by God alone." "[A]fter the death of Moses no one person…held all the offices of supreme commander. For nothing depended on the decisions of one man or one council, or of the people, but rather some things were administered by one tribe, others by the others, all with equal rights…"[35]

Two matters immediately call out for explanation. Spinoza apparently admired the confederal system of government of the ancient Hebrews, suggesting its divided powers prevented despotism and other abuses, and looked favorably on the fact that the priestly tribe lacked financial independence and military dominance, and could only advise on, rather than determine, the divine will. He looked equally favorably on a citizen-army, that is, a defense system that does not rely on either mercenaries or a standing army with a permanent commander in chief, but rather upon a collegial body of tribal commanders, who benefit from "God's choice" of a supreme commander in emergencies. That made the political system more pacific, rather than externally aggressive, and less liable to capture by military interest groups. Second, Spinoza compared this "theocracy," favorably, to the situation of "the States General of the United Netherlands—apart from the common Temple." Why would this allegedly paradigmatic case of the self-hating Jew be so favorably disposed toward the Hebrew model of government? Why would this alleged atheist (or pantheist), this advocate of unrestricted freedom of thought and argument, write so favorably of this theocracy?

There are two answers in the secondary literature—in which there is almost no interest in the specific matter of conceptualizing theocracy. One is Leo Strauss's in *Spinoza's Critique of Religion*.[36] It appears to indicate that Spinoza deployed his analysis of theocracy to show that this political order is a natural and enduring response to humanity's passions and superstitions, and that his political purpose may have been to show that because the Jews have lost their state their correct response to contemporary politics is to seek freedom in a liberal state. So, to put it crudely, Spinoza becomes an exemplary (ex-Jewish) assimilationist anticipating battles with Zionists to come.

A more convincing, and persuasive, answer is provided by Lewis S. Feuer.[37] The latter maintains that in the *Theological-Political Treatise*, "behind the façade of Biblical scholarship we find a point-by-point analysis of the great issues which were being debated by the Republican and Calvinist parties. The ancient Hebrew confederation was the convenient analogue around which Spinoza made his decisive reflections on Dutch politics."[38] Spinoza, a republican, "wrote . . . on contemporary Dutch politics in the guise of a discussion of the Hebrew confederation." He intended "the discomfiture of the Calvinist party."[39] The latter's program was the reenactment of the law of the Old Testament (much as the program of today's Islamist jihadists is the reenactment of the law of the Koran and the practices of the rightly guided caliphs).

Spinoza said, in effect, look, here is how that theocracy in fact operated. The political power of priests was regulated and checked under a sophisticated separation of powers. The Dutch Republic, with its admirable division of powers, shows how meritorious it is to divide sovereignty in a republican government. The judicial power among the Hebrews was separated from the executive. Executives typically seek to cloak their badly motivated or inappropriately self-interested conduct with legality, but this possibility was made more difficult for the Hebrew military élite because the Levites "had no share in the government," but they could interpret the law, and be supported by the people, if they did so correctly.[40] The Calvinists were being instructed, on Feuer's reading, that the role of priests was rightly limited then, and should be limited now; while the monarchists of the house of Orange were being told that judicial independence was admirable, and that military officers should be held to account both by the law and by the people. The Hebrew theocracy had neither been an unbridled clerical tyranny nor a military dictatorship. The stability of this theocracy and its strength in war, claimed Spinoza, owed most to its democratic elements, rather than to the domination of the clergy.

What present benefit may arise from clarifying Spinoza's parable on the theocratic government of the Hebrews? It may be used, I suggest, to support an important explanatory historical idea; namely, theocratic government, that is, sacerdotal government organized by a priestly ruling class, necessarily generates a separation of powers, and that separation of powers in turn generates the end of the priestly monopoly of power, and may usher in constitutionalization, the rule of law and liberal possibilities. We may exploit Spinoza's parable to confirm reasons to doubt the past ubiquity and stability of theocracy, to help explain its rarity, and to provide an explanation of the (desirable) instability of theocracies.

Before sketching these arguments let me summarize the leading statement of the day on "crafting the twin tolerations," namely the toleration of religious freedom by the democratic state, and the toleration of the democratic state's pluralism by the religious. Alfred Stepan shows that it is false to suggest that all Western democracies have separated state and church, and that all have, formally, constitutionally or institutionally, secularized

their politics. Five EU member-states have established churches, Denmark, Finland, Greece, Sweden, and Great Britain (in England and Scotland).[41] The Netherlands has a consociational and publicly funded education system. Protestantism and Catholicism are official religions in Germany and citizens pay a church-tax from which they may opt out at the expense of being at risk of being deprived of welfare services in old age. Religious parties have ruled or shared rule in coalition governments in Belgium, the Netherlands, Austria, Germany, and Italy. Virtually no Western European country, including France, Stepan maintains, now has a hostile separation of church and state. He suggests that, empirically, there is no inherent affinity between secularism, separation of church and state and democracy.

Doctrinally, he argues that there are resources within all of the world's religions for endorsing democracy, or for adapting their religious doctrines to democracy. As I put it, what is said today of Islam by Westerners was once said of Catholicism by Protestants. As Stepan puts it, religions are "multivocal" on political system-choice. Methodologically, he suggests we should beware of the fallacy of unique founding conditions, assuming that democracies must share a similar genesis in their management of religion. And normatively he cautions against the universal prescription of some liberals, such as John Rawls, to "take the truth of religion off the political agenda," noting that democracies can bargain and agree over profoundly conflictual matters, such as religious education, without sealing off religious commitments or practices from politics. Once again he cites the Dutch agreement on consociational educational arrangements. He might also have suggested that those democracies which have handled debates over abortion through majority rule in the legislature have had less overt political problems with the legitimacy of these decisions, in general, than those in which the relevant questions are decided by an unelected Supreme Court, charged with separating church and state according to the current reading of the relevant constitution. But Stepan suggests it may be vital for the stability of democracy that the religious persuade their own within their own value systems of the merits of working with compromises and accepting bargaining within constitutional democratic systems.[42]

What is the pertinence of this analysis? Stepan's arguments suggest there is no singular prescriptive institutional design, judging by comparative evidence, through which efforts should be made to inhibit theocracy, understood as sacerdotal government, or efforts to achieve it. There are in fact multiple ways of seducing the theocratically inclined into democratic—if not always liberal—bargaining and institutional compromises. The moral is that those who fear theocratic revivals might do well to be flexible in treating the religious. A universal platform of vigorous anti-clericalism, institutionally separating church from state, and rigorous anathematizing of all religions as illiberal and undemocratic, may be poor politics, at least in some localities. The secular may be better advised to build coalitions among the religiously enlightened, the religiously open and the religiously uncertain, rather than to guarantee their political enmity by tarring them

all with the fundamentalist brush. Some secularists may regard this as appeasement, but Stepan's message may be read as a counsel of prudence. We should be very careful in managing the religious, as Spinoza knew.

1.6 A Spinozist Historical Hypothesis

There are numerous religions, and insufficient agreement among scholars, social scientists, constitutional lawyers, and believers or nonbelievers, on what, if any, essence religions possess. After all it is unclear all mean the same by the sacred and the profane—even in contrasting these notions. We may, however, provisionally distinguish polytheistic from monotheistic religions, while knowing that rival monotheists often condemn their opponents as polytheists. Thus Muslims and Jews regard the Christian "mystery" of the Trinity as an outright contradiction of monotheism. "Within" Islam Wahhabists, among others, regularly accuse other "Muslims," of the sin of *shirk*, attributing partners to Allah, suggesting that they divinize Muhammad, or the Shia Imams; and "within Christianity" Protestants regularly accuse Catholics of Mariology, and the Orthodox of worshipping icons, and graven images. Even seemingly straightforward polytheisms, such as Hinduism, generate monotheisms. Within its absorptive textures flourish subcontinental Hegels who see one unified divine being amid all the diversity of beings, and who happily state that they will absorb and tolerate the self-identified hyper-monotheists—to their intense irritation.

Monotheisms, however, seem to have an affinity with the production of sacred or holy books—though there are Hindu sacred texts, and there are Buddhist sacred texts within a religion that is not obviously monotheistic. There are certainly monotheistic sacred books, in which we may include *hadith* and the like, said to be authored, dictated or sent by God. They are believed to be true, and to contain revealed Truth. They typically contain "constitutions," prescriptive principles for how political and social life should be governed, and "statute laws," commanding specific rights and forbidding wrongs, that is, prohibitions, permissions and inducements. These elements within sacred books are the sacred law, promulgated by the "divine legislature."[43]

Monotheists are not disposed to be relativists. There is one God, and therefore it is thought, there is but one truth. They know there is truth, and just Truth in the sacred texts, including the sacred law within the text. But truth-seeking procedures set up epistemic questions not easily handled in monistic or dogmatic ways. Sincere monotheistic theocrats face multiple dilemmas. Leave aside doubts over the integrity of certain sacred books, chapters, verses, *sura*, and *hadith*, and questions arising from the dating of the production and editing of the absolutely final, immutable texts. Assume the monotheists have an agreed, error-free text, containing error-free sacred law, error-free in the sense that the texts are as God intended, through his own postal or dictation services, or through his messengers, apostles and prophets.

Such textual "heroic assumptions" are the necessary working assumptions of confident monotheistic theocrats. The point is that excruciating problems confront such confident faithful readers. Are the sacred texts transparent and unambiguous, or do rightly guided believers require extensive training in their interpretation? Are the texts to be read and parsed, sung and meditated upon? Assuming that God was a perfect legislative draftsman, and not a seemingly jesting puzzle-master who rejects the principle of non-contradiction, does not, of course, ensure perfect transmission to perfectly competent readers, or chanters. Humans err, unlike God (by hypothesis). They may be fallible in reading. What rules of construction are to be followed if the texts are not transparent? How are such rules, once constructed, to be applied? And how are they to be revised, given that to err is human, and that there may have been errors in the initial, or the most recently revised, rules of construction? Are the sacred laws perfect? That is, do they require no supplementation? May there be analogical reasoning applied in situations not, apparently, covered when the sacred texts reached humanity? Must imperfect persons add to the sacred law, and, if so, may such additions be revised in turn? According to what procedures?

Theocrats with sacred texts may, in short, be obliged to work within the hermeneutics of constitutional law, not those of common law. The defenders of the Torah, the New Testament, the Koran and the *hadith*, or the Book of Mormon, know, or learn reluctantly to accept that in the "error-free" versions of their texts, apparent contradictions flood in upon the vigilant reader. God's revelation is hard. Can one *sura*, verse, or chapter abrogate another, if we know that another came later? But does that mean that fragments of the Book are false, or just superseded? And, how exactly does one grasp all the Book in its totality? And so on. In sum, priestly classes that take their sacred texts seriously cannot sustain single and authoritative readings with incontestable and unambiguous applications. Plural readings and dissent are latent in the enterprise of textualized religions.

Now let us move from the hermeneutical dilemmas of textualized religions to sociology. Following Max Weber's account of the "routinization of charisma" we may suggest that when the charismatic messenger-founder(s) of a religion die their community of the faithful has to be institutionalized. The sacred law contained in the sacred text(s) replaces the founder as the source of legislative authority. And it is from the sacred law that executive and judicial authority are delegated. But how?

Paul's *Letter to the Romans* offers one theological solution to the theory of executive authority, one that renders unto Caesar what is Caesar's, in the famously ambiguous dictum. In the King James version of the New Testament Paul proclaimed that "the powers that be are ordained of God." In a more prosaic contemporary idiom Paul's argument was: "Let every person be subject to the governing authorities; for there is no authority except from God, and those authorities have been instituted by God [lit. 'put in their place'…]. Therefore whoever resists authority resists what

God has appointed, and those who resist will incur judgment. For rulers are not a terror to good conduct, but to bad. Do you wish to have no fear of authority? Then do what is good, and you will receive its approval; for it is God's servant for your good."[44] But, as the annotators of *The New Oxford Bible* diplomatically put matters, "these verses stand in tension with Paul's views elsewhere of the 'rulers of the age' (1 Cor. 2.6–8; 15.24–26; 1 Thess 5.3–11) and with his own willingness to suffer punishment from civil authorities," and may have had a "very specific application," namely preventing a pogrom against the Jewish population in Rome.[45]

In a theocracy, the priests reject the quietism of Paul. They insist that they are in charge of sacralizing and perhaps applying executive power. They must either be Caesar or share and separate powers with Caesar. But, if so, how do they justify their authority? The sacred law cannot speak, short of a miracle. It must be interpreted—both by the *ulema* and the *umma*. How does one ensure that the executive is, if not ordained of God, rightly chosen by the *ulema* or the *umma*? If anointed by God, what signs can be given of that claim? Do the executive's rights of office pass through hereditary succession, or are they recovered after life-terms of office? The executive that seeks legitimacy from the priests will seek to establish consensus, to confirm that the executive enacts the sacred law, and, to that degree, may consent to separate powers.

As for judicial authority the guardians of the sacred text inevitably specialize among themselves, in theology, philology and law, and have to agree that their division of labor does not destroy the integrity of the sacred law—through having a Supreme Court, or a council of the guardians, or freely competing law schools. Such schools may develop around founders who articulate particular principles of construction or abrogation. They may develop law for the state and develop canon law for the church. They may develop both *fiqh* (ordinary divine law), and *usul al-fiqh* (theoretical jurisprudence). In a fascinating book Weiss claims to capture *The Spirit of Islamic Law* as "espousal of divine sovereignty (the basis of everything else); a fixation upon sacred texts that are the repositories of divine revelation; an uncompromisingly intentionalist approach to the interpretation of these texts; a frank acknowledgement of the uncertainty and fallibility of all individual human endeavor to capture the divine intent and a consequent acceptance of probabilism as the foundation of valid interpretation; a tolerance of legal diversity and a willingness to disseminate juristic authority among multiple schools; a moralistic bent grounded in a particular social vision, and, last, a preoccupation with the affairs of private individuals, and especially with family relations and contracts, coupled with a concern to define the limits of the [executive] power of government."[46] This description, with suitable modifications, resonates with accounts of Jewish law and of the development of Roman law by the Catholic Church. While there are very important differences all the monistic religions with sacred texts developed the idea that there was a sacred and applicable law that could not be abrogated by the executive power.

In short, the textual legacies of monotheistic religions with sacred law within their sacred texts create accountability dilemmas for executive and judicial authority. These dilemmas, as Spinoza suggested in the case of Moses's successors, result in some institutional incentives for a separation of at least executive and judicial functions (the vertical separation of powers) in the reading and application of sacred law. The historical record suggests no automatic passage toward either a collegial executive or a collegial judiciary. Moreover, there have been intermittent efforts at refusion of these powers, for example, in the medieval papacy, Orthodox caesaropapism, and in some readings of the practices of some caliphs. Executives have typically been singular. Yet the priests, *ulema* and rabbis, often prefer conciliar to papal government, at least within their own institutions, unless they foresee a role for themselves as a pope. If the idea is rejected that there is but one person capable of infallibly interpreting the sacred law then the priestly class is driven toward conciliar practices, even though they may not be persuaded of democracy.

The combination of monotheistic anti-relativism, hermeneutical difficulties with textual sacred law, and the routinization of charisma after the exit of a religion's founder, jointly destabilize the prospects of sustainable theocracy. Wherever a theocracy is attempted there will be pressure for the separation of executive and judicial powers of interpretation and application of the sacred law. The functional equivalent of constitutional law may therefore develop at the interstices of applying and interpreting sacred law within recently established theocracies. This in turn makes it difficult to maintain comprehensive sacerdotal government. The pressure for what sociologists call "differentiation" kicks in.

No claim is being made that the constitutionalization of theocracies is the sole means through which the separation of powers (and its kindred notions, such as the rule of law, and limited government) emerges in recorded history. It is but one path. There are perfectly sound reasons why a separation of powers may emerge grounded in the application of secular reason. Moreover, I have not suggested that the relevant religions permanently reform whatever theocratic impulses may be present within them. I am suggesting that if ever successfully implemented, *ceteris paribus*, a government of priests gives way to a government or lawyers.

1.7 Federalizing God?

Let me illustrate how religious parties, led by nominal theocrats, were recently persuaded into a radical separation of powers, one that federalized God. During the negotiation of the Transitional Administrative Law of Iraq in the spring of 2004, Kurdistan's secular political leaders and Shia Arab leaders, with the approval of Ayatollah Sistani, resolved on a formula for the management of Islam (Art. 7a) which recognized Islam's official status, the full religious freedom of non-Muslims, and also seemed to protect the "principles of democracy" and a new charter of rights from

the implications of certain readings of the *sharia*.[47] That formula pointed toward a future modus vivendi between these groupings. Some Shia Arabs, inspired by Kurdistan's comparative success from the late 1990s, signaled during the making of the TAL that they wanted to aggregate the governorates in the South into a larger region—or regions. If and when the Shia Arabs subsequently consolidated behind this position Kurdistan could expect firm support for a radically decentralized federation. That happened in the negotiation of the constitution of 2005.

There was little difficulty in recognizing Islam as the official religion in Iraq—it had already been accepted in the TAL. The permanent constitution of Iraq of 2005 does the same, treating Islam as *a* rather than *the* source of legislation, and stipulates that no law may be passed that violates the universal precepts of Islam—which, in principle, prevents federal sectarian legislation, given that Muslim jurists have to agree what these tenets are. There is therefore some restraint on dominance by any particular jurists' version of correct Islam. The Shia Marji'iyya wanted constitutional protection for their shrines—understandable given their treatment under Saddam and since—which was granted without controversy. However, they also wanted their own status institutionally recognized—in particular, the right of some among their number to serve as judges on the federal Supreme Court. This gave rise to deep fears among the secular Arab parties, the Sunni Arab religious parties, and Kurdistan's secular parties, that the Shia religious parties were trying to achieve a version of Iran's guardianship of the jurisprudent. This put the fear of the other side's God into the other parties.

The demand of the Shia Arab's leaders in Dawa and SCIRI was mediated by Ambassador Khalilizad, the Sunni Muslim ambassador of the secular United States, whose priority was meeting U.S. election timetables.[48] He considered it reasonable to have Muslim jurists on the Supreme Court. After all, he argued, they have the requisite expertise in Islamic law, and Islam is to be one source of legislation and jurisprudence in Iraq's constitution. This resolution intensely disappointed Iraq's secular parties, including those from Kurdistan. In response, Kurdistan's negotiators stripped the Supreme Court of its right to review regional laws, implementing what I call the "federalization of God."

In Iraq's 2005 constitution regulating religion, human rights and the rights of men and women are not among the exclusive powers of the federal government. Therefore, by virtue of other articles in the constitution insisted upon by Kurdistan, such provisions as exist on these matters are subject to the supremacy of regional law, and regional courts. So, the Kurdistan region is able to maintain its secular laws, while the Southern and the mid-belt governorates and regions, if they wish, may apply versions of the Islamic *sharia*. Western liberals would prefer to see liberalism everywhere, but this constitutional bargain reflects local political choices, and in the case of the Shia religious parties they seem, for now, to reflect local democratic majority preferences. Sometimes democracy and liberalism diverge.

The federal Supreme Court is not yet in existence. The final rules on how the Iraqi federal Supreme Court itself will be constituted are postponed for future statute law that has to be passed by a qualified majority: "The Supreme Federal Court shall be made up of a number of judges, and experts in Islamic jurisprudence and law experts whose number, the method of their selection and the work of the court shall be determined by a law that shall be passed by two-thirds of the Council of Representatives." The qualified majority provision prevents Shia parties from dictating the selection of judges and the powers of the court because one can expect both the Kurds and Sunni Arabs to use their votes to prevent such an outcome. If the court comes into existence we can therefore expect, minimally, that its powers in Kurdistan over religious matters will be nonexistent, and will not affect matters that usually preoccupy clerics, namely women's bodies and women's rights. Iraq's Shia party leaders are, these bargains suggest, not hard-line theocrats. They are willing to federalize private and public law, and to delimit the scope and application of versions of the *sharia* to regions where that is democratically preferred. Kindred arrangements are being attempted in federations like Nigeria and India, showing that it is possible for Islamic jurists to agree to federal arrangements. In short, not all nominal theocrats are either imperialists or political monists.

1.8 Conclusion

This chapter has suggested that sacerdotal government is a version of aristocratic or oligarchic government, and that unambiguous examples of sacerdotal government are rarer in history than popularly supposed. Adapting and modifying Spinoza, Gellner, and Weber, I have suggested that the combination of three pressures, the anti-relativist dispositions of theological monotheists, the hermeneutic and political issues that surround the rightful construction and application of sacred law, and the routinization of charisma that occurs after the departure of a religion's founder or founders, push toward some separation of powers within any established theocracy, at least one run by a textualist hierocracy which claims to know how to read a sacred book which has sacred law. The development of post-Kohemeini Iran may offer some scope for exploring the merits or otherwise of these arguments.[49]

The Occident and the Orient may owe part of their heritage in constitutional law to the pressures that destabilize theocracies. This argument is not intended to welcome the construction of theocracies. Far from it. But Stepan's analysis of how contemporary democracies manage bargaining over issues that divide the religious, and which divide the religious and the unbelievers, offers reasons for believing that theocratic preferences can be flexibly restrained when they emerge within democracies. This analysis may provide a small amount of not entirely cold comfort to those unfortunate enough to live within a recently established theocracy.

Notes

My sincere thanks to the participants at the conference whose papers are represented in this collection, and especially to Rogers Smith and Ron Wintrobe.

1. Khomeini (1981).
2. Nasr (2006), p. 134.
3. Moaddel (2005), p. 330. See also "Khomeini's Moment" in Nasr (2006), pp. 119–146. The dress code might be construed as long-term historical revenge for the imposition of a European dress code, the unveiling of women, and the restriction on clerical clothing mandated by the first Pahlavi Shah in the 1930s; see Arjomand (1981), p. 302.
4. BBC, "Profile: Mahmoud Ahmadinejad," http://news.bbc.co.uk/1/hi/world/middle_east/4107270.stm, Last accessed date October 21, 2008.
5. See inter alia, Keppel (2002) and Roy (2004).
6. Melanie Phillips (2006).
7. Huntington (1993, 2006).
8. O'Leary (2006).
9. Kevin Phillips (2006).
10. It has apparently sold 60 million books and tapes; Kevin Phillips (2006), p. xxi.
11. For an early and prescient work see Lustick (1988).
12. On India see inter alia Embree (1990), van den Veer (1994), Bailey (1996), Wilkinson (2004), and Adeney (2006). On Sri Lanka see the claims of Little (1994).
13. Stepan (2001).
14. Hardcastle and Resich (2006).
15. Luttwak (2006) and Schake (2007).
16. To that extent they partly agree with Gellner's diagnosis that "Khomeini is the most Sunni of Shi'ite theologians" and a Crypto-Sunni, see Gellner (1987).
17. Gunning (2007).
18. Wahhabism is the Saudis' chief gift to the cultural history of mankind, and is exported along with funding for Islamic charities and schools. The Wahhabists were memorably described by Khomeini in one of his ecumenical moments as the "savages of Najd," Arjomand (1981), p. 311, citing M.M.J. Fischer, *Iran From Religious Dispute to Revolution*, Cambridge, MA: Harvard University Press, p. 132. For an Islamic description and indictment of the Wahhabists see Algar (2002).
19. See Mabry (2007), and see Heiberg, O'Leary, and Tirman (2007), especially chapters by Gunning on Hamas and Hezbollah.
20. See Webb (2007).
21. It occurs in *Contra Apion*. Claims made by one scholar that Josephus was indebted to Plato for the idea are textually unsupported by source citations or my quick inspection of Plato's collected works (Schaublin, 1982).
22. *Merriam Webster's Collegiate Dictionary* 2003, 11th edition, p. 1295.
23. Ibid.
24. Aristotle (1962), pp. 115–116.
25. See O'Leary (1989), pp. 42–45.
26. Famously from a mixture of the three types Polybius constructed a normative defense of the "balanced" Roman constitution and an explanation of Rome's political successes (Polybius, 1922–1927).
27. Finer (1997), a work of extraordinary ambition that was incomplete and unpolished at its author's death.
28. Here I rely on the new translation by Michael Silverstone and Jonathan Israel, published as Spinoza (2007).

29. Finer (1997), Vol. 1, p. 53.
30. Ibid. p. 50.
31. Finer (1997), Vol. 3, p. 1478.
32. Ibid. pp. 1172–1173.
33. Spinoza (2007), p. 208.
34. There are nine citations or annotations which refer to Josephus but not to his discussion of theocracy (Spinoza, 2007, pp. 40, 96, 133, 135, 142, 147, 149, 232, 269). Attribution, other than to classical or sacred sources, was not customary in seventeenth-century scholarship (Hampshire, 1952, p. 179), but Flavius is cited by Spinoza, so it is surprising that he is not cited for pioneering the term theocracy. That may be because Spinoza deliberately wished to give the concept a different meaning.
35. Ibid. pp. 213–215, 219.
36. Strauss (1965), especially "The Theory of Natural Right and the Critique of Theocracy," pp. 224, and the Preface, p. 18.
37. Feuer (1987), see especially pp. 119.
38. Ibid. p. 119.
39. Ibid. p. 121.
40. Ibid. p. 122.
41. The same Queen is the head of the Anglican Church of England and the Presbyterian Church of Scotland; differently put, the relevant monarch is a theological schizophrenic.
42. Stepan (2001).
43. The phrase is Gellner's.
44. Paul, "Letter to the Romans," 13.1–4, in *The New Oxford Annotated Bible, New Revised Standard Version with the Apocrypha (An Ecumenical Study Bible)*, 3rd edition (Oxford: Oxford University Press, 1991), New Testament, p. 261.
45. Ibid. Annotations to "Romans" 13.1–7, p. 261, and p. 242 "Introduction."
46. Weiss (2006), p. xiii.
47. Article 7 (a) of the TAL stated that "(A) Islam is the official religion of the State and is to be considered a source of legislation. No law that contradicts the universally agreed tenets of Islam, the principles of democracy, or the rights cited in Chapter Two of this law may be enacted during the transitional period. This Law respects the Islamic identity of the majority of the Iraqi people and guarantees the full religious rights of all individuals to freedom of religious belief and practice." My reading of its meaning(s) can be found in Chapter 2 of O'Leary, McGarry, and Salih (2005).
48. See Galbraith (2006), pp. 199–200.
49. For still illuminating discussions of post-Khomeini Iran see the analyses in Chehabi (2001) and in Buchta (1999).

References

Adeney, Katharine. *Federalism and Ethnic Conflict Regulation in India and Pakistan*. Basingstoke, UK: Palgrave Macmillan, 2006.

Algar, Hamid. *Wahhabism: A Critical Essay*. Oneonta, NY: Islamic Publications International, 2002.

Aristotle. *The Politics*. Translated by T.A. Sinclair. Harmondsworth, UK: Penguin, 1962.

Arjomand, Said Amir. "Shi'ite Islam and the Revolution in Iran." *Government and Opposition* 16, 3, 1981: 293–316.

Bailey, F.G. *The Civility of Indifference*. Ithaca, NY: Cornell University Press, 1996.

Buchta, Wilfried. *Who Rules Iran? The Structure of Power in the Islamic Republic*. Washington, DC: Washington Institute, 1999.
Chehabi, H.E. "The Political Regime of the Islamic Republic of Iran in Comparative Perspective." *Government and Opposition* 36, 4, 2001: 48–70.
Embree, T.A. *Utopias in Conflict: Religion and Nationalism in Modern India*. Berkeley: University of California Press, 1990.
Feuer, Lewis S. *Spinoza and the Rise of Liberalism*. New Brunswick, NJ: Transaction Books, (1957) 1987.
Finer, Samuel E. *The History of Government*. 3 Volumes. Oxford: Oxford University Press, 1997.
Galbraith, Peter W. *The End of Iraq: How American Incompetence Created a War without End*. New York: Simon & Schuster, 2006.
Gellner, Ernest. "Waiting for Imam, or the Political and Hygienic Theology of Khomeini or Government Not by Imams but by Lawyers." In Ernest Gellner, *Culture, Identity and Politics*. Cambridge: Cambridge University Press, 1987: 134–151. Also published as "Inside Khomeini's Mind." *The New Republic* 18, June 1984: 27–33.
———. "State and Revolution in Islam." *Millennium Journal of International Relations* 1980, 8, 3: 185–199.
Gunning, Jeroen. "Hizballah." In *Terror, Insurgency and the State: Ending Protracted Conflicts*, edited by Marianne Heiberg, Brendan O'Leary, and John Tirman. Philadelphia: University of Pennsylvania Press, 2007: 157–188.
Hampshire, Stuart. *Spinoza*. Harmondsworth, UK: Penguin, 1952.
Hardcastle, Gary L. and George A. Resich (eds.). *Monty Python and Philosophy: Nudge, Nudge, Think Think!* Chicago and La Salle, IL: Open Court, 2006.
Heiberg, Marianne, Brendan O'Leary, and John Tirman, eds. *Terror, Insurgency and the State*. Philadelphia: University of Pennsylvania Press, 2007.
Huntington, Samuel P. "The Clash of Civilizations?" *Foreign Affairs* 72, 3, 1993: 22–49.
———. *The Clash of Civilizations and the Remaking of World Order*. New York: Simon & Schuster, 2006.
Keppel, Gilles. *Jihad: The Trail of Political Islam*. Translated by Anthony F. Roberts. Cambridge, MA: Harvard University Press, 2002.
Khomeini, Ruhollah. *Islam and Revolution: Writings and Declarations of Imam Khomeini*. Translated by Hamid Algar. Berkeley: University of California Press, 1981.
Little, D. *Sri Lanka: The Invention of Enmity*. Washington, DC: U.S. Institute of Peace Press, 1994.
Lustick, Ian S. *For the Land and the Lord: Jewish Fundamentalism in Israel*. New York: Council on Foreign Relations, 1988.
Luttwak, Edward. "Three Reasons Not to Bomb Iran—Yet." *Commentary* May 2006: 21–28.
Mabry, Tristan. "Nationalism, Language and Islam: A Cross-regional Comparative Study of Muslim Minority Conflict." Ph.D. dissertation, University of Pennsylvania 2007.
Moaddel, Mansoor. *Islamic Modernism, Nationalism, and Fundamentalism: Episode and Discourse*. Chicago: University of Chicago Press, 2005.
Nasr, Vali S. *The Shia Revival*. New York: W.W. Norton, 2006.
O'Leary, Brendan. *The Asiatic Mode of Production: Oriental Despotism, Historical Materialism and Indian History*. Oxford: Basil Blackwell, 1989.
———. "Liberalism, Multiculturalism, Danish Cartoons, Islamist Fraud and the Rights of the Ungodly." *International Migration* 44, 5, 2006: 23–33.
O'Leary, Brendan, John McGarry, and Khaled Salih (eds.). *The Future of Kurdistan in Iraq*. Philadelphia: University of Pennsylvania Press, 2005.

Phillips, Kevin. *American Theocracy*. New York: Penguin Books, 2006.
Phillips, Melanie. *Londonistan: How Britain Is Creating a Terror State Within*. London: Gibson Square Books, 2006.
Polybius. *Histories*. 6 Volumes. Translated by W.R. Paton. New York: Loeb Classical Library, 1922–1927.
Roy, Olivier. *Globalized Islam: The Search for a New Ummah*. New York: Columbia University Press, 2004.
Schake, Kori. "Dealing with a Nuclear Iran." *Policy Review*, Hoover Institution, April and May 2007, http://www.hoover.org/publications/policyreview/6848072.
Schaublin, Christoph. *Hermes* 110, 1982: 316–341.
Spinoza, Benedict de. *Theological-Political Treatise*. Edited by Jonathan Israel. Cambridge: Cambridge University Press, 2007.
Stepan, Alfred. "The World's Religious Systems and Democracy: Crafting the 'Twin Tolerations'." In Alfred Stepan, *Arguing Comparative Politics*. Oxford: Oxford University Press, 2001: 213–254.
Strauss, Leo. *Spinoza's Critique of Religion*. Chicago: University of Chicago Press, 1965.
van den Veer, P. *Religious Nationalism: Hindus and Muslims in India*. Berkeley: University of California Press, 1994.
Webb, Edward. "Civilizing Religion: Jacobin Projects of Secularization in Turkey, France, Tunisia, and Syria." Ph.D. dissertation. University of Pennsylvania, 2007.
Weiss, Bernard. *The Spirit of Islamic Law*. Athens, GA: University of Georgia Press, 2006.
Wilkinson, Steven I. *Votes and Violence: Electoral Competition and Ethnic Riots in India*. Cambridge and New York: Cambridge University Press, 2004.

2

The Economics of Theocracy

Mario Ferrero

Our lawgiver, however, was attracted by none of these forms of polity, but gave to his constitution the form of what (…) may be termed a "theocracy," placing all sovereignty and authority in the hands of God. [Hence,] there should be nothing astonishing in our facing death on behalf of our laws with a courage no other nation can equal.

—*Josephus Flavius,* Against Apion *(quoted in Frend, 1984, pp. 46, 12)*

2.1 Introduction

As Josephus's opening quote unambiguously states for ancient Israel, theocracy literally means government by God. Since, however, God is not known to have ruled worldly government directly, the word is usually understood to mean government by a clergy, or a self-appointed group who claim to speak and act on God's behalf. This will be our understanding of the term in this chapter: a political arrangement by which the main functions of secular government are discharged by a priesthood who double as secular officials. It bears noting that theocracy in this strict sense is by no means coterminous with overarching power of a church or religion; to take a current example, Saudi Arabia, which is ruled by a lay royalty, is arguably more tightly dominated by religion in everyday life than Iran, which is ostensibly ruled by clerics.

Irrespective of whether they maximize the religious intensity of a society, theocracies in history are noted for their rarity but also, when they do come into being, for their remarkable permanence. This is one of the very few safe generalizations one can make about historical theocracies; otherwise they can be warlike and aggressive as well as peaceful and benign, revolutionary as well as conservative, self-enclosed and defensive as well as expansionary and proselytizing, run by a hierarchical clergy as well as

by an egalitarian community of "saints" or a charismatic leader. A nonexhaustive catalog of prominent examples is sufficient to illustrate all these varieties and combinations thereof: the Israelite theocracy after the return from the Babylonian exile (the first for which we have a written record),[1] the crusaders' kingdoms in Palestine, the Papal state in Italy from the eight century to 1870, the Jesuits' mission system in Paraguay, Savonarola's brief rule in Florence, Calvin's rule in Geneva, the Anabaptist kingdom of Münster, the Mormon state of Utah, the Muslim caliphates, the contemporary ayatollahs' Iran, Afghanistan under the Taliban, the Mahdi state of Sudan in the 1880s, the Buddhist regimes of traditional Tibet and Mongolia.

Over the long haul of history this is a very small crop, but nearly all of these instances were long-lasting and were in most cases terminated only by outside force. This stylized fact speaks for the existence of particular environments that are fairly uncommon but, if and when they do occur, are singularly conducive to the birth and persistence of this type of political regime.

The foregoing list also highlights a perplexing feature of historical theocracies: only *some* religions, not all, seem to be given to theocratic experiments under appropriate circumstances. These are Judaism, the main branches of Islam, several varieties of Protestantism, and Buddhism. The Catholic Church's contribution to the crop is exceptional and that of Orthodox Christianity entirely absent. Other non-European religions do not feature at all in the list. There is no ready explanation for this differential propensity to theocracy, but a prior understanding of the appropriate environment for a theocracy will help us toward making sense of these propensities as well.

This chapter addresses the question of the appropriate environment for theocracy by treating theocratic government as an option that a religious organization or movement—here called a church for convenience—can purposely choose, the alternative option being the contracting out of the business of government to an outside party. The choice of theocracy versus secular government is here viewed as a make-or-buy choice: whether to "produce" government in-house or to outsource it under a proper procurement contract. Needless to say, the kind of government the church wants in either case is not likely to be just like any ordinary public administration: it will focus on the upholding and servicing of the ways of life that the church views as its mission to enforce on, or elicit from, the lay society. Hence, failure of delivery on a procurement contract will typically not mean delaying the release of passports to citizens, say, but allowing the heathens to defile a holy place.

The sequence of models that follow feature a "church" and a "ruler" as the principal and agent, respectively, of agency theory. In one model the ruler is a clergyman, in the other an outside contractor. The contract between church and cleric differs from the contract between church and outsider in that the latter contract must confront a problem of private

information about costs whereas the former need not. Our approach departs from standard asymmetric information theory in that it views the alternative between in-house and outside production, or full-information versus hidden-information contracts, not as a feature of the world but as a *choice* that the church (the principal) is free to make.

Why would a principal ever choose a second-best, hidden-information arrangement if he can avail himself of a first-best, full-information arrangement? Because the full-information regime, which relies on insiders to the church (clerics), has inherent disabilities. These may be of two kinds. The first possibility is incompetence: clerics have made an investment in clerical skills to the detriment of other, administrative or political skills. The basic principles of division of labor and specialization speak against professional clerics doubling as secular officials. If this skill gap is relevant the church may be willing to relax control in exchange for better governing abilities. The second possibility is corruption: if the church's control over its clergy is weak, the latter may take advantage of it and pursue a private agenda. This is particularly relevant since by definition a theocracy relies on a religious monopoly, and monopoly religion tends to be more corrupt than competitive religion, other things equal.[2] Thus in some cases the church may want to artificially create an agency problem with an outside agent for the purpose of putting a brake on inside corruption.[3]

Principal-agent models are in a sense reduced-form models that feature only two parties to a contract; the third party—here, the population or society at large—is left in the background. This may puzzle the reader. Is the population indifferent as between regimes? And what if the people think that the religion itself is wicked, its leadership totally corrupt, so that they want neither theocracy nor church-controlled government at all? Furthermore, assigning the church the role of principal and the ruler that of agent may be puzzling too: why not the other way round?

The best way to understand our approach is to focus on a society in which there is one dominant religion, and other religions either do not exist or are clearly a minority; the larger this minority, or the more the society is split along religious cleavages, the higher the probability that the outside ruler may listen to the minority and turn out to be "bad" from the church's point of view. Within the dominant religion, we assume, people are willing members of it and have no quarrels with the church leadership, so that the latter is popularly legitimated and empowered to either directly run the government or hire a ruler on the people's behalf. This assumption seems logical in our setup because, if people thought that the church leaders themselves are fundamentally corrupt, they would not really be willing members and the church would not be powerful enough to be the principal to a government contract. In such a one-religion society, or subset of society, made up of willing members, were it not for other factors, people would always want to live under a theocracy—provided it is *their* brand of theocracy. This is because clergymen have already made

a specific, non-salvageable investment in a clerical career and therefore are more trustworthy as government officials than any lay person: other things equal, the penalty for misbehavior is higher for clerics than for nonclerics, because dismissal of the former, unlike the latter, entails the loss of the religious asset which is useless elsewhere. Thus taking a clerical career prior to the access to political office is like posting a bond. From this point of view, somewhat paradoxically, the proper question to ask is not why theocracies exist at all, but why there are so few of them: why are one-religion societies not all theocracies? Our answer to this question will revolve around the disabilities of theocratic government mentioned above.

Finally, a church can be the principal and make the contract choice only if it is the dominant power in a society, which implies that secular powers or monarchs are for some reason distant, vacant, weak, or uninterested; the list of theocracies given above, which will be surveyed in section 2.7 below, shares in fact this feature, either because of the accidents of empire or colonization or the incidents of revolution.[4] On the other hand, it must be the case that such gaps in the web of secular power do occur somewhere, sometime; we would never observe a theocracy if the world were at all times completely partitioned into strong, established secular states. As the model to be developed below will show, we should never observe a theocracy when the probability of a "bad state"—an unfriendly ruler—is very high; in such a case the church will be wise to take cover and buy protection from the ruler. Thus, both the attitude of society and the church's power as a principal are captured by the environmental parameters that bound the regime choice in the models to follow.

The chapter is organized as follows. The next section describes the economic environment and the basic choice setting. Sections 2.3 and 2.4 characterize the full-information contract, or theocracy, and the hidden-information contract, or secular government, respectively. Section 2.5 models the church's choice of contract as a function of environmental parameters, and section 2.6 resorts to numerical calculation to establish the main theoretical result of the chapter. Section 2.7 surveys the historical evidence and finds that our theoretical findings account well for the religions' differential propensity to theocracy, for the occurrence and persistence of both conservative and revolutionary theocracies, and for the special Islamic mix of regimes. Section 2.8 concludes.

2.2 The Economic Environment

Suppose that the church's gross benefits from political government, b, depend only on the ruler's effort, e, through a deterministic function $b(e)$, with $b(0) = 0$, $b' > 0$, and $b'' \leq 0$. The church maximizes expected net benefits, that is, gross benefits minus wages paid to the ruler. Of course, in each particular case, these benefits will consist of different things, depending on

how the church wants society to be ordered, and therefore, ultimately, on the church's theology. But there is no need for the model to specify a particular theology.

The ruler's effort level is fully observable by the church; however, the ruler's disutility from effort is influenced by a random factor θ, whose realization is observed by the church only if the ruler himself is a cleric, that is, if government is managed directly by the church. We call this arrangement a theocracy. By contrast, if the business of government is contracted out to a lay ruler, only the latter, not the church, observes the state of nature θ. We call this arrangement a secular regime, though controlled by the church. The church is free to choose which regime to implement, that is, whether to run the government in-house as a theocracy or to make a deal with an outsider to get the job done. In either case, the ruler, whether lay or clerical, has to be motivated to accept the contract, hence the church's maximization problem is subject to a participation constraint. In addition, under the secular regime, an incentive-compatibility constraint arises which further bounds the church's choice of contract.

Since the church's choice of regime is in effect a choice between a full-information and a hidden-information arrangement, it is trivial to show that, other things equal, the former is always strictly superior to the latter. This basic insight from principal-agent theory captures the idea that a theocracy has a uniquely valuable asset: if the public official is a cleric, he has already posted a bond with the church, as it were, a bond whose value will be lost if he is caught shirking on his duties and fired; hence from the people's point of view a cleric is more trustworthy than a lay official. However, there are countervailing factors: incompetence and corruption, which might worsen the performance of clerical rule. If the clerics' skills at government jobs are inferior to those of a lay ruler—which they must be because of their specialization in clerical work—then other things are not equal and the church may after all prefer contracting out. Furthermore, if the church's control over its own personnel is weak enough that their self-serving activities are bad enough, then the theocracy may after all turn out to be inferior to the secular regime. In other words, the church may want to *purposely create* a hidden-information agency problem with an outside contractor, where none need exist, in order to hold its own corruption in check. Our model is compatible with both interpretations, even though we will often use the corruption interpretation for ease of exposition. Our central concern will be to establish under what environments one regime becomes preferable to the other from the church's point of view.

Under either regime, the ruler is a risk-neutral expected utility maximizer.[5] His utility from wages, w, and effort, e, depends on the state of nature θ. We use an additively separable utility function of the form:

$$U(w, e, \theta) = w - c(e, \theta) \tag{1}$$

The cost of effort function $c(e, \theta)$ has the following specifications:

$$\begin{aligned} &c(0,\theta) = 0 && \text{for all } \theta \\ &c_e(e,\theta)\begin{cases} > 0 & \text{for } e > 0 \\ = 0 & \text{for } e = 0 \end{cases} \\ &c_{ee}(e,\theta) > 0 && \text{for all } e \\ &c_\theta(e,\theta) < 0 && \text{for all } e \\ &c_{e\theta}(e,\theta)\begin{cases} < 0 & \text{for } e > 0 \\ = 0 & \text{for } e = 0 \end{cases} \end{aligned} \tag{2}$$

In words, the ruler's cost of effort is increasing and strictly convex in the effort level. Higher values of θ denote more productive states of nature in the sense that both total and marginal cost of effort are lower when θ is higher. For simplicity, we assume that θ can take on only one of two values, $\theta_H > \theta_L$, with $\text{Prob}(\theta_H) = P$. The ruler has a reservation utility level $U°$. In addition, in any state of nature, when he is a clergyman, the ruler can secure private benefits to the amount K (or, his effort cost is higher—his productivity lower—by the amount K): the church must take this into account when designing a contract that satisfies the participation constraint.

In this setup, under any regime, effort itself is always observable, so the contract can explicitly state the effort level required. However, an efficient contract that maximizes the principal's payoff must make the level of effort responsive to the cost incurred by the ruler, and hence to the realization of θ.

2.3 Theocracy

As explained above, a theocracy makes the state of nature observable by the church but is liable to be incompetent or corrupt. Thus, a complete information contract directly specifies effort level and wage contingent on each realization of θ and ensures the cleric an expected utility that is no lower than his reservation utility plus his private benefits from corruption (or his additional effort cost). With only two states of nature, the church solves the following problem:

$$\begin{aligned} &\max_{w_H, w_L, e_H, e_L} P\big(b(e_H) - w_H\big) + (1-P)\big(b(e_L) - w_L\big) \\ &s.t. \quad P\big(w_H - c(e_H, \theta_H)\big) + (1-P)\big(w_L - c(e_L, \theta_L)\big) \geq U° + K \end{aligned} \tag{3}$$

At the optimal solution, the participation constraint must bind. Note that the degree of corruption, or the extra cost, K, is analytically equivalent to an increase in the agent's reservation utility. Risk neutrality implies that wages and utilities in each state are indeterminate at the optimum, but this does not matter as long as the agent's expected utility satisfies the constraint.

Denoting by e_{H}^{*}, e_{L}^{*} the solutions to this problem, for strictly positive effort levels, the first-order conditions for an interior solution yield:

$$b'\left(e_{\mathrm{H}}^{*}\right) = c_{\mathrm{e}}\left(e_{\mathrm{H}}^{*}, \theta_{\mathrm{H}}\right) \tag{4a}$$

$$b'\left(e_{\mathrm{L}}^{*}\right) = c_{\mathrm{e}}\left(e_{\mathrm{L}}^{*}, \theta_{\mathrm{L}}\right) \tag{4b}$$

Thus, predictably, the optimal level of effort in each state equates its marginal benefit with its marginal cost.

2.4 Secular Government

Under this regime, only the ruler knows the true state of nature, so he may lie to the church and claim that it is θ_{L} when it is in fact θ_{H}, thereby lowering the church's net benefits; therefore the full-information contract described above is unfeasible.

To characterize an optimal contract in this setting, we rely on the revelation principle (Myerson, 1979; Baron and Myerson, 1982). By this principle, the principal can never do better than implementing a contract which requires the agent to announce which state has occurred, specifies an outcome (w, e) for each possible announcement of θ, and makes it optimal for the agent always to report the state *truthfully*. Thus an incentive-compatibility, or truth-telling, constraint is added on to the principal's contract design problem.

Of course, since only the ruler observes the state, if he is to accept the contract he must be guaranteed a utility of at least $U°$ in *each* state. Given the revelation principle, the contract specifies two pairs of values, (w_{H}, e_{H}) and (w_{L}, e_{L}), which are the outcomes (wage and effort levels) that are assigned to different *announcements* of the state by the ruler. To find the optimal wage-effort pairs, the church solves the following problem:

$$\begin{aligned}
&\max_{w_{\mathrm{H}}, w_{\mathrm{L}}, e_{\mathrm{H}}, e_{\mathrm{L}}} P\left(b\left(e_{\mathrm{H}}\right) - w_{\mathrm{H}}\right) + \left(1-P\right)\left(b\left(e_{\mathrm{L}}\right) - w_{\mathrm{L}}\right) \\
&s.t. \quad \text{(i)} \quad w_{\mathrm{L}} - c\left(e_{\mathrm{L}}, \theta_{\mathrm{L}}\right) \geq U° \\
&\qquad \text{(ii)} \quad w_{\mathrm{H}} - c\left(e_{\mathrm{H}}, \theta_{\mathrm{H}}\right) \geq U° \\
&\qquad \text{(iii)} \quad w_{\mathrm{H}} - c\left(e_{\mathrm{H}}, \theta_{\mathrm{H}}\right) \geq w_{\mathrm{L}} - c\left(e_{\mathrm{L}}, \theta_{\mathrm{H}}\right) \\
&\qquad \text{(iv)} \quad w_{\mathrm{L}} - c\left(e_{\mathrm{L}}, \theta_{\mathrm{L}}\right) \geq w_{\mathrm{H}} - c\left(e_{\mathrm{H}}, \theta_{\mathrm{L}}\right)
\end{aligned} \tag{5}$$

The first two constraints are the participation constraints for each state, as described above. The last two are the incentive-compatibility or truth-telling constraints for each state. For example, constraint (iii) says that when state θ_{H} obtains, the agent's utility if he reports the truth is no lower than if he claims that state θ_{L} has occurred instead. Constraint (iv) is interpreted similarly.

The solution to this problem is developed in the Appendix. There it is shown that only constraints (i) and (iii) bind in the optimal contract. This immediately implies that constraint (ii) holds as a strict inequality: thus the agent receives just his reservation utility in the bad state whereas he earns a surplus in the good state. Furthermore, denoting by $\hat{e}_L$, $\hat{e}_H$ the solutions to this problem, optimal effort levels are given by the following equations:

$$b'(\hat{e}_H) = c_e(\hat{e}_H, \theta_H) \tag{6a}$$

$$(1-P)\left[b'(\hat{e}_L) - c_e(\hat{e}_L, \theta_L)\right] + P\left[c_e(\hat{e}_L, \theta_H) - c_e(\hat{e}_L, \theta_L)\right] = 0 \tag{6b}$$

Equation (6a) is identical to (4a). In equation (6b), the second bracketed expression is negative (recall equation [2]), hence the first bracketed expression must be positive to satisfy the equation. Therefore, $\hat{e}_H = e^*_H$ and $\hat{e}_L < e^*_L$. The optimal contract sets the level of effort in state θ_H at its full-information level e^*_H, whereas in state θ_L it sets effort strictly below its first-best level e^*_L. As a consequence, the church's expected net benefits are strictly lower than those it receives (absent incompetence or corruption) when θ is observable. It is worth noting that here the church has two sources of losses in comparison with the full-information contract: one is a deadweight loss (an inefficiently low effort level in state θ_L), the other is a transfer to the ruler (a surplus wage for the same, efficient effort level in state θ_H). The relative weight of each type of loss depends on the relative probabilities of the two states.

The intuition for these results is that the ruler's private information about θ is an asset that is valuable to the church; if the ruler is to release his control of this asset (i.e., report the truth) he must be paid what is in effect a monopoly rent. This takes the form of making it in the ruler's best interest to report θ_H when it occurs by allowing him a surplus, whereas reporting θ_L earns him no surplus. (Recall that were it not for this incentive, he would be tempted to report θ_L when θ_H occurs.) This is costly to the church, the more so the higher is P, the probability of the good state. By combining constraints (i) and (iii) as equalities, it is easy to check that the agent's surplus utility in state θ_H is equal to $c(e_L, \theta_L) - c(e_L, \theta_H)$, the cost difference between states for the same level of effort; were he not paid this rent, the ruler would again report θ_L when θ_H occurs. Now this difference shrinks as e falls (recall from [2] that it vanishes as e goes to zero). Therefore when the probability of θ_H is high, the church will be driven to lower e_L even more, thereby losing benefits from state θ_L (whose probability is low anyway), in order to reduce its losses from the rents paid out in state θ_H. Differentiation of equation (6b) confirms that the optimal $\hat{e}_L$ falls as P rises (see appendix A). Figure 2.1 illustrates the optimal hidden-information contract in the w–e space.

Here the upward-sloping, convex curves are the indifference curves for each state corresponding to the reservation utility, while the increasing concave curves are iso-benefit curves. When the state is observable the solution

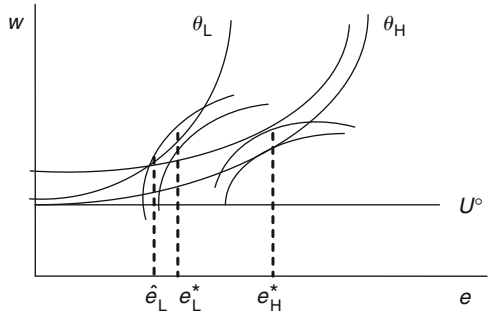

Figure 2.1 The Optimal Contracts under Full versus Hidden Information

is at the tangency points e^*_H and e^*_L (equations [4a] and [4b]). When the state is not observable the solution for state θ_H is still at a tangency point for the same level of effort (equation [6a]), but for a higher wage. This surplus wage insures that the agent does not lie when state θ_H occurs by giving him the same utility as in state θ_L (constraint iii): hence the tangency point occurs with a θ_H indifference curve which is above reservation utility and passes through the (w, e) pair that obtains in state θ_L. If this pair were the efficient one as under full observability, the surplus would be too high, so effort falls below e^*_L to $\hat{e}_L$ in order to relax the truth-telling constraint and reduce the surplus wage at e^*_H (equation [6b]). The surplus is therefore measured by the vertical distance between the two relevant indifference curves for state θ_H, that is, by the cost difference between states at $\hat{e}_L$.

An implication of this analysis underlines a key difference between the two regimes. Under the full-information regime (theocracy), optimal effort levels do not depend on the probabilities of the two states (although of course the church's total expected benefits do). In the hidden information contract, by contrast, optimal effort level in state θ_L does depend on the probabilities (equation [6b]). Keeping this in mind, we can proceed to consider the choice of regimes.

2.5 Choosing between Regimes

The church will naturally choose the arrangement that yields the largest expected net benefits. By substituting the constraint into expected benefits when θ is observable, EB_O (equation [3]), and substituting constraints (i) and (iii) into expected benefits when θ is not observable, EB_N (equation [5]), and simplifying, we find that $EB_O - EB_N \geq 0$ if and only if

$$(1-P)\left[\left(b\left(e^*_L\right)-c\left(e^*_L,\theta_L\right)\right)-\left(b\left(\hat{e}_L\right)-c\left(\hat{e}_L,\theta_L\right)\right)\right] + P\left[c\left(\hat{e}_L,\theta_L\right)-c\left(\hat{e}_L,\theta_H\right)\right]-K\geq 0 \quad (7)$$

If this condition holds, theocracy is superior to secular government. It will be noticed that although the outcome in state θ_H is part of total benefits

under each regime, it drops out from (7) since in both regimes e^*_H is efficient and independent of probabilities. The first bracketed expression on the LHS is the net benefit difference between regimes in state θ_L and is positive because e^*_L is efficient whereas $\hat{e}_L$ is not; the second expression is also positive as it measures the surplus wage at e^*_H. Therefore condition (7) would always be satisfied with strict inequality if K were equal to zero: absent incompetence and corruption, a first-best contract is trivially superior to a second-best one. Clearly, though, incompetence or corruption can be serious enough to overturn the inequality and make secular government superior to theocracy.

However, for any given level of K, the LHS of (7) is a function of two parameters: the probabilities of the two states and the distance between them, that is, how bad the bad state is and how likely it is to occur. There will be configurations of these parameters that make theocracy more resilient, or more profitable, despite incompetence or corruption: these environments will be the most favorable to the occurrence and persistence of theocracy. To find out what these look like, we treat the parameters P and θ_L (given θ_H) as variables and ask how the difference in expected net benefits between regimes, $EB_O - EB_N$ (i.e., the LHS of [7]), changes as those variables change. The difficulty lies in the fact that, as condition (7) shows, there are two sources of loss to the church under the secular regime, a transfer to the ruler at θ_H and an efficiency loss at θ_L, and the two vary inversely with each other: reducing the transfer involves increasing the efficiency loss and vice-versa.

Let us begin by looking at the changes in EB_O and EB_N separately as P and θ_L change (see appendix A). EB_O increases linearly in P (see equation [3]). EB_N is first decreasing then increasing in P, reaching an interior minimum. For a given θ_L, there will be a maximum difference $EB_O - EB_N$ at a value $\overline{P}$ to the right of this minimum. On the other hand, EB_O and EB_N are both increasing and convex in θ_L, but EB_O increases faster (more slowly) than EB_N when P is lower (higher) than a critical value P^*, at which the two rates of increase are exactly equal and the difference $EB_O - EB_N$ is at a maximum. An example is shown in figure 2.2, which depicts EB_O and EB_N as functions of P, for given values of θ_L. An increase in θ_L results in upward shifts of these curves. $\overline{P}$ is the optimal P at the initial level of θ_L. P^* is the level at which $\partial EB_O / \partial \theta_L = \partial EB_N / \partial \theta_L$. Clearly, as P^* is below $\overline{P}$, in the neighborhood of the latter the rise in θ_L increases EB_O by less than it increases EB_N, making the benefit difference fall. The figure also suggests that an infinitesimal change in θ_L would not change $EB_O - EB_N$ if $P^* = \overline{P}$, which would be the full optimum. Finally, an increase in K, the level of incompetence or corruption, would be simply captured by a parallel downward shift of EB_O in the figure, squeezing the range of P values where theocracy remains superior to the secular regime.

Turning now to the simultaneous optimization problem, we treat the LHS of (7)—itself a maximum value function in e^*_L and $\hat{e}_L$—as an objective function and proceed to maximize it with respect to P and θ_L, while making

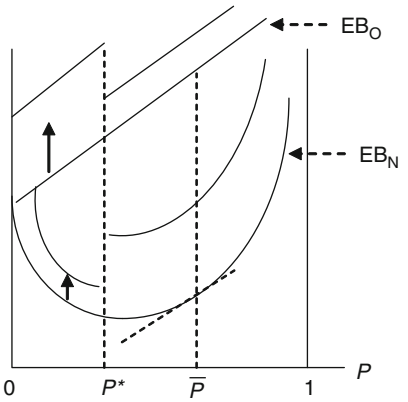

Figure 2.2 The Church's Expected Benefits under the Two Contracts

use of the first-order conditions of the previous two problems throughout (i.e., making sure that all contracts are optimal at all parameter values); the combination of parameters that solves this problem, if it should happen to be realized, is where the comparative advantage of theocracy is at its best.

Unfortunately, in general, there is no way of telling in what region of the $P-\theta_L$ space the full theocratic optimum T may lie; indeed, it is not even clear whether it may be an interior or a corner solution.[6] The fact that with respect to the probability range the optimal $\overline{P}$ lies to the right of the minimum of EB_N, which is in turn an interior point (see figure 2.2), strongly suggests that for a given θ_L this optimal probability cannot be too close to the lower end of the range. With respect to the low-productivity state θ_L, it is unlikely that its optimal value be too close to the upper end of its range, where (for θ_L close to θ_H) the two regimes become virtually indistinguishable. But beyond that, to gain some insight into the location of the optimum we must resort to specific functions and numerical calculation, to which we now turn.

2.6 A Numerical Example

In keeping with the assumptions of our general model, let us pick a standard gross benefit function which is strictly concave in the level of effort:

$$b(e) = \alpha\sqrt{e} \quad \text{with } \alpha > 0 \tag{8}$$

and a simple cost function which is strictly convex in the effort:

$$c(e,\theta) = \frac{1}{2}\frac{e^2}{(1+\theta)} \tag{9}$$

The latter satisfies all of the requirements for the cost function (2) above.[7] For the moment, set $\alpha = 2$ in (8). Define $\theta_H = 1$ as the upper bound of θ_L and zero as its lower bound. We thus have a 1×1 space.

With these functions, we can write the counterparts of equations (4b) and (6b) as follows:

$$e_{\mathrm{L}}^{*} = \left(1+\theta_{\mathrm{L}}\right)^{2/3} \tag{4b'}$$

$$\left(1-P\right)\left(\frac{1}{\sqrt{\hat{e}_{\mathrm{L}}}} - \frac{\hat{e}_{\mathrm{L}}}{1+\theta_{\mathrm{L}}}\right) + P\left(\frac{\hat{e}_{\mathrm{L}}}{2} - \frac{\hat{e}_{\mathrm{L}}}{1+\theta_{\mathrm{L}}}\right) = 0 \tag{6b'}$$

Moreover, the overall benefit difference between regimes (the LHS of (7), ignoring K) becomes

$$\left(1-P\right)\left[\left(2\sqrt{e_{\mathrm{L}}^{*}} - \frac{1}{2}\frac{e_{\mathrm{L}}^{*2}}{\left(1+\theta_{\mathrm{L}}\right)}\right) - \left(2\sqrt{\hat{e}_{\mathrm{L}}} - \frac{1}{2}\frac{\hat{e}_{\mathrm{L}}^{2}}{\left(1+\theta_{\mathrm{L}}\right)}\right)\right] + P\left(\frac{1}{2}\frac{\hat{e}_{\mathrm{L}}^{2}}{\left(1+\theta_{\mathrm{L}}\right)} - \frac{1}{2}\frac{\hat{e}_{\mathrm{L}}^{2}}{2}\right) \tag{10}$$

Maximizing (10) with respect to P and θ_{L} yields, after slight manipulation, the following first-order conditions[8]:

$$-\left(2\sqrt{e_{\mathrm{L}}^{*}} - \frac{1}{2}\frac{e_{\mathrm{L}}^{*2}}{\left(1+\theta_{\mathrm{L}}\right)}\right) + \left(2\sqrt{\hat{e}_{\mathrm{L}}} - \frac{1}{2}\frac{\hat{e}_{\mathrm{L}}^{2}}{2}\right) = 0 \tag{11a}$$

$$\left(1-P\right)e_{\mathrm{L}}^{*2} - \hat{e}_{\mathrm{L}}^{2} = 0 \tag{11b}$$

Thus, the complete optimization system (4b'), (6b'), (11a), (11b) simultaneously determines (e_{L}^{*}, $\hat{e}_{\mathrm{L}}$, θ_{L}, P) in such a way that contracts of each type are optimal throughout and parameter values yield a maximum of theocratic advantage (10).

First, ignore equation (11b). The first three can be numerically solved for e_{L}^{*}, $\hat{e}_{\mathrm{L}}$, and $\overline{P}$ for given values of θ_{L}. This exercise yields a slowly increasing, convex $\overline{P}\left(\theta_{\mathrm{L}}\right)$ curve, which starts at $P = 0.66$ for $\theta_{\mathrm{L}} = 0$, rises to 0.68 for $\theta_{\mathrm{L}} = 0.25$, to 0.72 for $\theta_{\mathrm{L}} = 0.5$, to 0.78 for $\theta_{\mathrm{L}} = 0.75$, to 0.85 for $\theta_{\mathrm{L}} = 0.9$, and ends up at $P = 1$ for $\theta_{\mathrm{L}} = 1$. Now take the starting point of this curve, where at $\theta_{\mathrm{L}} = 0$ we have $e_{\mathrm{L}}^{*} = 1$, $\hat{e}_{\mathrm{L}} = 0.64$, $\overline{P} = 0.66$, and plug these numbers into the LHS of (11b): this expression turns out negative. Hence a further fall of θ_{L} below zero would still increase $\mathrm{EB_O} - \mathrm{EB_N}$. In other words, the function $P^{*}\left(\theta_{\mathrm{L}}\right)$ that satisfies (11b) lies outside and to the left of the square box that bounds our parameter values. Therefore we have a corner solution[9] at $\theta_{\mathrm{L}} = 0$, $P = 0.66$. Figure 2.3 depicts the solution with some indifference curves. The reader can readily check that the partial-equilibrium example of figure 2.2 fits neatly in this $P - \theta_{\mathrm{L}}$ space.

If we go back to function (8) and change the scale parameter α, our results are unaffected: effort levels are scaled up or down but the $\overline{P}\left(\theta_{\mathrm{L}}\right)$ curve shifts only minimally and the corner solution remains. This is what one would expect as a parametric shift of the benefit (or of the cost) function that affects *both* regimes leaves the comparative advantage unchanged.

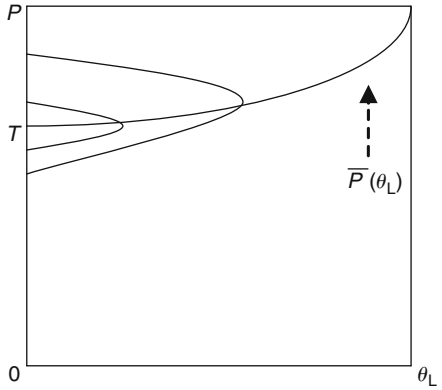

Figure 2.3 Theocracy as a Corner Solution

This exercise cannot of course lay any claim to generality. However, the specific functions that we have used do not seem special or biased in any way. While it may be possible to find plausible cost functions that behave differently in some respects—for example, yielding decreasing $\overline{P}(\theta_L)$ and $P^*(\theta_L)$ curves—the results here found seem robust and consistent enough to be taken seriously and deserve comment.

The first finding that deserves stressing is that under all specifications the $\overline{P}(\theta_L)$ curve starts high, well above the midpoint of the probability range, and then remains almost flat as θ_L rises until it starts picking up near the end and converges to the (1, 1) corner. This implies that for the greatest part of the range of θ_L values, the optimal probability $\overline{P}$ is nearly constant at a value between 2/3 and 3/4. Theocracy is at its best when the *good* state is substantially more likely to occur than the bad state.

The second finding that deserves emphasis is the corner solution at $\theta_L = 0$: theocracy is at its best when the bad state, even though not very likely to occur, is *really bad* when it does occur. This is the main theoretical result of this chapter: the optimal environment for a theocracy is one which is very bad on one dimension but fairly good on the other. Taken jointly, these two findings are counterintuitive, but on reflection they fit neatly into the logic of our model. Loosely speaking, theocracy is at its best when secular government is at its worst. In the latter regime, we know that the church has two sources of losses compared to a theocracy: an inefficiently low output in the bad state and a transfer to the ruler in the good state. We also know that the two are related in that the output loss in the bad state is purposely incurred in order to reduce the transfer. Now when the good state is very frequent (very high P) transfers are large but the overall weight of the output distortion in the bad state, which is aimed at mitigating them, is low in the church's expected net benefits since this state occurs so infrequently. On the other hand, when the bad state is moderately to very frequent (middle to low P) transfers are small so the distortion need not be very large, although it occurs fairly frequently. But for high enough values of P, transfers are

substantial as the good state occurs fairly frequently, and output distortions weigh heavily in expected benefits as they are both not insubstantial and occur frequently enough. So a critical value of P around 2/3 compounds and exacerbates both weaknesses of the secular regime.

On the other hand, we have seen that the difference in performance between regimes hinges entirely on the bad state: the worse this is (the larger the gap between θ_L and θ_H), the greater the inefficiency of the secular regime. It can be demonstrated[10] that a change in θ_L has always a larger impact on $\hat{e}_L$ than on e^*_L. Therefore for any given level of P, a fall in θ_L monotonically widens the effort gap between regimes and hence the output loss in the secular regime, so that this loss is maximized at $\theta_L = 0$.

2.7 A Look at the Historical Evidence

The foregoing model directs us to look for theocracies in situations in which the bad state is not very likely but, when it does occur, is very bad—indeed the worst possible for the church. The next question then is, what could the worst state of affairs be for a religion? One obvious answer immediately comes to mind: the prospect of termination of the religion itself. There is a real possibility that the next ruler might decide to make an about-turn and start disestablishing the church and suppressing and persecuting its practices. Then the church will be wise to fend off the threat by becoming a government unto itself. This terminal threat, however, must not be too likely, for if it is very likely it becomes more practical and less expensive for the church to "buy protection," that is, to scale down its requests and expectations somewhat and compensate the ruler for behaving himself.

A similar reasoning applies to situations where the established church does not have the power, nor perhaps the interest, to impose a theocracy, but a militant group, a radical movement, or an insurgent organization is able and willing to fight for it and oppose the secular government, thus in effect "choosing" between (the fight for) theocracy and (the accommodation with) secular rule. As we will see below, this "as if" interpretation is particularly relevant for early modern Protestant radicals and late modern Islamic extremists.

2.7.1 Propensity to Theocracy

The answer just given, however, begs a further question: what does "termination of the religion" exactly mean? The answer to this further question hinges critically on the type of religion, and more accurately, on whether the religion is mainly behavior-based or doctrine- or faith-based. A behavior-based religion asks relatively little of the believer in terms of profession of faith and focuses mostly on the person's publicly observable, outward behavior in everyday life: this group includes, for all their differences, Islam, Judaism, and Protestantism. By contrast, a doctrine-based religion demands orthodoxy of belief and, since theological subtleties in

the believer's mind cannot possibly be monitored, it focuses on practice and ritual *inside* the church and has very little in the way of behavioral restrictions: both Catholic and Orthodox Christianity belong here. Elsewhere (Ferrero 2006a, 2007) I elaborated this distinction in detail and showed how it differentially affects the propensity to, and the form taken by, religious extremism or fundamentalism. Here we need only note that a heathen ruler intent on suppressing the religion faces a very different task in the two cases.

Suppressing a behavior-based religion is relatively easy, because it has to deal with public behavior. Kings beholden to heathen cults introduced the worship of foreign gods and encouraged the marriage of foreign women in the land of Israel. In the territory of Utah a heathen ruler (i.e., the United States) would have at once outlawed polygamy and legalized saloons and brothels. A religiously lax sultan would permit the unveiling of women and the operation of non-*sharia* courts of law. A lay Tibetan prince might weaken or break the ordinary people's dependence on the Buddhist monasteries for all their needs. These things are not just desirable implications of the religion: they *are* the religion. This accounts for the vast majority of cases in the theocracies' list.

By contrast, suppressing Catholic or Orthodox churches would literally require burning down the churches and prohibiting the rituals, which would drive them underground as in the glory days of early Christianity: something that not even the Roman emperors at the height of their persecutions ever seriously attempted to achieve (see Ferrero, 2006b). In other words, being focused on practices behind closed doors, these religions can survive in a hostile environment in a way that those of the first group cannot. *Ulemas* don't marry people, the state does: hence a marriage is not a good Muslim marriage if the state is not a proper Caliphate. By contrast, Catholic marriages have to be performed by ordained priests, irrespective of whether the state recognizes them as legally valid. Hence, Catholic theocracies are confined to peculiar, exceptional circumstances[11]: the very heartland of the religion (the Papal states), the protection of native converts in Paraguay against enslavement by the nearby Portuguese raiders, or warring colonial kingdoms whose raison d'être was the defense of the holy places in Palestine and which were therefore run by orders that were religious and military at the same time. Finally, being acephalous and nonmissionary, at least after the early days, the Orthodox churches never found themselves in any such predicaments.

A glance at other religions that never turned theocratic provides tentative support to our approach. For example, consider another major world religion which deeply permeated its society: Hinduism. Here the caste system enforced a division of labor which was not negotiable and could never be altered. As a consequence, the option of Brahmins turning warriors (rulers) could never be an issue and the choice problem that lies at the heart of our model never arose. On the other hand, the same system guaranteed institutionalized protection of the religion, so that the main motive for resorting

to theocracy was lacking in the first place—at least as long as the ruler was himself a Hindu bound by the caste system rules. So, for better or worse, traditional India was spared the option of theocracy.

2.7.2 Conservative Theocracies

Thus, identifying a threat to the very survival of the religion as a prime motive for the rise of a theocracy provides an explanation for the differential occurrence of theocracies in different religions. We now turn to a bird-eye review of historical instances of conservative theocracies to show that they nicely fit our model's predictions.

The history of the two kingdoms (Shanks, 1999) that comprised the land of Israel between the death of king Solomon and the Babylonian exile is dotted by kings who lapsed back into multiple religious allegiances and sparked the outcry of a string of prophets from Amos to Jeremiah, followed in each case by a "reforming" king who promoted the religion of Yahweh back to the leading position.[12] Overall, this four-centuries-odd period was one in which Yahweh was Number One, not the Only One (Lane Fox, 1992). The lesson was not lost to the Yahwist minority in exile who subsequently returned to Judea to reclaim their homeland and rebuild the Temple under Persian protection: from the return to the onset of Roman rule Israel was a theocracy where there was no secular authority above or beside the High Priest and Yahweh was at last the Only One. Those were relatively quiet times as long as the Persian Empire, and then the Greek successors to Alexander, kept a distant oversight and let the Jews alone to go about their own affairs. The threat did materialize on one occasion, however, when in the 160s BCE the Seleucid despot Antiochus IV decided to overthrow the Temple cult and enforce all-out Hellenization of the place. This sparked a successful theocratic revolution that established the Hasmonean dynasty in which the king was also the High Priest. Thus the legacy of ancient Judaism for us includes the invention of both the conservative theocracy and the revolutionary theocracy.

The history of ancient Tibet (Stein, 1972; Norbu and Turnbull, 1972) is similar to that of ancient Israel in that since the dawn of recorded history (early seventh century AD) the country was ruled by a monarchy whose kings, and their wives and ministers, alternatively promoted Buddhism and the competing, older Bon religion; just as bad, they often meddled into church affairs by favoring one Buddhist sect against another. Then in the late ninth century the kingdom fell apart through internecine strife and since then no single local ruler was ever able to claim sovereignty over the whole country again. For several centuries thereafter the country was torn apart by conflict between rival monasteries and sects allied with different groups of lay nobility and territorial princes. Then the reformed Buddhist sect (Gelug-pa), established in the early fifteenth century, evolved a hierarchical system of high incarnations which peaked at the Dalai Lama, first recognized as supreme ruler of Tibet by the Mongol emperors in the late sixteenth century. Meanwhile, since the thirteenth century the country had

fallen under the distant but benevolent oversight first of the Mongols and then of the Chinese empire. These powers were happy to leave local affairs entirely in Tibetan hands, and so after centuries of anarchy, for about four centuries, until the Chinese communist takeover of the 1950s, Tibet was a theocracy, where the Dalai Lama, as the supreme head of the church, exercised whatever governmental functions were needed in a traditional society locked away from the rest of the world.[13]

The development which led to the establishment of the Papal theocracy follows the same broad pattern.[14] The three centuries between the fall of the Western Roman empire and the granting of sovereign territory to the pope by a Frankish king saw the political situation in Rome swinging widely as Italy passed from one foreign domination to the other, not always friendly to the Papacy. So when the opportunity for independent political sovereignty materialized in the eighth century the pope gladly seized it and never released it again until the kingdom of Italy took over the city in 1870.

2.7.3 Revolutionary Theocracies

Addressing the Protestant theocracies involves turning from conservation to revolution. A string of dissident groups tried to break away from the grip of the established church since the Middle Ages and then on through the Reformation and beyond, and to establish a "republic of the saints" where religion and worldly politics would be one. The list includes the Savonarola dictatorship in Florence, the Taborites in Bohemia, the Anabaptist "kingdom" of Münster, Geneva under Calvin, the English Puritans,[15] the Mormons in nineteenth century America, and many more; most of them, especially the early attempts, were wiped out. For illustration we will pick two examples: the Anabaptists and the Mormons.

The key to the Anabaptist story is the millenarian belief (Cohn, 1970; Bax, 1970; Lewy, 1974): the expectation that the Second Coming of the Lord was imminent and therefore the true Christians should ready themselves to the inception of His earthly kingdom. Persecuted in Holland and Northern Germany, they flocked to the city of Münster where a group led by a prophet had managed to secure control of the city government in early 1534. As ordinary citizens fled and immigration swelled the numbers of true believers, the theocracy turned more and more extreme until, after a long siege and appalling suffering, it fell to the army of the Lutheran prince-bishop of Saxony in June 1935. Clearly, the "bad state" for them would have been truly catastrophic: the collapse of a unique opportunity to reap the rewards awaiting the saints at the upcoming end of time. With the advantage of hindsight, we could say that their chances of survival as an independent "kingdom" were nonexistent, thus disproving the predictions of our model, but apparently they did not see the situation that way. In the turbulent political and religious conditions of Germany in those times, initially it was not at all clear that the bishop might not agree to give up control of the city and let the Anabaptists alone; moreover, hopes of an "international revolution of the saints" that might spread to other cities

ran high at the beginning. But even when these two bets turned out to be a delusion and the saints were left alone to confront hugely superior military forces, they took it as evidence that the final clash of good and evil was drawing near and therefore the Lord could at any time come to the rescue of His chosen people. Therefore buying protection or survival from a secular ruler would have proven disproportionately costly, in *their* view, compared to holding fast to their theocracy to the end.

The Mormons trekked to a distant no-man's land to the West in 1847 to break free from harassment and hostility in their native homeland in upstate New York (Arrington, 1958). They thought they were rehearsing the Exodus to the Promised Land, properly led by the self-appointed successors to their first prophet. These "saints" ran the Mormon society of Utah until the church had to surrender to American pressure in the 1890s. In the 1840s and for some time afterwards, the place was isolated enough that there was little to fear from the "gentile" government faraway in Washington; so buying protection and compromising on the standards of public religious behavior was clearly inferior to the theocratic regime. Things began to change toward the end of the century as railroads, civilian settlement and military control increasingly covered the West, until in the 1890s a compromise on the conditions for statehood became inevitable.

These groups reacted to the demise of theocracy in different ways. The Mormon Church became a powerful state-based pressure group within the federal framework of the American constitution, after giving up on some nonnegotiable issues such as polygamy. The Mennonites, the Hutterites, the Amish, and other groups heir to the Anabaptists retreated into mini-theocracies on a local community scale, negotiating their relationship with the government and exploiting the margins of freedom allowed by usually benevolent, absent "rulers" such as the American and Canadian governments. So as predicted by our model, theocracy died but rose again when, *relative to the group's goals and norms*, the bad state was very unlikely, whereas it died for good when the bad state was very likely.

2.7.4 Islamic Theocracies

The history of Islam (Lapidus, 1988; Berkey, 2003) offers a mixed picture that includes a variant of the conservative type of theocracy—the Caliphate, a number of revolutionary theocracies, and a whole range of secular regimes beholden to the religion. These differences criss-cross the sectarian differences within Islam: among the revolutionary regimes the Iranians are Shiite, the Taliban of Afghanistan and the Mahdi of the Sudan in the 1880s are Sunni, the Assassins of the twelfth century were a splinter group from mainline Shia (the Ismaili Nizari); likewise, in past centuries there were both Sunni and Shia Caliphates ruling over different parts of the Muslim world; and the "secular" regimes born of *jihad* range from Saudi Arabia to Palestine's Hamas.

The key to understanding the peculiar institution of the Caliphate is the Koranic Law, or *sharia*. Unlike any other worldly ruler, the Caliph is supposed to be there to protect and promote the *umma*, the universal Muslim community, and as far as domestic policies are concerned, this protection boils down to the enforcing of the Law, whose administration is properly entrusted to a religious class—the *ulemas*. To gain perspective, it is useful to contrast the Muslim Caliphate with a superficially similar political institution: the Byzantine Empire (Runciman, 1977). In the tradition of the first Christian Roman emperor Constantine, as theorized by church apologists, the Byzantine monarch always styled himself as the protector of the Christian empire, or the vicarious representative of God on earth, and was so anointed and upheld by the church. True to the linguistic roots of the word, they called the empire a theocracy, and this label, confusingly, is still sometimes used by modern historians. But here, unlike in the Caliphate, law-making, law-enforcement, and the court system were completely secular and based on the tradition of Roman law, as were the officials running the legal machinery. Consequently, the final fall of Constantinople to the Ottomans did not involve the suppression of the Orthodox Church, at least not in Greece.

In the Muslim world the institution of the Caliphate soon became entangled with the issue of the proper line of succession to the Prophet—a constant source of sectarian dispute and schism. But even when power fell into the hands of foreign invaders like the Ottoman Turks, who could lay no claims to legitimate succession, they styled themselves as protectors of the faith, so that the collapse of the empire in 1918 marked the end of an era—as Osama Bin Laden reminded the world after 9/11 (Lewis, 2001). Only with the greatest difficulty could the Ottomans take a few sections of the law out of *sharia* and into civil law.

When the institutional protector of the faith fails or wanes, the fallback option is *jihad*, or the holy war (Cook, 2005). While this was often used against infidels at the frontiers of the *umma* or as a weapon of anti-colonial struggle (Dale, 1988), time and again it has been called on against lapsed or corrupt Muslim groups or rulers, and here enters the revolutionary theocracy. *Jihad* has been used in this way since the Middle Ages, for example by the Assassins (Lewis, 1967), and then by charismatic, prophetic figures such as the Mahdi of Sudan (Lewy, 1974, Chapter 8) and those of several parts of sub-Saharan West Africa in the nineteenth century. The Saudis, allied with the rigorist Wahhabi sect, built up their Arabian kingdom through *jihad* from the eighteenth to the early twentieth century; they did not build a full-fledged theocracy because, in the absence of a Mahdi or prophet, the traditional organization of Sunni Islam, unlike that of Shia and other Muslim sects, lacked the hierarchical structure required to fully replace the secular ruler. This disability of the Sunnis, however, has rapidly been overcome in the twentieth century as the intrusion of Western rule and the rise to power of secular, nationalist regimes in the Muslim world sparked the rise and spread of fundamentalist

Islamic revolutionary organizations patterned after Western political parties, from Egypt to Afghanistan, from Iraq to Somalia, from Algeria to Palestine, from Lebanon to Sudan.

How does this picture fit with our model? In premodern and early modern Islamic societies (except perhaps at their fringes), despite the ups and downs of successive regimes, a terminal threat to the very survival of the religion was never felt to be a serious possibility—hence the half-way theocracy of the Caliphate (or the Saudi regime) in which a secular ruler is wedded to a religious class in charge of the law. This changed in the twentieth century with the arrival of Western imperialism and the score of Westernized, "apostate" regimes that arose in its wake. Now abolition of *sharia* law and suppression of the very heart of the religion became a real, impending threat. Where the "heathen" ruler was obviously too bad and too strong to be challenged, theocracy was hopeless and the Muslims turned into a locally powerful pressure group and bought protection from the non-Islamic state, as in the former Soviet republics of Central Asia and the Muslim enclaves in the Balkans. But in western and southern Asia, the heartland of Islam, the roots and traditions were thought to be strong enough that the "bad state" was not overwhelmingly likely to materialize—a theocratic revolution was, and still is, perceived to have real chances of success. Here, Iran's Islamic revolution of 1979 led the way[16]: in this interpretation, the Ayatollahs found the "procurement" contract with the Shah no longer acceptable and decided to "make" government for themselves. So, the rise of revolutionary Islamic theocracy is simply part of a general tendency toward radicalization as a reaction to perceived failure that has characterized Islamist politics in the past several decades (Ferrero, 2005).[17]

2.8 Conclusion

This chapter has addressed theocracy as a regime in which a clergy conducts political government directly in preference to an alternative arrangement where it negotiates a division of labor and rents with a secular ruler. Modeling these two alternatives as a full-information and a hidden-information contract, respectively, of principal-agent theory allows us to ask for which combination of environmental parameters the comparative advantage of theocracy over secular government is greatest. We find that this advantage is greatest when the bad state of the world, if it occurs, is disastrously bad, but the probability of its occurrence is low though not negligible. In such an environment, therefore, theocracies are most likely to arise and persist. A look at the historical evidence suggests that this theoretical result helps to account for the broad traits of a range of observed theocracies, from ancient Israel through the Anabaptists to contemporary Islamist radicalism. Needless to say, the testing of the model on historical theocracies deserves substantial further research.

Appendix A

Derivation of the Optimal Contract with Hidden Information

Recall problem (5). First, we can ignore constraint (ii) because when constraints (i) and (iii) are satisfied it will be satisfied as well, as follows:

$$w_{\mathrm{H}} - c\left(e_{\mathrm{H}}, \theta_{\mathrm{H}}\right) \geq w_{\mathrm{L}} - c\left(e_{\mathrm{L}}, \theta_{\mathrm{H}}\right) > w_{\mathrm{L}} - c\left(e_{\mathrm{L}}, \theta_{\mathrm{L}}\right) \geq U^{\circ}$$

The first inequality is due to constraint (iii) while the last is due to constraint (i). The strict inequality in the middle is due to our assumption (equation [2]) that $c_{\theta} < 0$ for all e. It follows that constraint (ii) will hold with strict inequality, that is, the agent will earn a surplus in state θ_{H}.

Second, we will proceed to solve the problem ignoring constraint (iv) and later show that any solution to problem (5) that ignores constraint (iv) will also satisfy it. Therefore by dropping constraints (ii) and (iv) problem (5) reduces to the following:

$$\begin{aligned} &\max_{w_{\mathrm{H}}, w_{\mathrm{L}}, e_{\mathrm{H}}, e_{\mathrm{L}}} P\left(b\left(e_{\mathrm{H}}\right) - w_{\mathrm{H}}\right) + \left(1 - P\right)\left(b\left(e_{\mathrm{L}}\right) - w_{\mathrm{L}}\right) \\ &s.t. \quad \text{(i)} \quad w_{\mathrm{L}} - c\left(e_{\mathrm{L}}, \theta_{\mathrm{L}}\right) \geq U^{\circ} \\ &\qquad \text{(iii)} \quad w_{\mathrm{H}} - c\left(e_{\mathrm{H}}, \theta_{\mathrm{H}}\right) \geq w_{\mathrm{L}} - c\left(e_{\mathrm{L}}, \theta_{\mathrm{H}}\right) \end{aligned} \tag{A1}$$

Letting $(\lambda, \mu) \geq 0$ be the multipliers on constraints (i) and (iii) respectively, and assuming $(w_{\mathrm{L}}, w_{\mathrm{H}}) > 0$, the Kuhn–Tucker conditions for this problem can be written as:

$$-P + \mu = 0 \tag{A2.1}$$

$$-\left(1 - P\right) + \lambda - \mu = 0 \tag{A2.2}$$

$$Pb'\left(e_{\mathrm{H}}\right) - \mu c_{\mathrm{e}}\left(e_{\mathrm{H}}, \theta_{\mathrm{H}}\right) \begin{cases} \leq 0 \\ = 0 \quad \text{if } e_{\mathrm{H}} > 0 \end{cases} \tag{A2.3}$$

$$\left(1 - P\right) b'\left(e_{\mathrm{L}}\right) - \lambda c_{\mathrm{e}}\left(e_{\mathrm{L}}, \theta_{\mathrm{L}}\right) + \mu c_{\mathrm{e}}\left(e_{\mathrm{L}}, \theta_{\mathrm{H}}\right) \begin{cases} \leq 0 \\ = 0 \quad \text{if } e_{\mathrm{L}} > 0 \end{cases} \tag{A2.4}$$

$$w_{\mathrm{L}} - c\left(e_{\mathrm{L}}, \theta_{\mathrm{L}}\right) - U^{\circ} \begin{cases} \geq 0 \\ = 0 \quad \text{if } \lambda > 0 \end{cases} \tag{A2.5}$$

$$w_{\mathrm{H}} - c\left(e_{\mathrm{H}}, \theta_{\mathrm{H}}\right) - w_{\mathrm{L}} + c\left(e_{\mathrm{L}}, \theta_{\mathrm{H}}\right) \begin{cases} \geq 0 \\ = 0 \quad \text{if } \mu > 0 \end{cases} \tag{A2.6}$$

Conditions (A2.1) and (A2.2) together imply that $\mu = P > 0$ and $\lambda = 1$. Hence, both conditions (A2.5) and (A2.6) hold with equality, that is, both constraints (i) and (iii) must bind at an optimal solution.

Because of our assumptions that $\mathrm{b}'(0) > 0$ and that $c_{\mathrm{e}} = 0$ for $e = 0$ (equation [2]), conditions (A2.3) and (A2.4) cannot hold at $e = 0$. Hence,

both e_L and e_H are strictly positive at an optimal solution, which implies that both (A2.3) and (A2.4) hold with equality. Then, substituting $\mu = P$ and $\lambda = 1$ into these conditions yields equations (6a) and (6b) in the text, which characterize the optimal values of e_H and e_L. Then, w_L and w_H are determined by constraints (i) and (iii), which hold with equality at the solution.

We now show that constraint (iv) is also satisfied at the optimal solution. The binding constraint (iii) yields

$$w_H - w_L = c(e_H, \theta_H) - c(e_L, \theta_H)$$

Since in the solution $e_H > e_L$, the assumption that $c_{e\theta} < 0$ (equation [2]) implies

$$c(e_H, \theta_H) - c(e_L, \theta_H) < c(e_H, \theta_L) - c(e_L, \theta_L)$$

These two together yield constraint (iv) as a strict inequality.

The second-order conditions for this problem are cumbersome but straightforward and will not be reported.

Finally, implicit differentiation of equation (6b) in the text yields:

$$\frac{d\hat{e}_L}{dP} = \frac{\left[b'(\hat{e}_L) - c_e(\hat{e}_L, \theta_L)\right] - \left[c_e(\hat{e}_L, \theta_H) - c_e(\hat{e}_L, \theta_L)\right]}{(1-P)\left[b''(\hat{e}_L) - c_{ee}(\hat{e}_L, \theta_L)\right] + P\left[c_{ee}(\hat{e}_L, \theta_H) - c_{ee}(\hat{e}_L, \theta_L)\right]} \tag{A3}$$

Since the denominator is required to be negative by the second-order conditions, this derivative is negative.

Effects of Parameter Changes

We begin with the two expected benefit functions separately. For EB_N, substituting constraints (i) and (iii) into the objective function (5) at the optimal solution yields:

$$\begin{aligned} EB_N = P\Big\{\Big[b(e_H^*) - c(e_H^*, \theta_H) - \Big]\left[c(\hat{e}_L, \theta_L) - c(\hat{e}_L, \theta_H)\right]\Big\} \\ + (1-P)\left[b(\hat{e}_L) - c(\hat{e}_L, \theta_L)\right] - U^\circ \end{aligned} \tag{A4}$$

whose partial derivatives with respect to P and θ_L are, respectively:

$$\left[b(e_H^*) - c(e_H^*, \theta_H)\right] - \left[b(\hat{e}_L) - c(\hat{e}_L, \theta_L)\right] - \left[c(\hat{e}_L, \theta_L) - c(\hat{e}_L, \theta_H)\right] \tag{A5}$$

$$-c_\theta(\hat{e}_L, \theta_L) > 0 \tag{A6}$$

Where (A5) is equal to zero EB_N reaches a minimum with respect to P, since, given the sign of (A3):

$$\frac{\partial^2 EB_N}{\partial P^2} = -\left[b'(\hat{e}_L) - c_e(\hat{e}_L, \theta_H)\right]\frac{d\hat{e}_L}{dP} > 0 \tag{A7}$$

EB_O is given by substitution of the constraint into the objective function (3) at the optimal solution:

$$EB_O = P\left[b\left(e_H^*\right) - c\left(e_H^*, \theta_H\right)\right] + (1-P)\left[b\left(e_L^*\right) - c\left(e_L^*, \theta_L\right)\right] - U^\circ - K \qquad \text{(A8)}$$

whose partial derivatives with respect to P and θ_L are, respectively:

$$\left[b\left(e_H^*\right) - c\left(e_H^*, \theta_H\right)\right] - \left[b\left(e_L^*\right) - c\left(e_L^*, \theta_L\right)\right] \qquad \text{(A9)}$$

which is a positive constant, and

$$-(1-P)c_\theta\left(e_L^*, \theta_L\right) > 0 \qquad \text{(A10)}$$

Since $EB_O - EB_N$, equation (7) in the text, is simply (A8) − (A4), its first derivatives are the difference of the first derivatives of the latter expressions. Using the specific functions (8) and (9) yields (10). Therefore, the first-order conditions for a maximum of (10), that is, equations (11a) and (11b) in the text, are the differences (A9) − (A5) and (A10) − (A6), respectively, set equal to zero, with these functions appropriately rewritten.

Notes

Earlier drafts of this chapter were presented at the World Meeting of the Public Choice Societies in Amsterdam, March 30–April 1, 2007, and at the sixteenth conference of AISSEC in Parma, June 21–23, 2007, where participants provided helpful discussion. The UCSIA workshop on The Political Economy of Theocracy in Antwerp, June 15–16, 2007, provided a unique opportunity for intense, focused exchange and discussion. I am especially indebted to Santanu Gupta, Donald Wittman, and Ronald Wintrobe for detailed comments and suggestions.

1. Earlier examples may arguably be found in the temple cities of ancient Mesopotamia and perhaps other ancient societies, but our knowledge of them relies only on the archaeological record.
2. See chapter 4. Of course the secular government too, here as always, can be corrupt. In the framework of this chapter, corruption in the theocracy must be understood as a system-specific problem over and above the level of corruption that would normally be expected in a secular government.
3. This is analogous to the approach to enterprise privatization by Shapiro and Willig (1990), which sees privatization and its attendant agency problem as a check on the private, self-serving agenda of a public official in charge of a public enterprise. Switching from priestly rule to contracted-out, secular government is, in a deep sense, tantamount to "privatizing" a theocracy.
4. In the Paraguay of the sixteenth to eighteenth centuries it would seem that roles were reversed: the Spanish crown was the principal and the Jesuits the agent, to whom the crown was happy to delegate control of the territory (see chapter 5). However, this withdrawal of the crown created exactly the power vacuum that our approach assumes: within that vacuum, the Jesuits were in principle free to choose whether to run the government themselves or contract it out to secular officials, such as could be drawn from the local Spanish landlords. As another instance, the Persian Empire did exactly the same thing with the Jews returning from the Babylonian exile (see section 2.7).

5. Assuming risk aversion would complicate the algebra but add no new insight. An interior solution is adequately ensured by effort-aversion.
6. For this reason the general solution to problem (7) is not reported, but is available from the author on request.
7. We also tried out a logarithmic benefit function, as well as some variations on the cost function. None of our results were materially affected.
8. The second-order conditions for problem (10) are not reported but are available on request.
9. An interior solution obtains when only costs are strictly convex but benefits are linear—which is still compatible with problems (3) and (5). If we replace equation (8) with $b(e) = e$, keep function (9) unchanged, and rework the calculations, we find a $\bar{P}(\theta_L)$ curve, satisfying the linear counterpart of (11a), which is almost unchanged. However, taking the linear counterparts of (4b′), (6b′), (11b) and solving numerically for e^*_L, $\hat{e}_L$, and θ_L for given values of P, we now find a steeply increasing, concave $P^*(\theta_L)$ curve which lies fully inside the parameter space. The full theocratic optimum at the crossing of the two curves obtains at $P = 0.61$ and $\theta_L = 0.28$. So the optimal θ_L is now positive but low. In what follows we will concentrate the discussion on the decreasing returns case of figure 2.3.
10. The derivatives $d\hat{e}_L/d\theta_L$ and $de^*_L/d\theta_L$, not reported here, can be calculated by implicit differentiation of equations (6b) and (4b) in the text, respectively: they measure the change in effort in each model as θ_L changes, fulfilling the respective FOCs throughout. Using the second-order conditions for problem (5) (not reported), it can be shown that they are both positive and, assuming (neutrally) all third-order partials equal to zero, that $d\hat{e}_L/d\theta_L > de^*_L/d\theta_L > 0$.
11. See chapters 4 and 5.
12. Raskovich (1996) offers an illuminating economic analysis of the rise of Yahwist monotheism in a setting of competing cults in the same period. His emphasis on the priesthood enforcing monopoly in worship through a territorially structured control of sacrificial shrines aptly complements our focus on the political system.
13. A similar development occurred in Outer Mongolia (Bawden, 1968), which was converted to Buddhism by the Tibetans in the late sixteenth century. Here, since the beginning of the seventeenth century, the Buddhist Church evolved a system of high incarnations which peaked at the Jebtsundamba Khutuktu. This figure, while acknowledging a spiritual subordination to the Tibetan "mother church," in fact exercised absolute control over the spiritual and temporal affairs of the Mongols, although the country was nominally a province of the Chinese Empire. The theocracy was overthrown by the Soviet-inspired communist revolution of 1921.
14. See chapters 3 and 6.
15. See chapter 8.
16. See chapter 11.
17. See also chapter 10, which documents and discusses the growing tendency to "go back" to the earliest sources and the fixed rules and institutions they prescribe that characterize many Muslim reactions to the threats and challenges posed by modernity.

References

Arrington, L.J. *Great Basin Kingdom. An Economic History of the Latter-Day Saints 1830–1900*. Cambridge, MA: Harvard University Press, 1958.

Baron, D. and R. Myerson "Regulating a Monopolist with Unknown Costs." *Econometrica* 50, 1982: 911–930.

Bawden, C.R. *The Modern History of Mongolia*. New York: Praeger, 1968.

Bax, E.B. *The Rise and Fall of the Anabaptists*. Original edition 1903, reprint. New York: A.M. Kelley, 1970.
Berkey, J. *The Formation of Islam*. Cambridge: Cambridge University Press, 2003.
Cohn, N. *The Pursuit of the Millennium*. Revised and enlarged edition. Oxford: Oxford University Press, 1970.
Cook, D. *Understanding Jihad*. Berkeley: University of California Press, 2005.
Dale, S.F. "Religious Suicide in Islamic Asia: Anticolonial Terrorism in India, Indonesia, and the Philippines." *Journal of Conflict Resolution* 32, 1988: 37–59.
Ferrero, M. "Radicalization as a Reaction to Failure: An Economic Model of Islamic Extremism." *Public Choice* 122, 2005: 199–220.
———. "Exclusivity and Strictness: A Model of Extremism in Sects and Universal Religions." Paper presented at the annual meeting of the European Public Choice Society, Turku, April 2006a.
———. "Martyrdom Contracts." *Journal of Conflict Resolution* 50, 2006b: 855–877.
———. "An Economic Approach to Religious Extremism." In *Faith-based Radicalism. Christianity, Islam and Judaism between Constructive Activism and Destructive Fanaticism*, edited by C. Timmerman et al. Brussels: Peter Lang, 2007: 71–87.
Frend, W.H.C. *The Rise of Christianity*. London: Darton, Longman and Todd, 1984.
Lane Fox, R. *The Unauthorized Version. Truth and Fiction in the Bible*. New York: A. Knopf, 1992.
Lapidus, I.M. *A History of Islamic Societies*. Cambridge: Cambridge University Press, 1988.
Lewis, B. *The Assassins: A Radical Sect in Islam*. London: Weidenfeld and Nicolson, 1967.
———. "The Revolt of Islam." *The New Yorker* November 19, 2001: 50–63.
Lewy, G. *Religion and Revolution*. New York: Oxford University Press, 1974.
Myerson, R. "Incentive Compatibility and the Bargaining Problem." *Econometrica* 47, 1979: 61–74.
Norbu, T.J. and C. Turnbull *Tibet. Its History, Religion and People*. Harmondsworth, UK: Penguin, 1972.
Raskovich, A. "You Shall Have No Other Gods Besides Me: A Legal-Economic Analysis of the Rise of Yahweh." *Journal of Institutional and Theoretical Economics* 152, 1996: 449–471.
Runciman, S. *The Byzantine Theocracy*. Cambridge: Cambridge University Press, 1977.
Shanks, H. (ed.). *Ancient Israel. From Abraham to the Roman Destruction of the Temple*. Revised and expanded edition, Washington, DC: Biblical Archaeology Society, 1999.
Shapiro, C. and R. Willig. "Economic Rationales for the Scope of Privatization." In *The Political Economy of Public Sector Reform and Privatization*, edited by E. Suleiman and J. Waterbury. Boulder, CO: Westview Press, 1990: 55–87.
Stein, R.A. *Tibetan Civilization*. Translated from the French by J.E. Stapleton Driver. Stanford, CA: Stanford University Press, 1972.

3

Serving God in a Largely Theocratic Society: Rivalry and Cooperation between Church and King

Pierre Salmon

You do things *with models, you don't just contemplate them or put them in correspondence with reality.*

—Francesco Guala, 2005, p. 212

3.1 Introduction

Theocracy may be understood in different ways. The meaning mostly used is government by priesthood but we may call that "ecclesiocracy" or "hierocracy." Here, theocracy will designate government according to God's prescriptions and wishes—with the specification that the implementation or satisfaction of these prescriptions and wishes should be a public or political rather than a private affair and should involve some degree of coercion. The two meanings are different notably because, in the second, priests need not be the ones, or the only ones, who rule on God's behalf.

Under the interpretation adopted here, theocracy may be conceived as a continuous variable. Some regimes or countries are very theocratic; others are so only to a degree or in some respects. To give an example, good reasons to deem a particular Islamic society very or largely theocratic are when many of its legal rules are dependent on the *Sharia*, when all or almost all the people living on its territory are governed by the *Sharia*-inspired rules, and when coercion plays a significant role in their implementation. As the cases of Iran and Saudi Arabia illustrate, a theocratic ecclesiocracy or hierocracy may turn out to be less theocratic than a theocratic monarchy.[1]

In the medieval West, according to distinguished historians, a Christian perspective on all matters dominated the minds and actions of most and was imposed on all. A particularly arresting formulation of that claim can

be found in Southern (1970, pp. 21–22): "Whether in the hands of pope, emperor, king, or community, the purpose of human government was to direct men into a single Christian path"; and "everyone thought that coercion should be used as long as it was likely to succeed, and that it should be used to promote the doctrine and discipline of orthodox Christianity."[2]

Southern identifies here the two main characteristics of what I will call a "largely theocratic society" (LTS): the main purpose of government is religious and some coercion is used to serve it.[3] The fact that we do not look for the criterion of theocracy in the distribution of power does not imply that this distribution is unimportant. Indeed, this chapter is centered on the question of the assignment of responsibilities for implementing God's precepts, or more generally satisfying his wishes, albeit under the assumption that the setting is that of a LTS. Under that perspective, Southern's citation is interesting for an additional reason. In the context of a society of the type I call a LTS, it stresses the possibility that the major religious role be played not, or not only, by the priesthood or its leadership but also by a monarch (to be generalized so as to include magistrates, etc.) and by the community (implicitly of the believers or the faithful). This chapter is concerned with those among LTS in which powers, responsibilities and tasks are distributed among these three poles. For convenience, the poles will be referred to as "Church," "King," and "Community" (by "Church" I mean not the whole membership of the church but its leadership—popes, pontiffs, patriarchs, hierarchs, etc.).

In the case of Christianity, it was generally agreed that there are some divine indications about how the responsibilities or powers should be set. As a consequence, at least until the thirteenth century, controversies about the distribution of power were framed mainly in theological terms. It is as if God had set and then revealed a number of constitutional principles and the object of controversies was their interpretation. The main focus was on how exactly the separation of powers or responsibilities between priesthood and kingship, or Church and King, should be understood in the light of a separation of the secular and the divine, or the temporal and the spiritual, which could be ascribed, it seemed, to the New Testament itself.[4]

This chapter is focused on Christianity but without precluding a more general relevance of the central part of the analysis. Its approach is distinctive in four ways. First, because I assume the society to be a LTS, it seems consistent to suppose also that the temporal power of the kings is also oriented toward the common religious objective.[5] We may invoke Southern's authority to support that [additional] assumption. Yet, two objections must be dealt with. At the time of the New Testament the Roman emperors were not yet Christian. Therefore, it is only after the full Christianization of the Roman Empire and perhaps also of the barbarian kingdoms that it became possible to interpret the question of the division of responsibilities under a perspective such as the one identified by Southern—a perspective under which "secular" and "temporal" cannot logically have the sense we give these words today. The second objection concerns the realism of the

features ascribed to the LTS. It is difficult to gauge the extent to which Southern's assertion is factually true with regard to the period he studies. Many episodes that he himself describes might inspire a degree of skepticism. Fortunately, I do not need to engage in a discussion of that matter. For our purpose, a LTS may approximate reality sometimes and in some places but it may also correspond to a tendency, a perception, an ideology, an objective, a utopia. As such, it may be shared by, or concern, most or only few people—at the limit the imagination of a single individual. An illustration of a LTS in our time is the type of society that some Islamists dream of implementing. Moreover, even if the LTS lacked counterparts on all layers of reality, including that of ideologies, objectives, and dreams, it could still be worth exploring—this time as a theoretical blueprint, system or ideal type—without one being prematurely distracted by more mundane and inevitable features of actual governance.

The doctrinal constructions, purportedly traceable to the scriptures, whose purpose was to specify the powers of the Church or the pope, on one side, and those of the emperor and other monarchs, on the other, certainly had some influence on how responsibilities were actually distributed. They are similar in this respect to the formal assignments of powers included in constitutions. A case in point is the assignment of powers among levels of government in federal states. The positive analysis of federalism and decentralization that has emerged recently in economics and public finance shows that the structure specified in constitutions explains only in part the actual distribution of responsibilities. Under the perspective of competitive federalism or governance pioneered by Breton (1996), at least as important as formal powers and assignments of tasks, or apparently neat divisions of policy and regulatory domains, what determines the actual division of responsibilities is competition among centers of power or governments (a competition which allows some forms of coordination and even cooperation). Whether individual governments do well or badly in such competition largely depends on their relative capabilities and access to resources, and the way they can or cannot benefit from economies of scope and scale (Breton and Salmon, forthcoming). Our ambition in this chapter, and this is its second distinctive feature, is to explore in a LTS setting the interaction between theological-constitutional assignments of powers to Church and King and an element borrowed from the competitive governance approach, namely evolving capabilities and resources.

The third distinctive feature of our approach concerns the way we treat the third pole suggested by Southern's citation above: the "Community." Its presence and influence are often overlooked or left largely implicit in the historical accounts of the relationship between Church and King.[6] I will treat the community of the believers or the faithful as an uncountable or holistic entity (of the same kind as "public opinion," the "people," or the "nation") embodied or represented over time by varying subsets of the population (e.g., Frankish warriors, Carolingian "magnates," members of urban guilds, lower clergy, Southern's "influential people").[7] For Church

and King to be able to contribute to the implementation of divine prescriptions or satisfaction of God's wishes, involvement of Community is important and perhaps even indispensable. I will assume that the more support Church and King receive from it, the more God-serving services they can produce.

The fourth and last distinctive characteristic of the approach adopted here is methodological. For the exploration of the questions adumbrated above, I present a little two-sector/three-factor model with the help of a few simple equations and a lot of geometry (too little of the first, too much of the second, most economists will feel).[8] This model cannot handle all the main relationships. In particular, it has nothing to say on the question of the hierarchy between the pope and the emperor, a matter often described as a conflict between two attempted theocracies (Powell, 1963; Tierney, 1964; Pacaut, 1989). Given the meaning of theocracy adopted here, this does not really matter. The only "constitutional" provisions important for our purpose are those that purport to assign tasks or domains.

The division of the argument between sections 3.2 and 3.3 reflects the distinction between production possibilities and the determination of a product-mix. Divine preferences have no bearing on the derivation of the set of possibilities. They intervene only when we turn to the said determination—that is, in section 3.3, which is devoted to the interaction between production possibilities and the interpretation of divine preferences. Concluding remarks are formulated in section 3.4. The whole is highly tentative.

3.2 Production Possibilities

The first part of the section is devoted to the presentation of the basic reasoning regarding possibilities. In the second part, I try to give some flesh to the variables and processes introduced in the first part and to address at least some of the queries that come to mind.

3.2.1 The Derivation of the Production Possibility Frontier

Let us assume that Church and King each produces a good or service which is God-serving and one or many goods and services that are secular. We are concerned exclusively with the production of the two God-serving services and call them Q_C when produced by Church and Q_K when produced by King. Community may have secular interests or engage in activities that serve God independently of both Church and King but, in the model, we disregard such interests and activities. We pay attention only to one kind of activity: the cooperation, contribution, support and/or consent (hereafter "support") that Community gives to Church and King for the production of Q_C and Q_K. More precisely, we assume that, to produce Q_C, Church combines two kinds of inputs: a Church-specific capability X_C and the support S_C it receives from Community. Similarly, to produce Q_K, King

associates a King-specific capability X_K and the support S_K he receives from Community. The two (well-behaved) production functions are

$$Q_C = Q_C(X_C, S_C) \quad (1)$$

$$Q_K = Q_K(X_K, S_K) \quad (2)$$

We call S_T the aggregate support given by Community to Church and King and we assume that it is the sum of the support given to each:

$$S_T = S_C + S_K \quad (3)$$

Assuming S_T to be fixed and S_C and S_K to be variable, this relation is represented by line AB in the lower left quadrant of figure 3.1. Each point on that line reflects a different distribution between Community's support

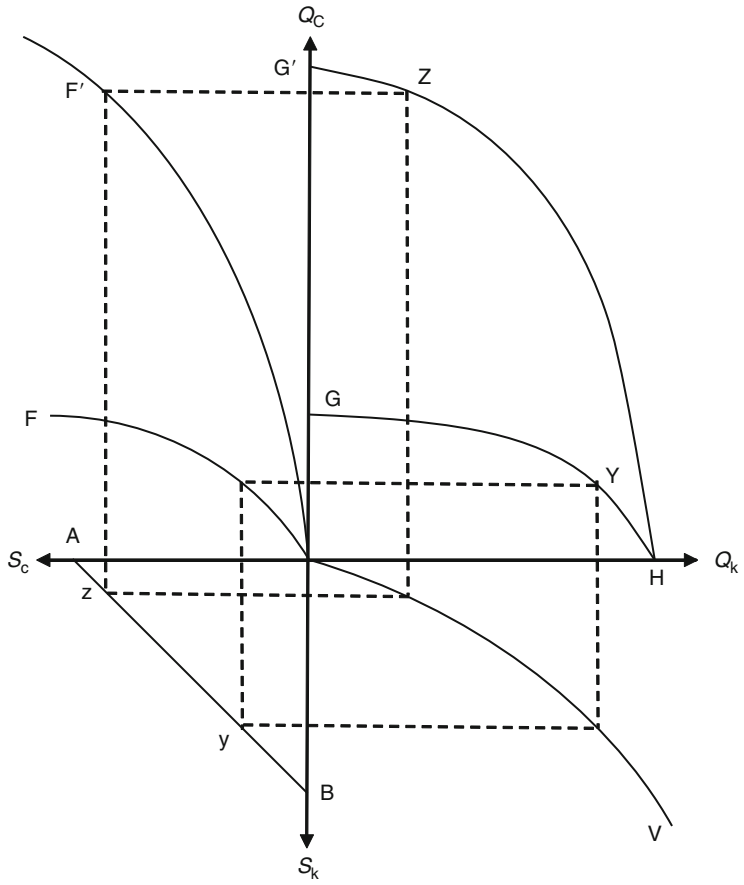

Figure 3.1 Production Possibilities

awarded to Church and Community's support given to King, their sum being fixed.[9] The specific capabilities may vary over time. At any point in time, however, they are also fixed. Curve OF in the upper left quadrant represents relation (1) when X_C is a fixed input. Similarly curve OV in the lower right quadrant represents relation (2) when input X_K is fixed. When the total quantities of the three inputs are fixed, the quantities of God-serving services that can be produced by Church and by King are indicated in the upper right quadrant by the production possibility curve GH, whose algebraic expression is

$$H(Q_C, Q_K) = 0 \tag{4}$$

There is a one-to-one correspondence between points on AB and points on GH, for instance between point y on AB and point Y on GH.

Suppose that, for some reason, Church becomes more capable whereas King's capability remains the same.[10] In other words, X_C increases whereas X_K remains constant. In figure 3.1, curve OF moves up and becomes OF', whereas curve OV does not move. The new production possibility curve is G′H. In view of future discussion, it will prove convenient to assume that it is everywhere steeper than GH.[11]

3.2.2 *Discussion*

The variables involved so far in the development of the model need some elaboration. I address first the question of the interpretation of the outputs (the "God-serving services") produced by Church and King with the support of Community. I turn afterward to various problems related to the inputs.

1) There are several reasons to remain imprecise with regard to the goods represented by Q_C and Q_K. One reason, related to the way our discussion is organized, affects only the present section. As is clear from the diagrams, the two outputs are different in the sense that their production taps combinations of resources and employs techniques that are different. The degree to which they are also different from the perspective of their use is a matter that we will be able to address only in the next section, after we have introduced preferences. A second reason is also evident. The relative importance of all possible God-serving outputs is dependent on circumstances. For some periods, we may remain at the level of generality of Southern's phrase cited earlier and interpret the two outputs as means of "promoting the doctrine and discipline of orthodox Christianity." For other periods or for other purposes, we may want to be more specific and refer to the conversion of Arians and barbarians, or to the Crusades. Or we may want to stress material achievements such as the building of churches and monasteries. Some God-serving services are more or less permanent. Fighting heresy has certainly been one of them. But a divinely inspired regulation of human conduct may be even more universal.[12]

Less obvious but perhaps more important, a third reason is related to the competitive governance or federalism approach mentioned earlier. Under that perspective,

strict divisions of tasks rarely prove fully sustainable. Centers of power or governments typically find ways to invade each other's policy domains, whatever the formal provisions enacted to prevent them to do so. There may be full de facto concurrency in the sense that the various governments or levels of government perform identical tasks and use for that purpose the same kind of means. More frequently, they may promote the same overall policy objectives with different means. One government or level uses regulations, whereas another uses financial inducements or persuasion, and so on. Returning to the example of the promotion of orthodoxy, the instrument used by Church, which is also its output in our model, may be mostly spiritual whereas King's instrument/output may be mostly coercive.[13]

2) As it is constructed now, the model makes no room to direct relations between Community and God, bypassing Church and King. An objection to this treatment that comes to mind is the role ascribed to God in the implementation of his own precepts. Admittedly, it has been argued (Gauchet, 1985) that, with Incarnation, Christianity introduced a more transcendental conception of God, making him more out-worldly, less prone to intervene in this world. But the effect was certainly not immediate in practice, reliance on providential protection in battles illustrating the continuing expectation of interventions[14] And, even if, eventually, the perception of God as not involved in the affairs of this world became more widely shared, this was compensated in Christians' minds by an increased concern with the afterlife and out-worldly inducements.

In most religions, however, with the notable exception of some Protestant denominations and some versions of Islam, the relationship between God and believers is not direct but mediated by some priesthood and/or sacral kingship.[15] This applies, in particular, to the role of God in the implementation of his prescriptions. The mediators are not simple believers. They are entitled to speak and act on the behalf of God. This often includes a privileged role in the interpretation of God's intentions and the power to distribute in God's name rewards and sanctions that have an out-worldly dimension. Our neglect of a direct relationship to God becomes less troublesome as a consequence. Moreover, as noted, we do not really assume the absence of the relationship, only that S_T is not affected by it.

3) The importance of secular concerns is obvious not only in the case of King but also with regard to Church. The existence of the Papal states gave the popes a temporal power which was generally regarded, at least until 1870, as "vitally necessary to the proper functioning of the papacy as a spiritual authority"—Pius IX using to "describe the Papal States as 'the robe of Jesus Christ'" (Vidler, 1961, p. 146). One could see the defense and administration of these territories as instrumental to the religious objectives. In practice, the existence of the Papal states certainly distracted many popes from their religious functions (Duffy, 1997).

In our LTS framework, a way to deal with secular concerns in general is to make them influence behavior not as arguments in Church's or King's utility function but as constraints, opportunities and exogenous forces that affect the feasible set, that is here the possibilities of serving God. To illustrate, we may assume that the head of Church—the pope in the case of Western Christianity before the Reformation—treats his own greed or pride as a force that he cannot suppress completely for the purpose of pursuing the only objective ascribed to him, which is to serve God. The behavior of the clergy and the lower tiers of royal administration are also to be treated as determinants of the feasible sets of Church and King respectively. Secular concerns tend to be detrimental to the pursuit of the religious objectives which characterize a LTS but, notably because of complementarities and

economies of scope (a matter to which I shall return), they may occasionally be supportive of that pursuit. Variation in the success met in curbing these concerns, or occasionally exploiting them for religious purposes, is one source of variation in the capabilities X_C and X_K.

4) God-serving capabilities are related to resources that have the dimension of capital. As such, they include not only various elements of tangible capital, but also immaterial assets such as organization, legal powers, customs, knowledge, integrity, reputation, and so on. In the case of the medieval Church, more or less voluntary sources of increases in capabilities include the acquisition of territorial sovereignty, the expansion of land ownership, the entrenchment of tithes, the generalization of the parish system, the development of literacy among the clergy, the enhanced consciousness of Christendom (notably that associated with the Crusades), new varieties of monasticism (Cluniac, Cistercian, Franciscan, Dominican, etc.), the building-up of an efficient central bureaucracy with hierarchical control and a capacity to adapt rules to local conditions, the edification of churches and cathedrals, the refinement of canon law and of the ecclesiastical judiciary system, theological advancement, liturgical improvements, the "birth" and institutionalization of the purgatory (Le Goff, 1981), the supply of indulgences, the strengthening of private confession requirements, the Inquisition. In the next period, the Counter-Reformation built up its success on new orders such as the Capuchins and the Jesuits, as well as on internal reorganizations, renewed discipline, changes in the liturgy, various inducements to piety, the development of charitable activities.

In the case of kings, conversions to Christianity—as those of Constantine in the fourth century and of the Frankish king Clovis around 500—were of course decisive steps. They allowed the use for God-serving purposes of Kings' previously held capacity to coerce. Kings' use of force for religious purposes played a major role in the extension and unification (against "northern barbarians" and Arianism in particular) of Christianity during its first thousand years (Brown, 1996; Dumézil, 2005), later in the Crusades, and later still in the religious conflicts of the sixteenth and seventeenth centuries. Key intangible assets were the "healing power of the royal touch," experimented by the Merovingian dynasty in the sixth century and officially established in England and France in the eleventh century (Bloch, 1924; Oakley, 2006); sacral coronation, perhaps initiated in 672 to the benefit of the Visigoth king Wamba (Bloch, 1924, p. 461) but particularly significant with the coronation of Charlemagne; anointment, introduced by Pope Stephen II to the benefit of the nascent Carolingian dynasty (Charlemagne, his father and brother were anointed together in 754, see Lynch, 1992). This contributed to the tendency of Kings to compare themselves to the Kings of the Old Testament, David and Solomon in particular (Lynch, 1992), and sometimes their kingdom to "a latter-day Israel" (Brown, 1996, p. 139). Belief in the priestly and sacral dimensions of kingship decreased sharply in the fourteenth and fifteenth centuries (Southern, 1970) but it recovered under the doctrine of absolute monarchy which developed in the sixteenth and seventeenth centuries, to evaporate more or less totally afterward (Oakley, 2006).

As is often the case with capital goods, the variation in God-serving capabilities mentioned above was not always voluntary. The logic of the model implies that Church and King will invest in capabilities so as to make them as large as possible, but capabilities will also vary as an effect of forces which Church and King can hardly influence. A related remark is (as alluded to before) that capabilities for the pursuit of religious objectives can be related, through various complementarities and economies of scope, to capabilities dedicated principally to secular purposes

or tasks. With Kings pursuing religious objectives, an exogenous increase in their ascendancy over aristocrats whose concerns are mainly secular increases Kings' God-serving capability. Similarly when Church is or becomes the main provider of education in general, complementarities or economies of scope between the religious and the secular dimensions of education may be such that the net effect is an increase in Church's God-serving capability—the net effect being possibly negative if involvement in education distracts Church too much from other God-serving pursuits.

5) The development of some capabilities may be detrimental to others. Indulgences provided Church with resources and enhanced its means to influence the behavior of laymen, but it also led to some loss of moral or reputation capital. In the course of time, the second effect became dominant and toward the end of the Middle Ages indulgences had become a major liability. The remarkable progress achieved in canon law led to an increased influence and a more encompassing role of Church in many sectors of society. It was a crucial factor in the formation of the Western legal system. But the focus put by Church on legal, and to a lesser extent theological, matters became increasingly perceived as a distraction from its main religious mission and thus an erosion of a major element of its capital.[16]

There is, however, some consensus among historians on the fluctuations over time (and, to a lesser extent, variation in space) of Church's and King's overall religious capabilities. Church's religious capacity increased clearly in the second half of the eleventh century and in the twelfth century, only somewhat less clearly (because less uniformly) in the thirteenth century (Tierney, 1964; Southern, 1970; Lynch, 1992). Arguably, it decreased in the fourteenth and fifteenth centuries and recovered in the sixteenth and especially seventeenth centuries. With regard to King's capacity, spatial differences should be taken into account together with fluctuations over time. For instance, in the thirteenth century, the capacity to act in the religious domain of the English and French kings was not challenged by the popes to the same degree as that of the German emperors. Because of spatial differences of that kind, one might want to apply our model to each kingdom separately, the Roman Catholic Church being an actor common to all. With the Reformation, the Church in turn became divided and the model should then be applied to each kingdom or principality with its own Church as well as its own King, or at even more disaggregated levels if need be.[17] But this should not prevent some generalization across kingdoms and religious denominations. For instance, in the wake of the Council of Trent, Church and King were affected by deep-seated trends common to all Europe, including the Protestant part of it (Chadwick, 1964).

3.3 Divine Preferences

Differences in the interpretation of divine preferences are discussed in a first subsection. We turn then to the interaction between production possibilities and interpretations of preferences, under various assumptions about the role of Church, King, and Community.

3.3.1 Interpretations of God's Preferences

What are divine preferences, in particular with regard to the division of tasks between Church and King? We may write the general form of God's

preferences or utility function as:

$$U_G = U_G(Q_C, Q_K) \tag{5}$$

Then, we distinguish five historical interpretations of these preferences and make them correspond to different mathematical assumptions about the shape of the utility or preference function. Let us start with the interpretation of Islam in which no privileged role is given to the priesthood or to sovereigns.[18] What counts for God is efficiency. God-serving services Q_C and Q_K are perfect substitutes from his viewpoint, even though their mode of production is different, and even though, as a rule, they are equally productive only at the margin. To reflect these assumptions, God's utility function may be represented by a family of indifference curves taking the form of straight lines (see the curves denoted U_{IS} in figure 3.2).

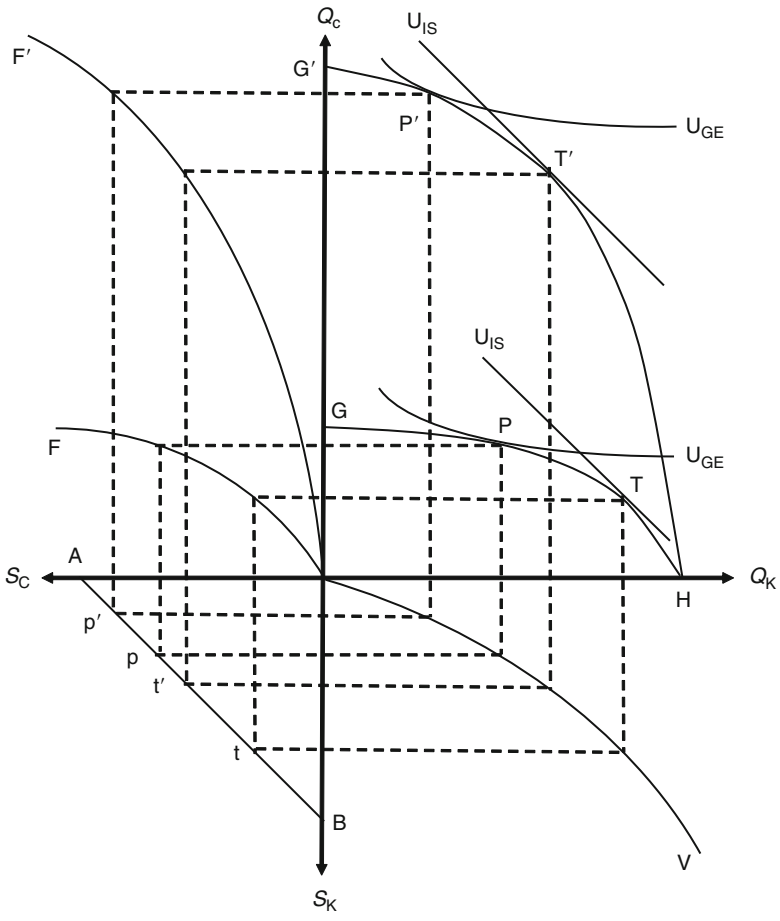

Figure 3.2 Effects of Change in Church's Capability under the "Islamist" and "Gelasian" Interpretations

In the case of Christianity, as noted, the separation of powers or functions between King and Church is a precept formulated in the New Testament. By itself this creates a difference between Q_C and Q_K which excludes perfect substitutability. Who produces a service becomes part of its characteristics. In addition, there are specific God-inspired precepts about what services King and Church may produce. For instance, as recalled by various Councils, priests should not bear arms. Inasmuch as bearing arms may be necessary for serving God, this suggests assigning the responsibility of some services to King. Conversely, Church can reasonably find in the scriptures some ground to claim a privileged role in their interpretation. This again suggests a specific assignment, this time to the benefit of Church. These constraints are far from absolute and their relevance varies over time, over space, and across denominations (Orthodox, Roman Catholic, Lutheran, Calvinist, etc). At any point in time and for a given denomination, they contribute to making substitutability between Q_C and Q_K imperfect. This feature of the preferences is reflected in the assumption that—with the exception of the particular Islamist interpretation just mentioned—indifference curves are strictly convex.

The rivalry between Church and King has led to two extreme interpretations of divine preferences. One may be called "Gelasian" by reference to a famous opposition between the spiritual and the temporal formulated at the end of the fifth century by Pope Gelasius I and used to promote Papal ascendancy in the eleventh and twelfth centuries. There always was and still is considerable disagreement about what Gelasius exactly claimed (see Tierney, 1964, pp. 10–15). But, in a LTS (in which Church and King pursue differently the same religious goal) the fact that Gelasius associates kingship with temporal or secular responsibilities and priesthood with spiritual—that is, religious—ones, clearly gives priesthood a leading and kingship a secondary role *with regard to this (religious) goal*.

To find a completely opposite view we may turn to an enigmatic author of year 1100 circa referred to as the Anonymous of York or, perhaps preferably, the Norman Anonymous (see Kantorowicz, 1957, pp. 42–61; Tierney, 1964, pp. 74–78; Oakley, 2006, pp. 101–110). According to him, the sacrament of coronation transfers Christ's kingship and priesthood to kings, who become then the priests of their people, and as such can perform sacraments and forgive sins. Some room is left for bishops but hardly any for the papacy. Few defenses of sacral kingship have been so extreme but "the belief in the supernatural authority of kings remained widespread throughout Europe for centuries after 1100" (Tierney, 1964, p. 75). Later, some of the arguments offered in favor of the royal supremacy by the Tudor lawyers were quite similar to arguments used by the Norman Anonymous (Kantorowicz, 1957, p. 46). Although this second stance is close to "Caesaropapism," I prefer calling it the "Norman" interpretation.

Both interpretations may be given a mathematical expression in the form of quasi-linear preferences. In the "Gelasian" case, the linearity will

be in Q_C:

$$U_G = Q_C + V(Q_K) \tag{6}$$

The indifference curves corresponding to this function have the same slope when Q_K is held constant (see the curves denoted U_{GE} in figure 3.2). The quasi-linearity here suggests a role for King which is both relatively stable and secondary, variations in Church's production being the dynamic determinant of God's satisfaction. It is the other way around under the "Norman" interpretation. Then the linearity is in Q_K. The formulation is:

$$U_G = W(Q_C) + Q_K \tag{7}$$

The "Norman" indifference curves (denoted U_{NO} in figure 3.4) have the same slope when Q_C is kept constant.

A moderate view according to which priesthood and kingship must collaborate on a more or less equal footing to implement divine precepts may take two forms. One stresses complementarity. It is best reflected in a concrete episode, the Papal-Frankish alliance concluded in 751 between Pope Zacharias and the founder of the Carolingian dynasty, Pepin the Short, the father of Charlemagne (see Lynch, 1992, pp. 63–64; and, for a dissenting view, Oakley, 2006, pp. 95–96). Although the original symmetry gave way over time to an ascendancy of King, the idea underlying the original alliance may be referred to as the "Carolingian" interpretation. Its mathematical counterpart is perfect complementarity between Q_C and Q_K which can be represented by rectangular indifference curves (see curves U_{CA} in figure 3.3).

The second form is driven by an ideal of intimate cooperation or harmony between Church and King, who should form a kind of team or diarchy. This ideal is generally referred to as "Symphonia" (Oakley, 2006, p. 80). It was advocated, but not implemented, by emperor Justinian. Later, it was formulated by Photius, Patriarch of Constantinople, as follows: "As the constitution of the state consists, like man, of parts and members, the greatest and most necessary parts are the emperor and the patriarch. Wherefore the peace and felicity of subjects in body and soul depend upon the agreement and concord of the kingship and the priesthood in all things" (Nicol, 1988, p. 69).[19] We may express the "Symphonia" interpretation as a homothetic utility function. Indifference curves have the same slope when the ratio Q_C/Q_K is held constant (curves U_{SY} in figure 3.4).

3.3.2 Effects of Changing Capabilities under Different Interpretations of Divine Preferences

If we suppose that the interpretation of God's preferences is given and generally accepted, that Church, King and Community have the maximization

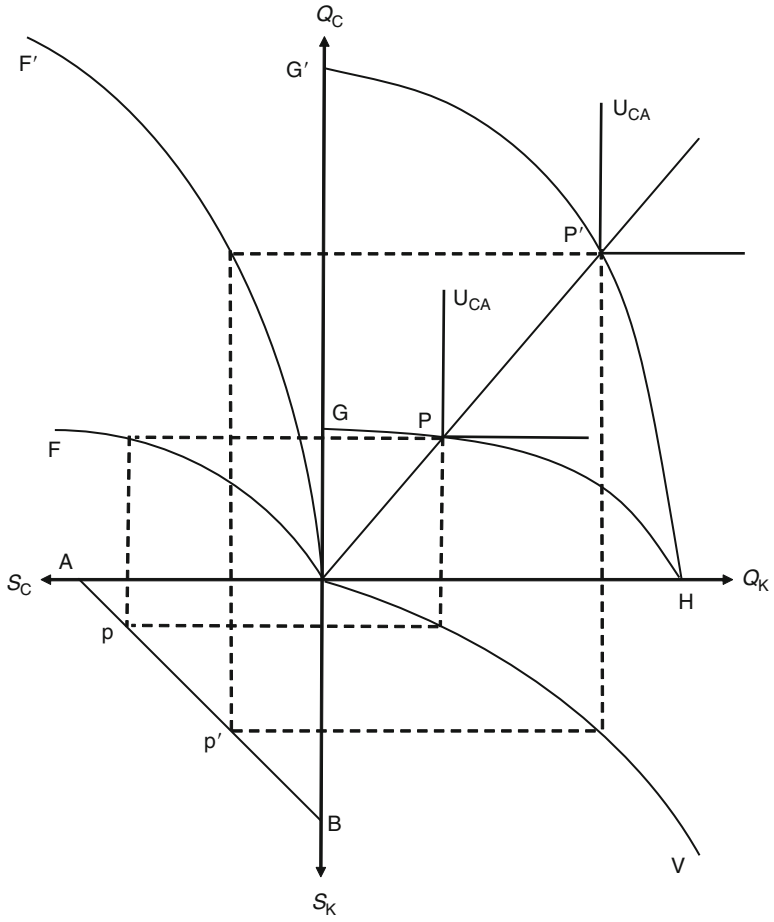

Figure 3.3 Effects of Change in Church's Capability under the "Carolingian" Interpretation

of God's utility as their sole objective, and that capabilities X_C and X_K are fixed, equilibrium may be derived from the maximization of God's utility function under the production constraints represented by relation (4) and, underlying that, by relations (1), (2), and (3). Geometrically, the output equilibrium is at the tangency point between the production possibility curve and an indifference curve—that is, at a point at which the marginal rates of substitution and transformation of the two goods are equal.[20] Geometrically also, the equilibrium value of the distribution of support by Community is derived from that point in the way illustrated by the broken lines in figure 3.1.

Suppose that, for some reason, Church becomes more capable whereas King's capability remains the same (X_C increases whereas X_K remains constant). In figures 3.2, 3.3, and 3.4, the new production possibility curve is G′H. As assumed previously, for any value of Q_K G′H is always steeper

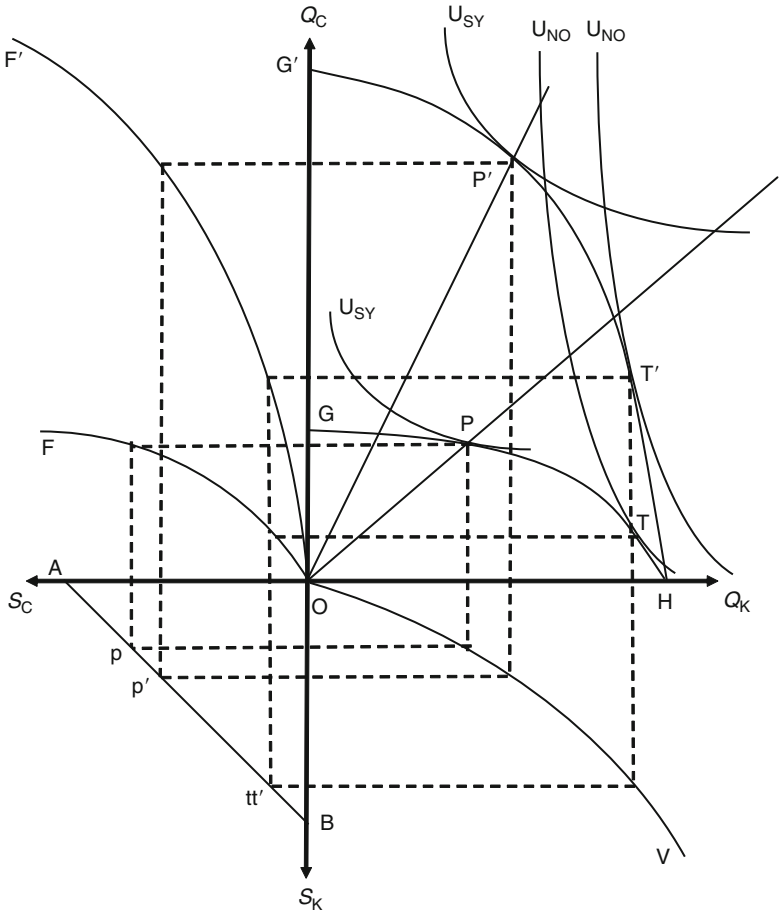

Figure 3.4 Effects of Change in Church's Capability under the "Norman" and "Symphonia" Interpretations

than GH. Whatever the interpretation of God's preferences, the equilibrium (tangency) point will always move upward. In other words, increased Church's capability, King's capability remaining constant, has always the effect of increasing Church's output. The question is whether this is associated with a reduction or an increase in King's output and, related to that, whether the distribution of Community support shifts in favor of Church or of King. If the equilibrium (tangency) point moves to the left (in addition to moving upward), there is a shift in the distribution of Community support in favor of Church and an absolute decrease in King's output. If that point moves to the right, this is the other way around.

Can we predict whether it will be the one or the other of these two possibilities? The five interpretations fall into three categories. The "Islamist" and the "Gelasian" interpretations are represented in figure 3.2 in the form

of sets of indifference curves U_{IS} and U_{GE} respectively. In both cases, the equilibrium point just mentioned moves to the left. By itself this increases further Church's output, and it reduces in absolute terms King's. Community support shifts in favor of Church. One may ascribe these results to something akin to a substitution effect. Under the "Carolingian" interpretation, which is the object of figure 3.3, the equilibrium point is displaced to the right. The increase in Church's capabilities entails a shift in Community support unfavorable to Church and an increase in both King's output and King's share of Community support. The effects are exactly the opposite of those obtained in the "Islamist" and "Gelasian" cases. One reason is that under the complementarity assumed in the "Carolingian" interpretation, the results are driven by the income effect alone.

The "Symphonia" and "Norman" interpretations fall into a third category because in both cases the configuration of the indifference curves is such that one cannot say with certainty whether the equilibrium point moves to the left or to the right. The way the curves are drawn, the "Norman" equilibrium point T in figure 3.4 remains on the same vertical whereas the "Symphonia" equilibrium point P moves to the right. But this could be otherwise. What one may say is only that movements to the right or to the left are relatively limited because they are the results of forces that have opposite effects along that dimension.

3.3.3 Preferences over Interpretations of Divine Preferences

The effects of changes in capabilities under different interpretations of divine preferences are unlikely to be indifferent to Church and King (nor to Community, but I'll discuss that possibility in the next subsection). Having preferences or feelings about the effects of the interpretations is fully compatible with the LTS logic if this has no consequence on behavior. Admittedly, the compatibility with the LTS logic becomes somewhat more problematic when Church or King does not only prefer some interpretation because of its effects but advocates that interpretation as a consequence. Advocacy in that case smacks of self-delusion or wishful thinking at best. Still, I will consider it as remaining broadly compatible with the LTS logic. Given some uncertainty about divine preferences it seems natural that even in a context in which serving God is the essential aim of society, both King and Church will often attempt to make a case in favor of an interpretation of divine preferences whose effects suit them.

To be more precise, we may assume that Church and King are concerned with the level of their production of God-serving services Q_C and Q_K. Because the context is that of a LTS, it is natural for them to wish their own production of these services to be as large as possible. In addition both Church and King may be assumed to be concerned with the support they receive from Community, and this not only because the more support they receive the more services they can produce but also because of some utility of support *per se*. Then Church's utility, instead of the function $U_C[U(G)]$

assumed so far, becomes

$$U_C\,[U(G),\, Q_C,\, S_C] \tag{8}$$

For the LTS logic to be respected, one might assume that Church persuades itself that (in our language) maximizing the two functions would yield the same result with regard to $U(G)$, King reasoning in a similar way.

What interpretations are likely to be preferred by Church and King? The arguments, mainly theological, developed by Church and King (and the theologians who support them) in favor of their preferred interpretation cannot be explicitly dependent on the particular state of the production possibilities. They must be expressed in general terms and refer to stable divine preferences. In mathematical language, this means that they must refer to structural properties of God's utility function, represented here by sets of indifference curves.

If Church and King reason in terms of fixed capabilities, we may expect them to prefer the interpretation of divine preferences which leads to an equilibrium (tangency) point as close as possible to G and H respectively. Suppose that the two interpretations giving these results are the "Gelasian" and the "Norman" ones (a possibility, not a necessity). Then, under our liberal interpretation of the LTS logic, we may predict that Church and King will claim God's preferences to be "Gelasian" and "Norman" respectively, and try to make their position accepted by all, in particular Community.

These claims might not be wise on the part of Church and King if they take into account the likelihood of changes in capacities. As noted, under the "Gelasian" interpretation of God's preferences, when Church's capability and output increase, the share of Church in Community support also increases. But when Church's capability and output decrease (in figure 3.2, the variation is from OF' to OF and from G′H to GH), support received from Community also decreases. In other words, the welfare of Church is positively and unambiguously associated with its own capability. Under the "Carolingian" interpretation (figure 3.3), Church's capability and output, on the one hand, and support from the Community, on the other, change in opposite directions. Even if a "Carolingian" interpretation gives Church less Community support than does a "Gelasian" one on average (which is possible but not necessary), Church may consider this to be compensated by the fact that it will gain rather than lose Community support in case of a decrease in its own capacity.

We must also compare the interpretations—still from Church's perspective—when there is no change in its own capability but a change in King's. Suppose an increase in the latter. Under the "Carolingian" interpretation—as figure 3.3 shows when one permutes the two axes—there will be an increase in the two outputs and an increase in Community support to Church. A decrease in King's capability will entail, under the same interpretation, a decrease in the two outputs and a decrease in Community support to Church. Under the "Carolingian" interpretation, the welfare of Church

is positively and unambiguously associated with the capability of King. It is easy to see (using symmetry) that the welfare of Church is correlated negatively with the capability of King under a "Norman interpretation," and weakly and ambiguously correlated with it under a "Gelasian" interpretation. In most circumstances, under the "Symphonia" interpretation changes in capabilities will have little effect on the distribution of Community support. This may make the "Symphonia" interpretation attractive to Church and King if they are strongly risk averse.

Can we relate these considerations to the way Church and King behaved in fact? No detailed study of the positions expressed on both sides will be attempted. Two things seem in agreement with our model. First, concentration of the literature on the disputes between the papacy and the emperor and other sovereigns should not hide the fact that, in our language, interpretations lying somewhere between the "Carolingian" and the "Symphonia" ones dominated over a long period of time. Then, Church and Kings did collaborate on most issues and that on a more or less equal footing. The doctrines expressed on both sides or by independent theologians largely agreed with that reality. Second, the strong "Gelasian" interpretation defended by Church—especially by popes Gregory VII and Innocent III (Powell, 1963; Tierney, 1964; Pacaut, 1989)—coincided with its growing capability and with a relatively weak capability of King. The model suggests that kings should have defended in that period not a "Norman" but a "Carolingian" interpretation. I think that there is some evidence that this was more or less the case, especially on the part of the kings of England and France. Church turned to something like the "Carolingian" interpretation only when its capability ceased to grow or started to decline.

Because of the diversity introduced by the Reformation and the Counter-Reformation and the co-existence of different varieties of Protestantism (and, for that matter, of Catholicism), a similar profile can be observed only dimly in the case of the revival of the "Norman" interpretation in the sixteenth and especially seventeenth centuries (Chadwick, 1964; Oakley, 2006). To account for the tumultuous events that succeeded one another in some countries, a different configuration is worth exploring.

3.3.4 Recalcitrant Believers

I present the idea in the form of a scenario. On a given territory, King, Church and Community agree on the interpretation of God's preferences and have done so for some time, so that the interpretation is well entrenched. For instance, the interpretation is "Gelasian." The capability of Church is high, which is reflected in figure 3.5 by the production possibility curve being G'H and equilibrium at D. Now, the capability of Church falls down. The new production possibility curve is GH. Then, Church and King agree on a new, this time "Carolingian," interpretation of divine preferences, represented by the rectangular curves U_{CK}. The main instance of such change of interpretation is a shift in the sixteenth century toward an increase in the

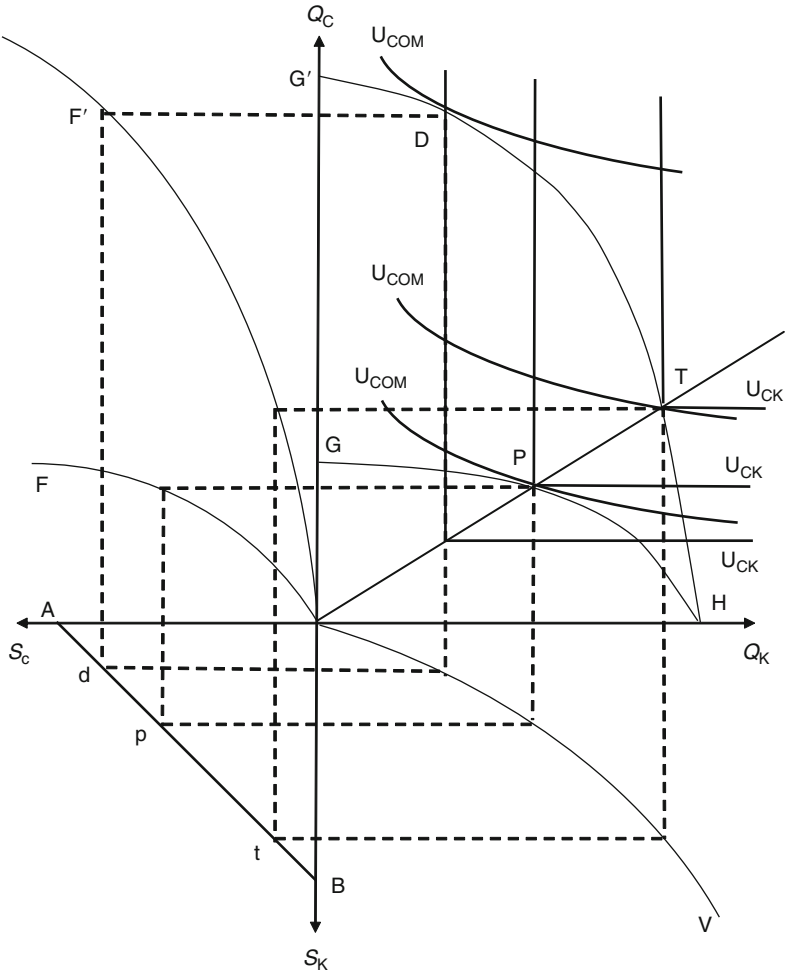

Figure 3.5 Recalcitrant Community

responsibilities assumed by King with the approval of Church (most denominations). Then, perhaps as a consequence of its alliance with King, Church recovers its capability and the production possibility curve is again G′H.

Will Community change its views and also adopt the new interpretation? In the sixteenth and seventeenth centuries, believers sometimes followed the injunctions of Church and King and shifted as asked some of their support from Church to King, and sometimes did not and kept their loyalties as they were. To complicate matters, evidence about what people thought is often sketchy and interpreted in different ways by historians. Still, in the sixteenth and seventeenth centuries, England, Scotland, Sweden and Bearn in particular offer examples of alliances between the sovereign and a Church—the denomination of which could vary—attempting to impose in

religious matters the royal authority on a population of tradition-inclined believers who did not really accept it in depth (see the complicated stories in Chadwick, 1964, and, perhaps more controversially, in Duffy, 1992).[21] And this happened despite the fact that, in the new setting, the Church (whatever the denomination) often increased its capabilities.

If Community could be persuaded to accept the "Carolingian" interpretation, the new equilibrium would be at point T. Compared to point P, this would represent an increase in the outputs of both Church and King. The distribution of Community support would have shifted to point *t* on line AB. However, if Community cannot be forced to change its views and the distribution of its support cannot be separated from these views, the distribution of support is again at point *d* on line AB—that is, even more biased against King than it was before the agreement between Church and King on a "Carolingian" interpretation (it was at point *p* then). Production is again at point D on G′H, Church producing the bulk of God-serving services and King very little. We may assume that Church cannot renege on its conversion to the "Carolingian" interpretation, for instance because the cooperation of King in a time of religious strife is absolutely indispensable. This means that Community imposes a suboptimal arrangement from the perspective of both Church and King. Both gauge the satisfaction of God's preferences at the level represented by the U_{CK} curve which passes through point D whereas God's preferences could have been in their view satisfied at the higher level represented by the U_{CK} curve passing through point T. From their perspective, the situation is even worse than it had become before the recovery of Church's capability (D is on a lower "Carolingian" indifference curve than P).

If, more realistically perhaps, Community, without changing its interpretation of God's preferences, can be constrained to adjust its support to the distribution required by the new interpretation Church and King agreed on, support is at point *t* on line AB, to which corresponds point T on the new possibility frontier. Church and King consider the solution optimal from God's perspective but this view is not shared by Community, which does not consider curve U_{COM} passing through T as the highest reachable. We may expect Community to make its views heard as soon as it recovers the possibility of doing so if this happens relatively quickly. On the other hand, if the constraints on its behavior are long-lasting, we may expect a progressive harmonization between Community's interpretation of God's preferences and the distribution of its support to Church and King.

3.4 Conclusion

The foregoing discussion is obviously exploratory. The questions mentioned have been studied in depth and in detail by historians, and to a lesser extent by sociologists and philosophers, especially in the context of Christianity. What can be added to all the accumulated knowledge? Largely theocratic societies are not things of the past only. They belong also to the world of

ideas relevant currently and possibly in the future. It is important to understand how these societies may work under different circumstances. For that purpose some abstraction is required. Economics is a discipline specialized, so to say, in abstract mechanisms. The main ambition of the chapter has been to use some approaches developed in economics to study the LTS logic in one of its aspects, namely the division of responsibilities between "King" and "Church"—a division largely determined by the interaction between theological considerations and actual capabilities.

The results presented in the chapter are definitely not very striking, whereas the model which inspires them may seem simplistic and distorting. However, as explained elsewhere (Salmon, 2007), I do not think that a model should be conceived as a simplified description or representation of reality, or even of a single aspect of it. Not to be confused with its mathematical characterization, it is a non-linguistic construct, which cannot be true or false but becomes useful if something *in* it (a process, mechanism or relation) and something *in* reality can be claimed to be similar. In addition, as Guala (2005) notes in the citation put as an epigraph, models are to be manipulated, and also (I would add) to be explored. We may do that by varying the value of exogenous variables, by changing some assumptions about motivations or by combining these different kinds of change and imagining scenarios and stories (Morgan, 2002).

In fact, even if its mathematical characterization is sketchy and intuitive, the model itself, as an idealized or constructed world, equipped with some of the furniture of reality, seems to me relatively promising. I feel that much more can be done with it than I have been able to achieve so far. It suggests developing or pursuing various implications or extensions. I have indicated some variants in note 9 but they concern only the production possibilities and even then only what is compatible with the existing geometry. Other variants could be imagined implying greater analytical changes and regarding also this time theological interpretations and the way they are treated by the main actors. Much more of course should be done to relate "things" in the model and "things" in the real world—not only the historical world but also the more currently relevant universe of politico-religious ideologies.

Notes

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1. If the logic is pursued further, this also suggests (*pace* Amin, 1999) that a regime may be democratic, in the sense of assigning authority to the majority of voters, and nonetheless theocratic as understood here. This requires only that the majority imposes on the minority God's wishes and prescriptions as it interprets them.

If combining theocracy and democracy is denied as a matter of principle, there are alternatives. For instance, Florence under Savonarola is called an "experiment in theocratic republicanism" by Duffy (1997, p. 196).

2. With some adaptation, these assertions seem to be transposable to other settings—for instance, Geneva and Scotland at the time of Calvin and Knox (Benedict, 2002; Mottu-Weber et al., 2006).
3. For convenience, I will use the term "religion," or "religious," even when it is an anachronism.
4. See in particular Luke (20: 25) and Romans (13: 1).
5. The fact that a society is a LTS is neither a sufficient nor a necessary condition for monarchs to play a religious role. They may have no role and even hardly exist in some forms of LTS (when these are theocratic ecclesiocracies and democracies in particular) while they may claim a major religious role in societies that are not LTS, as, arguably, did emperors Asoka, Constantine, and Akbar (Sen, 2000; Veyne, 2007). Similarly, arguments such as those developed in the wake of the French Revolution by Joseph de Maistre (1819) in favor of Papal ascendancy have little to do with the LTS logic.
6. For the role of various pious lay constituencies see e.g., Southern (1970), Lynch (1992), Le Goff (2004). We aggregate all of them into our "Community."
7. This holistic assumption may be related to a holistic character given by humans to their relationship with God prior to Christianity and for a long time afterward (Dumont, 1982). Under that perspective, God's demands are addressed to the whole group (tribe, people, nation) as such, and depending on how they are satisfied, God may punish or reward the group in this world (a possibility compatible, in the Christian case, with the purely individual character of out-worldly judgement). From the believers' perspective, this justifies that nonbelievers be also involved. But we may also follow a purely individualistic line. The fact that divine prescriptions are in part about collective features of society generates a public good situation as seen by believers. The latter may thus refuse to let nonbelievers undermine the collective effort necessary to please God.
8. The model is inspired by the specific factors model of Jones (1971), its geometrical presentation by Caves and Jones (1985).
9. Some of these assumptions could be changed in a way amenable to geometrical interpretation. If it were assumed that Church and/or King produce some quantity of God-serving services without any support from Community, curves OF and/or OV would start at some distance from the origin along the OQ axes. More importantly, Community's total support S_T could be assumed to be variable rather than fixed. This could be specified in different ways. The "supporting capacity" of Community could remain fully employed but be allowed to vary. Then, line AB would shift but equilibrium would still have to be sought on it. Alternatively, one could assume the "supporting capacity" to remain constant but not necessarily fully employed—that is, one could interpret it now as the upper limit of support. S_T would then design actual support and it could be represented by any point in triangle OAB, sides included.
10. Because of symmetry we could tell the same story inverting King and Church.
11. This results from OF' being in turn everywhere steeper than OF. A sufficient but not necessary condition for that property is that the function (1) be homogeneous of degree one. In figure 3.1, the way OF' is drawn precludes that this may be the case (with homogeneity, the slope of OF' would be the same as that of OF along any straight line passing through the origin).
12. As noted by Gaudin (1995, p. 199), religions concentrate on *orthopraxis* even more than they do on orthodoxy. Murdock (2004) devotes his chapter 4 to the strong

concern of the reformed churches of the second half of the sixteenth century with "moral discipline" (see also Benedict, 2002).

13. I have made coercion a defining characteristic of a LTS. Although in reality many members of society may contribute to the implementation of God's precepts or satisfaction of God's wishes, these objectives should not be expected to be achievable by purely voluntary and continuous participation from all. Some people will have to be forced all the time and most people at least occasionally.
14. Divine protection was instrumental to the conversion, if not perhaps of emperor Constantine (see Veyne, 2007), certainly of Clovis and many other "barbarian" kings (Brown, 1996; Dumézil, 2005). It was still welcomed, in the early fifteenth century, for the purpose of chasing the English out of France.
15. The historical importance of sacral kingship is documented by many authors (Fustel de Coulanges, 1864; Bloch, 1924; Kantorowicz, 1957; Gauchet, 1985; Oakley, 2006; Kumar, 2007).
16. An early warning was given in 1150 by St Bernard to Pope Eugene III (Southern, 1970, p. 111).
17. See Hervieu-Léger (2002) for an exploration of some of the problems raised by fragmentation.
18. In spite of the nostalgia expressed about the Caliphate, the interpretation seems at least close to the views of the young Islamists, described by Roy (2002), who interact mainly on the Web.
19. See also Dagron (1996, especially pp. 232–242).
20. A tangency point may not exist and equilibrium may be found on one of the output axes. In that case, despite the fact that divine preferences favour a division of power, their maximisation entails a complete ecclesiocracy or a complete religious (sacral) monarchy.
21. Other historical instances may be found at the end of the eighteenth century in the Italian possessions of the Hapsburg and, somewhat later, under and just after Napoleon (see Duffy, 1997).

References

Amin, S. "Judaïsme, Christianisme, Islam: Réflexions sur leurs Spécificités Réelles ou Prétendues (Vision d'un non Théologien)." *Social Compass* 46, 4, 1999: 545–561.

Benedict, P. *Christ's Churches Purely Reformed: A Social History of Calvinism*. New Haven: Yale University Press, 2002.

Bloch, M. *Les Rois Thaumaturges: Etude sur le Caractère Surnaturel Attribué à la Puissance Royale Particulièrement en France et en Angleterre*. Paris: Gallimard, 1983 (1924).

Breton, A. *Competitive Governments: An Economic Theory of Politics and Public Finance*. Cambridge: Cambridge University Press, 1996.

Breton, A. and P. Salmon. "Compliance in Decentralized Environmental Governance." In *Governing the Environment: Salient Institutional Issues*, edited by A. Breton, G. Brosio, S. Dalmazzone, and G. Garrone. Cheltenham, UK: Edward Elgar, forthcoming.

Brown, P. *The Rise of Western Christendom: Triumph and Diversity A.D. 200–1000*. Second edition. Oxford: Blackwell, 2003 (1996).

Caves, R.E. and R.W. Jones. *World Trade and Payments: An Introduction*. Boston, MA: Little, Brown, 1985.

Chadwick, O. *The Reformation*. Revised edition. London: Penguin Books, 1990 (1964).

Dagron, G. *Empereur et Prêtre: Etude sur le "Césaropapisme" Byzantin*. Paris: Gallimard, 1996.

Duffy, E. *The Stripping of the Altars: Traditional Religion in England 1400–1580*. Second edition. New Haven: Yale University Press, 2005 (1992).

———. *Saints and Sinners: A History of the Popes*. Third edition. New Haven: Yale University Press, 2006 (1997).

Dumézil, B. *Les Racines Chrétiennes de l'Europe: Conversion et Liberté dans les Royaumes Barbares Vème- VIIIème Siècles*. Paris: Fayard, 2005.

Dumont, L. "A Modified View of our Origins: The Christian Beginnings of Modern Individualism." *Religion* 12, 1982: 1–27. French version as Chapter 1 of *Essais sur l'individualisme: une perspective anthropologique sur l'idéologie moderne*. Paris: Le Seuil.

Fustel de Coulanges, N.-D. *La Cité Antique*. New edition. Paris: Flammarion, 1984 (1864).

Gauchet, M. *Le Désenchantement du Monde: Une Histoire Politique de la Religion*. Paris: Gallimard, 1985. Translated as *The Disenchantment of the World: A Political History of Religion*. Princeton: Princeton University Press, 1997.

Gaudin, P. "Postface." In *Les Grandes Religions*, edited by P. Gaudin. Paris: Ellipses, 1995, pp. 199–216.

Guala, F. *The Methodology of Experimental Economics*. Cambridge: Cambridge University Press, 2005.

Hervieu-Léger, D. "Space and Religion: New Approaches to Religious Spatiality in Modernity." *International Journal of Urban and Regional Research* 26, 1, 2002: 99–105.

Jones, R.W. "A Three Factor Model in Theory, Trade, and History." In *Trade, Balance of Payments, and Growth*, edited by J. Bhagwati, R.W. Jones, R.A. Mundell and J. Vanek. Amsterdam: North-Holland, 1971, pp. 3–21.

Kantorowicz, E.H. *The King's Two Bodies: A Study in Mediaeval Political Theology*. Revised edition. Princeton: Princeton University Press, 1997 (1957).

Kumar, V. "Sacral Monarchy." University of Hamburg, MS, 2007.

Le Goff, J. *La Naissance du Purgatoire*. Paris: Gallimard, 1981.

———. "Les Laïcs Sont le Moteur de l'Histoire de l'Occident." *L'Histoire* 289, 2004: 8–13.

Lynch, J.H. *The Medieval Church: A Brief History*. London: Longman, 1992.

Maistre, J. de. *Du Pape*. New edition. Geneva: Droz, 1966 (1819).

Morgan, M.S. "Models, Stories, and the Economic World." In *Fact and Fiction in Economics: Models, Realism, and Social Construction*, edited by U. Mäki. Cambridge: Cambridge University Press, 2002.

Mottu-Weber, L., A.-M. Piuz, and B. Lescaze. *Vivre à Genève Autour de 1600: Ordre et Désordres*. Geneva: Slatkine, 2006.

Murdock, G. *Beyond Calvin: The Intellectual and Political World of Europe's Reformed Churches, c. 1540–1620*. Houndsmills, UK: Palgrave Macmillan, 2004.

Nicol, D.M. "Byzantine Political Thought." In *The Cambridge History of Medieval Political Thought c. 350–c. 1450*, edited by J.H. Burns. Cambridge: Cambridge University Press, 1988, pp. 51–79.

Oakley, F. *Kingship: The Politics of Enchantment*. Oxford: Blackwell, 2006.

Pacaut, M. *La Théocratie: L'Eglise et le Pouvoir au Moyen Age*. Paris: Desclées, 1989.

Powell, J.M. (ed.) *Innocent III: Vicar of Christ or Lord of the World?* Second edition. Washington, DC: Catholic University Press of America, 1994 (1963).

Roy, O. *L'Islam Mondialisé*. Revised edition. Paris: Le Seuil, 2004 (2002).

Salmon, P. "Réflexions sur la Nature et le Rôle des Modèles en Economie." In *Leçons de Philosophie Economique, Tome III: Science Economique et Philosophie des Sciences*, edited by A. Leroux and P. Livet. Paris: Economica, 2007, pp. 355–384.

Sen, A. "East and West: The Reach of Reason." *The New York Review of Books*, June 20, 2000.

Southern, R.W. *Western Society and the Church in the Middle Ages*. Reprinted. London: Penguin Books, 1990 (1970).

Tierney, B. *The Crisis of Church and State 1050–1300*. Reprinted. Toronto: University of Toronto Press, 1988 (1964).

Veyne, P. *Quand Notre Monde Est Devenu Chrétien (312–394)*. Paris: Albin Michel, 2007.

Vidler, A.R. *The Church in an Age of Revolution: 1789 to the Present Day*. Revised edition. London: Pelican Books, 1974 (1961).

II

Theocracy as a Dictatorship

4

Theocracy, Natural Spiritual Monopoly, and Dictatorship

Ronald Wintrobe and Fabio Padovano

4.1 Introduction

The chapter looks at the behavior of theocracy. We first look at religion, and the reasons why people adopt religious beliefs. In particular we try to understand why people tend to believe in *one* God. We look at two motivations, the desire for solidarity with a group with common beliefs, and the individualistic desire for an afterlife. Then we turn to dictatorship. Section 4.2 outlines Wintrobe's (1990, 1998) model of dictatorship. Section 4.3 extends this model to explain the behavior of theocracy, a subject not considered previously. Extending a model developed to understand twentieth century dictatorships to understand the behavior of Calvin or the Papacy might strike the reader as outlandish, and we understand that skepticism. Nevertheless, we believe that the exercise yields some light. On the positive side, looking at a regime such as the Papal States that lasted more than 1,300 years provides a sample unmatched in modern times on which to discuss the implications of a theory of theocracy.

The predictions of this model are straightforward: First, compared to other forms of dictatorship, a theocracy will tend to have more power but a smaller budget (tax revenue). Second, we show that theocracy varies like other forms of dictatorship, in terms of the dictator's emphasis on the use of repression or loyalty to stay in power. To use Wintrobe's (1990, 1998) classification, there are all kinds of theocracies: tinpots, tyrants, and totalitarians. To illustrate this argument, we consider the behavior of the Catholic theocracy in the Papal States in some detail, as this was a very long lasting theocracy, and try to show how the behavior of different Popes demonstrates this point. Finally, the argument is illustrated with three other cases: the regime of Savonarola in Florence, that of modern Iran, and the regime

of Calvin in Geneva. In the last case, we ask if the individualistic nature of the religion would lead to better economic performance (as was in effect suggested by Max Weber), compared to religions based more on community solidarity. Thus, to the extent that Weber was correct, in a Calvinistic theocracy the second prediction of the model (that budgetary revenue will be lower) might not hold.

The questions addressed in this chapter are obviously partly concerned with the economic approach to religion. We assume it is possible to take a rational choice approach to this subject and direct the reader who is doubtful on this point to consult Montgomery (1996) who skeptically reviews the arguments for and against this way of thinking applied to religion. In particular, he points out that "rationality" in economic theory normally includes updating of beliefs. Do people rationally update their beliefs in God on the basis of evidence? Montgomery suggests they do not.

However, we will employ the economic approach in a new way, in which "beliefs" are grounded in a (rational) desire to belong to a group that shares these beliefs, and are not necessarily formed on a purely scientific basis. This does not mean that they are irrational, but it does imply that rationality includes the desire for group membership or solidarity, and that people are willing to adopt beliefs for this purpose. We are not suggesting that sometimes people are rational in the standard sense, and sometimes in this sense. We are suggesting that people *always* behave this way, although not to the same degree. And this includes scientists, such as economic scientists, who are themselves reluctant to give up the belief in human rationality, not least because they might find themselves excluded from the "club" of rational-minded economists.[1] Elsewhere one of us has suggested that this change in the assumptions of economics is necessary if economics is to be used to understand many phenomena, such as political revolutions, suicide terror, or crime, and including strictly economic phenomena such as bubbles, the microfinance revolution, and herd behavior in markets (Wintrobe 2006b).

The chapter is in six further sections: section 4.2 looks at religion, and discusses why people believe in *one* God. In turn this provides a justification for the idea that monotheism is a "natural spiritual monopoly." Section 4.3 outlines the theory of dictatorship used here. Section 4.4 discusses the behavior of theocracy. We first outline how theocrats use loyalty and repression to stay in power, including the processes that distinguish them from other dictatorships. We show how the basic model of dictatorship can be applied to these regimes. We then consider a couple of cases in detail, namely the regime of Calvin (section 4.5) and the Papal States (section 4.6). Section 4.7 concludes the chapter.

4.2 Why People Believe in *One* God

The question posed in this section can be best answered if we first ask what people want from religion. It is common in the economic literature to leave

this unspecified, and simply to discuss "supernatural services" but in other, older literatures on religion, scholars have been less loath to be precise, and one of the prime motives identified in the sociology of religion, for example, is the solidarity or social cohesion that comes from common belief. Thus, according to Emile Durkheim

> [A religious group] does not unite men by an exchange and reciprocity of services, a temporal bond of union which permits and even presupposes differences, but which a religious society cannot form. It socializes men only by attaching them completely to an identical body of doctrine and socializes them in proportion as this body of doctrine is extensive and firm. The more numerous the manners of action and thought of a religious character are, which are accordingly removed from free inquiry, the more the idea of God presents itself in all details of existence, and makes individual wills converge to one identical goal. (Durkheim 1897, 1951, p. 159, quoted in Hechter, 1987, p. 17)

Thus the Roman emperor Constantine thought the adoption of Christianity by the Empire would help to create social cohesion among his subjects. In the economic literature, Glaeser and Sacerdote (2002) have provided strong evidence that social cohesion or solidarity is a prime motive of religious participation.

Let us assume, then, to begin with, that people participate in religious activities for the same reason that they join many other groups: in order to get solidarity. Solidarity denotes "unity" or "oneness of purpose." The more solidarity there is among the members of a group, the more they are capable of cooperating as a group towards some common goal.[2] The desire for group identification seems to be a fundamental characteristic of human beings (Brown, 1991). This preference has been demonstrated in very simple experiments, such as the one where people were sorted by their teacher into groups with brown eyes and those with blue eyes, and the individuals within each group immediately began distinguishing between "insiders" and "outsiders," based on eye colour.[3] The nature of the group identified with appears to be subject to wide variation. A wide variety of groups with which individuals identify can be listed, including the family, youth gangs, cults, business firms, unions, religions, political parties, sporting clubs, ethnicity, and the nation state.

Elsewhere, one of us (Wintrobe, 2006a and 2006b) analyses the production of solidarity as a trade involving beliefs or values. In this trade, the individual adopts the beliefs sanctioned by the group and receives the benefit of social cohesion from members of the group in exchange. He constructed a simple formal model to illustrate this process. The person who gives up his beliefs loses something, which could be called his or her true "identity" or "independence of thought" or "autonomy." On the other hand, he or she gains the experience of greater solidarity or social cohesion or "belongingness." Thus, to sketch the model of how this process operates, assume that an individual is endowed with a certain set of beliefs, and, corresponding to

this, a certain identity. If a person agrees to join a group, the price of admission is, in part, that he or she adopts certain beliefs that are sanctioned by the group. Common belief is the basis of solidarity. Additional requirements might be that he participate in group activities or in some other way demonstrate that he shares in the beliefs and goals of the group.

The organization, in turn, supplies the individual with the sense of belonging to a community, by organizing events or activities that individuals can attend and participate in, meet and get to know others in the organization. The rate at which the individual can trade off autonomy for solidarity depends on the technology available for doing this, as summarized in the organization's production function. Thus churches have a "technology" for conversion involving rituals, dogmas, and ceremonies by which individuals are assisted in becoming believers.

The main implication of this way of thinking is that a person who holds a belief that appears on the surface to be irrational may not be irrational: the rationality may consist not in the *content* of the belief, but in the *reason for holding it*.

Now if the reason people choose to participate in religious groups is to obtain solidarity, and common belief is the basic source of solidarity, then a group which believes in one God will, *ceteris paribus,* have more solidarity or social cohesion than one which believes in many. In brief, the belief unites the group to the extent they all believe in the *same* thing. Thus a religious group which offers to its members the belief in monotheism, the belief in *one* God, will be more capable of uniting them (providing them with more social cohesion or solidarity) than one in which the members are asked to believe in many Gods. In the latter case, it will naturally occur that some will believe more in one of the Gods than in another, and so the common basis for solidarity is lost. So a person who joins a religious group to get solidarity will get more solidarity by joining a group that believes in *one* God than with a group that believes in many Gods. Consequently, in the competition among groups which offer religious services, those groups which offer a system of beliefs which is monotheistic will be more successul than those groups which offer a system of beliefs which is polytheistic. The latter groups will not be able to compete with them, to the extent that what people seek from religion is solidarity with a group.

Now if the belief in *one* God provides greater social cohesion or solidarity (to the group) than belief in a multiplicity of Gods, and this social cohesion lowers the costs of collective action, then monotheism has the character of a natural monopoly. The reason is simple: the marginal costs of solidarity rise as the number of Gods believed in increases. In turn, if solidarity lowers the marginal costs of collective action, then this belief in one God has the character of a natural monopoly.

There may be many different monotheistic religions (Judaism, Christianity, Islam) and within these different religions there may be many different sects, as in Christianity there are different kinds of Catholicism, various types of Protestantism, etc., or in Islam there is the division

between the Shiites and the Sunnis, or within Judaism there are Orthodox, Conservative and Reform denominations, and all kinds of subdivisions within each of the types mentioned. But they all share one common belief in that they are all monotheistic, and the *One God* of the Jews is the same as that of the Christians and the Muslims. So although the groups may have many differences, which are capable of leading to innumerable conflicts among them and within the groups, conflicts which indeed formed the basis for much of human history in the past and some think are returning again today, they all have this belief in common. And this is a basic source of solidarity for the individuals who make up this group—those who believe in monotheism. Indeed this solidarity was shown in a most dramatic fashion by the Pope Benedict's recent (November 2006) visit to Turkey where he prayed together with a Muslim leader in a Mosque to their common God.

Now there is an obvious flaw in the argument to this point. While the *group* benefits when there is a single source of spiritual authority, the *individual* may not. From the individual point of view, there may be some or many who don't *want* the solidarity, or want less than is being offered. Either they don't want to be part of the group or they do but they don't want to pay the "price" in terms of conformity to its beliefs. One way of putting this is that an individual within the group may not want to suffer the loss of *autonomy* that occurs as a result of conformity to the beliefs of the group.[4] Finally, they may simply reason that although they do wish to be part of the group, and they don't mind conforming to its beliefs, they may reason that their own contribution to its goals is, in any group of reasonable size, small enough that it pays them to "free ride" rather than adopt the beliefs of the group.

Thus although monotheism may provide solidarity, there are always people who don't want the "service," or who do want it but are willing to free ride on the contributions of others. In turn this reduces the effectiveness of the group, as it also reduces the effectiveness of an army as a fighting force. It immediately follows that the group needs some method of enforcing belief in order to control the tendency of individuals not to conform.

In part the answer to this problem is simple. Solidarity is a *private* good, and those who free ride and do not contribute can be "punished" by the withdrawal of solidarity or social cohesion by other members of the group. If the group is hierarchical, other members of the group can be instructed to refuse solidarity to those who do not contribute appropriately. If it is not hierarchical, other members will in any case wish to withhold solidarity to the member who free rides. So the free rider problem is not necessarily fatal to this argument. However, there is still the question of how to impose the beliefs of the group on those who simply do not wish to subscribe to them, and are willing to forego the feeling of solidarity rather than do so.

To solve this enforcement problem requires leadership, hierarchy and the implementation of punishments in order to enforce belief. Such enforcement was characteristic of the origins of monotheism, both initially with the first

monotheism imposed on the Egyptians by Akhnaton in Egypt, and, less well known, with Moses's imposition of monotheism on the Jews. Michael Walzer (1985) describes how Moses dealt with those who refused to accept monotheism.

> The word "purge" was brought into the vocabulary of revolution by the English Puritans. They took it, I think, from Ezekiel 20, where the prophet recounts the Exodus story and promises the Babylonian exiles a new Exodus and a new wilderness: "Like as I pleaded with your fathers in the wilderness…so I will plead with you, saith the Lord God. And I will cause you to pass under the rod, and I will bring you into the bond of the covenant: And I will purge out from among you…them that transgress against me…" The rabbis tended to talk of the "purgings" of the wilderness period as if they were a kind of laws enforcement, but even they saw in the killing of the idol worshippers at the foot of Mount Sinai a political act of a special kind (Walzer, 1985, p. 82).

Our argument does not imply that all groups will believe in the *same* God, or that there will be necessarily more solidarity between members of different groups because they all believe in *one* God. Indeed there may be fierce competition among them, as of course there often was among different groups throughout human history, as they are essentially competing on the same "turf." Moreover, another source of solidarity *within* a group is that its set of beliefs is different from that of other groups, and some extremist groups obtain solidarity to the extent that they, and only they, share a particular set of beliefs that are extreme judged by the standard of the society of which they are part. Our only proposition so far is that successful religious groups will be those that offer monotheism compared to polytheism.

In turn, when a particular group has more solidarity or social cohesion as a result of its adoption of monotheism, the costs of any collective action by the group are lower. For example, the capacity of the group to defend itself will be more effective. The role of solidarity in promoting fighting capacity was pointed out by Posen (1993), in the context of his analysis of ethnic groups. As Posen suggested for ethnic groups, (but the argument obviously generalizes to any other group), the internal cohesiveness of a group is part of its fighting strength.[5]

Others have pointed out that solidarity appears to be vital in battle. What motivates soldiers to kill and to be willing to participate in battles at the possible cost of their own lives? We do not know of anyone who knows the answer to this question, but certainly one of the most celebrated accounts of possible answers to it is John Keegan's *The Face of Battle* (1976), which synthesizes and analyzes a large number of historical accounts of the nature of battle, often as experienced by the protagonists. According to Keegan, solidarity is central to understanding the willingness of soldiers to fight, and the capacity of one army to dominate another. In his account, the group that keeps together or retains its solidarity wins, while the other side disintegrates.

In this way of thinking, then, religion is taken to be a set of beliefs about the supernatural or "myths" (i.e., beliefs whose truth or falsity is not really subject to scientific verification) that people believe in to a greater or lesser degree in order to obtain solidarity with others who share this belief. Monotheism is preferable on this score because it provides a single, deep source of common belief.

Of course there are enormous variations on the types of monotheism. Some religions have attributes which appear polytheistic but are in fact monotheistic. We cannot possibly address this profound issue here in any depth. However, with respect to Hinduism, the many and the One are not unrelated. This point is best made in the *Upanishads,* in which at one point a seeker asks the sage Yajnavalkya how many gods there are. He replies:

> "Three and three hundred, and three and three thousand"
>
> "Yes of course" he said, "but really, Yajnavalkya, how many gods are there?"
>
> "Thirty-three."
>
> "Yes, of course" he said, "but really, Yajnavalkya, how many gods are there?"
>
> "Six."
>
> "Yes, of course" he said, "but really, Yajnavalkya, how many gods are there?"
>
> "Three."
>
> "Yes, of course" he said, "but really, Yajnavalkya, how many gods are there?"
>
> "Two."
>
> "Yes, of course" he said, "but really, Yajnavalkya, how many gods are there?"
>
> "One and a half"
>
> "Yes, of course" he said, "but really, Yajnavalkya, how many gods are there?"
>
> "One." (Upanishads:Brihadaranyaka Upanishad, 3.9.1, quoted in Knott [1998], pp. 57–58)

In Buddhism, there is *no* God, a fact which has given rise to a great deal of confusion as to whether Buddhism is a religion in the usual sense at all (see, for example, Kolm, 1994). On the other hand, in Islam monotheism is unambiguously absolute, not relative or pluralistic in any sense of the word, as emphasized for example in *sura* Al-Ikhlas. Islam accepts as its fundamental tenet the oneness and uniqueness of God, the Arabic word for monotheism is *Tawhid* which means "being one," that is, alone, only one in number.[6]

Of course there can be other sources of common belief, for example, *one* nation, *one* emperor, king, football team, etc. and these can partially or completely replace spiritual belief as a source of solidarity, as they have indeed done for many people both in the past and today.

Solidarity and monotheism were both initially associated with the Jewish religion, which, if it did not invent monotheism, at least invented the first lasting version of it. In the covenant, the Jews promised to believe in the one God, and they made a covenant with the Supreme Being, and with each

other, for this purpose. Another reason people believe in religion is because they desire an afterlife, and they think that by subscribing to religious belief and behaving appropriately (e.g., by following the selfless way of Christ), they may get one. This motive historically became prime with the Christian religion, and later with Islam.

Now, in the Christian religion at least the belief in the afterlife is a more individualistic approach to religion, as an individual may be saved if he or she follows the teachings of Jesus, more or less irrespective of what others do. That is, salvation in Christianity is something that happens to individuals. In the Jewish religion, on the other hand, the people as a whole were said to be "Chosen" by God, and they covenanted jointly to believe in Him and with each other. As Finer put it in his *A History of Government from the Earliest Times* (1997),

> The entire community had covenanted itself to God at Mount Sinai. This is the central event in Jewish history. Everything else was elaboration and commentary. At Sinai God gave out his law; it was written down and the people covenanted to obey it. So, each individual, and the community as a whole, was in direct communion with God… (p. 238)

The early Christians modified the contract to one of belief. To put it simply, in the early Christian religion, if one believed, one was saved in return. The decisive turning point, according to the historian Thomas Bokenkotter, was in the controversy over whether the pagan Gentiles could be admitted to the Church simply if they believed, or whether they also had to obey the Jewish Law, and particularly become circumcised:

> For [Paul] the very essence of the Gospel was at stake in the controversy over circumcision; to require Gentiles to practice the Jewish Law would be tantamount to saying that faith in the risen Lord Jesus was not enough for salvation; observance of the Law was also necessary… So when Paul heard the traditionalists saying the Gentiles must be circumcised, he insisted "what makes a man righteous is not obedience to the Law, but faith in Jesus Christ… if the Law can justify us, there is no point in the death of Christ.… When Christ freed us, he meant for us to remain free. Stand firm, therefore, and do not submit again to the yoke of slavery (Ph 3: 8–9)." (Bokenkotter, 1990, p. 20)

Paul's views were ultimately decisive and as a result the Church shed its exclusively Jewish character and was enabled to spread the Gospel rapidly to the pagan Gentiles. Belief was sufficient and circumcision was not to be required of them (Bokenkotter, 1990, p. 21).

So we can think of belief in religion as motivated in two possible ways: out of a desire for solidarity, or a desire for the afterlife. Does the second, individualistic belief change our notion that monotheism will crowd out polytheism as a belief system? Obviously not. If an individual believes that some are saved and others are not, implicitly the assumption is that there is only *one* system of justice, *one* set of scales on which an individual's good

and bad deeds are to be weighed, as illustrated in the Book of Revelation, for example. So once again the belief system leads naturally to the belief in *one* God.

Now the fact that there are two possible motives for belief leads naturally to a system of classification, in which religions may be classified as more or less individualistic, and this has consequences for the effects on economic performance. For example Avner Greif, in a celebrated paper (1989) contrasts the solidarity of the Maghribi traders, who were, oddly enough, both Jewish and part of the *umma,* and who formed a network where information on the reliability of their agents was exchanged freely, with the Genovese traders, who were more individualistic and did not share information in this way. He argues that the individualistic Genovese were more suited to capitalistic endeavors, because they were more open to formal processes and markets. On the other hand, one can envision circumstances where the opposite would be true. For example, the contemporary success of the Grameeen Bank is often attributed to its capacity to exploit group solidarity by making loans to groups rather than to individuals. The group is sometimes solvent in a way that the individuals within it are not, and the Grameen Bank has had tremendous success with this group approach. More generally the contemporary success of Japan is often said to be due to its solidaristic society ("Japan, Inc."), and the same thing could be said about South Korea.

The Jews have been on the whole very successful capitalists despite (some would say partly because of) their solidaristic religion. At the same time, one could argue that this is because for most of their history they were not subject to a theocratic government. Similarly Islamic countries at one time were very successful economically, and their current troubles may not be due to the undoubted emphasis on the community, which is possibly more characteristic of Islam than either Judaism or Christianity.

So there is a fascinating question here if we turn to the question of theocracy. If a theocracy is based on an individualistic religion like Calvinism, would that tend to make it more stable and successful economically, compared to a more solidaristic religion like Islam? Or would the reverse be true? We return to this question after outlining the model of dictatorship to be used in this chapter.

4.3 Dictatorship

In the next section we look at the *behavior* of theocracy. The analysis is a new extension of Wintrobe's dictatorship model (1990, 1998) to theocracy (not considered before). So in this section we provide a brief outline of the basic principles of that model.

The classic view of the difference between democracy and dictatorship in political science (e.g., Friedrich and Brzezinski, 1965) is that dictators stay in power through repression. However, rule by repression alone creates a problem for the autocrat. This is the Dictator's Dilemma: the problem

facing any ruler of knowing how much support he has among the general population, as well as among smaller groups with the power to depose him. The use of repression breeds fear on the part of a dictator's subjects, and this fear breeds a reluctance on the part of the citizenry to signal displeasure with the dictator's policies. This fear on their part in turn breeds fear *on the part of the dictator*, since, not knowing what the population thinks of his policies, he has no way of knowing what they are thinking and planning, and of course he suspects that what they are thinking and planning is his overthrow. The problem is magnified the more the dictator rules through repression and fear. The more his repressive apparatus stifles dissent and criticism, the less he knows how much support he really has. The natural state of the dictator who rules by fear is paranoia.

To solve this problem, dictators do not rule by repression alone but through loyalty and political exchange. Like democratic politicians, they try to implement the policies their people want in order to obtain support for their rule. But, again, like democratic politicians, there is no legal way to enforce these "political exchanges." What guarantees one party that the other party will not cheat or renege in a political exchange? An interest group cannot sue a politician for breaking his promise, and a politician cannot sue an interest group for switching its support to his opponents. The general solution to this problem of preventing cheating on exchange in product markets is a "trust" or "loyalty premium." So the dictator invests in the loyalty of his supporters by "overpaying" them, particularly those in a position to bring the regime down, such as the military. The loyalty premium can take the form of subsidized ("efficiency") wages or capital projects, pork barrel projects, the distribution of goods and services at subsidized prices, and so on. The recipients provide loyal support in return.

That dictatorships use two instruments—repression and loyalty—to stay in power provides a useful classification of regimes. Four types can be distinguished: tinpots, tyrants, totalitarians, and timocrats. Thus, totalitarian regimes combine high repression with a capacity to generate loyalty. Under tyranny, the regime stays in power through high repression alone and loyalty is low. A tinpot regime is low on both counts. And timocracy implies that loyalty is high even at low levels of repression. These correspond to the four types or images mentioned which Wintrobe suggests in the Introduction to his (1998) book on dictatorship have tended to recur over and over in the literature on dictatorship.

The different types of regimes can each be derived from a more general framework (Wintrobe, 1998, Chapter 5). Suppose now that all dictators have the *same* utility function[7], whose arguments are consumption (C) and power (π).

$$U = U(\pi, C) \tag{1}$$

The dictator is constrained in two ways. The first constraint is the costs of accumulating power. This is governed by the prices of repression and loyalty, P_R and P_L. These, in turn, depend on the political institutions of

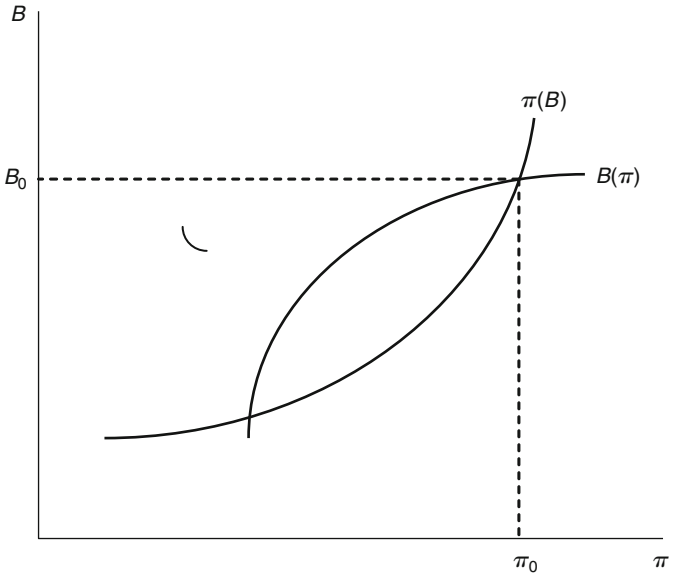

Figure 4.1 Power and Budget in a Dictatorship

the regime: is there a mass party, are the police and the army subservient to it, and so on. This constraint is illustrated by the upward sloping curve $\pi(B-C)$ in figure 4.1, implying a positive relationship between the dictator's *total* budget B, minus expenditures on C, and the level of π obtained. This curve shows how the dictator can convert *money* into *power*.

The second constraint is the ruler's capacity to use his power to increase revenue, as summarized by the $B(\pi)$ curve in figure 4.1. This curve describes the relationship between the exercise of political power, and its consequences for the dictator's budget, that is, the conversion, in effect, of *power* into *money*. There are many ways for a government to convert power into money: the most obvious are through taxation, regulation, or the provision of public goods that raise national income.

It seems reasonable to assume that, initially, the power-to-money curve $B(\pi)$ must be positively sloped: starting from very low (or zero) levels of power the provision of basic public infrastructure or the imposition of simple taxes at low rates must raise revenue. But after some point, further exercise of power must ultimately lower the budget by reducing the efficiency of the economy, therefore lowering national income and tax revenue.

Equilibrium in figure 4.1 is at the intersection of the $B(\pi)$ and $\pi(B-C)$ curves, or at E_0, implying a (total) budget of B^*, and power equal to π^*[8]. To illustrate the argument for a minute, consider the classic totalitarian economy, that of the Former Soviet Union. The Soviet system may have been inefficient economically, but since the economy was largely demonetized and controlled by the Party, which attempted to control the economy through central planning, *at the margin* an increase in the power of

the Party helped the economy. Thus the $B(\pi)$ curve is upward sloping in figure 4.1 ($B_\pi > 0$).

The equilibrium is also shown in equation

$$B(\pi) = P_\pi \pi (B - C) + C \tag{2}$$

The left-hand side of (2) shows the dictator's budget B as a function of power (π), that is, it shows how the dictator's power may be used to obtain budgetary resources. The right-hand side shows how the funds are "spent": either on consumption, C, or accumulating power π via the money-to-power relation $\pi(B-C)$, with each unit of π multiplied by P_π—the "price" of power in terms of money.

Maximizing (1) subject to (2) gives

$$\frac{U_c}{U_\pi} = \frac{1}{P_\pi \left(1 - (1/E_\pi)\right) - B_\pi} \tag{3}$$

where E_π is the elasticity of power with respect to its price.

In general, the ruler will choose a combination of C and π, depending on his preferences for the two, as shown in equation (1) or (2). Equilibrium is where the marginal rate of substitution between these two is equal to the ratio of their marginal costs. And once either the level of π or the budget is set, the dictator chooses the optimum levels of repression R and loyalty L. So this analysis jointly determine the dictator's optimal levels of R^*, L^*, C^*, B^*, and π^*. In turn, changes in the capacity to raise revenue or to repress dissent, the supply of loyalty, the dictator's consumption level, or any other

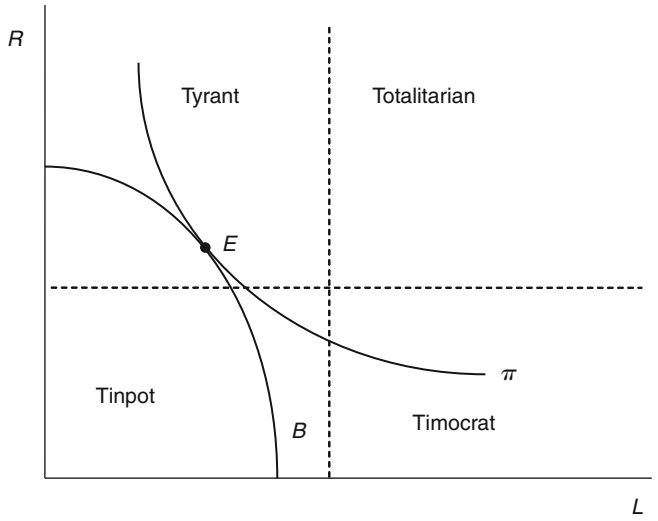

Figure 4.2 Equilibrium Loyalty and Repression

Note: Depending on the quadrant, the regime turns out to be either tinpot, tyrant, totalitarian, or timocrat.

variable entering into the equilibrium depicted by equations (1) and (2) or (3) changes the nature of the equilibrium. Thus whether a regime is a tin-pot (low repression, low loyalty), a tyranny (high repression, low loyalty) or totalitarian (high repression and high loyalty) depends on the more basic factors entering equations (1) and (2). This is explicitly shown in figure 4.2. Depending on the quadrant, the regime turns out to one of the four types of regime.

4.4 Theocracy

Now let us apply this model to the case of theocracy. Theocracies also stay in power through the use of the instruments of repression and loyalty. In particular, they can use the power of belief in the religion as an important way to provide a source of loyalty to their regime. How this works depends on the type of religion. Three notable sources of religious power are the priestly class, the Holy Book and sponsorship of the arts in the case of the Catholic religion in particular.

a) The priestly class. Theocratic rule usually involves the dominance of a priestly class, the leaders of the Church in the regime of Calvin, the rabbinate in the case of the Jews, and the religious clerics in the case of contemporary Iran. They may rule directly, as Calvin did, or indirectly[9] as in the case of modern Iran. In either case, their religious authority is obviously an enormous source of power. But their authority rests normally on tradition and on sources like the Holy Book. This tends to make them conservative and therefore unresponsive to innovation.[10] They try to buttress their authority in various ways, as discussed in the following sections.

b) The church as sponsor of the arts. To see this point, recall the model of seller reputation first put forth by Klein and Leffler (1981). In that model, a consumer wishes to buy a high quality good, but cannot distinguish high quality from low prior to purchase. Guarantees are assumed not to exist. Further, it is assumed that if a customer is "cheated" this information spreads immediately to all other customers. So the seller has a problem: the consumer will refuse to buy his goods unless the seller has some way to convince the buyer that his goods are in fact high quality. One way to convince the consumer that the quality of his products is high is for the seller to make investments in quality-specific attributes. For example, a restaurant may invest in expensive décor. The consumer is then assumed to reason as follows: if the food is in fact bad, the seller will lose all of his investment in the décor of the restaurant. Hence, as long as the décor has no other use (i.e., its value is specific to the quality of the product and will depreciate to zero immediately if a customer is cheated), the investments serve to guarantee quality. Once the customer has in fact been thus induced to try the goods, and finds out that they are indeed high quality, and this information spreads, the firm will have established a reputation for producing high quality goods, and can sell them at a premium price. Competition among firms guarantees that in equilibrium, this price

premium simply represents the normal rate of return on the firm's investments in reputation.

The model is easily applied to the problem of a religious group seeking to convince its "customers" that in fact it alone represents the True God. Thus many of the activities of the Catholic Church in this respect are easily interpretable as attempts to establish the Church's reputation for being the representative of the One God, in the same way that costly expenditures on décor are viewed as "signals" of quality of the product in the model of Klein and Leffler.[11] Duffy shows that in a way the Pope Nicholas V (1447–55), "the first and in some ways the most attractive of the Humanist popes (Duffy, 2006, p. 178)," thought of things in this manner. He inaugurated the physical transformation of Rome by restoring the Castel Sant'Angelo, and most importantly, rebuilding the Vatican, including planning the new piazza for grand papal blessings in front of St Peter's:

> Nicholas did not live to complete his many projects, but in a speech to the cardinals from his deathbed in 1455 he emphasized the religious vision that underlay them. His buildings were to be sermons in stone, laymen's books. The learned who had studied antiquity could truly understand the greatness and authority of Rome, but to create solid and stable convictions in the minds of the uncultured masses, there must be something that appeals to the eye: a popular faith, sustained only on doctrines, will never be anything but feeble and vacillating. But if the authority of the Holy See were visibly displayed in majestic buildings, imperishable memorials and witnesses seemingly planted by the hand of God himself, belief would grow and strengthen like a tradition from one generation to another, and all the world would accept and revere it.
>
> These words in many ways provided the programme for the Renaissance papacy. (Duffy, 2006, p. 181)

Hence, the tourist gazing at the depiction of the Last Judgement in the Sistine Chapel, or at any of the other innumerable beautiful paintings sponsored by the Church from the Middle Ages to the Renaissance and on into the Baroque period—a Michelangelo, say, a Raphael or even, but with less certainty, a Caravaggio—does so perhaps unaware that he is essentially gazing at "sunk" expenditures which have the purpose of establishing a claim to credibility or reputation that this Church and only this Church can claim to truly represent the One God. These magnificent works of art also serve the function of deterring entry into the religious "market" by competitors. This strategy is not available to Judaism and Islam because images of divine happenings are forbidden.

However, matters are not so simple, for two reasons. Both derive from the need on the part of the agent who claims to represent the One God (Church, Synagogue, Mosque, etc.) to provide credence to the belief that in fact the Church does really represent the wishes of God. The first way, which we have already discussed, is by expenditures which serve as a guarantee of high quality and hence the employment of artists, architects and builders

to construct enormous edifices, beautiful paintings, and so forth which are specific to the claim of the religion and have no other function. Hence if the Church "cheats" on its claims and does not provide high quality, the investment represented by these expenditures is lost. Of course, "cheating" is not directly observed by the consumer of religious services, but signs of corruption, particularly obvious ones such as the sale of indulgences, would tend to undermine the consumer's belief in "quality" in exactly the same way. In the model of Klein and Leffler, they are quality-specific[12] and depreciate to zero in any other use. However, the problem with these expenditures by the Church is that the "signal" is not always clear, and in fact the expenditures can also simply be interpreted as "excess profits" or corruption, and since, unlike in the model of Klein and Leffler, in a theocracy these expenditures may be financed by taxation, the subjects may groan under their burden, as in fact the people of Rome did under the taxation required to finance the great expenditures in rebuilding the Vatican and other magnificent works by Pope Urban VII (Duffy, 2006).

c) The Book. Thirdly, in all of the monotheistic religions, one of the most important ways to buttress the claim to represent the One God is via The Book, that is, the Holy Book (The Old Testament, The New Testament, the Koran, etc). The Holy Book provides the Authority that the Church uses to buttress its claim by telling "the" story of the relationship of God to Man. Thus many of the Prophets depicted in the Sistine Chapel are shown with an enormous book, either reading it, gazing at it, or simply holding it.

The Book (the Torah) became the fundamental organizing principle of the Jewish religion after the destruction of the Temple in 70 AD (Botticini and Eckstein, 2005):

> The destruction of the Second Temple in 70 C.E. deeply changed the Jewish religion…the core of Judaism no longer consisted of the rituals, sacrifices, and ceremonies that could only be performed by the priests in the Temple, but became centered around the reading and teaching of the Torah. (p. 10)

In turn, they argue that this provides a simple economic rationale for the transition of Jewish people from farming to urban, skilled occupations from the eighth to the ninth century.

One additional point, not made by Botticini and Eckstein (2005) is that, even in the reign of King David, the Holy Book (the *Pentateuch)* then also serves as a check on the organized religion or the government. Thus Samuel Finer describes the ancient Jewish Kingdom as the first *constitutional* monarchy, because the religious groups could consult the Pentateuch to see if the actions of the king were in accordance with it, and if not, they could disobey and oppose them.

This point is also the key to understanding "fundamentalist" movements, which essentially look back to the Story in the Holy Book and compare what is said there to what is being done in the name of the religion by those who claim to represent Him. According to Armstrong fundamentalism is

relatively recent (Armstrong, 2000). The point also provides the basis for constant re-emergence of radical religion as described by Stark and Finke (1993) for the United States.

d) Religious restrictions on economic activity. Theocracies typically imply religious restrictions on economic activity, such as, usury laws.[13] This causes the level of national income and therefore tax revenues B from any level of power π to fall. So in a theocracy, it would seem that the more power the regime has, the less efficient the economy. Hence the regime is on the downward sloping portion of the the power-into-money curve $B(\pi)$, as illustrated by the solid lines in figure 4.3. Unlike the Soviet system, the more power the state has, the more it imposes religious restrictions which do not help the performance of the economy, and therefore result in a lower level of national income and budgetary revenue. Moreover, in a theocracy like that of contemporary Iran, the greater the level of restrictions, the steeper the downward slope of the $B(\pi)$ curve. By contrast, in the economy of the Former Soviet Union, however inefficient it may have been on the average, the more power the centre had *at the margin*, the more it was able to run the central planning system, and the better the performance of the economy. Compare, for example, economic performance during the era of Stalin (when the centre was powerful) to that of Brezhnev or Gorbachev (when it was weak) in terms of economic performance. In figure 4.3, a regime like that of the Former Soviet Union is illustrated by the dotted lines; theocracy is shown by the solid lines.

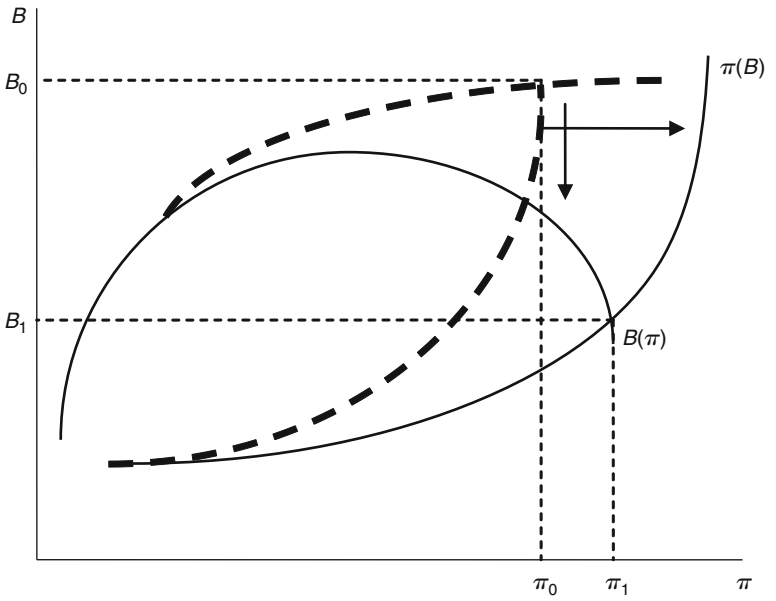

Figure 4.3 A Theocratic Economy

Note: If a dictatorship (dotted lines) is taken over by a theocracy (solid lines), the power of the regime will be higher, and its budget (tax revenue) smaller at any given system of tax rates.

Of course not all theocracies are the same, and the type and level of restrictions will depend on the religious basis of the regime. For example, Calvinism did not impose much in the way of restrictions on economic behavior. Still to the extent that it did, the effect is the same.

e) A "new" man? To the extent that the religion alters human personality, not a subject that we are used to discussing in economics, this will have economic effects. The most famous example of this is Weber's theory developed in *The Protestant Ethic and the Spirit of Capitalism* (1958), where he argued that, because of the doctrine of predestination, individuals adopted a spirit of discipline of thrift and hard work. The central point of the doctrine is that the decision as to whether one is "saved" or not has already been made (by God) and there is nothing the individual can do about it. However, as the result of his own actions he can help to convince himself that he is one of the elect, or not. So one false move (e.g., one night spent drinking and whoring) is sufficient to show that one is *not* one of the elect. And one cannot "repent" for this event afterwards, the way one can in Catholicism. So the individual has an incentive for hard work, thrift and the discipline which favored capitalist development, according to Weber (1958). But there is the additional point that to the extent that the values of the religion are internalized, there may be a change in behavior, and that change may have positive or negative effects on the performance of the economy *apart from their effects on the power of the regime over the individual.* Weber argued that the Protestant Ethic stimulated the sprit of Capitalism, thus these effects were positive.[14] To the extent that this was true, these would imply a shift in the $B(\pi)$ curve, not the $\pi(B)$ curve, because they imply that at any level of power of the regime, individuals are working harder, saving more, etc., and thus producing more income and hence more tax revenue (B) for the government. Thus this effect could compensate for religious restrictions and in the case of Calvinism, the regime might be on the upward sloping part of the $B(\pi)$ curve.

f) Diagram of theocracy. To sum up, if a dictatorship (like that of the Shah of Iran) is taken over by a theocracy (like the current Iranian regime), there are two effects. The first point about theocracy is that it implies a greater level of repression and loyalty for any given budget, because the apparatus of the church can be used to repress the people. Thus the $\pi(B)$ curve in figure 4.3 shifts to the right. The second point is that, because of the restrictions on economic behavior, the slope of the $B(\pi)$ curve turns negative at an earlier point than before.

These two shifts are shown in figure 4.3. In the most likely case, depicted there, the predictions are straightforward: power will be greater, and budgetary revenue lower, as is apparent from the figure. Thus if a theocratic regime takes over a secular dictatorship (where the more power the regime has, the better the performance of the economy) the result is that power increases, and budget decreases, as shown in the figure. However, note that if the fall in $B(\pi)$ were sufficiently large, π might not rise and could fall. B always falls as long as we are on the downward sloping part of $B(\pi)$ (which

we assume to be the case for theocracy) but π will rise only if the downward shift in $B(\pi)$ is not too large.

We can apply this reasoning is to contemporary Iran. The argument implies that Iran's economic performance is bad, as it has been since the revolution on several dimensions, for example, its rate of growth has been low since the revolution[15] (Zahedi, 2000).

4.5 Calvin

To the extent that the religion genuinely creates a "new" type of person, the second effect just described in the previous section (the downward slope of the $B(\pi)$ curve) has to be qualified. Of course the Former Soviet Union claimed to be creating a "new man" under Communism as well, but after the collapse of the regime it became clear that this had never happened. Still, with religion, this argument is less easy to dismiss. At the same time, it is worth emphasizing that the regime of Calvin also featured substantial political repression, as argued by Walzer (1976), and Zweig (1936). Calvin is sometimes described as the first "totalitarian" theocrat (Walzer) for this reason, although we have already seen that this description can be misleading. But he was completely totalitarian in the sense of demanding *total* obedience, and attempting to interfere with every aspect of private life of the citizens of Geneva (see Zweig (1936) below).

However, economic restrictions were not huge under Calvin, thus $B(\pi)$ does not fall much.

Moreover, to the extent that Weber's (1958) argument is true[16] and what might be called "the economic externalities" from the new *internal* discipline (of saving, working, etc. as a result of the "ethic of Protestantism") caused or at least reinforced the "Spirit of Capitalism" this may have caused income to increase. Secondly the capacity for internal repression was high, because of the nature of the religion. To the extent that the people believe in their religious obligations, they may *repress themselves* and aid in the repression of others to fulfill their religious obligations. We refer to this as the capacity of the theocracy to stimulate *internal* repression, as opposed to the capacity of any dictatorship to impose repression *externally* through the use of the laws against political activity, and the use of the police to enforce these. One effect of this *internal* repression, to the extent that it is accepted, is to shift the money-into-power curve $\pi(B)$ to the right, as, to the extent that people are willing to repress themselves, this internal repression has to be added to the repression of the state.

Thus, while power definitely increases, whether income (and tax revenue) falls depends on the relative strength of the two forces (the negative effect of restrictions on economic activity versus the positive effect of the spirit of capitalism), and if the augmentation of the spirit of capitalism was great, then $B(\pi)$ might have shifted upwards rather than downwards.

However, as Walzer (1976) has emphasized, Weber tended to neglect the repressive character of the Calvinist regime. Calvin's regime is described by

Stefan Zweig (1936)) as a *bibliocracy*:

> this new form of dogmatic dictatorship has been stigmatized as *bibliocracy*... From the first hour of his dictatorship this brilliant organizer herded his flock, his congregation, within a barbed-wire entanglement of paragraphs and prohibitions, the so-called "Ordinances," simultaneously creating a special department to supervise the working of terrorist morality. This organization was called the Consistory, its purpose being defined, ambiguously enough, as that of supervising the congregation or the community "that God may be honoured in all purity."... With one leap Calvin outdistanced the Catholic Inquisition, which had always waited for reports of informers or denunciations from other sources before sending out its familiars and its spies. In Geneva, however, in accordance with Calvin's religious philosophy, every human being was primarily and perpetually inclined to evil rather than to good, was a priori suspect as a sinner, so everyone must put up with supervision. After Calvin's return to Geneva, it was as if the doors of the houses had suddenly been thrown open and as if the walls had been transformed into glass. From moment to moment, by day and by night, there might come a knocking at the entry, and a number of the "spiritual police" announce a "visitation" without the concerned citizen's being able to offer resistance. Once a month rich and poor, the powerful and the weak, had to submit to the questioning of these professional "police des moeurs." For hours (since the ordinances declared that such examination must be done in leisurely fashion), white-haired, respectable, tried, and hitherto trusted men must be examined like schoolboys as to whether they knew the prayers by heart, or as to why they had failed to attend one of Master Calvin's sermons.... They felt the women's dresses to see whether their skirts were not too long or too short, whether these garments had superfluous frills or dangerous slits. The police carefully inspected the coiffure, to see that it did not tower too high; they counted the rings on the victim's fingers, and looked to see how many pairs of shoes there were in the cupboard... (Zweig, 1936, Chapter 2)

Similar descriptions, possibly caricatured[17] but useful could be made of any totalitarian regime: Nazi Germany, Stalin's Soviet Union, and so on. Of course, restrictions on consumption, like those in the Calvinist regime, apply also in contemporary Iran. For example, wine and other forms of alcohol cannot be consumed openly or legally sold. However, conversations with several Iranians who are currently outside that country affirms that Iranians often do manage to obtain wine and powerful spirits which they drink in copious quantities inside their own homes.

Doubt can be raised about how deep the control over the private life of citizens was, in fact, with respect to any of these regimes, and especially of the Calvinist one, where the apparatus of policing was presumably primitive. In short, how accurate this is a description of life in Calvin's Geneva is hard for us to say. But certainly it raises doubts about how the *individualistic* man or woman described by Weber could have arisen under such a set of controls. Another way to see this point is to reconsider the basic philosophy

of Calvinism, as described by Sheldon Wolin (1957, p. 437):

> While Calvin retained the Christian idea of the superior virtue of religious society, he reformulated it in a way which was different from both the medieval and the Lutheran conceptions of the Church. In adopting the Lutheran idea of a community-in-fellowship Calvin departed from the dominant medieval tradition; in enveloping that community within a structure of power he departed from Luther. The final result pointed at a church which was to be something more than a community and something more than a Christianized *polis*. At its deepest level the church cohered as a *corpus mysticum*, but on top of this mystic foundation Calvin erected a set of institutions to articulate and enforce a distinctive way of life.

Calvin was always sick, according to Zweig (1936). Zweig interprets his illnesses as the result of the neglect of the needs of the body typical of ascetics:

> The nerves of the ascetic who tries to pretend or to persuade himself that they do not exist, emphasize their reality by perpetually tormenting the despot; and perhaps few masters of the spiritual life have suffered more distresses than did Calvin, because of the revolt of the flesh. One indisposition followed hard upon another. In almost every letter from Calvin's pen we read of some mischievous surprise-attack by an enigmatic malady. Now he talks of migraines, which keep him in bed for days; then of stomach-ache, headache, inflamed piles, colics, severe colds, nervous spasms, hemorrhages, gallstones, carbuncles, transient fever, rigors, rheumatism, bladder trouble… (Zweig, 1936, Chapter 2)

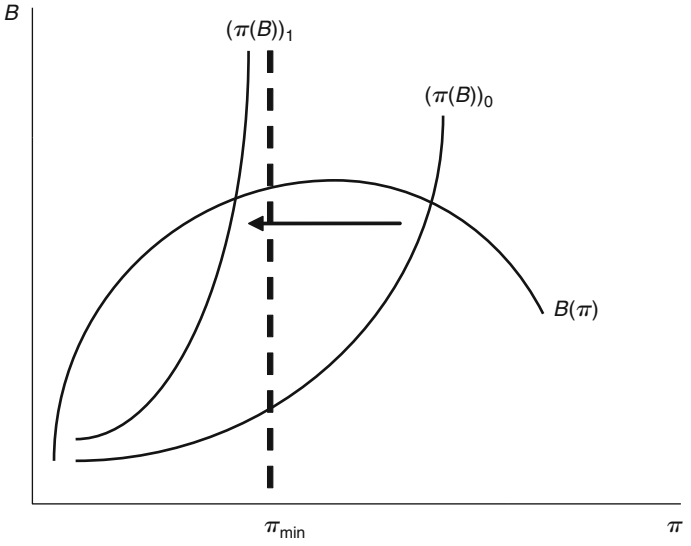

Figure 4.4 The Fall of Savonarola

Note: When he refused to take the Walk of Fire, loyalty to him fell sharply, as shown, causing power to fall below the minimum for the regime to survive.

But this is not true of every ascetic, and the recurrent illnesses might perhaps be better explained as the result of the standard paranoia of dictators, itself the result of the Dictator's Dilemma as discussed and illustrated in Wintrobe (1998).

Another application is to the Fall of Savonarola. Savonarola ruled Florence for a brief period. In part what ended his rule was that when he was challenged to take "the walk of fire" to prove his claims to represent God, he refused. As a result, his credibility fell, and loyalty to him fell sharply (Martines, (2006). Technically, this has the effect of shifting the $\pi(B)$ curve sharply to the left (see figure 4.4). So the regime fell, as it no longer has sufficient power to remain in office (π falls below $\pi_{\min}$ in the figure).

4.6 The Popes

Not all theocracies are totalitarian, as suggested in the last section with respect to Calvin and possibly Iran. In this section we provide anecdotical evidence about the hypothesis that theocracy is not a distinct class of dictatorship, nor is it necessarily totalitarian, as the Calvinist regime appears to be. Rather, it may fit into any of the four categories of dictatorship studied in Wintrobe (1998): timocratic, tinpot, tyrant, and totalitarian. As we have seen above, the only differences between theocracy and "standard" dictatorship are the nature of the base of loyalty and the possibility to promise "after life rewards." These promises shift the power into money and money into power functions, thus generating different equilibrium levels of loyalty and repression—the features that distinguish the types of dictatorship. To substantiate this claim we look at the history of the most durable (in fact, with a so far kept promise of eternity) and far-reaching example of theocracy, the Papacy.

This testing ground offers two main advantages. First, the history of the Papacy is very long and very well documented, by historians of all periods, countries, religions, and persuasions (among the many, Kelly, 1989; Hilaire, 2003; Gelmi, 1996; Livingstone, 1997; Duffy, 2006) and by apologetic documents, such as the *Liber Pontificalis*. Second, in 2,000 years the Papacy had to face a wide array of historical circumstances, from the barbarian invasions to internal power struggles, from exiles to change of residence, from schisms to multiplications of the number of converts, as well as relations with all sorts of political regimes. To all these circumstances the Popes had to react, thereby revealing information about their personality and nature of their regime. We evaluate this information not only to see to which of the four types of dictatorship each period of the Papacy seems closer, but, most of all, to argue that never has the Papacy taken any new and distinct form, which is an even more important argument in our analysis. On the other hand, a model that claims that theocracy is a distinct form of dictatorship would have to explain why it comes in so many different forms.

There are two ways to carry out this analysis. One is to categorize all the Popes (263 from St. Peter to Benedict XVI, antipopes excluded), to see who most resembles the timocratic type, who the tyrant and so on. This exercise is rather sterile, first because it is quite difficult and arbitrary to define where a difference of behaviour among two Popes is such as to put one before and the other beyond the line separating two types of dictatorship; second, because such an approach would deal more with the personal temperament of the Popes, rather than on the objectives, the constraints and the shocks that the Papacy was facing in a particular period, which is what really matters for our purposes. We thus prefer a "comparative statics" approach, whereby we look at periods of the Papacy and examine how the Papacy responded to an external shock that, according to Wintrobe's model, should make it evolve from one type of dictatorship to another.

We limit the examination to the period when the Papacy had in fact some temporal power, thus to a time interval stretching from the end of the fifth century, with the pontificate of Gregory the Great, to 1870. Limiting the sample to the temporal power avoids overstretching the concept of theocracy, which the literature always conceives as a political regime over a given territory. Moreover, the temporal power enabled the Papacy to develop a "domestic policy," in terms of the rule of the Papal states, that provided the Pope with some freedom of action and most of the financial means necessary to carry out his "international policy." This consisted not merely in the relationship between the Pope and other states and empires, but in his guidance of the Church and of all the Christians, even when they were subjects of other states.

This link between the Pope's "domestic" and "international" policy provides the basis both for our comparative statics exercise and for the classification of the Papal regimes. The comparative statics exercise looks at how shocks to the ability of the Popes to raise revenues domestically and from the Church at large affect the money into power and power into money functions. An increase of revenues from the Papal States, due to an extension of their territory (tax base) or to an improvement in their administration increases the Pope's ability to act and can be interpreted as an upward shift of his power into money function $B(\pi)$ (and vice-versa). That is, because of the larger tax base, any given level of π now translates into a higher budget.

Coming to the classification, a tightening of the constraints should produce a move towards tinpot Papacies, while their slackening increases the probability of finding a totalitarian Pope. This identifies the corner solutions of Wintrobe's model, and is as far as the empirical analyses have gone (Islam and Winer, 2004). Yet, the combination of domestic and international policy of the Papacy allows us to infer how much repression and loyalty was used in every period, making it possible to identify also the off-diagonals, that is, the tyrant (high repression, low loyalty) and timocrat types (high loyalty, low repression). The point is that the Pope may rule in the Papal States by means of repression only, but he needs loyalty in order

to pursue his "international policy": having no army, the Pope must count on the devotion and reverence of the faithful who are subjects to other political powers. When a Pope uses a slackening of the binding constraints to increase his power both domestically (by means of repression and/or loyalty) and internationally (by means of loyalty only) we have a totalitarian Pope.[18] Gregory VII, with the subjugation of the Roman families and successful excommunication of the Emperor, is the clearest example of this type. When the greater resources are used only to repress in the Papal States, without increasing the Pope's stance abroad, as in the case of the Popes of the Restoration, we have a tyrannical Papacy. A tinpot Papacy generally follows a tightening of the binding constraint, after which the Popes appear unable to play any international role and to control matters at home, as during the "dark century." Finally, it is conceivable that there are examples of timocratic Popes, who used only loyalty to pursue both their domestic and international policy. An example might be Nicholas V, who ruled by providing public goods at home (by restoring the city's buildings and infrastructures) and abroad (by brokering peace deals). However this claim would have to be buttressed by further research.

In 1,300 years of temporal power many are the events that affected the Papal regime and the behaviour of the Popes. Most of the historical and encyclopaedial sources (Hilaire, 2003; Kelly, 1986; Livingstone, 1997; Duffy, 2006) concur in affirming that at least nine major events, resembling permanent "structural breaks," affected the Papal regime: the establishment of some territorial dominion during the sixth century, the ensuing loss of it after the Lombard invasion and the contemporaneous strengthening of Byzantine rule in Southern Italy, the creation of the Papal State under Charlemagne, the crisis of the Empire during the tenth century, the economic renaissance after the year 1,000, the captivity of Avignon, the return to Rome, the Reformation, the demise of the Papal State under Napoleon. Not all these events have the same historical importance, and others could make the list, but these are the ones that all our sources consider as turning points.

The barbarian invasions of the fifth and sixth century, the twenty-years long war between the Byzantines and the Goths in the sixth century left the peninsula depopulated and impoverished. In a sense this was a boon for the Church. With Constantinople far away and its representative, the Exarch, powerless and secluded in Ravenna, the Church emerged as the sole authority left in all that misery. At those times many of the traditional Roman families bequeathed their vast land holdings to the Church before becoming extinct, or their progeny "retired from the world" and took the clerical or monastic vows (St. Benedict is the most famous example). This transfer of land provided the first financial underpinnings to the Church of Rome; the large influx of highly educated people made available a large "workforce" to carry out its activities steadily and efficiently. In terms of the theory of dictatorship these developments can be represented as an outward shift of the power into money $B(\pi)$ function. The pontificate of St. Gregory the

Great (590–604) is the best example of this shift. A learned monk from a very wealthy Roman family, with immense estates in Sicily (the only region untouched by invasions), Gregory set about reorganizing the patrimony of the Church, making it the largest landowner in the West, and its hierarchy, filling it with efficient and well trained monks (Duffy, 1996). He was thus able to buy off the Lombards and prevent another sack of Roman territory, and could also take a very firm stance in the face of the Emperor in Constantinople, to whose authority the Popes were still somewhat subjected. This took the form of the controversy over the legitimacy of the title of "Ecumenical Patriarch" by the Patriarch of Constantinople, which Gregory claimed for the Roman Pontiff alone. Beyond this controversy was the still unsettled issue of the primacy of the Roman Pope over the other Christian Patriarchs, in matters of doctrine and of rule of the whole Christianity, especially important in those times of heresies and of definition of the Christian religion. But this primacy had also important political consequences, as it eliminated the challengers to the recognition that only the Roman Pontiff held the "power of binding and loosing," bestowed on Peter by Jesus (Mt, 16, 16). It is on this passage of the Gospel that the claim of the supremacy of the Church on the worldly power of the Emperor ultimately rests. The victory in this controversy immensely raised the prestige of the Roman Pontiff, to whom the population of Italy and the West increasingly turned in order to receive spiritual comfort and protection from the barbarians, the two most important public goods sought at those times. Gregory was also the first Pope to start a truly missionary activity, conforming the liturgy of the newborn Church of Ireland to the Roman one, and converting Anglo-Saxon England. All these activities can be seen as an upward shift of the power into money function, because they marked the beginning of the ability of the Church to raise revenues and provide public goods beyond the territories under its direct rule.

All in all, Gregory's pontificate marked two developments relevant for the application of the theory of dictatorship to the Papacy. First, it provided the essential features for the application of the theory, as he was the first Pope to organize a political power over a territory. Second, he claimed (and to a great extent secured) a great deal more authority over the spiritual life of the believers and succeeded in converting many who were not. This spiritual authority in turn reinforced his temporal power. So Gregory appears like a totalitarian but it is difficult to define him only in that way. In religious matters he certainly was so, as he commanded great loyalty but also used considerable repression in his dealing with the hierarchy of the Church. The *Liber Pontificalis* is sketchy about Gregory to the point of insult; after his death the Roman clergy revolted against the monastic dominance introduced by Gregory to the point that his successor, Pope Sabinian, filled "the Church with monks" according to the *Liber Pontificalis*. In temporal matters too Gregory can, in a sense, be considered a totalitarian: he certainly received great loyalty by Italians fleeing the Lombards but had also to exert great repression in the rule of the Church estates, replacing

unsatisfactory "rectors," pestering them with an endless stream of letters, and closely scrutinising their activities. As these territories were basically left unguided before, the increase of repression from a zero level to one comparable to that of the Roman Empire is compatible with the definition of totalitarianism. On the other hand, Gregory governed these lands much more mildly than their previous rulers, Totila's Goths. The ambivalence in the definition of Gregory's reign in the religious and temporal domain is largely due to the unsettled definition of the temporal power of the Church at those times.

After Gregory's death, the Papacy lost the dominance over many of its territories, both because of high turnover of Popes in the first half of the seventh century (10 elections between Gregory's death and Martin I's accession in 649) and because of the expansion of Byzantine rule in Southern Italy. Having to fight terrible enemies (the Avars, the Persians and finally the Arab armies), the Empire squeezed all the resources it could from the lands not under barbarian rule. The Papacy yielded, both because of the lack of a continued guidance, but most of all because the battles of the Emperor were seen as Holy Wars: the Persians had initially conquered the Holy Land; the Arabs subtracted all Asia and the Southern Mediterranean to Christianity. Out of this continuing crisis arose a close identification between the Church and the Empire, with the Emperor looking the defender of Christian religion much more than the Roman Pontiff. The Pope became again subjected to the Empire, both in terms of temporal power (the estates of the Church came back under the Byzantine rule and fisc), of political prestige (it became compulsory that the elected Pope received the approbation of the Emperor before he could be consecrated) and most of all in terms of religion. To avoid a break with Constantinople, Pope Honorius I had to compromise the doctrinal purity of the Papacy by accepting the Byzantines theory of monothelitism (two natures, divine and human, coexisted in Jesus, but only one divine will) against the Roman canon of two natures coexisting in one person.[19] To sum up, during the period of the "Byzantine captivity," the Papacy suffered an inward shift of both the money into power and of the power into money functions, which significantly reduced the Pope's ability to exert repression and command loyalty, in its domestic and international policy. They were left with the minimum to subsist and manage the organization of the Church in Rome, with no possibility to direct missionary work. In a word, they look like tinpots.

The situation significantly changed when Popes Zacharias, Stephen II and Hadrian I struck an alliance with the Kings of the Franks and established the Papal state in the second half of the eighth century. Pepin and later Charlemagne subtracted central Italy to the Lombards and donated it to the Pope. Upon these territories the Pope ruled on behalf of St. Peter, under the protection of the Holy Roman Empire. The stabilization of the temporal power (justified by the famous forgery of the "Donation of Constantine") in part recreated the situation of the reign of Gregory the Great. The Pope was able to raise revenues in his land, as the establishment

of the *domuscultae* (lands earmarked to the sustenance of the Pope), the organization of a land army, the restoration of Roman churches and aqueducts testify. The power-into-money function shifted up, and the Pope was able to increase repression in his territories. Yet, although Pope Leo III crowned Charlemagne Holy Roman Emperor, the "international policy" of the Pope was severely limited by the King's role of protector of the Pope and the Church, much more than at the times of Gregory. Charlemagne made it clear that Christians were to be loyal to the Emperor first and foremost: imperial power came directly from God, not from the successor of Peter. To see this, one must remember that it was Charlemagne, not the Pope, who anointed his son Louis the Pious Emperor in 813. The pope had to be approved by the Emperor, just like under the Byzantine captivity[20] and so were bishops. Even in matters of religious dogmas Charlemagne took the leading role. When the issue of the *Filioque* arose between the Roman Church and the Patriarch of Constantinople (the dogma that the Holy Spirit proceeds from the Father *and* the Son, and not *through* the Son, as the Church of Constantinople claims still today) it was Charlemagne who imposed the addition of the *Filioque* in the Creed prayer, while pope Leo preferred to avoid another confrontation with Constantinople. In brief, the temporal power did raise the Pope's power of repression at home, but it did not increase the loyalty, either within the *Christianorum Res Publica*, or among his new Roman subjects. In 799 Leo was mobbed by a crowd led by the nephew of his predecessor and had to flee to Paderborn under Charlemagne's protection. Overall, the situation of the Popes of these times resembles that of tyrant dictatorship.

The demise of the Carolingian Empire corroborates this conclusion. The confrontations between the empire and the Pope at the times of Pope Nicholas I, the struggles between the Emperors over the divisions of the Empire throughout the ninth century, a new wave of barbarian and Arab invasions greatly reduced the strength of the Empire, upon which the temporal power of the Popes rested. The papacy in fact became the possession of the great Roman families (the Theophylacts, the Crescentii, the Tusculani), who regarded it as a ticket to local dominance. Many of the Popes bribed their way to the Holy See, some were elevated from the status of layman to pope in one single day, most had mistresses: Pope John XI, for example, was the illegitimate son of Pope Sergius III and of his mistress Marozia Theophylact. The tenth century is remembered as the "Dark Century" of the Popes. Political power and repression was in the hands of the Roman families, and loyalty was nowhere to be seen: a third of the 40 Popes elected between 872 and 1012 died in suspicious and often horrendous circumstances. With a few notable exceptions, chiefly that of Gerbert of Aurillac, Pope Sylvester II, these popes were all tinpots, interested in consumption only. One of them, Benedict IX, the only man who served as Pope for three discontinuous periods, was eventually given 650 kg of gold to abdicate; allegedly he needed the money to marry.[21] The instability of the Papal regime of those times show that, more often than not, those Popes were living on the edge of the $\pi_{\min}$ line.

Interestingly enough for the study of theocracy, even at the all time low of the dark century, the Papacy kept some prestige and was able to command some loyalty. In 1027 King Cnut of England made a pilgrimage to Rome, under the reign of Pope John XIX, one of the worst of those times. Cnut observed that the Pope "was the guardian of mysteries so holy that own merits or demerits hardly mattered" (Duffy, 2006, p. 109). Power in theocracies with a stable base of loyal support for the system is less associated with the persona of the dictator, which increases the resilience of the system.[22]

In all likelihood, ideas such as those evoked by Cnut set the restoration of the Church and of the Papacy in motion. During the eleventh century three factors produce a decisive outward shift of the money into power and of the power into money functions. As for the power-into-money function $B(\pi)$, the restoration of the force of the Empire under the Ottonian dynasty slowly decreased the influence of the Roman families and re-established the close links between the Empire and the Papacy of the times of Charlemagne. Otto III regained Ravenna and the Pentapolis for the Papal State, greatly increasing the revenues for the Pope. Also the "economic boom" that characterized Western Europe after the year 1,000, due to a restored confidence that the world was not about to end and to technological advances in agriculture, improved the Pope's finances. Moreover, the Empire staffed the hierarchy of the Roman Church with its own men and clergy, raising the ability of the Papacy to collect revenues and preventing their appropriation by the Roman families, shifting outwards the money-into-power $\pi(B)$ function. But the most important development of these years was the Cluny reform. Cluniac monks promoted a change of the behaviour of the Church, fighting corruption, simony (the acquisition of religious offices by cash payments), clerical marriage and generally raising the spiritual and educational standards of the Church. The very rapid spread of Cluniac monasteries and of ordained monks testifies the great loyalty that this movement commanded and transferred to the Church. For the first time, the Papacy was again able to receive assets, both financial and in terms of human capital, from sources outside its temporal power. Most of all, Cluny's statute marked a stark innovation from all religious institutions till that time, as it was granted complete freedom "from our power, from that of our kindred and from the jurisdiction of royal greatness," in the words of its founder, the Duke William of Aquitaine. Until then, religious freedom meant freedom under the King. For Cluny, it meant freedom *from* the King, among other things.

When the Cluny movement captured the Curia and Papacy, under Leo IX and most of all, Gregory VII, the result was a remarkable change of ideas and of regime. Gregory VII's *Dictatus Papae* turned the relationship between the Church and the Empire on its head, compared to the ideas of Charlemagne. The Pope alone is Universal (Catholic), he is the only one who can call general councils, authorize or reform canon law, depose or translate bishops. Most of all, for the first time the Pope claims

the power not only to create, but also to depose emperors, to refuse them the sacraments (excommunication) and to absolve the subjects from their wicked rule. Never had the Papacy claimed so much power; the Empire's reaction soon forced Gregory to use all of it in the Controversy for the Investitures. Whatever the result of the controversy, what matters for our purposes is the unprecedented extension of the papal power, as shown by the increased repression in the Papal states, and unprecedented loyalty: the effective excommunication of Henry IV, who had to go to Canossa barefooted to ask for pardon, made it clear to whom the allegiance of individual subjects' and barons went, even in Germany. The bequest of the Tuscany and Emilia to the Papal State by Countess Mathilda of Canossa is another example of loyalty, which also increased the Pope's ability to use repression. The century between Canossa and the rise of Emperor Frederick II (beginning of the thirteenth century) saw 19 Popes between Gregory VII and Innocent III, 11 of whom were monks, and marks the pinnacle of Papal power. Urban II launched the Crusade that freed Jerusalem from Muslim control, Alexander III successfully confronted Frederick Barbarossa, the Popes started to travel and to spread their ambassadors (the *nuncios*) all over the world, making the Papacy a truly international institution. Moreover, these are the years when the monk-ridden Curia established the legal machinery that immensely consolidated the papal authority and ability to govern. Examples of this legislative production are the *Liber Censuum*, an exhaustive account of all sources of Papal funding designed to maximize revenues (Duffy, 2006), the bulk of the Canon Law under Alexander III, the "lawyer-Pope" and the *Concordia Discordantium Canonum*, a method proposed by the monk Gratian in 1140 to sort out legal disputes when laws are conflicting or unclear. Innocent III, probably the most powerful Pope ever existed, extended papal power in Italy, adding lands in the Marche, Tuscany, Campania and Umbria to the Papal state, intervened in succession disputes as far as in Norway, disciplined the mass and what came to be known as the Christian orthodoxy in the Fourth Lateran Council (that settled the doctrine of Transubstantiation) and promoted two new great monastic orders, the Franciscans and the Dominicans. This is the period of the truly totalitarian Papacy.

All this assembling of power eventually backfired on the Papacy. The Pope was a true monarch, with its machinery of power, the canon law, its court, the Curia and large number of subjects and financial resources. As the thirteenth century progressed, the Papacy would gather round itself more and more the trappings of monarchy. After the reform of the papal election in 1059,[23] which transferred from the Roman aristocracy to the Conclave of the Cardinals the power to elect the Pope, the Cardinals developed a strong sense of collegiality, that eventually evolved into opposition to the power of the Pope and provided the basis for the doctrine of the superiority of the Council to the Pope. Moreover, as the papacy became more international, it forfeited Roman loyalty. The establishment of the Roman Commune during the twelfth century made the city an increasingly unsafe

place for the Popes, who were constantly threatened with revolution: three of them (Eugene III, Hadrian IV, and Alexander III) were temporarily driven out of the city by the citizens, Lucius II died of wounds sustained while storming the Capitol Hill. Finally, the empire reacted to the expansion of the power of the Church, with Frederick II invading the Papal States, and receiving the loyalty of the Ghibellini party in Italy against the Papal supporters, the Guelphs. The split between Guelphs and Ghibellini, which did not exist at the times of Innocent III, shows that loyalty to the Pope was on the decrease. The Papacy was nonetheless still able to effectively rule and exert repression on its territories, as the establishment of the Inquisition in 1231 clearly shows. High levels of repression with low(er) levels of loyalty are a sign of a tyrannical dictatorship, and it is no accident that most historians of the Church, or chroniclers such as Dante Alighieri, depict the Pope that best epitomizes this period, Boniface VIII, as a tyrant.

After Boniface VIII the Popes moved to Avignon for seventy years, and upon their return to Rome, the Great Schism began and lasted thirty more years, until the Council of Constance solved it in 1418. In this century the high papal prestige and unchallenged papalist theory of the era of Innocent III were gone forever. The Popes from Martin V to Nicholas V faced the task of reconstructing Rome and the Papal State and to re-establish the credibility of the Papacy in the Community of all the Faithful. Three events then produced an outward shift of their money into power function, and one a similar movement of the power into money function. Starting from the latter, the Conciliar solution of Constance decreased Papal authority because it spread the belief in the superiority of the Council to the Pope. Yet, the inconclusiveness of the subsequent Council discredited the Conciliar movement and restored the Papal authority. On the other hand, the ability of the Popes to raise revenues in new original ways, such as the pilgrimages and the Holy Years; the further evolution of the administration and jurisprudence of the Papacy, far superior to any of the then emerging nation states; the economic boom that followed the black plague of the fourteenth century and the human capital boom that was the Renaissance; all these events contributed to the restoration of Papal authority during the Renaissance.

Renaissance Popes until the Reformation are a difficult historical problem, with their combination of secularization, artistic splendour, cynical foreign policy, and reconstruction of the Church after the Great Schism (Duffy, 2006). Besides differences in the personal temperament of Popes, such as the (possibly) benevolent Nicholas V or the storming Julius II, the theory of dictatorship suggests the following interpretation of the Renaissance Popes. Their ability to act benefited from the outward shifts of the constraint functions described above. Yet the Popes differed in the way they reacted to these shift. Some of them, like Nicholas V, tried to increase loyalty, by avoiding confrontation abroad with the other European and Italian States and with the Conciliar movement. In the domain of domestic policy they supplied public goods, chiefly the restoration of the city after

more than a century of neglect, and of the protection of property rights, ensured by the papal administration. Nicholas V intended the expenditures in the patronization of the arts and culture (among other things, Nicholas planned the rebuilding of St. Peter and established the Vatican Library) as a way to rally the uncultivated masses around the authority of the Holy See. Nicholas V certainly succeeded in his program of keeping repression low and increasing loyalty, and might be considered a timocrat Pope. Other Popes, using up the capital of loyalty that the Papacy gathered during the reigns of Martin V and Nicholas V, promoted more confrontational foreign policies, even wars as in the case of Alexander VI Borgia or Julius II, continued in the large and costly programs of promotion of the arts, this time also to outshine other princes, became secularized to the point of failing to understand the spiritual unease that bred the Reformation. To further their policies, popes such as Sixtus IV, Julius II, and Leo X had to increase repression at the expense of loyalty. These Popes therefore appear as tyrants. Even Erasmus of Rotterdam, certainly no Protestant, condemned the sack of Rome of 1527 exclusively in terms of the harm done to the City, "the common mother to all peoples" (Partner, 1976), not to the Pope or the Papacy.

The Counter Reformation was a slow and complex process, generally aimed at restoring the capital of loyalty that the Popes of the Renaissance had lost. To a certain extent it was successful, as in the case of the missionary movements in the New World, masterminded by the Papacy, or the reconquest of parts of Europe to the Catholic faith, or the redefinition of Catholic orthodoxy by the Trent Council. But in the following centuries, the Papacy never restored the level of loyalty it enjoyed at the times, if not of Innocent III, at least of Nicholas V. The establishment of the modern nation states further eroded the loyalty to this essentially international institution: excommunications remained ineffective, as in the Gallicanism controversy at the times of Louis XIV; the Popes soon ceased to play a relevant role in international politics (in 1648 the Peace of Westphalia put an end to a religious conflict such as the Thirty Years War wholly ignoring the bull of protest of Innocent X); they increasingly surrendered to the demands of the European monarchies, even in matters related to the Catholic Church, such as in the case of the expulsion and then dissolution of the Jesuit order by Clemens XIV in the eighteenth century. Many of the Popes of the seventeenth and eighteenth century "enjoyed the Papacy," to use Leo X's famous expression. They used it to promote the wealth and political stature of their families (these centuries are heydays of nepotism), as well as the arts and culture (Baroque Rome was built in these times). But as time passed and the resources of the Papal state became increasingly exhausted, the Popes of the seventeenth and eighteenth century retrenched from a tyrant-type of behaviour to essentially a tinpot type of behaviour. Even the most powerful instrument of repression then in the hands of the Popes, the Inquisition, backfired. In the age of the Enlightenment, the blatant injustice of the trial

of Galileo caused immense damage to the prestige of the Popes and of the Church in general, and further reduced the loyalty it was able to summon from the most advanced quarters of society.

It took Napoleon and the sufferings he inflicted to Pius VI and VII to restore some loyalty to the Church. In 1799, the death of Pius VI in Valence, France, after his brutal removal from Rome when terminally ill, the refusal of a Christian burial and the announcement of his decease as that "…of citizen Braschi, exercising the profession of Pontiff" was generally regarded as martyrdom. Similarly, the French occupation of Rome in 1808, the first demise of the Papal state and annulation of the temporal power, as well as the consequent imprisonment of Pius VII between Rome, Savona, and Paris, rallied the Christians around the Pope and away from the tyrant. It is at these times that the name Pius became synonym of a suffering Pope. Yet, the successors of Pius VII quickly destroyed this capital of loyalty. The experience of the loss of the temporal power, the fear that it might happen again, became the drivers of the policy of the Popes of the Restoration. Pontiffs like Leo XII or Gregory XVI tried to secure their rule over the Papal States by means of concordats, closure to all new ideas brought about by the Revolution or even Liberalism, and support by the French and Austrian armies. Repression mounted, and the temporal power of the Popes became a by word for obscurantism and backward government. It was an awkward spectacle that the Father of all the Faithful should rule seated on foreign bayonets, after that his subjects made him flee in 1848. In a sense, also the declaration of the dogma of the Infallibility of the Pope by the First Vatican Council in 1870 was a response to his failing temporal power. The lack of loyalty and the use of repression make the Restoration Popes, the last to hold the temporal power, appear as tyrants.

This rather long historical excursus shows not only that the theory of dictatorship helps to explain the evolution of the Papal theocracy, but most of all that never in the history of the temporal power of the Church have the four categories of dictatorship that the theory foresees proven inadequate. Theocracy is just like any other form of dictatorship. And there is no single kind of theocracy: it can take any of the forms of tinpot, totalitarian, tyrant and conceivably timocratic.

4.7 Conclusion

In this chapter we have investigated the origins and behaviour of theocracy. We first asked why people tend to believe in *one* God, and argued that, if the main reason people join religious groups is out of a desire to belong to an organization, that is, for social cohesion or solidarity, then any group with monotheistic beliefs could provide more solidarity than a polytheistic one. Hence polytheism would lose out in the competition among religious organizations. Secondly, although different groups might propose different single deities, the attributes of infinite power, wisdom, justice, etc.

characteristic of a single God mean that all of these groups would essentially converge on a similar God. However, while the common belief within a group unites them, the different groups will propose different variations on this belief, with different organizational structures, Holy Books, ancestry, and different modes of worship.

Similarly, to the extent that people believe in religion because it promises an afterlife, since there can be only one system of justice which decides who gets one and who does not, this also leads unequivocally to a belief in monotheism rather than polytheism.

However, there is an obvious source of conflict among the different religious groups, namely, which one is His sole source of authority on Earth? Thus despite their common belief in the one God, they may end up competing, sometimes fiercely, with each other to be His sole representative on Earth. Each religious group will in turn end up attempting to buttress its position by various reputation-building mechanisms and through the invocation of their Holy Book.

In addition, there is an additional source of competition, namely that within the religion, from potential heretics and others with a different idea of how to worship the One God. Thus although the group gains more solidarity when people subscribe to the beliefs and practices of the group, the individual within the group may attempt to deviate, and hence the necessity for hierarchy and discipline within the religion.

Finally we turned to the behavior of theocracy, and showed that theocracy, compared to other forms of dictatorship, will tend to have more power and a smaller budget. A theocracy is more powerful to the extent that it can impose a common belief and enlist the apparatus of the state to enforce religious practices and modes of behavior. On the other hand, to the extent that it imposes religious sanctions on economically efficient practices (the prohibition of usury is the classic example) it interferes with the operation of the economy, and hence lowers national income and therefore tax revenue. An exception to this second result may occur to the extent that the religion actually inculcates economically efficient norms of behavior. The classic example is Calvinism, which according to the argument of Weber, inculcated the spirit of capitalism (hard work, saving, and discipline) in its adherents. In addition, Calvin did not impose heavy restrictions on economic behavior, and so the Calvinist religion and its offshoots may have stimulated, rather than retarded economic efficiency. However, Weber concentrated on the personality of the individual, and neglected the extent to which religious behaviour was imposed on the people of Geneva via a repressive political regime, and the resolution of the question of the economic efficiency of that regime awaits further research. Finally we applied the theory of dictatorship to the Papal theocracy, and using the long history of the Papacy as a test case we showed there is no single kind of theocracy: it comes in totalitarian, tinpot and tyrant forms, like other dictatorships.

Notes

1. More precisely, according to the operation in practice of science according to Thomas Kuhn in his celebrated *The Structure of Scientific Revolutions* (1970), scientists in a particular discipline share a paradigm, whose structure is not subject to test, and is only overthrown when a new and superior paradigm replaces it in a scientific "revolution." The shared paradigm is what provides the solidarity among the practitioners of a particular discipline.
2. A formal proof of this proposition can be found in Wintrobe (1998), Chapter 11.
3. See Huddy (2003) who reviews these experiments and subsequent work.
4. This version of the argument is described in Wintrobe (2006a and 2006b).
5. Indeed he suggested the possibility of a security dilemma, in which increased social cohesion on the part of one ethnic group threatens another, in the same way that the acquisition of nuclear armaments by one country may threaten another.
6. Wikipedia, entry on monotheism.
7. Tinpots and totalitarians emerge as the special cases at either extreme where U_c or $U_\pi = 0$.
8. See Wintrobe (1998), Chapter 5 for a proof.
9. The choice between the two is considered by Ferrero in chapter 2 of this volume.
10. On this point, see the chapter 9 in this volume.
11. What cannot be derived from the Klein and Leffler model, but is rather a difficulty in their model (elaborated on in Shapiro, 1983), and is apparent with the standard model of advertising expenditures, is that these expenditures also serve as a barrier to entry, since a contender will have to duplicate them or find some other way to build a reputation, which may involve similar "sunk" investments.
12. Of course in modern times, churches can be "converted" into restaurants, condominiums, and so on, but so far as we know these possibilities were not economic at the time of their construction.
13. See Kuran (2004) for the Islamic versions of these, though he says they were all abolished in the nineteenth century, and it is the *waqf* and other institutions which causes underdevelopment.
14. In a similar spirit, some argue that the values of Islam are collectivist, with possibly negative effects on economic performance.
15. See chapter 11 in this volume.
16. See Engerman (2000) for a review of theoretical and empirical developments of Weber's ideas.
17. Wintrobe (1998) shows how even a totalitarian regime is limited in its powers.
18. It may sound odd to apply the concept of totalitarianism, generally associated with the likes of Hitler, Stalin, or Saddam Hussein, to the Popes. The religious mission of the Catholic (i.e., Universal) Church, its responsibility on the body and soul of all believers and non believers, its promise of eternal salvation make the Papacy inherently biased towards totalitarianism. Bernholz (2001) defines a totalitarian regime as one where "believers" in an ideology are convinced that the others have to be converted to the values of the ideology for their well-being. Believers spend resources on winning new converts, even enemies of their creed whose presence is obnoxious to them, and on securing the secular power of the State. Here we apply the concept of totalitarianism to the Papacy in a strict sense, that is, as a regime that maximizes power by using both repression and loyalty.
19. This is not peanuts: still today, the standard argument against the dogma of the Infallibility of the Popes in matters of doctrine is that Honorius I *did* err when he accepted monothelitism.

20. In his approval letter for the election of Leo III, Charlemagne exposed his vision of the roles of the King and of the Pope. "My task, *assisted by the divine piety*, is everywhere to defend the Church of Christ; abroad by arms, against pagan incursions and devastations of such as break faith; at home by protecting the Church in the spreading of the Catholic faith. Your task, Holy Father, is to raise your hands to God like Moses to ensure victory of our arms. [...] May your prudence adhere in every respect to what is laid down in the canons and ever follow the rules of the holy fathers." Doubtless the most important role is the Emperor's who is assisted directly by God. The Pope must say his prayers, and is bound to follow the laws (Wallace-Hadrill, 1983, p. 186).
21. This information is reported in the *Liber Gomorrhianus* of St. Peter Damian, written around 1050.
22. The Communist Party of the Former Soviet Union provided a similar stable base of loyalty to whoever happened to be the leaders of the Party.
23. See chapter 6 in this volume.

References

Armstrong, K. *Islam: A Short History*. New York: Modern Library, 2000.
Barraclough, G. *The Medieval Papacy*. London: Thames and Hudson, 1968.
Becker, G. *A Treatise on the Family*. Second edition. Cambridge, MA: Harvard University Press, 1991.
Bernholz, P. "Ideocracy and Totalitarianism: A Formal Analysis Incorporating Ideology." *Public Choice* 108, 2001: 33–75.
Bloom, H. *Jesus and Yahweh: The Names Divine*. London: Penguin Books, 2005.
Boisellier, Jean. *The Wisdom of the Buddha*. Translated from the French by Carey Lovelace. New York: Harry N. Abrams, 1994.
Bokenkotter, T.S. *A Concise History of the Catholic Church*. New York: Image Books, 1990.
Botticini, M. and Z. Eckstein. "Jewish Occupational Selection: Education, Restrictions, or Minorities?" *Journal of Economic History* 65, 4, 2005: 922–948.
Breton, A. and R. Wintrobe. *The Logic of Bureaucratic Conduct*. New York: Cambridge University Press, 1982.
Brown, D.E. *Human Universals*. New York: McGraw Hill, 1991.
Docker, J. "In Praise of Polytheism." *Semeia* 88, 2001.
Duffy, Eamon. *Saints and Sinners: A History of the Popes*. Second Edition. New Haven: Yale University Press, 2006.
Ekelund, R.B., Jr., R.F. Hebert, and R.B. Tollison. "An Economic Analysis of the Protestant Reformation." *Journal of Political Economy* 110, 2002: 646–671.
Ekelund, R.B., Jr., R.F. Hebert, and R.B. Tollison, G.M. Anderson, and A.B. Davidson. *Sacred Trust: The Medieval Church as an Economic Firm*. New York: Oxford University Press, 1996.
Engerman, S. "Capitalism, Protestantism and Economic Development: Max Weber's *The Protestant Ethic and the Spirit of Capitalism* after Almost One Century." *EconomicHistoryServices*, 2000, URL: http://eh.net/bookreviews/library/engerman.shtml.
Friedrich, C. and Z. Brzezinski. *Totalitarian Dictatorship and Autocracy*. Cambridge, MA: Harvard University Press, 1965.
Gelmi, J. *I Papi. Da Pietro a Giovanni Paolo II*. Milano: Rizzoli, 1993.
Glaeser, E. and B. Sacerdote. "Education and Religion." Unpublished manuscript, Harvard University, MA, 2002.

Grant, M. *Myths of the Greeks and Romans*. London: Phoenix, 1960.
Hechter, M. *Principles of Group Solidarity*. Berkeley: University of California Press, 1987.
Hilaire, Y.M. (ed.) *Histoire de la Papauté: 2,000 Ans de Mission et de Tribulations*. Paris : Seuil, 2003.
Huddy, Leonie. "Group Identity and Political Cohesion." In *Oxford Handbook of Political Psychology*, edited by D.O. Sears, L. Huddy, and R. Jervis. Oxford: Oxford University Press, 2003.
Huntington, S. *The Clash of Civilizations and the Remaking of World Order*. New York: Simon & Schuster, 1996.
Islam, M. and S. Winer. "Tinpots, Totalitarians (and Democrats): An Empirical Investigation of the Effects of Economic Growth on Civil Liberties and Political Rights." *Public Choice* 118, 2004: 289–323.
Keddie, N.R. *Modern Iran: Roots and Results of Revolution*. London and New Haven: Yale University Press, 2003.
Keegan, J. *The Face of Battle: A Study of Agincourt, Waterloo and the Somme*. London: Jonathan Cape, 1976.
Kelly, J.N.D. *The Oxford Dictionary of Popes*. Oxford: Oxford University Press, 1989.
Klein, B. and K. Leffler. "The Role of Market Forces in Assuring Contractual Performance." *Journal of Political Economy* 89, 1981: 615–641.
Knott, Kim. *Hinduism: A Very Short Introduction*. Oxford: Oxford University Press, 1998.
Kolm, Serge-Christophe. *Le Bonheur-Liberté: Bouddhisme Profond et Modernité*. Paris: Presses Universitaires de France, 1994.
Kuhn, T. *The Structure of Scientific Revolutions*. Second edition. Chicago: University of Chicago Press, 1970.
Kuran, T. "Islamic Economics and the Islamic Subeconomy." *The Journal of Economic Perspectives* 9, 1995: 155–173.
Livingstone, E.A. (ed.). *The Oxford Dictionary of the Christian Church*. Oxford: Oxford University Press, 1997.
Martines, Lauro. *Fire in the City: Savonarola and the Struggle for the Soul of Renaissance Florence*. Oxford: Oxford University Press, 2006.
Montgomery, J.D. "Contemplations on the Economic Approach to Religious Behaviour." *American Economic Review* 86, 1996: 443–447.
———. "A Formalization and Test of the Religious Economies Model." *American Sociological Review* 68, 2003: 782–809.
Panzar, J.C. and R.D. Willig. "Free Entry and the Sustainability of Natural Monopoly." *The Bell Journal of Economics* 8, 1977: 1–22.
Partner, P. *Renaissance Rome, 1550–1559: A Portrait of a Society*. Berkeley: Berkeley University Press, 1976.
Phillips, K. *American Theocracy*. London: Penguin, 2006.
Posen, Barry R. "The Security Dilemma and Ethnic Conflict." *Survival* 35, 1993: 27–47.
Shapiro, C. "Premiums for High Quality Products as Returns to Reputation." *Quarterly Journal of Economics* 98, 1983: 659–679.
Stark, R. and R. Finke. *The Churching of America, 1776–1990*. New Brunswick, NJ: Rutgers University Press, 1993.
Stark, R. and L. Iannaccone. "A Supply-Side Reinterpretation of the 'Secularization' of Europe." *Journal of the Scientific Study of Religion* 33, 1994: 230–252.
Van Belle, D. "Leadership and Collective Action: The Case of Revolution." *International Studies Quarterly* 40, 1996: 107–132.

Wallace-Hadrill, J. *The Frankish Church*. Oxford: Oxford University Press, 1983.
Walzer, M. *The Revolution of the Saints*. New York: Athenaeum, 1976.
———. *Exodus and Revolution*. New York: Basic Books, 1985.
Weber, M. *The Protestant Ethic and the Spirit of Capitalism*. Translated by Talcott Parsons. New York: Charles Scribner's Sons, 1958.
Wintrobe, R. *The Political Economy of Dictatorship*. New York: Cambridge University Press, 1998.
———. "Extremism, Suicide Bombing and Authoritarianism." *Public Choice* 128, 1–2, 2006a: 169–195.
———. *Rational Extremism: The Political Economy of Radicalism*. New York: Cambridge University Press, 2006b.
Wolin, Sheldon. "Calvin and the Reformation: The Political Education of Protestantism." *The American Political Science Review* 51, 1957: 428–453.
Zahedi, D. *The Iranian Revolution: Then and Now: Indicators of Regime Instability*. Boulder, Colorado: Westview Press, 2000.
Zweig, Stefan. *The Right to Heresy: Castellio against Calvin*. Translated from German by Eden and Cedar Paul. New York: Viking Press, 1936. Available at: http://www.gospeltruth.net/heresy/heresy_chap2.html.

5

On the Economics of the Socialist Theocracy of the Jesuits in Paraguay (1609–1767)

Walter Nonneman

From 1609 to 1767 the Jesuits governed a "socialist theocracy" in Paraguay. Never more than 200 Jesuits managed a Guaraní Indian population of up to 150,000 people in a network of over thirty-five "reductions" or missions dispersed over an area twice the size of France and encapsulated in the Spanish-Portuguese colonial system. In spite of external political adversity, war, and epidemics, the Jesuit state in Paraguay reached extraordinary levels of economic welfare, surpassing standards of living even of many European areas at the time.

The acceptance of Jesuit governance by the Guaranís in the early years of the Jesuit state was stimulated by external threats such as the Portuguese slave traders (Paulistas) and the early Spanish colonialists adopting the "encomienda" system of personal service and forced labor. By the end of the seventeenth century, the Jesuit state had grown into a fully developed and well-organized command economy. The Jesuits imported and adapted Western technological know-how and organizational methods to local circumstances. They organized the seminomadic Guaranís into local relatively self-sufficient sedentary agricultural economies, with artisan production and basic manufacturing, division of labor, and specialization combined with internal and external trade. They planned the production of public goods, structured saving and investment, and provided for social insurance and external security. Jesuit rule was high on loyalty and low on repression. Loyalty was derived from heavy investments in religious indoctrination, but also based on successful military and diplomatic protection of the Indian population. Repression was limited by incorporating indigenous customs and structures of authority. The Jesuit state came to an abrupt end when the Jesuits were expelled, first from Portugal and its colonies in 1758 and later also from Spain and its dependencies in 1767. The command economy of the Jesuit state collapsed very quickly after the takeover by Spanish colonial civil authorities.

This chapter attempts to go beyond mere historical storytelling—although it is a fascinating story—but tries to explicate developments using social science and economic theories, that is, making abstract statements saying why and how phenomena are linked and generating falsifiable propositions. It draws on that part of economics and sociology taking the assumption of rationality as its dominant paradigm—call it "utility maximization" as economists do, "exchange theory" as sociologists do, or "rational choice theory." Throughout the chapter it is assumed that observed choices are the outcome of weighing perceived anticipated costs and benefits of actions and then seeking to act so as to maximize net benefits. The rise and fall of the Jesuit state saw many players: the Jesuits, the indigenous people, the Spanish colonialists, the Spanish Crown and its internal and external rivals, and the church. All these players pursued their self-interest as they perceived it, with the information they had available, and subject to the constraints and uncertainties of the day. For example, the endeavor of the Jesuits is neither the result of religious fanaticism, nor of irrationality, but may well be explained by concepts from the economics of religion or public economics. The Guaraní Indians were not as primitive and naïve as some historians want us to believe but knew how to serve their own interests, despite their disadvantage in violence potential. Spanish colonialists acted as rent-seekers in an environment with scarce labor and abundant land and the Crown wanted to claim its share by regularly adapting institutions. In all this South American turmoil, complicated by European wars of succession, wars of religion, "heresy" and rising nationalism, the Catholic Church tried to impose its morality and maintain its position of religious, moral and worldly power.

The history of the Jesuit missions in Paraguay from 1607 till 1767 is the subject of many books. In the mid 1980s it was made famous by Robert de Niro and Jeremy Irons in Roland Joffé's prize winning movie *The Mission*. Some of the early literature is contemporaneous and mostly written by Jesuits. Perhaps the most extensive and scientific study is de Charlevoix' six volume work from 1757 *Histoire du Paraguay*. A similar work is by Muratori (1757) and Dobritzhoffer (1822). Nineteenth- as well as twentieth-century historians have written on the subject (Demersay, 1860; Brucker, 1880, Huonder, 1899; Charles, 1926; Goetstouwers, 1930; Mörner, 1965; Haubert, 1967; Krauss and Täubl, 1979; Abou, 1997). Some economists (Baudin, 1962; Gothein, 1883; Fassbinder, 1926; Popescu, 1952; Warren, 1954; Ward, 1967) studied the missions' history and described the economic organization in more detail. A lot of this literature is unashamedly biased. It is either apologetic, focusing on the positive aspects of the missions or on the heroic efforts of the Jesuits (Heinen, 1935; Caraman, 1975; Graham, 1901). Other historical accounts are outright hostile to the Jesuits (Madariaga, 1965; Garay, 1965).

Even today, the historic enmity between Jesuits and Franciscans can get the better of some scholars (Kiernan and Mathias, 1977, reviewing Caraman, 1975).

5.1 Discovering Paraguay

The story starts with the early-sixteenth-century exploration of the South American Atlantic coast. South America was explored first from the west and later from the east with Peru and Chile discovered before the Atlantic side of South America. Several early-sixteenth-century explorers—Juan de Solis in 1511, Sebastian Cabot in 1526—searched unsuccessfully for some channel upstream the Río de la Plata up to the mines of Peru and Bolivia. In 1535 Pedro de Mendoza led a great expedition and chose to settle in Buenos Aires. Constant battles with the Pampas Indians around Buenos Aires ultimately forced him to retire upstream, almost a thousand miles from the mouth of the La Plata, to a fort near Asunción. Asunción was founded on August 15, 1537, the day of Assumption. Later reinforcements by Cabeza de Vaca's group in the late 1530s brought the number of Spaniards in Asunción to about 600.

The area was inhabited by the seminomadic and agricultural Guaraní who were basically friendly toward the newcomers. However, the area was constantly threatened from the west by war prone Indian tribes from the nearby Chaco. The Guaraní looked upon the Spaniards as potential allies to fend off the warlike tribes of the Chaco.

Aboriginal Guaraní culture differed from other Indian civilizations the Spaniards encountered in Mexico and Peru. Guaraní lived seminomadic in separate consanguine clans. They used tropical forest agricultural techniques. Fields were abandoned every two to three years for more productive virgin areas by slash and burn. They had no domesticated animals and hunted for deer and tapir. The Guaraní women concentrated on horticultural labor; the men on hunting and warfare. They lived in large communal houses, housing several families in patrilineal lineage. Each village had a headman—a *cacique*—with quite limited power over his kinsmen compared to the power of the chiefs in the high cultures of the Andes and circum-Caribbean areas. There was no class-structured society with a hereditary hierarchy of chiefs with authority over conquered or federated villages and Guaraní society lacked the political or class structure the Spaniards found in Mexico or Peru. The Spaniards could not replace the ruling class, as they did in other discovered territories, and so rule the whole population. More direct rule, close to the local Indian population, was required.

5.1.1 A Portfolio Selection Problem

Pastore (1997) offers a clarifying economic view on the sharp differences the Spaniards encountered in the sixteenth century in the highlands of Peru and the lowlands of Paraguay and its consequences for colonization.

Early Spanish conquerors of South America faced two types of pre-Columbian situations: the Peruvian and Mexican highland areas and the vast lowlands of Paraguay between the foothills of the Andes and South

America's Atlantic coast. The American lowlands and the highlands differed in their factor endowments and consequently in political organization. In the lowlands land was abundant and deposits of precious metals scarce or absent. The lowland population was sparse, thinly spread in small groups and nomadic or seminomadic. Due to its land abundance vis-à-vis labor, land rent was almost zero and hence private property rights over land nonexistent. Labor productivity accordingly was very low. The forms of political organization of the lowland forest communities were relatively simple. Wars were waged for slaves and wives—which were a scarce resource—but not for land. When the population grew competition for land was simply resolved by splitting the group and moving into previously unoccupied areas in the forest. This land abundance and the lack of competition for land reduced the need for political organization such as some justice system for the protection of property rights, resolving disputes over land and for a military apparatus against external claimants. More complex forms of political organization in the lowlands appeared only where agglomeration had occurred—in so-called *varzeas*, the periodically flooded fertile banks of large rivers. At the time of the initial Spanish *entradas*, the population of the vast area formed of non Amazonic Brazil, Paraguay, and Uruguay is estimated at about one million inhabitants—mainly Tupi and Guaraní Indians, making the place virtually empty (Livi-Bacci and Maeder, 2004).

In contrast, in the highlands, the indigenous population was more dense and concentrated and good agricultural land was relatively scarce vis-à-vis labor. Hence, the division of labor was highly evolved, giving rise to specialized artisan labor and much higher labor productivity. Resource scarcity—especially of agricultural land—leads to more complex forms of political organization to protect and enforce property rights, to maintain internal law and order and to a military organization for external protection. Consequently highland societies were more complex with extended systems of public finance and labor coercion supporting large pre-Columbian states and religious bureaucracies of the Incas and the Aztecs.

Conquering the highlands was far more cost-efficient and profitable than colonizing the lowlands. Highland societies could be controlled by replacing the ruling elite and broadly maintaining existing political organizations. Conquest of the highlands was a quick win investment for the Spanish Crown as the expected revenues from land rents exceeded the cost of collecting them. Once conquered, the highlands were easier to police internally and in pure military terms easier to defend against external attacks than the lowlands. Subduing and controlling the dispersed nomads from the lowlands was a far more costly venture with fewer prospects for returns. Lowlands are more difficult to defend against encroaching mercantilist rivals. Furthermore, less could be expected from the colonization of lowlands as land rents were zero or very low due to its abundance.

Pastore (1997) frames the Spanish Crown situation as a portfolio selection problem. As investing in highland colonization yielded a higher

return with lower risk, compared to lowland colonization, the Crown put more effort and resources into the Peruvian and Mexican colonies than in its Paraguayan ventures. But to supply its prime highland colonies with staple and defend them from encroachment by Europeans—especially the Portuguese—and indigenous rivals—the Chaco Indians—it needed to settle frontier colonies. Rents in the lowlands could only be produced by sponging on labor as land had little or no value and deposits of precious metals nonexistent. Inducing Spanish colonists to settle and remain in frontier lowland areas necessitated concentration of indigenous labor, restricting its mobility and controlling it in order to raise its productivity so that the difference between productivity and wages or rent on labor could be split by the colonists and the Crown.

5.1.2 Early Spanish Indian Cooperation and Indigenous Enslavement

In the early decades of Spanish settlement around Asunción, the Spaniards took great care to respect the customs and not to offend the Guaraní. The Spaniards, hoping to find gold and silver mines, organized many cooperative military raids with the Guaraní. Joining forces, they won a number of victories over the Chaco enemies. The military prowess of the Spaniards gradually gained them the status of chiefs and the Guaraní accepted the Spaniards as in-law relatives. The Spaniards adapted to the Guaraní family clan culture, acquired large numbers of Guaraní women, serving as wives and concubines but also as servants and food providers, as was customary practice for Guaraní chiefs. By the mid-sixteenth century, Spaniards were a small diminishing minority and the number of mestizos and creoles increased greatly as a consequence of polygyny of the conquistadores and the Guaraní women. This gradual and rather casual adaptation of the Guaraní and Spaniards is considered one of the most notable aspects of the early colonial period in Paraguay and the early pattern of concubinage-kinship-labor was never entirely replaced in later periods (Service, 1951, p. 234). Both Spaniards and Indians benefited from these polygamous marital unions and their cooperation is perfectly explainable by rational choice theory. The Indian turned a potentially dangerous enemy into a friend—even a family member. The Spaniards not only enjoyed the favors of these women but also acquired their agricultural labor not only from their wives but also from their in-laws who were bound to reciprocal service according to indigenous custom (Pastore, 1997).

Early cooperative relations between the Spanish conquerors and indigenous people gradually turned into large scale indigenous enslavement. The Spaniards from Asunción gradually exacted more labor from their "relatives." Wives were effectively treated as slaves as they became objects of exchange and trade among Spaniards for clothing, horses and other goods. This even provoked some indigenous uprisings against the Spaniards. In 1545 the Spaniards had to put down an uprising with the aid of two thousand loyal Indians. Also, military raids to Chaco territory in the west produced numerous captives that Spaniards as well as Indians used as slaves.

Eventually the early Spanish settlers abandoned the hope to find mines locally and turned to agricultural production, not only for their own use but also to supply the Peruvian mining highland. This demand for staple could only be met profitably with a sufficient supply of slave labor. Although slavery was legally abolished within the Spanish Empire in 1542, for more than a decade Spaniards raided indigenous communities—especially seeking women who traditionally did most of the agricultural work in indigenous communities. Slaves were also exported to Sao Vicente to be sold on to Portuguese sugar planters. Slave labor could continue to prevail in the New World because of the unequal distribution of violence potential between the Spaniards and the Indians and poor delineation and enforcement of property rights by the colonial state. Labor coercion—combining carrot and stick—created rents on labor to be divided by slave owners and the taxing government. The Crown benefited from early enslavement through higher tax revenues, which it used to support the local representatives of the royal bureaucracy. Furthermore, increased rents on labor enabled local settlers to set up militias, which reduced the Crown's expenditures for colonial defense. It would not have been in the Crown's interest to enforce the New Laws of Abolition of 1542 rigorously in Paraguay (and similarly Chile) as it would have been costly for the Crown to do so (Yeager, 1995; Pastore, 1998).

5.1.3 Enslavement and the Tragedy of the Commons

Not only the introduction of European diseases to the continent and the hostile military encounters between Spaniards and Indians triggered the fast decline of the indigenous population, but also the practice of polygamous marriage between Spaniards and indigenous women and the encroaching gradual enslavement of the indigenous people contributed to this decline.

It is well known that competitive use of a common good quickly leads to its overuse as is exemplified by the "tragedy of the commons." The early Spaniards—often adventurers with very high discount rates—treated indigenous people as common property and depleted this renewable resource at a rate which was detrimental to reproduction. Especially the preference for enslaving women reduced their fertility and increased child mortality. Lack of women in the indigenous communities diminished the output of agricultural production, leading to malnutrition and susceptibility to disease (Pastore, 1998).

There were earlier sixteenth-century examples of colonial overuse of labor. In the Greater Antilles, the Taino population was wiped out a few decades after Columbus' landfall due to confiscation of labor that dislocated communities and disrupted families and clans and especially subtracted women from the indigenous reproductive pool. This brought the Taino people in the Greater Antilles to the verge of demographic collapse. The European epidemics later wiped them out completely (Livi-Bacci and Maeder, 2004).

5.2 Redistribution of Labor Rents and the "Encomienda"

5.2.1 Rent Redistribution

Typically, once a colonial region was conquered, the Crown tried to change the distribution of rents captured by the conquering class in its favor by limiting the political and economic powers granted to the conquerors or ultimately replacing them with salaried officers of the royal bureaucracy, as was done in Peru and Mexico. The Crown responded similarly in Paraguay when indigenous enslavement and depopulation proved detrimental by the mid-sixteenth century to its public finances. Spaniards—by that time a mixture of Spaniards and mestizos—were due to pay a head tax per slave. Free Indians also had to pay this head tax. Depopulation was not in the Crown's interest as government income dropped (Pastore, 1997).

In 1556, the Crown responded to the situation by introducing the system of the "*encomienda de la mita*" and the "*congregación*" (or "*reducción*"), but recognizing some specific Paraguayan institution, the "*encomienda yanacona*" (or the "*encomienda originario*").

Some 27,000 adult males (the equivalent of a population of about 100,000) were assigned to 320 Spaniards (and mestizos) in Asunción. Later, the system was extended to areas beyond Asunción.

The grant of an *encomienda* was a legal contract—binding by the Courts—between the Crown and private Spaniards. Indians assigned to an *encomienda mitaria* were exempt from paying tribute to the Crown but required to provide specified labor services to their masters—the *encomenderos*—initially for six months per year and later for two months per year. *Encomenderos* had the duty to protect, convert and acculturate their Indians, fix their residence in a specific town, pay a certain amount of taxes to the Crown and contribute at their own expense to the defense of the colony. An *encomendero* could keep *an encomienda* during his lifetime and two generations, but could not trade it or rent it. *Encomenderos* could be assigned duties of royal officials but had no judicial powers and no right to arm the indigenous people entrusted to them.

With the introduction of the *encomienda* system, slavery did not disappear and enslavement of indigenous labor remained common practice in a disguised form. The so-called *encomienda yanacona* or *encomienda originario* was not created by decree but was a gradual institutionalization of the Guaraní customs of polygyny and kinship obligations that had turned out into enslavement. Also, Indians who earlier resisted the Spaniards during their conquest of Paraguay or were involved in uprisings against the Spaniards and were consecutively enslaved were kept under close supervision in the homes and farms of the colonists. These slaves—*yanacona*—could be put to work the year round although the *encomienda* system introduced ownership restrictions on this labor force. Similar to *encomienda de la mita, encomienda yanacona* could not be legally rented out or traded and bequeathed indefinitely.

5.2.2 *External Trade, Labor Demand, and the Demise of the Encomienda*

Until the 1570s the economy was based exclusively on indigenous agriculture. All production was for local consumption and there was no export. That changed with the expansion of the silver mining economy around Potosí (Bolivia) which set off regional trade with agricultural exports of cereals, sugar and wine. Also, raising cattle started in the 1560s and 1570s and developed toward the south where the land was more suited. A demand for *yerba mate*—a tea in high demand especially by meat eating people because of its digestive properties —developed. As it was reasonably abundant in forests northeast from Asunción, it grew out to become the most important export product by the 1630s.

With the development of regional trade, new businesses developed such as trading, warehousing and transportation generating a derived demand for labor outside the *encomienda* system. By the mid-seventeenth century, due to the rise of exports and the increasing scarcity of labor, the Crown imposed a new coerced labor requirement on town Indians—the so-called *mandamientos* by which the state rented out indigenous labor to private entrepreneurs at a set taxed wage. Even after the introduction of the system of *encomiendas*, *congregación,* and *mandamientos* the numbers of the indigenous population dwindled continuously seriously aggravating the problem of scarcity of labor. The decline of labor supply and the competition from new business engaged in regional trade was detrimental to the *encomienda* system that quickly deteriorated. By the early seventeenth century the indigenous population was at least halved—according to some sources even reduced to one-tenth—compared to its original size at the beginning of the sixteenth century. The decline in the *encomiendas* implied that the Crown had less military resources to call upon to defend the colony. *Encomenderos* evaded military service by purchasing government offices—a Hapsburg technique that grew in fashion in the seventeenth century—that exempted them from military duties.

5.3 Enter the Jesuits

Partly in response to the consistent decline of the indigenous population and to establish a more secure frontier in the northeast, local authorities asked the Jesuits in the 1610s to found missions in Guayrá, east of Asunción in towns already entrusted to Spaniards. The first Jesuits landed earlier in San Salvador de Bahía in Brazil in 1550—not ten years after the foundation of the order by Ignatius of Loyola and his friends. In 1586 Jesuits had started missionary work in the province of Guayrá, by 1593 a college was founded in Asunción and a provincial (Diego Torres) was appointed for the province of Paraguay (non Amazonic Brazil, Paraguay, Uruguay, and Argentina) and Chile. In 1609 two Italian Jesuits—Fathers Simón Maceta and José Cataldino—founded the first mission—the Reduction of Loreto—on the banks of the river Paranapané. Three years later when the most remarkable

Jesuit of that period—Antonio Ruiz de Montoya—arrived in Paraguay more than one hundred Jesuits from different European regions were already active in Guayrá and Paraguay. He was later put in charge of the missions in Guayrá (Graham, 1901, p. 53).

To the dismay of Spanish settlers the Guaraní flocked to the reductions and mission after mission formed with the Jesuits starting a policy of isolation and standing between the mission Indians and the Spanish settlers. Also much to the annoyance of the local Spanish authorities, opportunists from São Paulo—so-called Paulistas or Mamelucos—ventured into this area in search of slaves primarily for the Brazilian sugar plantations. It is estimated that some seventy thousand Guaraní were captured by the Paulistas most of them between 1629 and 1631 (Wright, 2004, p. 113). The Paulistas destroyed three Spanish cities and fourteen towns of Guaraní Indians. The by then Jesuit superior Antonio Ruiz de Montoya decided to evacuate some of the earliest missions of the Guayrá province in 1631. He marched some twelve thousand Indians to safety, four hundred miles downriver to lands between the Uruguay River and the coast. Only a third of the migrants escaped with their lives (Graham, 1901, p. 85). The missions resettled in the area between the Paraná and Uruguay rivers. When the slave raids continued in the 1630s forcing further evacuations and after a visit by superior Montoya to the Pope (Urban VIII) and the King (Philip IV), the Crown authorized the Jesuit missionaries—some of them veterans from wars in Italy and Flanders—to train and equip the Indians with firearms. In 1639 the Indians of the missions rendered their first military service—but not the last—to the Crown. In 1641 an army of five hundred Paulistas and seventeen hundred Indian collaborators was decisively defeated by the Jesuit army.

5.3.1 The Establishment of the Jesuit "Republic"

The year 1641 could be considered the real birth of the so-called Jesuit "republic" of Paraguay. A small number of Jesuits—never numbering more than two hundred and of which at least twenty-nine were killed "in action"—founded, developed, and administered a society of some thirty and at times more "reductions" of Guaraní Indians. The reductions, initially self-sustaining agricultural economies gradually specialized and developed some industrial and commercial activity and adopted a remarkably advanced culture. The purpose of the Jesuits in founding the republic was—as the Jesuit superior Antonio Ruiz de Montoya in 1609 explained—"to christianize and to civilize the Indians so that they could be free subjects of the Spanish Crown and loyal members of the Catholic Church." The republic developed economically and socially and could be maintained for more than a century coping not only with epidemics and other life hazards, but also with a growingly hostile colonial and mixed population of officials, planters and rival clergymen, competing for cheap Indian labor or also for the Indian's soul and servitude.

The hostility and competition between the Jesuits and the local colonials and clergy is illustrated by many incidents. In 1633, when the governor in Asunción called upon the Indians of the Jesuit missions for personal service (forced labor), the bishop of Paraguay thought it opportune to press for tithes, despite a papal bull and a king's order exempting the Jesuit missions. The demands were overruled by an explicit order from the king. "So for the present the Jesuits scored a victory, though in the future it was to cost them dear" (Graham, 1901, p. 90). Relations between the local church and the Jesuits even worsened with the coming in the 1640s of bishop Cárdenas—a Peruvian born Franciscan—who charged the Jesuits of dodging the king's tax, keeping back tithes from the church, making themselves sovereign rulers in mission territory, and exploiting gold and silver mines in secret. Cardenas eventually succeeded to elect himself as governor, forcing the Jesuits to flee out of Asunción. His authority was contested by the Crown and he was finally defeated in battle by a newly regularly appointed governor and ousted from Paraguay. All this did not contribute to the Jesuits' popularity with the local colonial community and with the local clergy, who particularly resented the governors sent out by Spain and their Jesuit allies.

5.3.2 Tax Farming to the Jesuits

Between 1660 and 1680 the Crown gradually shifted its reliance for taxes and control over its colony from the *encomienda* Spaniards toward the Jesuit missions because it was profitable to do so in terms of tax revenues net of costs of maintaining the colony. The Crown exempted the Jesuits from the *encomienda*. In return the Crown required from the reductions under their control, military service and the payment of a tribute in cash. The Jesuits dutifully paid these taxes and maintained their Indian armies which were repeatedly put in the service of the Crown, against the Portuguese, against English corsairs, in quelling rebellions, in protection of Buenos Aires against a French naval attack in 1681 and at the first siege of the Colonia in 1678 (Graham, 1901, p. 143).

In the 1660s and later, the Paraguayan *encomenderos* repeatedly requested the Crown to extend the *encomienda* to the Jesuit mission towns without success. Despite periodic bouts of the plague, the Jesuit missions continued to grow in the seventeenth century. From the Crown's point of view, the returns on indigenous labor in the Jesuit missions exempt from the *encomienda* and segregated from the Spaniards were much higher than the returns from less isolated *encomienda* towns mostly founded by Franciscans. Hence, the Crown—advised by the local Spanish colonial administration—had no interest in subjecting the Jesuit missions to the *encomienda* system as it judged that this would reduce its net revenue and increase its expenditures for defense.

The relative success of the Jesuit missions is illustrated by their demographic development, well researched by Livi-Bacci and Maeder (Livi-Bacci

and Maeder, 2004). During the long phase of growth from 1643 to 1732—despite high mortality rates of 150 or 200 per 1,000 largely because of nonendemic diseases that occurred every fifteen years or so because of a youthful susceptible population—the population quadrupled. This long phase of growth was almost exclusively the result of natural growth. Scarcity of religious personnel, which was a common complaint of the Jesuit provincials during that period, completely involved in the administration of the missions, left no room to proselytize.

5.3.3 Rising Mestizo Peasantry

In the same period of decline of the *encomienda* and the rise of the Jesuit missions, a small mestizo peasantry became important in the seventeenth century. In the second half of the sixteenth century, the number of original peninsular Spaniards in Paraguay had diminished greatly, but was compensated by rising numbers of their mestizos out of polygenic marriages between the conquistadores and the Guaraní women. To illustrate this, towns such as Santa Fe were founded by nine Spaniards and seventy-five creoles and Buenos Aires by ten Spaniards and sixty-three creoles. By the seventeenth century the mestizos not only greatly outnumbered the Spaniards, but were found in official positions, as *encomenderos* but also as smallholders. In general, they displayed a very independent attitude toward Spanish rule (Service, 1951, p. 235).

Under conditions of scarce labor and abundant and almost costless land, a free small peasantry will arise, provided property rights on the produce of their labor and means of production are well defined and can be enforced. In the early seventeenth century, the state had an interest in protecting and enforcing the property rights of this small mestizo peasantry, despite the pretensions of the *encomendero*. The dominant reason to do so was the increasing reliance of the Crown for military manpower. By the seventeenth century the Crown relied heavily on peasants to staff a newly set up provincial militia. The problem of colonial defense was acute in the seventeenth century because of threats not only by the Paulistas from Brazil—later kept in check by the Jesuit mission armies—but also by nomadic Indians—the Chaco—from the plains west of the Paraguay who became a fearsome enemy after adopting the horse.

By the late seventeenth century the Crown relied on Indian armies from the Jesuit missions but also increasingly on the peasant-based militia. In return the Crown recognized privately owned lands of the small peasantry.

5.4 The Organization of the Jesuit Missions

In the 1640s, the missions found permanent settlement in the valleys of the Paraná and Uruguay rivers—twenty-two of them at the beginning and eight more created between 1687 and 1707, when some of the original ones

became too populous. The missions were dispersed over some 200,000 square kilometers, including the cattle *estancias* (ranches) and the fields of *yerba mate*—an area larger than England or France. The missions grouped the majority (54% in 1680) of the autochthonous populations of the vast Río de la Plata province, which included—besides Paraguay and Uruguay—Buenos Aires, Tucumán, and Cuyo.

The economy in the reductions gradually evolved over a period of a century from a confederation of agricultural self-sustaining autocracies to a centrally commanded economy of federated towns with an agricultural and artisan manufacturing base, trading internally at planned terms of trade and externally at market determined terms of trade.

Conform to an early instruction of the Jesuit provincial Diego de Torres issued in 1609, two rules for the missionaries among the Guaraní were followed: first, adapt the reductions to preexisting sites and to the mentality of the Indians and second, organize the use of time as in a monastery.

Each mission was administered by a minimum of two Jesuit fathers, sometimes assisted by a co-adjuror and under the general authority of a Superior. The number of fathers governing the area and a population at its peak of 140,000 never exceeded 200. At the time of expulsion of the order in 1767, there were only seventy-eight Jesuits remaining. The complexity of the missions' economic activities, the need for spacious farmland and for estancias, and the difficulty of governing a crowded village meant that a mission's population normally did not exceed some 1,000 families. In 1732—the year of the demographic zenith—only one of the thirty missions exceeded 7,000 inhabitants (Livi-Bacci and Maeder, 2004, p. 193).

The reduction of the indigenous population to life in the missions brought profound changes to their way of life. From seminomadic, living in communal houses in polygenic households, they were turned by the Jesuits into farmers and into a strictly monogamous family life. Formal regulations on marriage were in effect and early marriages were rewarded with the allocation of a separate family home and household resources. Polygamy was curbed by providing separate housing and securing the maintenance for orphans and widows. In spite of precepts and rules, the old polygamy never completely died. For example, the *caciques* or clan heads of nine reductions claimed the right to have multiple wives in return for their military cooperation.

The Indian clan head—the *cacique*—distributed the land to the families under his control. The Jesuits did not interfere in the procedure but made sure that the distribution was somehow equitable and that the assignment of land to a conjugal family was sufficient to ensure produce for one year subsistence. In some reductions the Jesuit fathers even defined a minimum family plot size—*chacra*—which was used as a unit of distribution. The family home and agricultural tools to work the family land were assigned at the time of marriage and were lifelong private property of that family. Private property by inheritance was unknown and all property returned to the community represented by the *cacique*.

5.4.1 Property Rights at the Missions

The Guaraní distinguished *abambae*—what is possessed by the Indian—and *tupambae*—what belongs to God. Private possession—*abambae*—mainly covered consumption goods such as food, clothing, household utensils, arms or tools for waging war, hunting, and fishing. It also included the possession of some luxury consumption goods such as jewellery beyond a certain minimum and textiles not originating from Paraguay (Gothein, 1883).

Apart from the lifelong assignment of dwellings and private plots of land and tools over which a family had *usus fructus,* all other factors of production—land, tools, farm work animals, seed inventories, etcetera—were public property (*tupambae*) with the *cacique* representing the community.

The Jesuits reserved large areas of communal land. Part of the produce was used to pay for the obligatory Crown taxes, a poll tax of one peso per resident. Another part was traded to pay for commodities not produced in the reductions such as iron and copper for weapons and tools, gold and silver for ornamental purposes, instruments from Europe, specific religious objects, and such. Still another part was used to cover the needs of widows, orphans, warriors, *caciques*, *corregidores,* and the Jesuits and to cover periods of bad harvests. This public sector part was planned and strictly regulated by the Jesuits. In this way, the Jesuits ensured a provision of public goods—maintenance of law and order, external defense, basic social security—essential to sustain internal and external stability and growth.

The Guaraní worked their personal plots and also communal plots. Agricultural productivity was low, but a large variety of products was produced ranging from maize, rice, sugar cane, cotton, manioc, a wide diversity of vegetables to the *yerba mate* tea. *Yerba mate* tea was not only produced for consumption but also as medium of exchange. Ruiz de Montoya, writing of the early years of the seventeenth century, notes that the lack of money in Paraguay caused *yerba mate* to become the principal medium of exchange (Service, 1951, p. 248). Paraguayans collected (low quality) *yerba mate* from the forest but the Jesuits cultivated this tea on large plantations. In effect, they acted as central bankers. Ultimately, *yerba mate* became the most important export product of the missions.

5.4.2 Mission Productivity, Division of Labor, and Welfare

Several sources report that the Guaraní were gifted manual workers but indifferent farmers.

Despite strict supervision, encouragement and punishment by the Jesuit fathers, the Guaraní often failed to meet subsistence level on their private plots. They generally took six full months of their allotted time to prepare, plant, and harvest their individual plots, but it is estimated that they would have harvested enough for a year with four weeks of work because of the high fertility of the land (Livi-Bacci and Maeder, 2004, p. 194). Consequently, the production of the communal fields regularly had

to supplement insufficient individual resources. The actual productivity of fields planted with maize was one-fifth of their theoretical yield, given the techniques of the time. Taking into account labor in the communal fields—limited to Mondays and Saturdays—the working regime was light, certainly compared to that in the *encomienda*.

The production of communal fields was used for four purposes: as capital for planting and seeding, for the maintenance of orphans and widows, as reserve in adverse times and for barter to acquire necessary commodities from Buenos Aires and from Spain and for tax payment. "Each family was assured from the common stock sufficient food for its maintenance during good conduct, for the Jesuits held in its entirety the Pauline dictum that if a man will not work, then neither shall he eat" (Graham, 1901, p. 181).

In normal times—that is, in the absence of war, uprising, and famine—nutrition was adequate in both quantity and quality. Livi-Bacci and Maeder (2004) refer to Carbonell who estimated the Guaraní per capita consumption of meat at about 82 kg per year (compared with 13 kg in late-nineteenth-century Italy) and their per capita caloric budget at 2,500 per day in the final days of the missions which were not the most prosperous. This caloric estimate is probably low because it does not take into account products such as wheat, rice, or eggs and corresponds to the average per capita caloric budget of Brazil around 1980.

This high caloric budget should not blind us to the harshness of life. From the 1700s until the 1750s—including a period of political turmoil in the 1730s and some devastating epidemics—life expectancy at birth surpassed thirty years only three times. In the periods of strife and disease (1733, 1738, 1739) it even fell below ten. Average life expectancy at birth was about twenty-four years and mortality rates of 150 to 200 per 1,000 were the rule, largely because of recurrent nonendemic diseases hitting a young population without immunity.

All Indians—from the tribe chieftain to the children—were obliged to work a certain number of hours. Children for example were put to work in protecting harvest and sown fields against birds, similar to Peruvian practices. Inspectors controlled this obligation to work and aberrations were punished. The division of labor was organized by the Jesuits who determined—depending upon needs and skills—the distribution of jobs in agriculture as well as in artisan manufacturing. There was no free choice of occupation. The Jesuits made sure that a certain social promotion was possible by rising to the ranks of supervisory jobs by multiplying offices with names such as corregidor (mayor), lieutenant, sub-lieutenant, head alcalde, second alcalde, captain of the militia, chief justice, sergeant-major, fiscals, chief of the cattle farm, captain of painters, carpenters, smiths, and so on. (Graham, 1901, p. 184).

The division of labor must have been highly specialized with most arts and trades—weaving, tanning, carpentry, tailor, hat-makers, coopers, cordage-makers, boat-builders, cart wrights, joiners, arms and powder, musical instruments, silver smiths, painters, turners, printers, etc. Archaeological

research—with fragmentary remains of the mission towns, their cathedral-size churches, colegios (centers of religious instruction in a range of skills, from literacy and music to carpentry, metal, brick and polished stone crafts), with arcaded streets linking residences—shows the remarkable level of transformation of the Neolithic Guaraní into a highly complex division of labor (McNaspy, 1987).

The missions were located in excellent cattle-breeding country and large *estancias* (ranches) developed over time. At the time of expulsion the number of cattle was more than 700,000 with some 44,000 oxen, 27,000 horses, and 140,000 sheep. Cattle—especially hides—was a major source of export income, but also mainly a living food reserve in times of duress.

5.4.3 Freedom and Policing

The General Rules of the Missions of 1689 reveal that the Guaraní were not free to leave the village without the explicit authorization of the fathers. The Jesuits tried to keep each village isolated and minimize its contact with other villages and with the external world, but this isolation was relative as trade between missions as well as external trade was conducted. Also, whenever the social and economic system was under duress Indians fled into the wilderness and reverted to their traditional way of life. They also fled to avoid duties or to escape punishment for say, unauthorized killing of cattle, neglecting work or committing "sins of lust." However, the proportion of runaways seemed to be not more than 1 percent (Livi-Bacci and Maeder, 2004).

Each mission had its internal policing structure with different offices (*corrigedores, alcaldes, regidores, alguaciles*) chosen by the Jesuits amongst the deserving Indians. They maintained and trained a militia for external defense and for the service of the Crown. In it, the *caciques*—mostly hereditary but sometimes elected chiefs of different clans—held commanding positions. *Caciques* were rewarded with more abundant food, personal guards and messengers to keep track and communicate with companies of Indians in the field. Every Indian belonged to a company that trained on a regular basis. This system of well-armed, trained and standing militias loyal to the Crown made the Jesuits feared and unpopular with the local colonial population (Graham, 1901, p. 190).

5.4.4 Barter and Trade

From the mid-seventeenth century, the Jesuit missions engaged in commerce, internally as well as externally. Within their own missions, they initially developed a barter system for the mutual convenience of the different mission towns. The barter trade was based on divisible, nonperishable commodities with a stable demand (*monedas de tierra*) such as tobacco, *yerba mate*, maize and honey. Later for internal trade among the mission towns an accounting currency—the *peso hueco*—came into use. It was a mere accounting standard which was loosely related to the peso that circulated

in the Spanish territories. To save on transaction cost—and especially avoid monetary disputes with the Indians—an extensive price list in *peso hueco* was established and prices for a large number of commodities traded internally and among the missions were fixed (Baudin, 1962, p. 43).

The missions imported raw materials like iron and most metals, but also salt, arms, religious ornaments (crosses, medallions in precious metals), luxury products (silk, fine cloth, coloured glass), paper and specialized tools for hunting and fishing. The missions exported high quality plantation *yerba mate*—the digestive tea in high demand by the gauchos of Argentina. These exports competed with the lower quality tea from Spanish colonials of the area who complained to the governor of Asunción and succeeded in getting a royal decree to limit the mission exports to an annual quota of 12 tons. The second important export product was leather, in demand for the production of covers, tents, bags, and such. The cattle of the missions provided an abundant source of hides. Other articles of exportation were cotton, sugar, tobacco but also furniture and artisan products such as lace, decorated chests, etcetera (Baudin, 1962, p. 45). Only rarely did the missions make use of specialized labor for public works or did they send out Guaraní labor externally at the going *mandamiento* wage rate. The trade balance was always in surplus as the capital account was negative as taxes due to the Crown—a capitation tax of one peso (of which a few notables were exempt and with a 50 percent reduction for Guaranís in the militias)—were not compensated by the indemnity paid by the Crown to the missionaries for their services. All trade was ultimately centralized by procurators in Santa Fe and Buenos Aires who managed warehouses with supplies of different products and traded as they saw fit employing bookkeepers, employees and handlers. All trade surpluses accrued to the Jesuit Province of Paraguay which recycled the surpluses in improving the mission infrastructure and its religious structures (Baudin, 1962, p. 47). Especially in the eighteenth century, the Jesuits were severely criticized and accused of violating the canonical rules that prohibited ecclesiastics to engage in trade and commerce. Between the towns of their own territory all was arranged for mutual convenience at standard accounting prices and nonmarket terms of trade, but in their dealings with the outside world the Jesuits adhered to business principles that is "buy in the cheapest, sell in the dearest" (Graham, 1901, p. 194). Despite the evidence revealed at the time of the expulsion of the Jesuits that most of the gains were recycled "*Dei ad majorem gloriam*" and that there was no "Jesuit treasure," the business like exploitation of their realm was one of the accusations that ultimately contributed to their downfall.

5.5 The End of the Jesuit State

The causes of the end of the Jesuit state in Paraguay are manifold, some rooted locally and others as a consequence of shifting power positions in Europe.

Several factors made the Jesuit highly unpopular—to say the least—in Paraguay. The Jesuits followed a system of isolation of the Indians from the outside world, making them inaccessible as slaves, coerced and paid labor for the rest of the Paraguayan economy. The Jesuits and their Indians were loyal to the Spanish Crown which increasingly put them in conflict with the growing local inclination to secede from Spain, especially in the early eighteenth century. When José de Antequera appoints himself governor of Asunción and is commanded by the Crown to relinquish his illegal power, he refuses and defeats several armies sent against him by the Viceroy of Peru. He was finally defeated with the help of a 6,000 strong army from the missions and executed in Lima. Also during the *Comuneros* revolt (1721–1735), which is the first large scale attempt to secede the colony from Spain, the Jesuit army played a crucial role in restoring the authority of the Spanish Crown. In addition to the local enmity, there was the rivalry between religious orders—particularly with the Franciscans lingering on since the time of bishop Cárdenas—with accusations that Jesuits possessed secret mines and enslaved the Indians to their own benefit.

The definite demise of the missions came with the "war of the seven reductions." In 1680, the Portuguese governor of Rio de Janeiro, founded Colonia—a strategic position almost opposite Buenos Aires across the Río de la Plata. The town—thriving on smuggled items of trade, especially of British origin—undercut Spain's mercantile monopoly and for this reason it was besieged intermittently by Spanish forces. In the 1740s the Portuguese governor of Rio de Janeiro, Gomez de Andrade, proposed the court in Lisbon to exchange the area of Colonia against seven reductions in Uruguay which he believed to hold Jesuit gold mines and to adjust the frontier up to the river Uruguay. In 1750 a treaty was signed between Spain and Portugal sealing this exchange. The treaty provided that the Jesuits and the 30,000 Indians would resettle on the opposite bank of the Uruguay, a move they refused and was vehemently protested by the Spanish colonial authorities as well as the church. The Spanish Crown judged that the protection of its mercantile monopoly by getting a hold on Colonia and the colony of Sacramento was far more important than the hardship caused by the evacuation of seven Jesuit mission towns.

When the order for the evacuation was given, a revolt broke out as the Indians and the Jesuits did not accept confiscation of their settlements. Despite explicit orders to comply by the Jesuit General Visconzi—recognizing also the threats to the future of the Order under fire in the European political and ecclesiastical scene by several "enlightenment" ministers in Spain, France and especially Portugal and also even within the Vatican—active hostilities broke out in 1754 with open and guerrilla warfare. Some Jesuits complied and contributed to the resettlement in existing reductions on the river Paraná and on the right bank of the Uruguay, but others did not until a combined Spanish-Portuguese force finally defeated the Jesuit Indians in 1758.

The "war of the seven reductions" accelerated the expulsion of the Jesuits from Portugal in 1759, from France in 1764 and from Spain in 1767. All this

eventually led to the abolishment of the Jesuit Order by Pope Clemens XIV in 1773. The Pope was under pressure of five Catholic rulers and hoped by this move to avoid a possible schism similar to England under Henry VIII with national churches no longer united with Rome. The abolishment meant that more than 20,500 Jesuits worldwide lost their identity as religious persons. Some 670 colleges, 270 missions, and 1,540 churches were closed after the abolishment of the Order. Historians (Imberechts, 2004, p. 168) cite many reasons that contributed to the abolition: the influence of Jesuit confessionaries at the Courts, their real or perceived influence on politics and the jealousy it aroused; the monopoly on secondary education in many countries; the resentment against the reductions in Paraguay and other Jesuit ventures in foreign lands; the Jesuit stance on slavery; the dispute on the rites in China and India; Pascal's attack against "Jesuit morals"; the influence of the "philosophes"—especially Voltaire—and enlightened despotism ideas and rising nationalism and struggle against the church. Some Jesuits, such as P. Cordara who wrote at the time of their abolishment, argued that part of the blame was Jesuit "*superbia*"—a form of hubris and glorification of the Order which came with Jesuit training.

Earlier, in 1767, Charles III of Spain signed the edict to exile the Jesuits from the Spanish possessions in America. The expulsion was carried out *manu militari* by Viceroy Bucareli of La Plata without Jesuit or Indian resistance. Some 150 Jesuits from Córdoba, Buenos Aires, Montevideo and Santa Fe were shipped off to Europe and 78 Jesuits from the missions were marched to Buenos Aires and then shipped off to Europe (Graham, 1901, pp. 265–268).

The spiritual administration of the reductions was placed under the care of the Franciscans and the public administration under the Spanish civil authorities. The reductions rapidly declined from 80,000 inhabitants in the early 1770s to 45,000 at the end of the century. In the beginning of the nineteenth century, they were abandoned due to uprisings, the revolution and its wars and the despotic rule of the first republican presidents.

5.6 The Jesuit Model

5.6.1 The Origin of the Jesuit Model

The structure of the economic model of the Jesuit missions—centralized planning of investment, a concentration of ownership of factors of production by the "state," highly autarkic local economies with internal trade between these economies at accounting prices but with a business like attitude in international trade—clearly resembles the autocracy of Soviet days. The Jesuit mission state is an example of Benjamin Ward's "command society" which he defines as "an ideal type which has as its most important intermediate activity the production of compliant zealots, that is, of administrators with a deep commitment to the aims of the regime and who are trained intensively to be not only technically competent but also obedient." (Ward, 1967, p. 259)

Were the Jesuits inspired by a theory in organizing the reductions? Some argue (Gothein, 1883) that the Jesuits of the time were inspired by the writings of the early sixteenth century Dominican Thomas Campanella who described a utopian state—*Civitas Solis*—and put these ideas in practice in Paraguay. Others (Fassbinder, 1926) are convinced that the Jesuits were just pragmatic in their adaptations to local circumstances and in maintaining some Indian customs. For others, the Jesuits learned much of the Inca strategy in Peru of conserving the old agrarian society and superimposing a planned superstructure (Baudin, 1962).

More recent scholarly work (Höpfl, 2004) explains and extensively documents the Jesuit ideas on organization at the time. The most characteristic and distinctive feature of the Society's organization is "its consistent structure of super- and sub-ordination, command and obedience, strict hierarchy and concentration of authority in a single superior at every level of the order, culminating in the overriding authority of the Superior General, at the expense of the authority of any collective representative body or collective decision-making by Jesuit communities" (Höpfl, 2004, p. 24) and "what is fundamental to the Jesuits' principles of organization is their distinctive understanding of the virtue of obedience, not any military or pragmatic considerations" (Höpfl, 2004, p. 26). Obedience is assigned a preeminent place in the Jesuit order with an abundance of texts emphasizing and justifying it because of its (presumed) functionality, the naturalness of super- and subordination observed in the whole universe and the ascetic motif. The emphasis on obedience is rigidly linked with Jesuit spirituality—most explicit in Ignatius' Spiritual Exercises, understanding the essence of Christian life as willed obedience to God. Typical of the Society's mentality in the sixteenth century (and much later) are Bellarmine's Roman college lectures of 1576 on the best form of government in which he unequivocally argued in favor of pure monarchy (*monarchia simplex*) which outperformed republics in terms of unity, power, stability and longevity. The Jesuits' "distinctive spirituality of obedience and active life both presupposed and reinforced irreducible beliefs about the irreplaceable centrality of order, hierarchy, monarchy, and obedience in any collectivity" (Höpfl, 2004, p. 51). Their views were not exceptional as the absolutist monarchic interpretation of hierarchy was becoming the standard in early modern Europe and many others like Bodin, "les politiques," patriarchalists, and Hobbesians thought the same about the proper ordering of civil society.

Documented Jesuit political thought in the sixteenth and seventeenth century justified the end of government, law and policy in the common good. Basic elements of the common good were security of the commonwealth and its ability to fend off external and internal enemies, distributive justice or fair allocation of burdens and rewards and commutative justice or fair conduct involving mutual obligations and rights. For the Jesuits the common good also encompassed the moral improvement of the subjects and the advancement of true religion. "Jesuits fully approved of sumptuary laws, which attempted detailed regulation of the attire, ornamentation,

and consumptions permitted to persons of different social statuses. They also approved of: the control of publications of all kinds, price-fixing (at least for staples), the regulation of imports and exports, the encouragement of agriculture and trade, including promoting immigration by useful craftsmen, even heretical ones, the policing of witchcraft, of sexual morals, of mothers breast-feeding, and of the conduct of fathers with regard to excesses in punishing, the provision of education, public munificence, charitable enterprises, the regulation of banking and the provision of public institutions for lending (so-called *montes pietatis*), and the enforcement of laws against usury" (Höpfl, 2004, p. 286). In view of the thought at the time, it is not surprising that they considered command and control a more "natural mechanism" to foster the common good rather than rely on private or social contractual exchange or engagement.

5.6.2 Olson's Theory of the Soviet-Type Autocracy and the Jesuit State

The Jesuit republic of Paraguay may justly be called a Soviet-type "theocratic" autocracy organized along the same principles as Stalin's state absorption of the economy and collectivization of agriculture, except that enforcement and authority relied more on loyalty rather than on repression.

Dictators can choose between investing in loyalty and investing in repression to maintain their position of power (Wintrobe, 1998, p. 106). Historical evidence suggests that the Jesuit state in Paraguay was relatively high on loyalty and low on repression. Although at the time the Jesuits vigorously contested the Machiavellian view on "reason of state," they acted according to his maxim that the best way for the prince was to be loved—not hated—and feared—not ridiculed (Höpfl, 2004, pp. 140–163). For example, archaeological evidence (McNaspy, 1987) shows the splendor of the religious edifices in which the Jesuits heavily invested. Although no Jesuit writing of the time pointed to the dramatic and theatrical quality of Catholic religious ceremonies as one of the sources of power over minds and imaginations, they surely knew about the power of theatre as it was one of their great educational innovations and about the superiority of the visual over the oral as Ignatius' Spiritual Exercises are built on visual imagination (Höpfl, 2004, p. 114). Contemporaneous writing reports on the encouragement in the Jesuit missions of theatre, music, dance, and processions. Apparently the first to teach the Guaranís European music was the Flemish Jesuit Juan Basco, the former maestro de capilla to the Archduke Albert (Graham, 1901, p. 179). They not only relied on loyalty as "they had their prisons, with good store of chains, fetters, whips, and all other instruments with which a moral code is generally enforced. The most usual punishment was whipping; and the crimes most frequent were drunkenness, neglect of work, and bigamy" (Graham, 1901, p. 195). Even the Jesuits opponents (e.g., Asara) admitted that the Jesuits "exercised their authority with mildness and moderation (*suavidad y moderación*) which one

must admire." Indian officials within the missions were not permitted to inflict punishment of any kind without the explicit authority of the Jesuits. Capital punishment was never inflicted but crimes deserving capital punishment were punished by expulsion. The Jesuit way of maintaining control was cost-efficient in the sense that two or three Jesuits were sufficient to keep a population of a few thousand in check. None of the missions ever experienced an uprising against their rulers in contrast with very frequent *encomienda* Indian uprisings.

The parallels between the key features of the economic organization of the Jesuit reductions and Stalin's Soviet Union as described by Mancur Olson (2000, pp. 111–134) are striking. Both commonwealths were an autocracy, ruled by a group with an encompassing interest—the more productive the domain was, the more resources were available for the autocrat's objectives so that the autocrat had a powerful incentive to make the commonwealth even more productive—and with the autocrat extracting the largest possible surplus to increase his political (or religious) power, military might and international influence. The two autocrats pursued a different ideology—socialism for Stalin, Christianity for the Jesuits—and adopted a different strategy to secure their power—Stalin choosing for repression and the Jesuits for loyalty. The most striking feature however is that both autocrats opted for communism or almost universal public ownership and a large proportion of prices and wages set by the regime.

Olson's theory of Soviet-type autocracies offers an explanation for this approach. First, autocracies are based on coercive power. In the case of Stalin, he muscled himself to power first by joining the Bolshevik faction and later by ruthlessly eliminating his opponents. In the case of the Jesuits, initially they were protected under the military prowess of the Spanish Crown in the colonies and the moral authority that came with the Catholic religion and the blessing of the Pope and later by their own military standing. Second, autocracies or "stationary bandits" as Olson calls them in a criminal metaphor (2000, p. 6), with an encompassing interest rather than a narrow stake in society, have a strong incentive to limit the amount of resources they extract from a society. A rational autocrat, in contrast to an individual criminal or a "roving bandit," keeps the share he extracts from the population down from outright confiscation because he shares part of the burden of taxation. A crushing tax rate reduces effort and output. Therefore, decreasing the "tax-theft" rate from a high confiscatory level on the one hand implies taking a smaller share of output, but increases output and hence the tax base on the other hand. An autocrat will have found the revenue-maximizing tax rate when both effects cancel each other. Furthermore, an autocrat has an incentive to use part of his tax revenues to invest in public goods, enhancing production and hence the tax base. This is exactly what the Jesuits did—they invested in basic public goods such as external protection, internal law and order, infrastructure and social security (widows and children). Third, an autocrat with a long term time horizon can augment his long term net tax revenue by confiscations that increase

savings and investment. Stalin confiscated all of the farmland, the natural resources and commercial and industrial property, held privately under Lenin's New Economic Policy, and increased the Soviet Union's rate of saving and investment that surpassed those of most other societies of his time. In addition he could decide on the output mix with an emphasis on capital goods reinforcing capital accumulation and growth of the economy. Olson claims that "Stalin continued to receive more golden eggs than ever, even after he had killed the goose. In the long history of stationary banditry, no prior autocrat seems to have managed this task." He is wrong. The Jesuits found this out long before Father Joseph. They collectivized and controlled the capital stock and made sure that the rate of savings and investment was high enough to maintain economic growth and development. Fourth, Soviet-type autocracies encourage labor participation. This was achieved by setting low rewards for work (low wages relative to consumer goods) implying high average wage taxes but with low marginal taxes and bonus and reward systems to encourage labor supply. Stalin and his planners introduced a combination of bonuses, progressive piece rates, prizes for Stakhanovites, etcetera to stimulate people to increase effort and engaging all into productive effort. The Jesuits based the missions on similar principles. Every man, women and even children had a task and they rewarded work using "the Pauline dictum that if a man will not work, then neither shall he eat" (Graham, 1901, p. 181). Another feature of Stalin's regime was that it used different implicit tax schedules for the more productive people, contributing to labor supply, development and the tax base. In the Soviet system, wages provided only austere levels of consumption and highly egalitarian, making the higher marginal earnings in more demanding jobs very attractive. The Jesuit reward systems seemed similar with basic subsistence wages for all and a multiplicity of offices and employment with appropriate rewards for marginal effort. Finally, autocratic systems relying on command and control have to overcome the problem of information and monitoring of performance to obtain a reasonably efficient allocation of resources. Centralized systems face a multitude of principal agent problems with subordinates having incentives to hide performance shortcomings or distort information on productivity. Soviet-type autocracies use competition among bureaucrats and between officials and workers as a countervailing force (Olson, 2000, p. 138) and similar techniques were used by the Jesuits in the missions (Graham, 1901, p. 184).

5.7 Conclusion

Olson rightly claims that his theory on Soviet-type autocracies—explaining the historical record of the Stalinist era by assuming a power maximizing autocrat with an encompassing interest in his commonwealth—offers an analysis with genuine explanatory power rather than merely asserting that the Soviet type of economic organization came out of ideology. Olson recognizes that more than one theory can be consistent with the historical

facts and that one should confront the implications of the theory with the historical record in order to test it. The main test he proposes is that "if the theory is true, the military or geopolitical power and the expenditures on projects that add to the status and prestige of political leaders should have been greater, in relation to the standard of living of the population, than in other societies—even other autocratic societies. A casual glance at the historical record [of Stalin's Soviet-Union] is enough to show that this was the case." (Olson, 2000, p. 130). Is this the case of the Jesuit missions in Paraguay in the sixteenth to eighteenth century? In their space and at the time, the Jesuit state—especially in the seventeenth century—was formidable and influential with a ratio of power to income that was very high compared to other states and autocracies. It proved to be an unprecedented effective system of resource mobilization. In contrast with Stalin's or Mao's Soviet-type of autocracy, the Jesuit state succeeded to attain this power and level of economic welfare by investing heavily in religion and ensuring loyalty, rather than investing in repression to maintain power and enforce their will.

References

Abou, S. *The Jesuit "Republic" of the Guaranís (1609–1768)*. New York: Crossroad, 1997.

Baudin, L. *Une théocratie socialiste: l'état Jésuite du Paraguay*. Paris: Editions M.-Th. Génin, 1962.

Brucker, P. *Le gouvernement des Jésuites au Paraguay*. Paris, 1880.

Caraman, P. *The Lost Paradise: The Jesuit Republic in South America*. New York: Dorset Press, 1975.

Charles, P. *Les réductions du Paraguay*. Louvain: Museum Lessianum, 1926.

Charlevoix de, P. F.-X. *Histoire du Paraguay*. Paris: Chez Ganeau, 1757.

Demersay, A. *Histoire physique, économique et politique du Paraguay et des établissements des Jésuites*. Paris, 1860.

Dobritzhoffer, M. *History of the Abipones, an Equestrian People of Paraguay [1784]*. London, 1822.

Fassbinder, M. *Der Jesuitenstaat in Paraguay*. Halle, 1926.

Garay, B. "The Guaraní Missions—A Ruthless Exploitation of the Indians." In *The Expulsion of the Jesuits from Latin America*, edited by M. Mörner. New York: Knopf, 1965, pp. 63–78.

Goetstouwers, J. "De reducties van Paraguay." *Xaveriana* 7, 5, 1930.

Gothein, E. *Der Christlich-Sociale Staat der Jesuiten in Paraguay*. Leipzig, 1883.

Graham, C.R. *A Vanished Arcadia Being Some Account of the Jesuits in Paraguay 1607–1767*. London: Kessinger's Rare Reprints, 1901.

Haubert, M. *La vie quotidienne au Paraguay sous les Jésuites au temps des missions*. Paris: Hachette, 1967.

Heinen, A. "Martelaren van Paraguay." *Xaveriana* 12, 2, 1935.

Höpfl, H. *Jesuit Political Thought—The Society of Jesus and the State, c. 1540–1630*. Cambridge: Cambridge University Press, 2004.

Huonder, P. *Deutsche Jesuiten Missionäre des 17 und 18 Yarbund*. Freiburg, 1899.

Imberechts, H.S. *De Jezuïeten—Een boeiend verhaal over markante figuren*. Averbode, Belgium: Altoria, 2004.

Kiernan, O. and G. Mathias. "Review of the Lost Paradise: A Jesuit Republic in South America." *The Hispanic American Historical Review* 57, 4, 1977: 737–738.

Krauss, H. and A. Täubl. *Mission und Entwicklung: der Jesuitenstaat in Paraguay*. München, Germany: Kösel, 1979.

Livi-Bacci, M. and E.J. Maeder. "The Missions of Paraguay: The Demography of an Experiment." *Journal of Interdisciplinary History* 35, 2, 2004: 185–224.

Madariaga, S. "The Fall of the Jesuits—The Triumph of the Philosophers." In *The Expulsion of the Jesuits from Latin America*, edited by M. Mörner. New York: Knopf, 1965, pp. 33–52.

McNaspy, C. "The Archeology of the Paraguay Reductions (1609–1767)." *World Archeology* 18, 3, February 1987: 398–410.

Mörner, M. *The Expulsion of the Jesuits from Latin America*. New York: Knopf, 1965.

Muratori, L.A. *Relation des Missions du Paraguai*. Paris: Chez la Veuve Bordelet, 1757.

Olson, M. *Power and Prosperity—Outgrowing Communist and Capitalist Dictatorships*. New York: Basic Books, 2000.

Pastore, M. "Taxation, Coercion, Trade and Development in a Frontier Economy: Early and Mid Colonial Paraguay." *Journal of Latin American Studies* 19, 2, May 1997: 329–354.

———. "Government, Taxation, Coercion, and Ideology: A Comment on Yeager." *Journal of Economic History* 58, 2, 1998: 511–520.

Popescu, O. *El sistema económico en las misiones jesuíticas*. Bahía Blanca, Argentina: Editorial Pampa Mar, 1952.

Service, E.R. "The Encomienda in Paraguay." *The Hispanic American Historical Review* 31, 2, 1951: 230–252.

Ward, B.N. *The Socialist Economy: A Study of Organizational Alternatives*. New York: Random House, 1967.

Warren, H.G. "El sistema económico en las misiones jesuíticas: Review." *Journal of Economic History* 14, 1, Winter 1954: 82–83.

Wintrobe, R. *The Political Economy of Dictatorship*. Cambridge: Cambridge University Press, 1998.

Wright, J. *God's Soldiers: Adventure, Politics, Intrigue, and Power—A History of the Jesuits*. New York: Image Books Doubleday, 2004.

Yeager, T. "Encomienda or Slavery: The Spanish Crown's Choice of Labor Organization in Sixteenth-Century Spanish America." *Journal of Economic History* 55, 4, 1995: 842–859.

6

Combining Autocracy and Majority Voting: The Canonical Succession Rules of the Latin Church

Luisa Giuriato

6.1 Introduction

Numerantur enim sententiae, non ponderantur, nec aliud in publico consilio potest fieri[1] (Plinius, *Epistulae,* Book II, 12, 5): the Latin Church opposed for centuries the application of this principle to the procedures for its leadership replacement, which were essentially based on elections. Unanimity and the weighting of votes had dominated the ecclesiastic elections during the first millennium, until the pure numerical rule of majority was given juridical (canonical) form[2] and was finally adopted, in coincidence with the major institutional reform of the Church in the eleventh to thirteenth century.

In those centuries, the Latin Church faced and reacted to the secular powers repeated and serious attacks to its own autonomy. To support their policies and consolidate their position, kings and emperors severely interfered with the succession of bishops and abbots (the investiture), exerted pressures on the papal elections, dismissed popes and bishops, caused schisms, autonomously summoned ecclesiastic Councils. The Church's reaction aimed at emancipating the clergy from the control of emperors and feudal lords and at sharply setting itself as an autonomous political and legal entity. This reaction represented a radical discontinuity in European history, known to historians as the Papal Revolution[3]: it began in 1075, when Gregory VII (1073–1085) proclaimed the papal supremacy and independence from the secular power, and ended in 1122, when a compromise was reached between the papacy and the emperors.

The Papal Revolution caused also a sharp turn toward absolutism and autocracy in the governance of the Church, with the concentration of power

in the hands of the pope and the elaboration of theocratic doctrines on the papal infallibility,[4] the papal primacy, the pope's fullness of power, *plenitudo potestatis*. This chapter aims at interpreting the links between the autocratic regime of the Latin Church and its anomalous procedures for the autocratic succession, namely elections by majority voting, which are usually associated with democracy.

6.1.1 The Issue of Autocratic Succession

The growing political economy literature on autocracies[5] is aware of the institutional heterogeneity of these regimes and of their mechanisms for leadership replacement. Tullock (1987) first focused on the constitutional modes of autocratic succession (open, hereditary, appointed) and on the relationship between them and the occurrence of coups against the incumbent autocrat. Tullock (1987) and Kurrild-Klitgaard (2000) account for the evolution of the constitutional rules of autocracies toward hereditary succession. The main focus of some recent trends of research is instead on the variables (in particular, growth and welfare-enhancing policies) that affect the probability of a dictator's survival (Grossman and Noh, 1994; Overland et al., 2005; Acemoglu and Robinson, 2006) and on the institutions that make autocratic governments accountable (Bueno de Mesquita et al., 2003; Besley and Kudamatsu, 2007). Bueno de Mesquita et al. (2003) have emphasizes the role of the "selectorate," that is, of the group of individuals on whom the leader depends to hold onto power and who play a role in shaping his policy incentives. Besley and Kudamatsu (2007) state that autocracies are successful if the selectorate can credibly remove poorly performing leaders and that an autocratic regime with a high rate of leadership change is more likely to be successful on average than those with less turnover: turnover is interpreted as the sign that the regime has been able to generate accountability mechanisms even in the absence of open contests for power.

The Latin Church, which was shaped by the Papal Revolution of the eleventh to thirteenth centuries, is a religious autocracy and a successful one in terms of its time survival. Its constitutional rules provide for open succession, where "no singular particular individual is designated ex ante as being the automatic successor upon vacancy" (Kurrild-Klitgaard, 2000, 66). The open succession is regulated by elections at the death of the autocrat (the pope) and of the top hierarchy (bishops and abbots), an element which is atypical in an autocratic regime.

Since its origin, the leadership replacement in the Church has been elective. However, in the ancient Church, the term *electio* referred more to a collective choice than to a real voting procedure: the word itself, *eligere*, means "to choose" and not to "elect." In a religious perspective, the electoral moment was conceived as the expression of the whole community, acting under the influence of God's will: voters were defined by Dante *denuntiatores divinae providentiae*.[6] Besides, the elected candidates were not considered the representatives of their constituency, as their life-long

and unconditioned mandate (the transmission of the faith and the protection of the Church unity) was meant to come from a divine source. This rather mystical characters were not lost even later, when the electoral moment took the traits of a juridical act and the theological concepts adapted to the needs of politics.

This change was set up by historical circumstances, the break-up of the Roman Empire, the invasions and the political situation under the Merovingian and Carolingian kings and under other rulers, which compromised the spiritual power of the Church with the exercise of temporal powers. The bishops frequently remedied for the lack of civic governance and provided the cities with essential services: justice, administration, defense, food and water supply. The temporal rulers often complained for such an extensive power: "Our treasury is void: our richness have gone to the Church. Nobody reigns but the bishops. Our honour is dead: it has gone to the bishops of the cities" was the complaint of the Merovingian king Chilperic I in the sixth century.

The ecclesiastical involvement in both the civic and the spiritual competences raised the question of the appointment: who had the right to appoint a bishop, given that he both guided the spiritual life of the city and performed governance functions[7]? The temporal rulers aimed at controlling these independent authorities and challenged the Church in its appointment functions, by influencing the selection procedures and by making the validity of the elections dependent on their consent (6.2). This sparked off the reaction of the Church and notably Gregory's VII Reform, that is, the consolidation of the autocratic structure and of its dogmatic foundations (6.2.2), and the Investiture Struggle.

Although the Church was increasingly moving toward an autocratic regime, it did not renounce elections to regulate its leadership succession, rather it constitutionalized them by the draft of canonical procedures (6.3). The evolution of the canon law on ecclesiastical appointments "can be explained as a series of rational responses to political problems" (Colomer and McLean, 1998, p. 22), but is also an example of the relationship between the search for stability in autocratic regimes and their constitutional rules governing succession, as illustrated by Tullock (1987). However, the electoral rules of the Church in the eleventh to thirteenth centuries did not evolve into hereditary succession, as Tullock's analysis assumes, but preserved their open succession character, although modified in order to grant stability, to avoid multiple equilibria and to isolate the electoral process.

The canon laws provided for precise definitions of the active electorate (6.3.2), which was gradually restricted to the clergy only, and for the introduction of numerical voting rules (6.3.3). The pure rule of majority, inherited from the Roman law codes, was deemed inadequate with respect to the needs of the Church, whose character is strongly spiritualistic, transcendent and rigidly hierarchical. The solution provided by the canon law was to associate a qualitative criterion to the pure numerical criterion: votes had not to be just counted, they had also to be weighted according

to voters' merits and wisdom. Majority was identified with the *maior et sanior pars,* the greater part by number and wisdom. The chapter describes the application of the principle to the different types of canonical elections and its various interpretations. The papal elections will deserve particular attention (6.4).

The whole electoral system designed by the canon laws is ideally at the opposite of the modern individualistic, rational approach to the problems of collective choice and voting and it is also anomalous with respect to the secular autocracies. The present analysis aims at accounting for the differences between a religious autocracy and other autocratic regimes and at employing, when possible, the results provided by the political economy and the social choice literature (6.5 and 6.6).

6.2 The Political and Ideological Foundations of Autocratic Reform in the Latin Church

The competition between the papacy and the temporal powers developed in the Middle Ages both on doctrinal and on political grounds (figure 6.1): when the temporal powers tried to make the Church an *instrumentum regni* (Pacaut, 1957; Levillain, 1994), they aimed at the appropriation *de facto* and *de jure* of the appointment of its leadership. In Europe, the feudal regime, simony (the sale of ecclesiastical benefices) and nicolaism (clerical marriage) contaminated the clerical and, especially, the episcopal status. The succession of the bishops in large parts of Europe largely depended on the temporal power, although this practice was explicitly condemned by the Cluniac reformers in the tenth century, by single bishops, like St. Ambrose of Milan in the fourth century, and popes (Nicholas I, 856–867), by local and ecumenical Councils of the Church (starting from the Council of Paris in 556).

In Italy, the papacy had difficulty in maintaining its autonomy with respect to the Byzantine empire and to the ancient Roman families. Supporters of the different parties strenuously strove to obtain the election of their leader, causing schisms and civil conflicts.[8] The Byzantine emperors interfered with the elections, sometimes imposed by force their anti-popes or exiled incumbent popes who were not loyal to them.[9] Since the ninth century, the pope's autonomy began to be challenged also by the increasingly powerful Frankish rulers.

A serious attempt to the autonomy of the Church was the investiture, that is, the transfer of the bishopric by the king's bestowing the symbols of the territorial and administrative jurisdiction, the pastoral staff and the ring upon the elected bishop. The investiture implied the right of the king to transfer the whole charge, with its functions, rights and properties (Blumenthal, 1994) and voided of meaning the election by the Christian faithful, *a clero et populo* [by the clergy and the laity], which was the legitimate source for the exercise of the episcopal function.

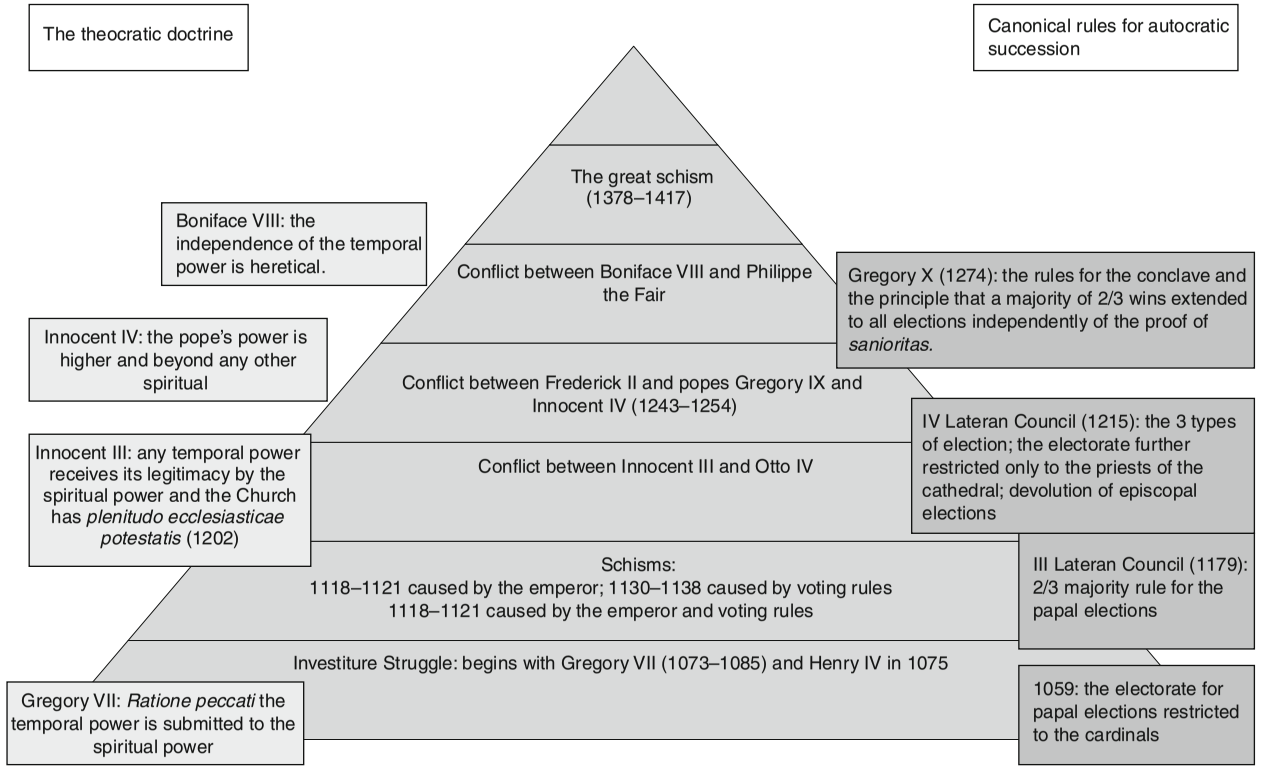

Figure 6.1 The Latin Church in the Twelfth-Thirteenth Centuries

On many occasions the Church could not react to the secular challenges which came from more powerful institutions. However, since the eleventh century it became increasingly eager to defend its own autonomy: popes Leo IX (1048–1054), Nicholas II (1059–1061), and Gregory VII (1073–1085) started to oppose the secular investitures and in 1075 Gregory VII severely forbade them, thus setting off a long conflict with the emperors, which was ended by Pope Callistus II and Henry V signing the Concordat of Worms in 1122. In England and Normandy, the Concordat of Bec (1107) provided for a similar but temporary solution to the conflict, which was definitely settled only after the martyrdom of the Archbishop Thomas Becket in 1170.

The compromise implied a division of the sources of legitimacy. The emperor renounced to the investiture of the bishops by bestowing the ring and the staff and committed to respect free canonical elections. The pope accepted that the emperors could attend the elections of bishops, could grant them feudal rights of property, justice and secular government (*regalia*) and receive their homage and fealty before the liturgical consecration. Conflicts were to be judged by the metropolitan bishop and by the bishops of the ecclesiastical province, but the emperor kept a certain decision-making power on the disputes inside his empire. To draft the compromise the Church had to renounce to the well-established concept of the indissoluble unity of the episcopate (which included the functions, the properties and the rights) and to separate the spiritual jurisdiction from the temporal jurisdiction.[10] The pope acknowledged a generic royal right on the possessions and rights of the Church.[11] It was not clear whether the granting of benefits corresponded to the emperor's veto power over the election and this opened new disputes under the emperors Lothar III and Frederick I. However, the Church was substantially successful in protecting its own autonomy, by making the election a separate moment in which the emperor could not interfere.

When the competition for legitimacy involved the election of the highest rank in the ecclesiastical hierarchy, the pope, no compromise could be found and the conflict repeatedly resulted in schisms, when two popes were simultaneously appointed, or in mutual disavowals. In both cases the stalemate was usually solved by the death, more rarely by the renunciation of one of the parties. In some instances the contest escalated into mutual disavowals by the emperor and the pope.[12]

6.2.1 The Doctrine of Theocracy

The autonomy of the Church was strengthened by the development of the dogmatic foundations of religious autocracy, the theocratic doctrine of the supremacy of the spiritual power over the temporal powers: the concepts of papal infallibility and primacy and of the pope's *plenitudo potestatis* founded the constitutional autocratic reform and influenced also the rules for autocratic succession.

The Church had asserted its supremacy over the temporal powers already in the fifth century, when St. Augustine's theory of the two Cities opposed

the doctrine of Constantine, entrusting the ecumenical Council, supervised by the emperor, with the supreme teaching on dogmatic issues and conceiving the pope's power as just sacramental and disciplinary. According to St. Augustine, the heavenly City has a supernatural essence, while the earthly City depends on it and is contingent: thus the Church preexists to the earthly kingdoms and can exert its power over them with the purpose to lead the peoples to salvation. The high Middle Age theologians limited the power of the Church on secular affairs to the settlement of moral questions and the pope's intervention was justified to correct the human sins (*ratione peccati*).

The theocratic doctrine was resumed at the beginning of the second millennium and was elaborated during the reign of about forty popes, from Leo IX (1049–1054) to Boniface VIII (1295–1304). The Gregorian reform was the first attempt to restate the complete spiritual and temporal independence of the Church. Any secular link had to be broken: the pope did not acknowledge the clergy that had received their power from a temporal authority. Gregory VII went further, stating that, given the Church responsibility for the world salvation, *ratione peccati* the temporal power is subordinate to the spiritual power. The Church can control the moral behaviour of the temporal authorities, judging both their private life and their political action: on these grounds, the emperor Henry IV was twice excommunicated and then deposed in 1080.

The emperor's party replied by advocating the historical independence of the temporal power from the Church and by founding the existence of temporal power in God's will. The two opposite doctrines further developed during the twelfth century: the canonists of the university of Bologna, Honorius of Autun, Hugues de Saint-Victor and St. Bernard reduced the temporal rulers to the role of mere executors.

In 1204 Innocent's III decree *Novit* asserted the *plenitudo ecclesiasticae potestatis,* that is, the absolute and full power of the pope over all churches and over the whole clergy. The pope's power is distinct from the civil power, which is subject to the law, and qualifies instead as an absolute power, free from any legal constraints: *Secundum plenitudinem potestatis de iure possumus supra ius dispensare*.[13] The temporal power is deemed independent in the administration of the human affairs but inferior to the spiritual power (*Deliberatio* 1199 and decree *Venerabilem* 1202) and receives its legitimacy from it, "like the moon receives its light from the sun." The pope has the right to interfere with the political decisions that have consequences on the spiritual and moral life. The pope thus cannot interfere with the election of the emperor, but he can and must examine his moral qualities and he can excommunicate him, if he is unworthy or if he menaces the ecclesiastical order. In Innocent's III view, the pope is no more the vicar of St. Peter, but the vicar of Christ himself and thus his power comes directly from God. The doctrine was completed by Innocent IV's canonists, stating the permanent authority of the pope on the temporal governments: the pope is the ordinary judge of everybody and his power is higher and beyond any other spiritual and temporal power.

Boniface VIII (1294–1303) increased the level of the dogmatic statements[14] (bull *Ineffabilis amor,* 1296 and bull *Unam sanctam,* 1302) and completed the theocratic construction. God is the only source of authority, the Church is God's city on earth and its chief, the vicar of Christ, is the master and judge of the temporal princes. The independence of the temporal power is heretical as it would imply the dualism of the sources of authority. Therefore, the supremacy of the Church is not just *ratione peccati,* as it has *plenitudo potestatis* on the whole temporal and spiritual governance.

The theocratic doctrine began to decline since the middle of the fourteenth century, when confronted with the theological attacks from university scholars (Marsilius of Padua, William of Ockham) and with the increasingly powerful nation-States, that entailed the decline of the feudal structures but also of their menace to the autonomy of the Church. However, the theocratic ideas survived inside the Church for a long time after the doctrine had been dismantled (Pacaut, 1957).

6.3 The Evolution of the Succession Rules

As figure 6.1 illustrates, the development of the theocratic doctrine was accompanied by the evolution of the succession rules,[15] which, once established, showed much greater resistance: the canon law adopted by Clemens V in 1311, at the end of the Papal Revolution, was the core of the Church's legislation until the 1918 codification.

6.3.1 Unanimity as the Optimal Rule in the Ancient Church

In the Latin Church of the origins the episcopal succession required the election from the clergy and the laity[16]: "*post divinum iudicium, post populi suffragium, post coepiscoporum consensum*"[17] wrote Cyprians (*Epistulae*, 59, 5). The laity's consent was essentially a proof of the quality of the candidate (*vox populi*).

The Christians of Rome chose their bishop, the pope, in the same way. The first three popes (Lino, Cleto, Clemens) were naturally appointed as they had been co-operators of St. Peter. Alexander I (106–115) was the first pope to be elected after the consultation of the whole community. The laity was progressively restricted to the civic notables, the imperial executives, the municipal magistrates, the garrison officials and the noble families, who took the leadership of the *vox populi* (Zizola, 1993; Alberigo, 1989, Levillain, 1994).

Unanimity dominated these elections, as documented by the ancient texts of the first centuries referring to *electio concorditer* or *unanimiter facta, unanimes conclamaverunt, pari voto et unanimi consensu*.[18] One reason for the request of unanimity was certainly that the ancient Church was a rather primitive political and juridical body with unsettled decision-making procedures. The laity's consensus was expressed in a disordered and sometimes violent way, as there was no regular scrutiny. A second fundamental

reason was that the Church considered itself not an ethnic, but a mystic body, the body of Christ himself: therefore, its members had the "duty" to agree on a unanimous decision inspired by God, as in the first community of the Apostles. Basically, only God can elect: "*solus eligit Deus, solus ipse confirmat, cum superiorem non habet*"[19] (Dante, *De Monarchia,* III, 16: 13).

Unanimity in the ancient Church did not imply granting the individual a veto power and thus the opportunity for strategic behaviour in order to extract side payments from the other voters (Klick and Parisi, 2003). Rather it was the expression of the assembly as a whole, from which the individual was neither separated nor protected.[20] Such a concept of unanimity implied that deciding was a collective and spontaneous act of coordination on a focal point, God's will. Historical and narrative sources extensively account for the emergence of the focal point (Gaudement, 1998). Symbolic events often helped the assembly to focus its attention on the best candidate and thus revealed God's will: a dream, the sun ray, the apparition of a dove, a child's voice. God sometimes indicated a totally unknown candidate or put a halt to the pious hesitancy of a saint or showed the place where he was hidden. God's intervention stopped the conflicts between the clergy and the laity and turned into legal elections what would otherwise be illegal appointments, such as those made by the predecessor or by the king.

Rules for governing a mystic body, where individual interests merge in the search for the collective or divine will, proved frail when secular influences added: however, the fascination of unanimity did not decrease in time and it continued to be considered the only desirable first-best rule also when it had to be necessarily substituted.

6.3.2 Consolidating the Autocracy: The Direct Appointment of the Bishops

As a first step to reduce the external influences on the successions, the Church limited the size of the electorate: this mitigated the pneumatic aspects of the elections, which became an increasingly political act. The electorate was restricted to the clergy and the laity was excluded: *Ducendus est populus, non sequendus,*[21] was the principle that grounded the belief that the laity has not the right to choose, but only to consent to the choice. At the end of the twelfth century, even this final consent was no more required (*Summa Reginensis*, 1191).

Nevertheless, the regime for the episcopal succession remained highly permeable by secular interferences during the twelfth and thirteenth century. The countermoves of the Church were: the further restriction of the episcopal electorate only to the priests of the cathedral (Pope Alexander III in 1180 and Fourth Lateran Council, 1215); the "devolution," that is, the direct appointment by the metropolitan bishop or by the pope when the local electoral college was inactive or unable to elect the new bishop within three months (Fourth Lateran Council, 1215); the direct appointment of loyal bishops by the pope, a practice introduced by Pope Innocent IV (1243–1254) in his conflict with Frederick II. Supported by the theocratic doctrine

of the *plenitudo potestatis,* the direct appointment by the pope became the usual practice at the end of the thirteenth century. From 1295 to 1301 in France, only one bishop out of sixteen was chosen after an election and during the papacy of John XXII (1316–1324) there were nine elections in the 127 French dioceses but 230 direct appointments by the pope.

6.3.3 Sub-optimal Decision-making Rules: From the Double Principle of Maioritas et Sanioritas to the Pure Numerical Rule

Not only the electorate, but also the electoral procedures were modified to speed up the elections and to avoid inefficient results. When the laity and clergy could not coordinate on a focal point, as either there was no suitable candidate or there was more than one, the solution was the appeal to the hierarchical superior authority, the metropolitan bishop, who appointed the more zealous and virtuous candidate and confirmed the election. The appeal to the superior authority was gradually substituted by a majority rule, which granted a quicker decision-making process and avoided external interferences. The elections were thus changing from the transcendent revelation of the divine will into a pure juridical act. The Roman majority principle imposed itself as the optimal "non-unanimity" rule (Buchanan and Tullock, 1962; Mueller, 2003) to isolate the decision-making process of a restricted electorate.

However, the pure rule of the number was not apt to the needs of the Church, which required a final control over the electoral outcome. The solution was to associate a qualitative criterion: votes had not just to be counted, they had also to be weighted according to the merits (*sanioritas*[22]) either of the electors or of the candidate and a double criterion of majority and *sanioritas* was applied in the canonical elections. The principle of *sanioritas* was introduced in times when unanimity still dominated, as the guiding rule for the exceptions to unanimity. In St. Benedict's rule (Chapter 64) the choice of the abbot required the unanimous consent of the congregation. If unanimity failed, the right to elect had to be entrusted to the wiser part of the congregation, independently of its size. This *sanior* pars would elect the most eminent member. Thus *sanioritas* of the voters was a guarantee of the *sanioritas* of the elected one and vice versa.

A true majority was made by the simultaneous presence of a *pars numerosior* and of a *pars sanior: Non sufficit maioritas numeri sine sanioritate.... Non ergo sufficit sanioritas nisi etiam concurrat maioritas*,[23] Panormitanus wrote (Commentaria, Chapters 57 and 42). The principle of *sanioritas* had also the positive feature of granting stability and avoiding cyclical results in the application of majority voting.

The application of the principle, however, still required the *arbitrium boni iudicis*, that is, that an impartial and superior authority could weight the votes and decide which part was *sanior.* In St. Benedict's rule, the arbitrator was the bishop, who confirmed the election of the abbot. The metropolitan bishop did the same for the episcopal elections. The judgement on the

sanioritas could overturn not only a majority result, but also a unanimous voting, if this was inspired by malice and partisan interests. "The minority, which is greater with respect to wisdom, wins," stated canonist Hostiensis, who added that even one single individual could make his own judgement prevail over the preferences of all other voters (*Glossa* Chapter 11 D.31).

It was obviously difficult to have positive results in elections, unless *maioritas et sanioritas* coexisted in the same group of voters. This difficulty gave birth to a new doctrine, introducing the presumption that, unless the contrary was proved, the part with numerical majority coincided with the part with the wiser opinion (*Glossa* Chapter 1 X, 3, 11).

The minority, which claimed to be greater in wisdom, could demonstrate its *sanioritas* in front of the hierarchical superior. However, the element of arbitrariness implied by the recourse to the impartial arbitrator was still troublesome, as it could subject the election to external influences.[24] To avoid this risk, the presumption of *sanioritas* of the majority was further strengthened: a "great numerical majority" implied *iuris et de jure* that it was also the greater part with respect to the wisdom of judgement. The "great majority" was soon identified with a two-thirds majority. In 1179 the Third Lateran Council adopted it for papal elections. The introduction of the two-thirds majority had the same effect of the *sanioritas* principle that it replaced: it avoided electoral cycles and granted stable outcomes (Colomer and McLean, 1998).

In 1274, Gregory X extended to all canonical elections the principle that a majority of two-thirds wins independently of the proof of *sanioritas*. The canonists stated that the principle of *sanioritas* could still apply in two cases:

a. when a two-thirds majority could not be reached and the minority was clearly the wiser part of the electorate (Goffredi de Trano);
b. when an unworthy candidate was elected by voters knowing of his indignity: in this case they would be deprived of their voting rights for three years, their votes would be spoiled and the right to decide would be entrusted to the minority (Third Lateran Council, 1179).

The secrecy of the votes was the final step toward the dominance of the numerical principle, as the *sanior pars* was no more recognisable: the ancient presumption that the majority was also the wisest part did not allow for proof to the contrary. This practice was sanctioned in the Trent Council (1520–1563), were the secrecy of votes was imposed to the papal and to the monastic successions, the only ones where elections still took place, as the bishops were definitely directly appointed by the pope.

6.4 The Papal Elections: A Selectorate and Its Decision-making Rules

The papal election was originally entrusted to the clergy and the laity. A common practice in the first centuries was, however, that the pope himself

indicated his successor to avoid disorders after his death: the indication was however often disregarded. Given the conflicts that since the second half of the fifth century marked the papal elections[25] and that originated in the contest between Rome and Constantinople, in 498 Pope Symmachus declared that, in case the incumbent pope could not indicate his successor, unanimous voting was required: majority voting could be applied only in the last resort.

To isolate the election from external influences, a synodal decree by Pope Gregory III in 769 reserved the papal election only to the clergy, who chose from a list of names prepared by the Roman notables: the election was finally approved by the population. However, for nearly five centuries the election was prey of the influences of the ambitious Roman families, of the pressures exerted by the Byzantine emperors, by the Ostrogoth, Lombard and Frankish rulers. The pope could then be consecrated only after the political approval. King Lothar imposed the presence of the emperor's ambassadors during the election, granted the active electorate only to the Romans and the passive electorate only to the noblemen, required a fidelity oath from the newly elected pope.

The Papal Reform of the eleventh century began with the return to the free election of the popes. In 1059, Nicholas II radically reformed the electoral system. The emperor was deprived of the right to approve the election. To guarantee the voters' independence, the electorate was restricted to the cardinal-bishops, the dignitaries of the Roman clergy who assisted the pope in the liturgical celebrations. The cardinal-priests and the cardinal-deacons, the other two orders that formed the consistory, had to "assist" the cardinal-bishops in the election, while the consensus of the clergy and of the population was no more essential.[26] The Third Lateran Council abolished the supremacy of the cardinal-bishops and stipulated equal voting rights. The consistory was exalted as the heir and successor of the Apostles, with the role of co-operators of Peter's successor.[27]

A selectorate was thus legally established with the specific purpose of maintaining the papal succession within the autocracy. Although direct appointment and hereditary succession were forbidden, the pope could exercise an influence on the choice of his successor by appointing new cardinals to his liking. He could not however totally renew the consistory, as the appointment of the cardinals is a life-long one. The electoral outcome thus remained highly unpredictable and very often the most favoured candidates were not elected.

Against the consolidation of the autocratic regime played, however, the fact that the creation of a selectorate, charged with the succession of the autocrat, concentrated on it the external pressures to influence the papal election. All European kingdoms tried to acquire their partisans among the cardinals[28] and simoniac practices of vote buying became common among the cardinals (the election of Alexander VI Borja in 1492 was the paroxysmal case), until the bull by Julius II , *Cum tam divino,* invalidated any simoniac election.

The strategy of the Church to consolidate the autocratic succession included also rules for the selectorate, namely the introduction of qualified majority voting and the institution of the conclave (6.4.1). However, the frequent and long schisms of the twelfth and thirteenth centuries proved the insufficiency of the autocratic and rule-based approach to defend the autonomy of the Church. The constitutional crises were then the occasion for the conciliar movement to enlarge the selectorate and to try to introduce accountability mechanisms (6.4.2).

6.4.1 The Voting Rules of the Selectorate

The ideal requirement of unanimous voting, which was the proof of the divine intervention, when transferred to the restricted body of the cardinals, lost much of its spiritual traits and much more resembled the modern concept of unanimity, that is, the granting of a veto power to the voters. The significant impact of transaction costs, side payments and strategic behaviors can be detected from the long vacancies of the papal See, due to the difficulty to converge on one single candidate: Pope Gregory X was elected in 1271 after a vacancy of two years and nine months.

A voting rule less strict than unanimity was thus necessary: two-thirds majority was introduced by the Third Lateran Council in 1179. A candidate, obtaining less that two-thirds of the votes but nevertheless claiming the papacy, was to be excommunicated together with those who supported him. The Fourth Lateran Council (1215) constitutionalized the three electoral systems that had been in use since the beginning of the twelfth century in case of dissent among cardinals: *per scrutinium,* the most common practice, a secret voting where ballot papers were first distributed in 1198; *per compromissum,* a compromise choice made by a small commission appointed by the consistory; *per inspirationem,* a unanimous choice under divine inspiration.

The double principle of *maioritas* and *sanioritas* was not applicable to papal elections,[29] because no hierarchical superior could be invoked above the pope and because, under the dominant autocratic tendency, the General Councils were not considered a suitable supreme instance. Thus, automatically, the *maior pars* was identified with the *pars saniori consilii.* Only the emperor Frederick I tried to appeal to the principle of *sanioritas* to decide on the double election of Alexander III and Victor IV in 1159. Unsuccessfully, the emperor summoned a Council in Pavia in 1160 to demonstrate that his candidate Victor IV, who had received five votes out of twenty-eight, was the expression on the *sanior pars*.

The selectorate of the Church was not left acting on its own greed, as its inaction and the consequent long vacancies of the apostolic See could endanger the autonomy of the Church. To accelerate the negotiations and the building of those large coalitions required by the two-thirds majority, a set of "incentives" was first spontaneously applied by the population and by the local civil authorities and then detailed by the canon law and, in

particular, by Pope Gregory's X constitution *Ubi periculum* (1274).[30] The cardinals were obliged to close themselves in the papal palace within ten days after the pope's death. Nobody could approach them nor communicate with them and they were deprived of all their income during the conclave days. If, after three days the new pope had still not been chosen, the meals would have been limited to one dish for seven days. If, during this time, the new pope was not elected, the meals would have been limited to bread, water and wine. These rules had the effect to accelerate negotiations and to make them successful in a shorter time.[31]

As in the other canonical elections, the modern concept of electoral representation cannot be applied: the pope is not the elected representative of the cardinals, but God's vicar. As a matter of fact, the electing body, the cardinals, cannot govern the Church during the See vacancy, the period elapsing from one pope's death to his successor's election. In this time the Church is headless: the cardinals are just the substitutes of the pope (*vice capitis*). This concept met the resistance of the selectorate, which repeatedly tried to assert its own full power during the See vacancy and was finally established by Pope Clemens V in 1311.

Besides, the cardinals always failed in their repeated attempts to impose on the elected pope the respect of the so-called *Capitolazioni*, a preelectoral formal commitment behind the veil of ignorance: all cardinals promised that, in case of appointment, they would respect an agreed upon political platform. The commitment was however not credible, as the absolute power of the pope could easily disregard it: all popes rejected or ignored the *Capitolazioni*, until in 1505 Julius II declared that elections under conditions were invalid.

6.4.2 An Irrevocable Appointment?

The autocratic reform did not admit any accountability mechanisms. Gregory's VII *Dictatus papae* (1075) stated that, as the pope is God's vicar on earth, nobody could judge or dismiss him, neither the consistory nor the ecumenical Council (*Dictatus papae,* proposition 18). The religious nature of the papal power and of the electoral moment made irrevocable the choice of the selectorate. An open overthrow of God's vicar by the selectorate was constitutionally unacceptable.[32] The one occasion in which the selectorate reneged on its own choice opened, in fact, a deep constitutional crisis.

In 1378, five months after the appointment of Urban VI (1379–1389), the cardinals alleged the invalidity of his election, claiming that they had been induced by the mob to quickly appoint an Italian pope and proceeded to elect Clemens VII (1378–94). The constitutional rules for the papal succession proved then their limits: as both the pope and his anti-pope were backed by a part of the consistory and refused to abdicate and as no superior authority could be appealed to, a schism opened, which lasted for thirty-nine years (the Great Schism, 1378–1417). It ended when the cardinals

decided to appeal to the ecumenical Council as the final arbitrator (Pisa, 1408–1409).

Backed by the doctrines of the university scholars, according to which a general Council could judge and, in case, dismiss an heretic or an incompetent pope, the Pisa Council affirmed that a prolonged schism could be likened to an heresy: the Council dismissed both schismatic popes and elected a third one. As the two incumbent popes did not obey the Council and the schism continued, a new Council was summoned in Constance (1413–1418), which definitely dismissed the successors of the three previously elected popes (John XXIII, Benedict XIII, and Gregory XII) and canonically elected a new one, Martin V (1417–1431). Some years later, the Council of Basel, Ferrara-Florence (1431–1442) deposed the canonically elected pope Eugene IV who did not recognise its supreme authority. The conciliar movement however found little support in the Church and among the secular rulers and was dispersed in 1449:[33] "apparently the conciliarists at Basel had overplayed their hand in the game of the Church power politics" (Gordon, 1999, p. 120).

The Councils raised the issues of representation and accountability, that the autocratic reform had excluded. The conciliar theses were not uniform, however the accountability issue was central in most of them. Marsilius of Padua (*Defensor pacis,* 1324) stated that the legitimation of the power comes from the people both in the civil society and in the Church, where it is delegated to the general Council. William of Ockham (*Dialogus*, 1343) said that the Church was the congregation of the believers which, not being able to directly exercise its power, delegates it to the Council. Konrad of Gelnhausen stated that only the universal Church and its representative, the Council, cannot err. The power of the militant Church comes from Christ, stated the *Haec sancta* decree (1415) of the Council of Constance, adding that each Christian, and the pope too, must obey the Council in matters that touch faith and the reform of the Church.

Even without seeing in the conciliar movement the first seeds of modern parliamentarism and of a mixed form of government (Gordon, 1999), it however represented an attempt to profit from a constitutional crisis to generate accountability mechanisms inside the autocracy and to enlarge the selectorate. The autocratic tendency of the Church finally prevailed: the selectorate was restricted to the consistory, the popes restated their supreme authority and new generations of canonists supported the idea of a monarchic papacy. The Councils were then interrupted for three centuries.

6.5 Some Remarks

Some observations about the peculiar traits of the autocratic regime of the Latin Church can be drawn from the above historical account. The first remark concerns the exceptional stability of the autocracy and of its rules for succession, which bears no comparison with other secular

autocracies (6.5.1). The second remark explains the choice of the electoral rule with the concern for the quality of candidates (6.5.2).

6.5.1 Why So Much Stability?

The amazing stability of the canonical succession rules, established in the eleventh to thirteenth century and substantially kept unchanged until today, can be certainly explained by the taste for tradition of the Church. Besides, the Church does not need to fear that excess stability of the rules generates opportunistic strategies by the elected representatives, as it happens in modern democracies, where "[…] permanency can encourage investment in devices apt to bypass the rules, leading to a zero- or negative-sum outcome. It is with time that the agents learn how to adjust to the constraints they face, so that a change of rules can at times be better than the best of rules to keep the proper set of incentives" (Galeotti, 2003, p. 194). In the Church, a change of the rules would not provide for better incentives, as the incumbent leadership does not feel the spur of competition: their life-long and irrevocable office protects them against the risk of not being reelected, while they are accountable not to their constituency but only to their hierarchical superior, be it the bishop, the metropolitan, or God.

Other explanations for the rules stability can be found in history, in the decreasing challenges to the Church autonomy from the secular powers and in the quite satisfactory results obtained by the canon law in isolating the leadership replacement: as a matter of fact, the appointment of antipopes (forty in all) ceased with Felix V in 1449. Besides, two-thirds majority voting, with the implicit acknowledgement that the *maior pars* is also the *sanior pars,* proved a good second best solution with respect to the first best unanimity rule. It provides for a large consensus that mimics the original unanimity, which was the proof of the divine will in the transmission of the religious power.

6.5.2 Sticking to Elections: The Concern for Quality

Tullock (1987) points out the advantages of hereditary succession for the autocracies and the defects of the other replacement mechanisms, in particular the direct appointment. Hereditary succession, reducing competition and risks for the successor, reduces also the probability of a violent overthrow of the autocrat: "hereditary succession does not guarantee a peaceful succession, it [however] seems to be more peaceful than other methods" (Tullock, 1987, p. 162). Direct appointment, on the contrary, puts the autocrat on a very risky position, as the appointed successor's expected benefits from a coup can be very high and the costs negligible.

With the exception of the first centuries, the direct appointment of the successor was severely forbidden in the autocratic papacy of the Middle Ages: when in 1197 Celestin III unsuccessfully tried to break the rule, the cardinals objected that the pope is not the owner of the Church, but only its administrator. However, the reason for excluding the direct appointment

should not be found in the concern for the incumbent pope's personal risks, much more in the concerns for a legitimate transmission of power and for the quality of the appointment.

Legitimate transmission of ecclesiastic power requires a connection with the original divine mandate and the election, with its flavour of mystical convergence of the electors' will on one single candidate, sacralises the succession. The concern for the quality of the appointee is also relevant, as a bad choice can be dangerous for the institution. A collective choice was deemed better than the incumbent's decision in granting that a suitable candidate is appointed: "*Per plures melius veritas inquiritur*"[34] (*Apparatus*, Chapter 42, X), wrote Pope Innocent IV. Likewise, the Council of Antioch (341), which explicitly forbade the incumbent bishops to appoint their successors, feared not so much that the successor could murder the incumbent, rather that the successor could not be worthy:

> The bishops are not allowed to appoint their own successor, when they are approaching the end of their life. If something like this has been done, the appointment will be invalid. On the contrary the ecclesiastic rule must be respected, according to which the appointment is made after summoning a synod and hearing the opinions of the bishops who, after the death of the incumbent, have the authority to choose a suitable successor. (Council of Antioch, Chapter 23; quoted in Gaudemet, 1998, 18)

The same concern for quality can be detected from other provisions: the requirement of the laity's consent to the elections, which was a proof of the qualities of the appointee; the introduction of the principle of *sanioritas;* the unusually long list of qualities a candidate must have to be eligible according to the canon law.

The core concern of the autocracy is its own survival and autonomy: this implies not only the peaceful transmission of power, but also the appointment of candidates who are up to the tasks, have a sense of mission and are faithful to the institution. Although the results in the Church history have sometimes been disappointing, this concern for the institution survival seems to differentiate religious autocracies from secular autocratic regimes.

6.6 Conclusions

The autocratic turn of the Latin Church in the eleventh to thirteenth century was born out the need to protect its unity and autonomy and to preserve the legitimacy of its power. The Latin Church answered to the challenges of the secular power by means of direct political countermoves (excommunication of kings and emperors, search for political allies, summoning of Crusades), by concentrating the decision-making power in the hands of the top hierarchy and finally in the hands of the pope and by weaving a protection net around the core of its legitimacy. This latter included a doctrinal

support, theocracy, stating the supremacy of the spiritual power over the temporal powers, and the constitutionalization of the procedures for leadership replacement.

In particular, the active electorate was limited to the clergy and the episcopal election was gradually substituted by the pope's direct appointment. Besides, the voting rules changed from unanimity, conceived as the expression of the divine will, to the dual principle of *maioritas et sanioritas* and finally to the numerical rule of two-third majority. This evolution aimed at preserving the election from external interferences and at eliminating the elements of arbitrariness (the evaluation by an external judge).

The most important succession, the papal election, was protected by institutionalizing a selectorate and its decision-making rules: two-thirds majority voting (no *sanioritas* principle could be applied), no electoral mandates and the conclave. The concerns for autonomy and for the quality of the electoral results conditioned the evolution of the canon rules for the papal succession, avoiding the direct appointment and preserving an electoral process guided by the pure rule of the numbers.

At least partly, the Church meets Besley and Kudamatsu's (2007) criteria for a successful autocracy. In particular, the leadership turnover in the Church is controlled by a selectorate which appoints the autocrat's successor without losing its power. However, the Latin Church autocracy is also anomalous with respect to secular autocracies: the contest for power, in the form of an open succession, is an electoral contest, where the selectorate decides by two-thirds majority voting. The electoral succession rules of the Church were not meant to insert accountability and representation mechanisms in the autocracy, rather they aimed at protecting the autonomy of the regime and the quality of the appointed leadership and thus at guaranteeing the long-term survival of the institution.

Notes

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1. [Votes must be counted and not weighted: there is no other alternative in public decisions].
2. The Latin Church is a structure governed by rules and laws, although a deep antinomy between its inner nature, a community grounded on faith, and the nature of law has been repeatedly pointed out. The Lutheran canonist Rudolf Sohm (1892) [1996] stated that the nature of the canon law is in contradiction with the nature of the Church. Other scholars acknowledge the existence of the laws of the Church only when the State grants it the *ius statuendi*: this implies a primacy of the laws of the State and that the canon rules depend on the secular approval.
3. The Papal Revolution is sometimes denoted as Papal Reform, which, according to Berman (1983), is a "serious understatement, reflecting the desire of the papal party

itself to play down the magnitude of the discontinuity between what had gone before and what came after. The original Latin term, *reformatio*, may suggest a more substantial break in continuity. [...] Another term used to denote the same era, namely the Investiture Struggle,...connect the conflict between the papal and the imperial (or royal) parties with the principal slogan of the papal reformers: 'the freedom of the Church.' But even this dramatic slogan does not adequately convey the full dimensions of the revolutionary transformation,...the disengagement of the two spheres of the sacred and the profane, from which there stemmed a release of energy and creativity analogous to a process of nuclear fission" (Berman, 1983, 87–88).

4. The collection of twenty-seven propositions by Gregory VII, known as the *Dictatus Papae* (1095), firmly restated an old idea (already expressed in the collection known as False Decretals or Pseudo-Isidore of the ninth century), that the Roman Church can never err. Canonists initially distinguished between the Church (*sedes*), which can never err, and the pope (*sedens*), who may err. At mid-thirteenth century the doctrine of the pope's infallibility was more firmly grounded by St. Bonaventura and the Franciscan Pietro Olmi: the latter wrote in 1279 that all Roman Catholics should obey the pope *tamquam regulae inerrabili* [as if he were an infallible rule].
5. The term autocracy is employed as in Tullock (1987) in relatively broad terms: a political regime where an individual is *de facto*—and often *de jure*—the ultimate decision-maker. This does not imply that the advice or preferences of other institutions (an executive council, a parliament) or individuals (a counselor) are not taken into account or that there are no legal restrictions to action. Other studies, especially empirical analyses, define autocracies according to the presence or absence of elections or regularized contests for leadership and on polity scores measuring the degree of democracy (Besley and Kudamatsu, 2007).
6. [Those who reveal the divine will].
7. The Latin word employed to indicate the appointment of the bishop is *ordinari*, which means "to install in a charge and in a social category." This term was the same employed by the administrative language of the imperial bureaucracy.
8. Violent conflicts arose on the occasion of the double elections of Ursinus and of Pope Damasus I in 366, of Eulalus and of Pope Boniface I in 418, of Pope Symmachus and of the Deacon Laurentius in 498.
9. Pope Liberius in the fourth century, Pope Silverius in 536.
10. Berman (1983) and other scholars consider that the separation, concurrence and interaction of the spiritual and temporal jurisdictions enacted by the concordats have been the principal source of the Western legal tradition. The concordats thus "gave rise to the formation of the first modern Western legal system, the 'new canon law' of the Roman Catholic Church, and eventually to new secular legal systems as well—royal, urban and others" (Berman, 1983, p. 2).
11. This was the legal bases that turned the imperial episcopates and abbeys into elective principalities, fiefs of the empire.
12. Gregory VII and Henry IV deposed each other. Frederick II (1212–1250), after having been twice excommunicated by Gregory IX (1127–1241), tried to depose the pope and was finally deposed himself by pope Innocent IV in 1245. Mutual disavowals characterized also the papacy of Boniface VIII (1294–1303) and his conflict with the French king Philippe the Fair.
13. [According to our fullness of power, we can lawfully decide above the law itself].
14. The occasion was the conflicts with Philippe the Fair, who tried to raise a tithe on the French clergy without previous permission from the pope and prosecuted the bishop of Pamiers charged with treachery.

15. For canonists' writings on voting rules, see Gaudemet (1997), Ruffini (1977).
16. The Eastern Churches and their Councils in the first half of the fourth century (Nicea, Antioch, Sardica, Laodicea) prescribed the episcopal appointment by cooptation.
17. [After the divine judgement, after the voting of the laity, after the consensus of the bishops].
18. [An election made consensually, at unanimity; they unanimously acclaimed; with both unanimous voting and consensus].
19. [Only God chooses, only He confirms, as there is no higher authority].
20. Grossi (1958) states that the concept of unanimity in the Church was opposed to the concept of unanimity in the ancient German societies, where it meant the consent of all single individuals. Unanimity in the ecclesiastical sphere was the essence of the mystical body, a duty for the believers. The dissenting minority was generally considered heretical.
21. [The people must be guided and not followed]. The principle was stated by Pope Celestin in his Letters to the bishops of Puglia and Calabria (in 429) and was confirmed by the "Decree of Gratian" in 1140.
22. *Sanioritas* consisted of *auctoritas, zelus, sapientiae doctrina and meritum*. Authority derived from the position of the voter, his ecclesiastic rank, his age. *Zelus* meant the uncorrupted disposition of the voters. *Meritum et doctrina* referred to the qualities of the candidates. These positive requirements for both voters and candidates are in sharp contrast with the current practice of admitting only negative moral requirements in elections. On the principle of *sanioritas*, see Ruffini (1977), Gaudemet (1997), Moulin (1959).
23. [Numerical majority is insufficient without merits.…However, merits are insufficient without numerical majority].
24. In the collection *Elegentia in iure divino* (or *Summa Coloniensis*, 1169), the risks due to the judge's arbitrariness are so described: "We may ask whether the metropolitan bishop can refuse the unanimous election of a unworthy candidate. If the electors persist in their votes, the judge must approve the election or prove something against the candidate. […] The superior authority […] cannot repeal the election, unless he has very good reasons to do it or unless the voters change their opinion. The possibility to repeal an election could give a corrupted judge a splendid occasion to act by malice and thus the right would be changed into injustice" (Chapter 49).
25. The first electoral dispute dates back to the third century and was occasioned by the election of Pope Cornelius (in 251), which was challenged by the secretary of the Roman presbyters Novatian. The dispute was settled by the bishop Cyprian and by the decision of a Roman Synod.
26. Only the public announcement of the electoral result remained compulsory until Pope Innocent III.
27. The biblical and theological foundation of the cardinals college was given in the Decree *Per venerabilem* by Innocent III in 1202. Reference was made to the elderly appointed by Moses as his counselors: this Leviticus priesthood was deemed to attain perfection with the Roman consistory.
28. The national States' interferences with the papal election continued all along the history of the Church and took also the form of a veto power against single candidates. The so-called exclusive right allowed the Austrian, Spanish and French governments to exclude one name from the list of the candidates to the papacy. The practice was employed frequently in the nineteenth century and was definitely interrupted in 1904, when Pius X threatened the excommunication of the cardinals who expressed a veto against a candidate during the conclave.

29. Colomer and McLean (1998) illustrate for the *per compromissum* election of Innocent II (1130), the conflicts between the *sanior pars* (the cardinal-bishops in the commission) and the *maior pars* (the consistory college).
30. Gregory's X constitution was strongly opposed by the cardinals: it was abolished for nearly eighteen years and restated by Pope Celestin V, who was elected after a twenty-seven months deadlock. Pope Boniface VIII definitely inserted it in the *Decretali*. The Church borrowed the institution of the conclaves from similar practices employed in the communes of Venice and Piacenza during the thirteenth century (Ruffini, 1977).
31. The first papal conclave was probably the Perugia conclave of 1216 that elected Onorio III and whose conclusion was speeded by the pressures exercised by the people of Perugia. Zizola (1993) anticipates the first conclave to the Roman one that elected Innocent III in 1198. The first time that the pope's election took place in a segregated place was on the occasion of the election of Pope Gelasius II in 1118. The first conclaves were endured by the cardinals as an imprisonment. During the conclave that elected Pope Celestin IV, a seventy days seclusion during the Roman summer caused collapses among the cardinals and the death of the candidate of the majority: the new pope himself survived only seventeen days after his election. During the conclave that elected Pope Gregory X in Viterbo in 1271, the cardinals found a compromise only when the civil authorities and the people of Viterbo closed them in the papal palace, cut their food supplies and removed the roof of the palace, exposing the cardinals to bad weather.
32. However, attempts to overthrow a pope have not been infrequent in the history of the Church, as demonstrated by the violent coups performed by the rival Roman families during the eighth to ninth centuries or by the poisoning of some popes in eighth to ninth century.
33. The Councils soon became a political weapon in the hands of the national states, which in the fourteenth to fifteenth century contributed to their summoning, organization and results (Camelot et al., 2001). Pope Pius VII formally condemned the doctrine of conciliar supremacy in 1460.
34. [Truth is more effectively pursued by many].

References

Acemoglu, D., and J. Robinson. "Economic Backwardness in Political Perspective." *American Political Science Review* 100, 2006: 115–131.

Alberigo, G. *Il Cristianesimo in Italia*. Bari: Laterza, 1989.

Berman, H.J. *Law and Revolution. The Formation of the Western Legal Tradition*. Cambridge, MA, and London: Harvard University Press, 1983.

Besley, T. and K. Kudamatsu. "Making Autocracy Work." CEPR Discussion Paper 6371, 2007.

Blumenthal, U.R. "La Querelle des Investitures." In *Dictionnaire Historique de la Papauté*, edited by Ph. Levillain. Paris: Fayard, 1994, pp. 1409–1411.

Buchanan, J. and G. Tullock. *The Calculus of Consent*. Ann Arbor: Michigan University Press, 1962.

Bueno de Mesquita, B., A.Smith, R.M. Siverson, and J.D. Morrow. *The Logic of Political Survival*. Cambridge, MA: MIT Press, 2003.

Camelot P.T., P. Christophe, and F. Frost. *I Concili Ecumenici*. Brescia: Queriniana, 2001.

Colomer, J.M. and I. McLean. "Electing Popes: Approval Balloting and Qualified-Majority Rule." *Journal of Interdisciplinary History* 29, 1998: 1–22.

Galeotti, G. "Voting Rules." In *Rational Foundation of Democratic Politics*, edited by A. Breton, G. Galeotti, P. Salmon, and R. Wintrobe. New York and Cambridge: Cambridge University Press, 2003, pp. 177–197.

Gaudemet, J. *Les Elections dans l'Eglise Latine des Origines au XVI Siècle*. Paris: F. Lanore, 1997.

———. *Storia del Diritto Canonico. Ecclesia et Civitas*. Cinisello Balsamo: San Paolo, 1998.

Gordon, S. *Controlling the State. Constitutionalism from Ancient Athens to Today*. Cambridge, MA, and London: Harvard University Press, 1999.

Grossi, P. "Unanimitas." *Annali di Storia del Diritto*, 1958.

Grossman, H. and S.J. Noh. "Proprietary Public Finance and Public Welfare." *Journal of Public Economics* 53, 1994: 187–204.

Klick, J. and F. Parisi. "The Disunity of Unanimity." *Constitutional Political Economy* 14, 2003: 83–94.

Kurrild-Klitgaard, P. "The Constitutional Economics of Autocratic Succession." *Public Choice* 103, 2000: 63–84.

Levillain, Ph. (ed.) *Dictionnaire Historique de la Papauté*. Paris: Fayard, 1994.

Moulin, L. "Sanior et Maior Pars. Studio sull'Evoluzione delle Tecniche Elettorali degli Ordini Religiosi dal VI al XIII secolo." *Studi Politici* 6, 1959: 48–75.

Mueller, D. *Public Choice III*. New York and Cambridge: Cambridge University Press, 2003.

Overland, J.R, M. Spagat, and K.L. Simons. "Political Instability and Growth in Dictatorships." *Public Choice* 125, 2005: 445–470.

Pacaut, M. *La Théocratie. L'Eglise et le Pouvoir au Moyen Age*. Paris: Aubier, 1957.

Ruffini, E. *La Ragione dei Più*. Bologna: Il Mulino, 1977.

Sohm, R. *Staat und Kirche als Ordnung von Macht und Geist: Ausgewahlte Texte zum Verhaltnis von Staat und Kirche*. Berlin: Haufe, 1996 (1892).

Tullock, G. *Autocracy*. Dordrecht: Kluwer, 1987.

Zizola, G. *Il conclave*. Roma: Newton Compton Editori, 1993.

III

Theocracy, Trust, and Morals

7

Theocracy and the Evolution of Morals

Donald Wittman

This chapter considers the evolution of moral sentiments in humans, the role of religion in satisfying these pro-social emotions, and the conflicts that arise when religions gain secular power. The structure of the chapter is as follows: We first observe that the starkest version of Homo Economicus does not adequately explain human behavior. We then ask why evolution might lead to humans having pro-social emotions and a desire to act "morally."[1] Having laid the groundwork regarding individual motivation, we then ask how religions and other cultural institutions respond to this need. Finally, we explain why, despite religions being pervasive and religious leaders having great influence over spiritual matters, theocracies are relatively rare.

7.1 Moral Behavior in Humans

An individual's moral beliefs are the set of desires and actions that the individual views as being good and evil.[2] Just as humans have a capacity for language, they have a capacity for moral beliefs. In this chapter, we consider such beliefs within the context of individual preference functions. That is, the individual gains utility from acting morally. We first need to show how other-regarding behavior based on emotions can increase survivability of both the group and the individual. The improvement of group survival is relatively clear, but demonstrating that other-regarding behavior increases individual survival and reproduction is not a trivial task for the following reasons: First, one must show that this other-regarding behavior improves the individual's evolutionary fitness. Second, one must show that rational calculations are not superior to a more primitive emotionally driven desire. That is, it is not enough to show that emotional feeling regarding morality increase survivability; one must also demonstrate that this mechanism is superior to a purely rational calculator.[3]

In the *Wealth of Nations* (1776, 2000) but not in the *Theory of Moral Sentiments* (1759, 2002), Adam Smith argues that we get our meat not from the benevolence of the butcher, but from his regard to his own self-interest. Certainly, narrow self-interest explains a very large part of our behavior, but does it explain it all? I think not. First we observe anonymous kindness (and vengeance) toward strangers. Second, some simple thought experiments suggest that many of us would not kill or steal even if there were no negative repercussions for us (except for guilt and shame). And speaking of guilt, that is an emotion that appears to be outside the package of narrowly defined Homo Economicus.

It is clear that a society would function better if all its members were honest, possibly to avoid the guilt if they were to be dishonest. There would be little or no need to monitor whether people were cheating on agreements if everyone were 100 percent honest. And even if people were honest only 20 percent of the time, this might reduce the need for costly monitoring from a situation were people were never honest if they could get away with being dishonest. So society benefits when its citizens are more honest as more activity can be devoted to producing than to deterring theft (broadly defined). Clearly, this argument can be extended to other areas such as sacrificing one's life for the protection of the society from invaders.

So a society composed of like-minded altruistic individuals is more likely to survive than a society of selfish ones. The problem is that such a society may be very susceptible to an "invasion" by selfish actors (see Dawkins, 1989). If everyone else is altruistic, then the selfish person gains by being selfish and gaining reproductive success because of the selfishness. Eventually the selfish actors will become the norm if the society does not die out first. An easy way out of this puzzle is to assume that such people are banished from the tribe. By losing the benefits of collective action, the banished person faces diminished capacity to reproduce. But people are by and large self-regarding; so this is at best a weak force. However, as we will see, the *threat* of banishment as well as the need for group solidarity when facing an external threat may be the foundation for pro-social emotions.

All of this brings us to the subject of emotions. Why have them? If they improve survival, why wouldn't a rational calculator undertake the same behavior to improve survival in the absence of such emotions? There are a number of answers. First, emotions help to determine our wants and desires. From this point of view, rationality is the slave to our emotional desires, or to use standard economic terminology, emotions determine preferences.

Humans have a sense of self and identity. *Identity creates predictability and goal orientation* and enables one to achieve ends. People without a sense of identity cannot function very well. To use the language of economics, they have an inchoate utility function, rendering them incapable of maintaining consistent goals. From a social network perspective, identity provides a notion of which sets of people you should be more willing to trust and which set of people you should be less willing to trust even if you know very little about them individually. This fear of the "other"

is pervasive across societies and has a rational explanation. The closer the social connection, the more likely the relationship of acquaintances is intertwined with others who have a long-term connection with each other. These long-term connections reduce opportunism.

Here too one must be on the lookout for invasion of bad types. In this case, one might want to cheat members of one's own group because they are more trusting and therefore cheating would be easier. But groups have all kinds of mechanisms to prevent individuals from taking advantage of in-group trust. There are honor codes that increase internal pressure to behave and when those forces are not sufficient, the group will punish those who break the code. Banishment may be very effective when survival depends on collective effort. In more modern times, treason is punishable by death and is generally deserving of greater punishment than the same behavior undertaken by an enemy. And turning our attention toward religion, religions often treat apostates much worse than they treat members of other religions.

Second, emotions may be more effective than rational calculations. For example, a rational calculation that one should get out of a dangerous situation may not be as effective as the response induced by fear. Fear induces the flight or fight response, increased adrenalin and heart rate, which is a much more powerful stimulant than rational calculation. The related emotion of anger focuses one's thoughts on the issue at hand to the exclusion of other concerns. In this regard, emotions and rational calculations are complements rather than substitutes.

Third, emotions are a kind of commitment device (see Hirshleifer, 2001). If you are bigger than I am and I am rational, I may not go after you when I discover that you have stolen my food. If I am governed by my emotions (in particular anger) I may go after you even if it is irrational as I will get hurt more than you will. But if you know that I am irrational in this way, you may decide not to steal my food in the first place as the harm to you will be greater than the benefit of stealing. So, this "emotional irrationality" may be rational (as long as it holds within some bounds).

Let us consider the last point in more detail. Many people are impelled by guilt as well as the desire to avoid shame. These pro-social emotions are commitment devices that often encourage people to act in their long-run interests when rational calculations might not be sufficient. Think about simple things such as being honest. It may be rational to have a reputation for being honest, but that may not be sufficient motivation to be honest all of the time. Avoiding guilt and shame may help to get over those times when the long-run rationality does not provide sufficient incentives to avoid present temptations. For example, the immediacy of stealing and consuming food and the accompanying hyper-discounting of a future punishment for theft may lead to a "rational" decision to steal; but the immediate guilt may shift the balance toward honesty. To drive the point home, we consider a case where neither rational calculations nor pro-social emotions are sufficient. Most people who are obese would like to lose weight. Given

these goals, it is rational for them to eat less and exercise more. But this requires constant vigilance. Long-term goals and even short-term emotions like guilt and shame about eating too much and being obese are not sufficient to overcome the brain's measure of hunger. In this case, the person is up against primal urges to eat. But even when rational calculations do not face such a formidable adversary, it is still difficult for rationality to always keep the person in check. It is in such cases where emotions may help. In a nutshell, on average emotions promote the individual's self interest—emotions are rational.

So the other-regarding pro-social emotions may be useful for maintaining long-run social relationships and promoting self-centered ends. Other individuals will trust people with these attributes and thereby enter into alliances of one sort or another that increases reproductive success. People without these pro-social emotions will have to rely on their rational calculations which over time tend to let them down and expose the person as being not worthy of being trusted. Short-run emotions back up the long-run rational calculations. Humans are social animals and the more basic animal emotions have been adapted to improve the person's functioning in human society. Humans have an emotional need to be social—they develop emotional attachment to others and become depressed when these bonds are broken. This bonding is most important for raising children and passing on one's genes to the next generation. But this capacity for emotional attachment does not completely stop when one encounters non-genetically related humans. Friendship aids survival. A person without any of these emotions might not even know what friendship entails and therefore have a very hard time faking it in the first place. As a somewhat different example, suppose that there is a raid by another group, the sense that the other group is a threat and that one should combine forces with other members of one's own group would not exist if one did not have some sense of group identity in the first place. And without such a group identity, none of the members of the group would survive the onslaught of the other group (see Reeve and Holldobler, 2007). So fear of the other helps to generate within group cooperation.

While there is a rational basis for emotions, emotions are not finely tuned. At times, they create harm for the individual (e.g., uncontrolled anger) and, at other times, they may not make complete distinctions. In the popular imagination, emotions are typically associated with the irrational. And this is not surprising as emotional individuals often undertake acts that run contrary to their long run interests.[4] Some get angry, and lose their job or harm people they care about. Others stay in abusive relations because of their emotional attachments. As a final example, the fight or flight response may be warped into panic attacks.[5]

Because emotions are not finely tuned like rational calculations, there may be emotional spillover effects. For example, altruism might be a spillover from self-centered emotional behavior. Consider the strong emotional attachment to babies. It makes sense to want to protect one's own progeny.

Evolutionary success of humans depends on it. Suppose that there is some very modest spillover effect so that increasing desire to care for one's own children increases one's desire to help other children, as well. A cry by a child is felt most by its parents, but other parents are not completely oblivious to such crying. And even unrelated people are attracted to the big smiling eyes of babies. Thus, some altruism may be due to the inability of emotions to completely disregard people just because they are not closely genetically related. In turn, this means that genetically unrelated or distantly related people can trust each other to make some effort in protecting them or their children. Rational actors might want to do the same in long-run relationships, but their emotions have more power in the short-run.

Thus people have the emotional capacity for believing that certain things are right and wrong just as they have a capacity for language. Individuals will naturally pick up the language of their culture and just as naturally individuals will tend to pick up the values of their own tribe or society. An individual's sense of right and wrong will be culturally influenced and will tend to promote the individual's own success in the culture. If bravery on the battlefield is valued by the culture and the culture rewards people who are brave, then men will feel good about themselves when they are brave. Such emotional feelings may overcome their short-term rational calculation to flee.

It is easy to see that other cultural values may also be inculcated, even if they may be dysfunctional for the culture as a whole. A particularly telling example is the African-American community's prohibition against snitching (telling the police that someone has committed a crime). Starting at a very early age, African-Americans believe that to snitch is bad, even when a friend has been the victim of a crime. It is easy to see why this prohibition might be self-preserving if others in the community will shun (or possibly harm) you for snitching. At the same time, such behavior increases the amount of crime in the African-American community. The reason for such a dysfunctional meme appears to be that much of the African-American community feels more oppressed by the European-American power structure than by the criminal behavior of fellow African-Americans and therefore its members are hesitant to help the power structure in anyway.

7.2 The Role of Religion

So where does religion fit into the picture? Religion satisfies a number of needs: A sense of identity, a moral code for the community, and emotional support during trying times (particularly, when a loved one dies). And, in the past, religions might have served as a repository of information regarding solar eclipses, making of elixirs, and so on.[6]

Starting with the second and third points, religion provides moving parables that resonate with the emotional life of the members of the religion.[7] These parables become the language of understanding in the community and a way to articulate a moral code. Thus religions are a *coordinating*

device. It is not surprising that most of the major religions tend to have a great book such as the Bible, Koran or Upanishads as the foundation of the religion. To the extent that the community believes in the religion, this moral code encourages success in this life and the hereafter. Of course, success in the present life may be more in terms of respect than in material wellbeing. Religion satisfies the small but not insignificant need for people to believe that they have done good in the world, even if such beliefs do not always work to increase their material being (or actually bring good to others).

Individuals can identify to various degrees with any number of groups, including members of the immediate family, tribes that are ostensibly based on biological relatedness, citizens of the city and/or country, people engaged in the same occupation, followers of the Boston Red Sox, membership in the Mafia, and of course, religions. All of these may promote some sort of moral code as well as providing an identity. The Mafia has the code of silence (Omerta) much like the prohibition against snitching in African-American groups that we alluded to earlier, and professional societies have codes for members of their profession to follow.

The long-lived success of religions suggests that they have certain advantages over identifying with the Boston Red Sox, for example. First, because religions specialize in providing a moral code, individuals' desire to be moral will make them naturally inclined toward religion. And because religion is part of an individual's life from the time that the person is quite young, part of an individual's identity will be religious identity, which is passed on to the next generation. Religions have traditions and holidays that provide a shared experience.[8]

While new religions are started and people do switch their religious affiliation, by far the best predictor of a person's religion is the person's parents' religion. So religion provides a set of shared values and traditions for the members of the religion. These shared values or identities help to decrease conflict within the membership but at the same time increase conflict across religions. A few formal religions have tried to promote cross-religious harmony (e.g., the Bahai faith), but even these religions have created a sense of identity that their way is superior to the more standard religions. It is the more secular western democracies that have a more liberal tolerance of different religions and behavior (a point that we will come back to below).

7.3 Theocracies

We now need to have a working definition for theocracy. We initially define a theocracy rather narrowly: A priestly class from a recognized religion rules the country directly or indirectly through puppet political leaders. Under this definition, Iran is a theocracy, but not Saudi Arabia, despite the fact that religious leaders have considerable control over religious doctrine and its political implementation in the latter.

While religions are ubiquitous, theocracies are uncommon, particularly so in the modern world.[9] Some theocracies have been long lived, such as the Papal States and the reign of the Dalai Lama in Tibet, but their power and influence have been limited. Given the large Catholic population in Europe and later in South and Central America, the Papal States were very small in comparison. Furthermore, the Papal states were often independent in name only; similarly, throughout the Dalai Lama period, Tibet served as a kind of protectorate of Mongolia and/or China. Much the same can be said about the Holy Roman Empire. While the Archbishop of Mainz was an influential ecclesiastic and secular prince, the Holy Roman Empire was for the most part a name without substance.

For a number of reasons, theocracies are a very mixed blessing for a religion, and this helps to explain their rarity.[10]

(1) Religions become impure when they have to deal too much with the temporal world. *Religions typically claim some kind of universality, but politics inevitably divides.* The realities of running a government interfere with the purity of a moral vision. Some people must win and others must lose even if all are members of the same religion and in the eyes of the religion they are equal. So religious theocracies lose their moral compass and the power to influence based on their moral compass.[11] The political is ugly and the church or mosque has a greater moral authority for more citizens when it is out of political power than when it is in.[12] In a nutshell, religion can remain pure only when it "Renders unto Caesar the things which are Caesar's, and unto God the things that are God's" (Matthew 22:21).[13]

(2) *When religions have political power they substitute coercion for loyalty.* To more fully understand this, it is useful to first consider democracies. In a democracy, a political party achieves and maintains power by appealing to the majority. To a large degree, the key to winning is to discover what issues resonate with the preferences of the voters. Not surprisingly, the standard model of democratic politics assumes that preferences of the voters are given and that the two candidates converge to the preference of the median voter.

In contrast, the interest of a religion is not to appeal to the preferences of the median citizen, but to mold the preferences of the citizens so that as many as possible of their preferences are in conformity with those of the religious hierarchy.[14] It appears that an important way to achieve this end is to start religious indoctrination at a very early age so that the person's sense of identity is closely tied to being a member of the religion. Also, the person's way of understanding the world is greatly influenced by the religious training at an early age. The stories in the Koran and Bible shape the way the child and adult understand the world just as supply and demand curves shape the way economists understand the economy. Of course, not all children accept the model either as children or when they grow older: Some reject the religion completely, others accept the trappings, but not the content—but a significant number feel comfortable with the ideas and values. So established religions maintain adherents by successfully

creating identities that internalize the values of the religion.[15] To make use of Padovano and Wintrobe's dichotomy (chapter 4), religions tend to rely more on creating loyalty than on coercion. But, as we will now show, political power enables theocracies to rely more on coercion, which undermines the loyalty of less ardent followers.

Religions, particularly when they have political power, can force people to outwardly conform to religious doctrine. Coercion has two contradictory effects. Those co-religionists who are coerced will tend to reject the religion more fully. Those who believe that coercion is justified will have a deeper attachment to the religion. Coercion makes mild differences of opinion into fundamental disagreements. Essentially, coercion divides the people into two groups, with members of each group tending to vilify the members of the other group. The present day theocracy in Iran is an insightful example. The Iranian theocracy has created a backlash among the urban population against religious fundamentalism (mainly a rural phenomenon) and a greater desire for a separation of mosque and state than if the country had settled into a democracy after the fall of the Shah.

(3) Some religions are not centralized (Sunni Muslims, Jews, most Protestant groups, etc.) and therefore are not good candidates for exercising centralized political control.[16] The internal struggle for political control over the state would undermine the religious unity of the coalition of more or less independent congregations. Small Protestant theocracies such as Calvinist Geneva were instituted, but larger scale theocracies would first have to overcome the internal power struggle as to who was first among equals. Because the Catholic Church was hierarchical, it had *fewer* hurdles to overcome in establishing the Papal States (but it has not been able to bring the Orthodox Churches back into the fold).

(4) A centralized and hierarchical religion has an easier shot at taking over a centralized and hierarchical political apparatus. But at the same time, such centralization comes in conflict with nationalism. Instead of the Vatican being head of the Catholic Church in England, Henry VIII famously made himself the head. Now personal aggrandizement rather than nationalism may have played a significant role in this case, but it is not hard to see that the conflicts between Catholic Spain, Catholic France, and the Catholic Italian city states and then later the Catholic state of Italy, would have split apart a theocratic church that held the reins of political power across these political frontiers. Indeed, rising nationalism has been seen as one reason for the Protestant reformation and the breakup of Christianity, and the rise of state-sponsored religions. Even in Arab countries, where there is a much greater mingling of mosque and state, there is no central religious authority over several states.

(5) Religious organizations, like all organizations, specialize. Training in religious texts does not provide the knowledge necessary to be powerful in war and successful in political affairs. In order for a theocracy to survive, it either needs an outside protector (as was the case in Tibet) or it needs to develop its own military. But in either case there is a threat to the religious

power and a conflict between the religious and the military. We will now consider the internal threat more closely. Even in ancient times, theocracies were vulnerable to the threat of religious leaders turning their leadership into a kingly dynasty (e.g., the Hasmonean dynasty in ancient Israel). In the middle ages, the Knights Templar were a power unto themselves and a threat to the Pope's power, as well as to the power of secular leaders. But even when the religious leaders are able to remain in power, there is always the possibility of internal conflict between those who hold military power and those whose interest is more theological.

In a nutshell, political power generates (or exacerbates) conflicts for a religion, which in turn, forces the religion to make tradeoffs between moral purity and practical politics.

7.4 A Broader Definition of Theocracy

All political leaders are the same in that they pursue power to achieve certain ends, but the specific goals and the nature of their constraints differ. For some leaders, political power enables them to satisfy their own narrow interests. When the leaders' time horizon is short, economic self-interest may lead to kleptocracy, where the economy suffers under the ruling class; when the leaders' time horizon is long, then preservation of their economic status may encourage rulers to pursue policies that lead to long-term economic growth. Other leaders may desire political and/or cultural ends: They may want to make their country strong (perhaps to expand their own sphere of influence) or promote some ideological end. In totalitarian systems, leaders stay in power mainly by force; while in democracies, leader stay in power by satisfying the majority.

As noted in the previous paragraph, all political leaders use their power to achieve goals. And it is often the case that there is considerable support among the population to further those goals. Of course, a Shia theocracy is different from a Sunni theocracy, which in turn is different from a Catholic theocracy in that a different religion is being promoted, but these differences should not mask their similarities. By a similar logic, communist countries can also be seen as theocracies in that they had their own sacred texts interpreted by a priestly class (the Communist party) that were taught in schools and supported by a large set of believers (at least initially).[17] Again, there are differences in the "religions." Communism was about the evils of a class society. The Christian view that the meek would inherit the earth was not left to God, but to the communist revolutionaries. Fascism promoted national economic and political power and the elimination of those who were not part of the "national character."

Finally, liberal democracies have their own sacred texts (e.g., the constitution, and, in particular, the Bill of Rights in the United States) that are also taught in schools, with a strong following of believers. Again there is a priestly class, the Supreme Court, whose members interpret the sacred text. The difference here is that the religion is more about the method of

rule (one person one vote) and the limits of political power than about substance. The followers of this liberal democratic religion believe that citizens should be granted considerable latitude in promoting their own preferences (that is why the word liberal prefixes democracy because democracies need not be liberal).

There are however interesting differences among these various "theocracies," broadly defined. Because my area is political economy, I will concentrate on economic performance. This, of course, does not imply that this is the only way or even the best ways to judge their differences.

If the goal of the theocracy is to be a good Muslim, Catholic, or Jew and the sacred text is over a thousand years old, many of the values may be inconsistent with strong economic growth in the *modern* world. An obvious example is the religious proscription against working on the Sabbath. Although religions can jettison unworkable requirements, the basis of the religion is to maintain the tradition and the teachings of the sacred text. And so some traditions may be maladapted for the present era.[18] Kuran (2004) provides an insightful case study. Islam outlaws the collecting of interest. As any economist will tell you, interest is the price of capital and, like all prices, serves to ration the scarce commodity to the highest use. To some degree, clever contracts can get around the Koranic prohibition against interest. For example, in some Islamic countries, one can borrow money to purchase a car "without paying interest," but the contract requires the person to sell the car back for one day in the year at a low price and then buy it back later in the day at a higher price. Unfortunately, such evasions are not always possible, making the allocation of capital much harder.[19]

The Communists did not believe in private ownership of the means of production. Class warfare, to say the least, undermined property rights and economic growth. And once established, the Communist dictatorships had to create an ideology of government that involved a centralization of power in the hands of the Communist party. This centralization of power undermined the competitive process and reduced economic growth. At the same time, the moral basis of Communism—a classless society led by the Proletariat—was shown to be untrue. In the Soviet Union, this led to a collapse of the Communist theocracy. In China, the Communist theocracy, after a disastrous beginning, eventually jettisoned most of the economic ideology and the concept of a classless society. It is now doing much better economically, but it is unclear whether there is a substantial group of people who believe that the Communist Party has the moral right to be in power.

Fascist regimes seem to have had more success than communist countries at creating high economic growth as they supported the existing capitalist structure (with certain exceptions, most notably, Jewish ownership in Germany).[20] No doubt these fascist regimes ruled by intimidation; that is why they are called fascist. Nevertheless, these regimes had a loyal following among a significant proportion of the population. However, this following seems to have been based, to a large degree, on the greater fear of

Communism within and the threat of foreign power from without. So they were ultimately about strengthening the power of the government.

Turning to democracy, the advantage of democracy is that it allows for flexibility and change without changing the political system. The other forms of theocracy are harder to change internally and may require a complete change in the form of government. On the other hand, because everyone has a vote and income distribution does not tend to be uniform, there is always the potential for the majority to expropriate the wealthy minority. If this is a real danger, then there will be less desire to appropriate wealth in the first place, and consequently lower growth. Despite this logical possibility of expropriation, democracies have only undertaken a limited amount of redistribution, mainly through property and income taxes.[21]

7.5 Concluding Remarks

Because religions specialize in moral codes and emotional support, they are not particularly adept at wielding political power. In the modern world, with larger communities and competing interests, religions have a dwindling albeit still significant presence. In the twenty-first century, religious theocracies are likely to be rare and those that do occur are likely to exist for only a short period of time.

Notes

1. For a general introduction to the concept of pro-social emotions, see Bowles and Gintis (2006); for a treatise on the role of emotions, more generally, see Frank (1988); and for background on the evolution of morals, see Ridley (1997).
2. Moral beliefs that guide an individual's behavior need not be moral when viewed from a Kantian perspective. A person may think that it is right to hold slaves or kill children of a different religion. This is a "moral belief" even though most of the readers of this chapter would find such views to be morally repugnant.
3. Actually, there is a way out of the latter requirement. Since the ability to undertake rational calculation was added to an emotional control system, it could be true that emotions in the presence of a rational brain are no longer needed. However, we have argued that emotions give direction to the rational self.
4. "Rational" individuals also may undertake actions that are contrary to their long-run interests because their cognitive abilities (logical deduction, memory, and ability to make proper inferences) may be impaired.
5. Despite these examples, one should realize that we use the word "emotional" to convey atypical situations where a person's behavior is counterproductive, as opposed to the far more common situation where emotions guide the person in a sensible direction.
6. As this last example suggests, religions may have taken on different roles in different time periods. Indeed, the theme of this chapter is adaptation. In order to survive, religions have had to evolve overtime to satisfy the needs of their members.
7. Because humans are social animals, much to the consternation of economists, humans respond more to anecdotes than to abstract arguments about supply and demand and the benefits of international free trade.
8. And so do atheistic quasi-religions such as Communism and Fascism.

9. Even in very primitive agricultural societies, shamans and other religious authorities had a limited role in running the affairs of the group as they did not serve in a dual capacity as leader or big man.
10. For another, but complementary view on theocracies, see Ferrero (chapter 2). See Eickelman (1985) who explains the transition from theocracy to a monarchy in Oman.
11. In countries, such as Saudi Arabia, where the religious leaders and the political leaders have their separate spheres of influence, the religious leaders can claim purity despite the corrupt behavior of the secular leaders. The reason for saying religious theocracy instead of just theocracy will become clearer later on in the chapter.
12. Much the same thing happened to the Catholic Church in Poland. When Poland was under communist rule, the Catholic Church was the moral center of Polish peoples' lives. After the fall of Communism, the Catholic Church entered into the political arena and lost a great deal of its standing among its followers.
13. Now this invocation unto Caesar may have been just a strategic ploy of a small sect that did not want to be tangled with the power of the Roman Empire.
14. Economists treat preferences as given and have little understanding regarding the creation of preferences. But other social scientists have not proceeded very far along this track either.
15. Parents have beliefs about what is right and what is wrong, and what is true about the world that they want to impart to their children. So parents also have an important role in "reproducing" religious and moral beliefs.
16. There were however Sunni Caliphates.
17. The differences between these "theocracies" and our more narrowly defined version is that the communist dictatorships are not typically characterized as theocracies, but their similarities to religious theocracies may be more important than their differences.
18. Religions may be maladapted in non-economic ways, as well. In the modern world, there are many competing views of the world (both scientific and faith-based) and the traditional religions (particularly those that are centralized) may not adapt very well to this rapidly changing world. The issue of centralization has come up several times in this chapter and it is a topic worthy of further investigation. The Catholic religion is more centralized than many Protestant religions, The Shia are more centralized than the Sunni, and Tibetan Buddhism is more centralized than the Buddhism practiced in many other countries. As an economist, one would think that the competition between the clergy when there is no centralization would create closer matches between the religion and the interests of its adherents.
19. For an example of where Islamic law bends to secular law in Islamic countries, see Layish (1987).
20. Over the long run, fascist regimes tend to be inefficient because these regimes use their political power to maintain the status-quo economic power against more efficient entrants. See Acemoglu (2006).
21. A number of authors have tried to answer the puzzle as to why there is not more redistribution, in democracies, including Acemoglu and Robinson (2001) and Przeworski (2006). At the same time, it is a puzzle why various dictatorships have opted for slow growth. For a partial answer to this puzzle, see Wittman (2007).

References

Acemoglu, Daron. "A Simple Model of Inefficient Institutions." *Scandinavian Journal of Economics* 108, 2006: 515–546.

Acemoglu, Daron and James Robinson. "A Theory of Political Transitions." *American Economic Review* 91, 2001: 938–963.

Bowles, Samuel and Herb Gintis. "The Evolutionary Base of Collective Action." In *Oxford Handbook of Political Economy*, edited by B. Weingast and D. Wittman. Oxford: Oxford University Press, 2006, pp. 951–970.

Dawkins, Richard. *The Selfish Gene*. Oxford: Oxford University Press, 1989.

Eickelman, Dale. "From Theocracy to Monarchy: Authority and Legitimacy in Inner Oman, 1935–1957." *International Journal of Middle East Studies* 17, 1985: 3–24.

Frank, Robert. *Passions without Reason: The Strategic Role of the Emotions*. New York: Norton, 1988.

Hirshleifer, Jack. "On the Emotions as Guarantors of Threats and Promises." In *The Dark Side of the Force*, edited by Jack Hirshleifer. Cambridge: Cambridge University Press, 2001, pp. 198–219.

Kuran,Timur. *Islam & Mammon*. Princeton: Princeton University Press, 2004.

Layish, Aharon. "Saudi Arabian Legal Reform as a Mechanism to Moderate Wahhābī Doctrine." *Journal of the American Oriental Society* 107, 1987: 279–292.

Przeworski, Adam. "Self-enforcing Democracy." In *Oxford Handbook of Political Economy*, edited by Barry Weingast and Donald Wittman. Oxford: Oxford University Press, 2006, pp. 312–328.

Reeve, H. Kern and Bert Hölldoble. "The Emergence of a Superorganism through Intergroup Competition." *Proceedings of the National Academy of Sciences*, May 25, 2007.

Ridley, Matt. *The Origin of Virtue: Human Instincts and the Evolution of Cooperation*. New York: Viking, 2007.

Smith, Adam. *The Theory of Moral Sentiments*. Cambridge: Cambridge University Press, 2002 (1759).

Smith, Adam. *The Wealth of Nations*. New York: Modern Library, 2000 (1776).

Wittman, Donald. "Hobbes and the Political Economy of Power." In *Democracy, Freedom and Coercion*, edited by Jean-Michel Josselin and Alain Marciano. Cheltenham: Edward Elgar, 2007, pp. 251–266.

8

Theocracy as a Screening Device

Douglas W. Allen

8.1 Introduction

The subject of theocracy, a government grounded in a religious theology, seems beyond economic analysis.[1] First, a theocracy is a type of organization, and despite the advances made in the economics of organization over the past forty years, the calculus of markets still rules the roost. Second, a theocracy implies theology—a topic not taught in economic graduate schools—and worse a subject related to "faith," which seems incongruent with morally vacuous utility maximizing agents. Finally, the secular world view, so commonly held in economics, finds theology uncomfortable at best, but somewhat irrational at worst.[2] The result has been that economists have generally ignored the study of religion, churches, and theocracy.[3]

In its purest form a theocracy is government by God. Perhaps Eden qualified as a theocracy under this definition, but no other administration has. Many define a theocracy as a government run by clergy. Although a half dozen examples of this can be found, the definition still excludes too many cases where religion plays a significant role in state affairs. By "theocracy" I mean a situation where government offices, including the leadership, are held by members adhering to a particular theology. This is broader than what others deem theocratic because there is no requirement for the government to be headed by a religious organization, for members of the administration to be clerics, or for the political leaders to have divine guidance or inspiration. In any specific theocracy these more restrictive elements may be present, but they are not necessary. This definition is flexible enough to include all the cases the layman considers theocracies without including states that are religious in name only.[4]

Thus, the Mormon community of nineteenth century Utah was a theocracy because it was based on the revelations of Joseph Smith as interpreted through Brigham Young. In this particular case the church over saw

the actual affairs of the state and formally intervened in political appointments. At the other extreme, John Calvin's power through the Consistory, an ecclesiastical court made up of church leaders who imposed strict discipline among the membership based on his particular reformed theories of the Bible, could also be considered a theocracy in that he had considerable *informal* influence on the city council and the running of political affairs. Whether the Israelites under Moses or the Papal states in the past, or Saudi Arabia or Iran in modern times, what organizes these states as theocracies is that the set of property rights laying out the various rights and responsibilities of the society's governance structure were dictated by a theology interpreted by a spiritual leader who held political control. They are theocracies even though they had different degrees of cleric administrative control.

Here I propose a relatively simple economic theory of theocracy. Theocracies are just one particular solution to the problem of trusting people.[5] Since the beginning of recorded time, people have formed societies to capture the gains from human interaction: gains from specialization, production, and exchange. Unfortunately, human interaction brings with it bad things, as people engage in various ways to cheat, rob, and hurt one another for their own gain. Societies have risen and fallen based on how well they have managed the darker side of human interaction. From the Hammurabi Code to the EU's constitution, the problem has been dealt with one way or another with various levels of success. The institutions that have arisen to deal with the "trust" problem have varied tremendously over time, and many are now alien to modern economies.

Theocracies work under some circumstances when they can efficiently select trusting individuals: that is, theocracies *screen* trustworthy types and encourage trustworthy behavior. There are many potential screens for trust, each with their own costs and benefits. Successful societies are ones that make the right choices—one way or another—in the selection of their institutions. Since theocracies often survive for decades, they must be screening well compared to their alternatives during these time periods.

An interesting feature of theocracies is that they are not ubiquitous, and seem to fade with increases in modernism and wealth. Thus an objective of this chapter is to explain the variation of theocratic institutions across time and space.

This chapter starts with a discussion of the new institutionalism, in order to lay down the theoretical underpinnings of the model. I then articulate a theory of theocracies as a screen, contrasting it with aristocratic screens, which tend to exist in similar circumstances. Finally, I briefly use this theory to interpret events in seventeenth century English politics, in particular, the theocratic rule of Cromwell during the Commonwealth.

8.2 The New Institutional Approach

An institution, according to Douglass North, is the "humanly devised constraints that shape human interaction."[6] Avner Greif similarly defines an

institution as "a system of social factors that conjointly generate a regularity of behavior."[7] Hence, laws are institutional devices, but so are social norms and conventions like peer pressure and ostracism. Institutions can have both formal and informal aspects, like legal marriage with its legal and religious elements and its bargaining constraints among members.

Institutions can be small and narrow, like a private contract, or enormous and broad, like a theocracy. Institutions are fundamentally the set of economic property rights that define the abilities of individuals to carry out decisions within some context.[8]

The new institutionalism is a methodology for understanding any given distribution of property rights, and it has two critical characteristics. First, it views long lived institutions as efficient, and therefore proper subjects of economic inquiry. Second, it adds to the neoclassical analysis the assumption that transaction costs are positive. Understanding transaction costs is necessary for the study of institutions because the grand hypothesis of the new institutionalism is that institutions are designed (either explicitly through a conscious act or implicitly through trial and error) to maximize wealth net of transaction costs.

In a famous paper, Alchian (1950) argued that the process of natural selection works on firms over time, and that the market for firms is one of self-selection. Only those firms that are efficient and maximize profits survive. Those firms that fail to meet a market test, fail and are not observed. It is a powerful argument, and it applies to all types of behavior and institutions beyond firms. Any institution that exists in a competitive environment must satisfy the condition of maximizing wealth if it is to survive. If an institution fails to achieve a social outcome at a sufficiently low cost, it will be replaced by more efficient institutions, that may have little resemblance to their precursors.[9] Nations that have inefficient institutions will fail relative to other nations with better institutions.[10] And institutions that are appropriate under some circumstances are often failures under other circumstances.[11]

A theocracy is a complex institution that must also survive in a Darwinian world. All forms of government face competition at various levels. Governments that are unsuccessful will ultimately be over thrown by groups from within or outside its jurisdiction. If a theocracy is successful in maximizing wealth subject to the relevant constraints, then it will survive. This argument of an efficient institution provides the license to use economic tools to analyze the institution.

A theocracy also depends on the nature of transaction costs within the political environment. As an institution, a theocracy is basically a *distribution of property rights*; that is a set of rules and constraints, both formal and informal, that define the ability of agents to exercise choices. As Coase showed, institutions are *irrelevant* when transaction costs are zero. Any economic model, therefore, that assumes transaction costs are zero will have nothing to say regarding the organization of any institution, including a theocracy. Since institutions clearly matter, in order to understand them

we must understand the relevant transaction costs that the institution is facing. Furthermore, the new institutionalism provides a powerful hypothesis by which all institutions are explained. Namely, the grand hypothesis is that *institutions are chosen to maximize the gains from trade and production net of transaction costs*. Thus, at the most general level new institutionalism views an institution like theocracy as an optimal solution to a transaction cost problem. Changes in the nature of the transaction costs will lead to changes in the nature of the theocracy, or even its elimination. As I'll argue below, the major transaction problem a theocracy addresses is the question of trusting individuals.

8.3 Theocracy as a Screening Mechanism

For as long as social records have existed, institutions resembling governments have provided goods and services ranging from defense, money and banking, infrastructure, and courts. These services have been organized around a number of different governance structures. Over the past 1,000 years, and especially in Western Europe until the industrial revolution, these governance structures have most often taken on two generic forms: aristocratic and theocratic.[12] Aristocracies exist where the chief public offices are held by members of the nobility. Movement in and out of the aristocratic class is difficult and membership is mostly determined by birth. A theocratic governance structure has major offices held by confirmed adherents to a particular theology, and movement in or out is more fluid, or at least, in principle, open to larger segments of the population.[13] Since the two methods of civil administration often existed in competition to each other, an explanation of theocracies, is an explanation of the choice between the different governance structures for public services.

Theocracies and aristocracies both arise in an environment where information on individual characteristics and behavior are difficult to determine. In such environments, the abilities to engage in opportunistic behavior are abundant, and therefore trust becomes a virtue that generates wealth.[14] In situations where it is difficult to monitor performance, a King, Protector, or other patron in control, assigns an office to an agent only if he trusts him. Certain types of individuals will be more trustworthy than others, and the major role of aristocratic and theocratic institutions is to screen trustworthy types of individuals.

Individuals can be trusted when they stand to lose a significant amount of wealth if they get caught not acting in the interest of their patron. Within aristocratic communities individuals are expected to invest in sunk *social* capital within the group of nobles. In such a society social capital is an inalienable asset that generates value through connections with other people.[15] Because social capital requires the cooperation of others in the group for it to be useful, it is not a form of private property like physical or human capital. As such it is not transferable to other levels of society, and investments in it are sunk. Social capital is costly to acquire, and comes from

attending the same schools, social events, clubs, and churches. Social capital is also acquired through education, marriage, business connections, and family history. Social capital is often difficult to observe because it depends on the *quality* of the interpersonal associations.[16]

Theocratic societies operate in a slightly different way. Here members invest in what might be called *theological* capital. Primary among this investment is a legitimate conversion to the faith. Conversion, by its spiritual nature, is unobservable. As a result, theological capital also includes investments in theological knowledge, participation in specific religious and non-religious activities, abstinence from various foods and behavior, and alterations in the relationships with the secular world. Theological capital is a subset of social capital, and is defined by a particular theology. Because of the theological link with this type of social capital investment, theological capital is potentially "measurable." For example, theological knowledge can be determined through formal tests. This allows for third party confirmation of theological capital. Since theological capital may be confirmed by third parties, there is an opportunity for relationships between a patron and agent that are less personal. Hence, unlike social capital, a great deal of theological capital may be easier to observe, especially by insiders.

Like social capital, theological capital requires recognition by other members of the group in order to have value, and thus like social capital, the threat of excommunication is what allows theological capital to guarantee trust.

Social capital was very effective as a policing device for aristocrats. An aristocrat, virtually by definition, is someone whose entire social life, business connections, and persona are based on inclusion within the aristocratic group. To be a social outcast in an aristocratic society rendered all one's stock of social capital worthless. Likewise, investments in theological capital were effective in policing theocratic states. Expulsion from a theocracy renders all past investments in theological capital useless.

8.3.1 A Simple Screening Model of Theocracy

I model a theocracy as a one shot screening game to show how it can solve the trust problem.[17] In the model there are N people in a society where there are two labor markets. The first market has individuals tilling their own land to produce a crop with income worth β. The second market is an elite administrative market where people engage in self-enforced, long term political trades. The total gains from exchange in the elite market increase with the number of people involved, and are given by

$$G = g(n) \tag{1}$$

where n is the number participating.

Every individual is born with zero theocratic capital ($t_i^0 = 0$), and at some point in an individual's life it is possible for an *unobservable* faith conversion to happen. Not everyone in the population experiences such a conversion,

which has two implications. First, a conversion fundamentally changes a person's "type." Most theologies have an afterlife and a reward and punishment scheme to encourage good, trustworthy behavior. Therefore, members of a given faith group will find other true believers more trustworthy than members outside the group. Unfortunately for members in the faith group, the conversion experience is unobservable, and so a mechanism is necessary to screen the different types. Second, and critical to the argument here, conversion also lowers the cost of acquiring theocratic capital.[18]

If an unobservable conversion leads to different types of players and a different cost of acquiring theocratic capital, we have a standard screening situation. In order to determine the true believers the theocratic leader must set a level of theocratic capital just above the break-even level for the non-believer. Thus, the reservation level of theocratic capital, assuming that members of the elite group simply share the total gains solves the following:

$$g(n)/n - c^{n}(t^{R}) = \beta \tag{2}$$

where c^{n} is the cost to the non-believer of acquiring theocratic capital. Since the cost is lower for true believers, it will be in their interests to invest and join the administration as long as the gains from the isolated market are low. Non-believers will not invest in the theocratic capital because the cost of doing so is too high, they simply stay on the farm and earn the low income β. The theocratic screen works on two levels. First, it allows the theocratic leader to screen for those he believes are trustworthy types because the reservation level t^{R} is observable through testing. Second, it provides a punishment mechanism for those who might be tempted to cheat their earthly leader since effort spent in investing in theocratic capital is sunk, and an *ex post* cheater can be exiled from the faith community.[19]

The value of theological capital lies in enhancing trade through trust by *enforcing* cooperative behavior among the participants through the use of hostage capital. Individuals found lacking in some way, either through unacceptable behavior or political practices, could be punished with ostracism when they have invested in these sunk forms of capital. Thus, in theocratic markets trustworthy behavior among civil servants was policed along the lines of Klein and Leffler (1981) or Camerer (1988), with one's theocratic capital acting as a bond for good performance.

8.3.2 The Conditions for a Theocratic Screen

Theocracies acting as screening mechanisms will emerge in environments where three necessary conditions hold: the cost of measuring performance are high; societies are dominated by a single faith group; and investment in the faith groups is measurable to some extent.[20] In terms of high measurement costs, they must be high in the bulk of society, and not just in a

particular field. All trade and production must be characterized by high measurement costs caused by large roles of nature and generally poor ability to measure. Low measurement costs would mean that performance could be directly measured and rewarded through contract. In low measurement cost situations, screens are unnecessary and incentives can be created through monitoring. High measurement costs lead to situations where societies use some type of hostage capital to ensure trust.[21]

A second necessary condition for theocracy, is that there must be a dominant section of the population holding to one theology. Whenever different faiths (e.g., Christianity vs. Islam) or different theologies with a faith (e.g., reformed vs. Arminian Christianity) are present, theocracy will be difficult. Multiple faiths that can vie for resources mean that expulsion from one group does not necessarily punish individuals.[22] Theocracies, are therefore, naturally monopolistic and will generally be intolerant of competitive theologies. If a society does have multiple faith groups, especially if they are closely related theologically, then a theocracy is not possible unless there is collusion among them.[23]

The final condition for a theocracy is that the particular investment in theological capital must be amenable to measurement. That is, one must be able to tell if a member is legitimate in their belief. Otherwise, wolves can enter in with sheep's clothing.

If it is not easy to do so then it is likely that another type of screen that does not require a large group of the population to hold a single faith will take over.

8.3.3 Advantages and Problems with Theocracy

The difficulty for both aristocratic and theocratic societies is to determine whether or not an appropriate investment in the relevant capital has been made. Given the generic and (usually) unobservable nature of social capital, this is a particularly difficult problem for aristocratic societies. Hence, in these societies entrance into the elite is difficult (often only by birth), sale of title is illegal, and costly screens that have no productive benefits must be developed.[24] The great advantage of theocratic governance is that it avoids the pitfalls of aristocratic social capital. In order to exist theological capital must be measurable, and thus the costs of weeding out pretenders is lower than in an aristocracy.

Although the conversion experience will never be observable, for some faiths there may be significant sacrifices that are tied to conversion that are observable. In fact, some faiths start with a public declaration of belief.[25] An implication of this is that theocracies will tend to arise from "fundamentalist" or sectarian faiths since these groups will tend to have well defined theologies, tight knit groups, and rely heavily on distinctive lifestyles and excommunication for enforcement.

Theocracies have other advantages. A theocracy is not closed to the vast majority of a population, so individuals with skill can compete for high

offices. A particular theology may have embedded in it various doctrines that further encourage trust and productivity. For example, commandments to tell the truth, respect property, and save income can be wealth enhancing. Furthermore, many theologies encourage their adherents to study the religious texts, which means the members must have minimal literacy skills.[26] When members of the theocracy believe in the sincerity of other members belief and commitment, a theocracy can be a very low transaction cost type of organization.[27] However, theocracies do not have an absolute advantage over aristocracies.

One of the most problematic aspects is that a society must be dominated by a single faith group. Since this is seldom ever the case, theocracies are unlikely to arise, and when they do arise their physical jurisdictions are likely to be small. Even when a single faith group can gain political control, the presence of other faith groups create a number of problems. First, the theocratic institutions must close state offices to large segments of the population with different faiths. This causes animosity towards the state government, and the theocracy may have to deal with civil unrest or even war. Second, those excluded could have a comparative advantage in government production, and this is likely to be a serious problem when the group in power is very small relative to the outsiders.

A second problem arises from rent seeking within the monopoly theology. By construction there can only be one ruling theology, but this creates rents, and this leads to efforts of those inside to capture these rents. The model above assumed that the cost of acquiring theocratic capital was the same within the groups of believers and nonbelievers. In practice this will not be true, and some low cost individuals will be present in both groups. Thus there will be effort among agents competing for government posts devoted towards satisfying the theocratic screen without sincerely investing in theocratic capital. A successful theocracy will attempt to mitigate this behavior, especially through a fundamentalist theology that lacks fuzzy boundaries.[28] However, the basic unobservability of the spiritual conversion means that imitators and rent seekers will always be present. In particular, rent seeking and wealth transfer may be an issue with the spiritual leader. Such a leader has enormous abilities to transfer wealth to himself. Allen (1995) argues that church institutions are organized around this problem, and that the more ecclesiastical power a spiritual leader has, the greater the governance restrictions on his behavior. Thus gains from having a benevolent powerful dictator will be hampered by institutional restrictions preventing opportunistic wealth transfers.[29]

The institutional restrictions are not necessarily amenable to the leader of a state who is likely the commander in chief of the armed forces. One solution is to adopt a practice of sacrifice, whereby the believers reveal themselves as true through the act of destroying wealth.[30] Unfortunately, this eliminates a major advantage that a theocracy has over an aristocracy, which also uses some type of sacrificial screen to identify investors in social capital.

8.3.4 Implications of the Model

A screening model of theocracy has a number of implications. These can be stated:

1. Theocracies are unlikely to exist in modern economies where measurement costs are low, and monitoring performance relatively easy.
2. Theocracies will rely on theologies that are rigidly defined, such that members can easily identify other members of the group.
3. Theocracies require either homogeneous faith groups or homogeneity in faith combined with military power.
4. The ruling faith group will be hostile to other faith groups and will not share political power with these groups.

In the following section I provide a brief history of the English Revolution and argue that the Commonwealth is an example of a theology used for the purpose of screening for trust.

8.4 Screens in Seventeenth-Century England: A Case Study

8.4.1 Aristocracy

Although the current interest in theocracy stems mostly from Islamic governments in Iran and Saudi Arabia, I use my theory to elaborate on civil administration in England during the seventeenth century. This is a useful period because measurement of performance was particularly difficult during this time, and the century was wrought with struggles between the aristocratic governments of the Stuarts and the theocratic administration of Cromwell. Although the Commonwealth is not often thought of as a theocracy, I make this case based on the use of faith as a screen for entry into state affairs.

To begin, consider the role of nature in the ordinary business of life in the seventeenth century. Prior to the industrial revolution, *everything* in life involved a large natural component—variance was everywhere. Agriculture, practically by definition, depended heavily on seasonal factors. In manufacture, power came from humans, animals, water, or wind—all natural and non-uniform factors. Products were produced with hand tools that required skill, but that led to nonuniformity in the final output. Inputs were local since transportation costs were high, and measured imperfectly with crude instruments, further causing variance in the quality and quantity of output. There was no refrigeration, no dependable transportation, no expectation of long lived trading relations, and often no reliable means of knowing where you were, especially at sea—everything about life involved enormous elements of chance.

Large roles played by nature meant that there were large opportunities for transaction cost behavior. If a load of wares headed for a "distant"

market could be lost at sea or lost to bandits, it could also easily be lost to opportunistic agents. Large roles of nature allows an "out" or "excuse" for failed performance. Hence the inability to accurately measure performance in the face of extreme variance meant that modern institutions were not an option in the seventeenth century. This was particularly true in the area of civil administration. Governments were small, but efforts to *directly* monitor ministers and their underlings through bureaucratic methods of reporting were absent. If the local port-commissioner could not be monitored, or if the tax collector could easily collude with the firms paying taxes, then how could revenue ever find its way to the King's Household? Alternative institutions, foreign to modern readers, had to be found.

In the seventeenth century the resolution of performance measurement in civil administration and other quasi-government offices revolved around trust, and depending on the type of regime in power trust was generated by different means. During the aristocratic regimes trust resulted from, what historians call the "three P's": patrimony, purchase, and patronage. Purchase, or the sale of office, transferred ownership and control to the decision maker.[31] Offices that were purchased were considered real property and could be left to heirs of an estate (patrimony). Isolated private decision makers bearing all the costs and benefits of their decisions could be trusted because owners do not cheat themselves. When the incentives of these individuals were compatible with the objectives of the King, then private ownership through purchase was common.[32]

Purchase worked well in many instances, but not without a major cost, and was seldom used for the high offices of state. The major problem was that the incentives of the private residual claimant could be at odds with the incentives of the Crown. Incompatible incentives between the King and his agents was quite common.[33]

The chief method of dealing with the incompatibility problem in an era of high measurement costs was patronage. The Stuart governments during the seventeenth century were staffed by aristocrats, and senior appointments were made primarily on the basis of patronage. The system of patronage as then practiced deviated fundamentally from appointments and promotions in the modern civil service.[34] There was no advertising for positions, no examination, no interview, and no requirement for professional qualifications. A civil servant often had no tenure in office and was expected to act on behalf of his patron.[35] Although patronage again rings of corruption and nepotism, it was a system of promotion from within a given class based on personal connections, or social capital. At a time when monitoring inputs and outputs was difficult, trust and honesty were highly valued traits—seemingly even more valuable than skill and ability.

Thus, during the non-republican years the government of the monarchs ruled through the use of patronage. It was the prerogative of the royal court to deliver positions within the administration, military, and general government to whom it pleased, and as discussed earlier these ministers would then act as patrons to lesser individuals for other positions in the civil service.

8.4.2 *Theocracy*

The seventeenth century was a turbulent time for England. The reigns of James I and Charles I were characterized by chronic shortfalls in government revenues, tensions between the church of England and the so-called independents, and constitutional struggles between parliament and the Crown. Civil war broke out in the early 1640s, and victories by Fairfax and Cromwell in 1648 led to the death of Charles I in January 1649, the abolition of the monarchy and House of Lords in March 1649, and the declaration of the Commonwealth in May 1649. Cromwell succeeded Fairfax as Lord General in 1650, and became the lord Protector in late 1653. The Protectorate lasted until the restoration of Charles II in 1660.

The Protectorate has been described in many ways. On the one hand, it was an early republic, although the restrictions on voter eligibility and the ability of Cromwell to prevent various MPs from participating in Parliament limit this interpretation. On the other hand, the power, lifestyle, and structure of the government remarkably resembled the monarchy in all but name only. Here I suggest another interpretation. Namely that the Commonwealth was a theocracy, and that the theocratic screen was used to place individuals in positions of power. This theocratic screen replaced the aristocratic screen that was used before and after the Commonwealth, but was just as necessary given the measurement problems of the seventeenth century.

It is a moot point on just how different the Commonwealth was—after all, it only lasted eleven years.[36] Aylmer (1973, p. 70) states that "The coming of the Protectorate and the institutional changes which followed it altered the pattern of appointments appreciably. Direct appointment by Parliament virtually disappeared."

Still, it would be an error to suggest Cromwell, who enjoyed virtually supreme power and had complete control in appointing great officers of state, dispensed with a system of patronage. A better interpretation is that patronage continued, but along different terms.

At a fundamental level, the Civil War and the subsequent governments were driven by serious divisions of theology. Unfortunately for Cromwell the puritan side was homogeneous only in their opposition to the Crown. Once in power divisions arose between Baptists, Quakers, Calvinists, and Fifth Monarchy Men.[37] Yet there was sufficient unity and sufficient military control by Cromwell to significantly alter appointments. To begin with, committees were established almost immediately to purge administrative positions based on belief. For example, there was the "Plundered Minister's Committee" which was "responsible for purging non-puritan Episcopalian clergymen and imposing tests on all others; these were often replaced by previously 'plundered' puritan ministers."[38] There was the "Ejection Commissioners" to get rid of ministers for "misconduct or non-subscription to the prescribed minimum of Protestant belief."[39] Throughout the Commonwealth administration there is constant watch over the "moral integrity" of servants. In 1649, early in the theocracy, Cromwell argued

that Parliament should "hand over the supreme authority for a while to about forty men fearing God, and of approved integrity."[40] When the Rump Parliament resisted these instructions Cromwell took over by force and established the Barebone Parliament, made up of 140 men that met his approval.

For Cromwell, the character of a man came down to what he termed "the root of the matter" which most historians seem to take as a minimum standard of Puritan belief. Various committees and tests were designed to sort these beliefs out, but much came down to letters of recommendation from men of known quality. Thus Sherwood writes "…the overriding criteria for office in the republic being known ability coupled with a noticeable identification with the regime."[41] Aylmer notes the same thing in that Cromwell had "…a firm belief in careers open to talent, provided men had 'the root of the matter' in them—that is, a minimum puritan conviction."[42] It is worth pointing out that Cromwell also put an emphasis on merit and ability that was absent in the royal administrations prior to and after the Commonwealth.[43]

One of the strongest pieces of evidence for the idea that Cromwell's theocracy was a screening mechanism, is that during the Commonwealth years the social institutions used to aid the aristocratic screen were drastically reduced or ceased to exist. First, since aristocracies generate trust through social capital, and since social capital is unobservable, these societies required an observable screen. As Allen and Reed (2006) argue, dueling served this purpose. Aristocrats who invested in social capital always had an incentive to duel, while pretenders always rejected the duel. During the theocratic reign of Cromwell, dueling ceased because the nature of the screen changed. During the Commonwealth, one's theocratic capital was important, and this was generally observable to the Puritan community, or at least vouched for by individuals whom Cromwell trusted. Second, although purchase and patrimony continued, patronage given to men independent of any talent, ceased. Again, under the aristocratic screen, trust was enforced solely by social capital investments. However, because theocratic capital was directly measurable there could exist a separation between merit and theocratic investment. This was perhaps the great advantage of the Commonwealth administration. Cromwell did not have to rely just on a "useless" screen, his theocratic screen did not preclude productivity.

The Commonwealth matches the other predictions of the screening hypothesis. Cromwell's theology was no wishy-washy twentieth century mainstream liberalism. Cromwell's puritan beliefs not only held to a literal, inerrant view of scripture, but to a strong reformed interpretation of the Bible. This gave specific meaning to their faith tests, and allowed them to identify others with similar beliefs. Interestingly, the cavaliers of Charles I's court, as a term of derision, called the members of Cromwell's army "roundheads" because their short hair contrasted with their own

ringlets. The different physical appearance of the puritans was just another act of sacrificial investment made into the theocratic group.

Finally, in the Commonwealth we see outright hostility toward competing theologies. By today's standards, the differences between the Anglicans, Baptists, and Reformed churches may seem rather minor. But not so in the seventeenth century, at least not so according to Cromwell's treatment toward others of different faiths. Much of the civil war can be traced to differences with the Church of England and its connection with the Crown. However, Cromwell's reduction of MPs to form the "Rump" Parliament, and his subsequent further reduction to the "Barebones" Parliament, speak toward his view of faiths with marginal differences. Of course, these reductions of power were only achievable because of the military power Cromwell had.

8.5 Conclusion

On the surface a theocracy is puzzling, but when interpreted as a screening device it makes economic sense. The general observability of theological sacrifice and the potential incentives provided by a theology give this particular governance structure a considerable advantage over other screens when measurement cost are high. Indeed, the major draw back is the homogeneity required in faith. The necessity to have homogeneous belief is a major factor in the fall of theocracies in developed states. The industrial revolution introduced standardized products which started the process of performance measurement. Measurement of performance means screens are not necessary. Furthermore, developed countries will be built upon specialized production and exchange. This necessarily involves interactions among large groups of people often spread across vast distances. The lowered measurement cost and increased interaction with different people work against theocratic governance. "Theocracies" might be used for smaller organizations than the state, such as the provision of various public goods, but they will not be efficient for staffing civil offices in the modern Western world.

Notes

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1. Indeed, a search of the keyword "theocracy" among titles in EconLit found no matches.
2. The recent uproar over the Danish newspaper *Jylland-Posten* to publish twelve cartoons in September 2005 depicting Muhammad as a terrorist, is a case in point. In the secular Western media the Islamic reaction is argued to be "over the top" and out of balance with the offense. The idea that blasphemy should be a serious challenge to the natural right to a free press is almost incomprehensible to the secular mind.

3. As with all generalities, there are exceptions. Adam Smith and David Hume discussed economic incentives in religion. Gary Becker and some of his students analyzed religious behavior and church attendance based on his theory of time costs. Most significantly, Larry Iannaccone has taken the economic study of religion to new levels by not only relentlessly applying economic analysis to all areas of religious behavior, but also extending economic ideas to discuss even the most "irrational" aspects of religion. For example, in Iannaccone and Berman (2006) they discuss how terrorism is a complement to some types of religious organization.
4. Under this definition, at no time has the United States been a theocracy.
5. This paper is closely related to Allen and Reed (2006), where we argue that dueling was an institution designed to screen for trusting people as well.
6. North, 1990, p. 3.
7. Greif, 2006, p. 30.
8. See Allen (1991) or (2000) for a defense and discussion of this definition of property rights.
9. E.g., the "family" organized around a father and mother biologically related to their children has been the dominant core organization for raising children throughout history. Although pockets of alternative institutions have been discovered by anthropologists, these societies were never successful at generating large populations, and when exposed to the dominant institution they either switched or were absorbed. See Coontz (2005) for an interesting and readable history of marriage.
10. For example, I've argued in Allen (2002) that the chief reason the British Navy (and therefore Britain) was able to overwhelm the French Navy during the age of fighting sail, was because the institutional rules of the British were so much more effective at overcoming the transaction cost problems arising from wind power.
11. E.g., prior to the industrial revolution venality was a common and effective method used to staff minor offices, but it was replaced by other devices afterwards (See Allen (1998) for an elaboration of one example). The industrial revolution changed the world so much that it virtually led to an institutional revolution, and many of the institutions prior to 1750 did not survive into the nineteenth century despite existing for hundreds of years.
12. It has been common practice to view the ancien regime as corrupt and inefficient. No doubt because since the industrial revolution both governance forms have been generally replaced with democratic leaders with bureaucratic administrations. However, recent research has been more favorable on the past elites. Janssens and Yun-Casalilla (2005) edit a volume that generally argues that the elite societies prior to the industrial revolution made major contributions to economic development, and were not the parasites they are often portrayed to be.
13. In a theocracy civil appointments are available to "true believers," this number may be smaller than the nobility, but given the historically small sizes of the latter, this seems unlikely.
14. In a neoclassical model agents trust each other because they know everything, or at least the Walrasian auctioneer knows everything, and this knowledge is sufficiently conveyed in terms of a price vector. In life, however, our knowledge is not perfect, and furthermore, the information we do have is often asymmetric. As a result, people do not naturally trust others, and beneficial opportunities to trade and gain from specialized production are lost.
15. The literature on social capital defines it a number of ways, but the essential element is an association between people, either formal or informal, which facilitates

trade through "trust." Trust potentially lowers the cost of trading through a number of potential mechanisms: information on exogenous types, coordination resolution, and reinforcement of social and personal mores. Here I treat social capital as "hostage capital," and the future return from it is lost if agents indulge in cheating behavior. This interpretation of social capital follows Coleman (1988). For discussions of the role of social capital in economics see Dasgupta and Serageldin (1999) or Francois (2002).

16. The interpersonal associations might also be occasional, and knowledge of other interactions and acquisitions of social capital may be costly to obtain, making social capital too costly to observe.
17. If I treat the one shot game as the last period, it is easy to convert the model to a repeated game. Allen and Reed (2006) develop a more complicated, but similar, model to show how investments in social capital guaranteed performance in aristocratic societies. In their model, because the social capital investment is never observable or testable, dueling results as a mechanism to screen for investment.
18. Later I use Cromwell's Protectorate as an example of a theocracy. Under his reformed beliefs he would have held to (i) the doctrine of depravity of man ("…for all have sinned and fall short of the glory of God." Romans 3:23), and its implication that the "natural" man is not trustworthy; (ii) the regeneration of the "righteous" man ("But thanks be to God that though you were slaves of sin, you became obedient from the heart to that form of teaching to which you were committed, and having been freed from sin, you became slaves of righteousness." Romans 6:17–18) who is capable of being trusted; iii) the possibility of wolves in sheep's clothing ("Jesus answered them, 'Did I Myself not choose you, the twelve, and yet one of you is a devil?' Now He meant Judas the son of Simon Iscariot, for he, one of the twelve, was going to betray Him." John 6:70–71. See also the story of Ananias and Sapphira in Acts 5.); and, he would have believed that conversion involves the baptism of the Holy Spirit, and that the presence of the Holy Spirit is necessary to understand scripture ("…no one can say 'Jesus is Lord,' except by the Holy Spirit." 1Cor. 12:3).
19. This is particularly important in faith communities where forgiveness and redemption are part of the theology. E.g., in Reformed Christian theologies a true believer is saved once and for all by grace, and future sins are still covered by the initial conversion. Although good works are to flow from the believer as a result of conversion, bad behavior is still possible. Thus, in the Reformed case, even if the conversion was completely observable, the dual presence of the natural and regenerated man would mean that an individual cannot be completely trusted.
20. Ultimately the domination must be backed by force. This may result from overwhelming numbers in the group, or through superior military capabilities.
21. As mentioned, both aristocratic and theocratic societies are built around social capital, and as a result these two forms of governance compete with each other. When measurement costs are low, bureaucracies develop where individual performance is measured.
22. When performance is enforced through aristocratic social capital, then a similar condition holds: there can only be one aristocracy. For this reason, aristocrats were never allowed to sell their titles. The ability to sell a title means that punishment through expulsion is ineffective. Note that when offices were historically sold, office holders who crossed the crown were allowed to sell their offices.
23. Adam Smith (1776, Book V, Chapter 1) argued that free competition among churches was good for churches and for states since monopoly churches would seek political power and engage in hostile activities towards other religions.
24. As mentioned, Allen and Reed (2006) develop a model showing how dueling was an effective screen for social capital among aristocrats. The duel was designed such

that legitimate investors in social capital dueled, and pretenders never dueled. Thus, aristocrats who dueled could be trusted and were given offices of state. However, dueling was costly for many reasons: it encouraged investment in dueling skills, limited participation in civil administration to a small class, provided no output, and killed or wounded valuable individuals.

25. Iannaccone (1992) argues that the problem of identifying legitimate believers is an issue within the church itself. Individual denominations that are able to identify true members through sacrifice and stigma tend to outperform other churches in terms of growth because they are able to eliminate free riding caused by pretenders.
26. Other theologies may discourage literacy.
27. Iannaccone and Berman (2006) make this same point regarding a sect's ability to raise children.

> Sects help parents socialize their children; their concern for "family values" is no coincidence. Combine the typical sect's comprehensive behavioral guidelines with its members' high levels of commitment and participation. Add extensive monitoring and sanctions, both formal and informal. One arrives at a very effective means of constraining opportunistic behavior and transmitting values to children. [2006, p. 118]

Iannaccone and Berman make an argument similar to the one in this paper. They argue that a religious sect is a high-powered institution designed to police free-riding, in part through its ability to screen. These high-powered incentives, unfortunately, may also be complementary to terrorist attacks and suicide bombings.

28. Broad classifications of fuzzy boundaries are easy to see. Groups such as Pentecostals or Quakers, with their over riding emphasis on individual Holy Spirit experience, would never be able to create a successful theocracy given the problem of identifying rent seekers. On the other hand, fundamentalist Islam, with its well defined legalist rules, has a much easier time monitoring pretenders.
29. Secular institutions arise to manage different theologies. Those societies that had lots of theological competition would be expected to have the most successful secular institutions.
30. Along the lines of Iannaccone (1992).
31. As modern readers the extent of private ownership in what we now often consider the exclusive domain of the public service, strikes us as corrupt. Indeed, the system of venality that existed in premodern Europe is often called "the old corruption." However, the private system was simply a method of avoiding the problem of measurement, and for many things like military commission, tax collection, creating money, policing, prosecution and investigation of crime, recreational park land, and a host of other government occupations the system worked well.
32. As an example, consider the practice of purchasing military commissions. Prior to the mid-nineteenth century, every European nation had armies made up of mercenaries, led by professional soldiers who purchased their commissions. Although these officers tended to be nationals (especially by the eighteenth century) it was not uncommon for a King to have a foreigner as his senior officer. As just one example, in 1685 James II of England had the Frenchman Louis Feversham as his Commander in Chief during the Monmouth rebellion at Sedgemoor—much to the chagrin of John Churchill, the future Duke of Marlborough (Churchill, 2002, p. 188). The key to understanding this odd practice is that officers were mostly paid through prizes taken in battle. If the officer didn't win the battle, he didn't receive any reward. In an age where measuring military performance was not practical, this institution screened those individuals who at least thought they would be successful.

The practice of purchasing a commission was actually quite complicated, and the various rules worked to ensure that higher ranking officers were screened more than lower ones. See Allen (1998) for a detailed analysis.

33. As I have argued elsewhere (Allen, 2002) one of the most dramatic examples was the British Navy. Although military commissions in the Army were sold, they were not sold in the Navy because the very individuals who would be willing to pay the most to be an Admiral, would be the ones who would not act in the King's interest. Namely, they would be the ones who would seek lucrative and safe merchant vessels for prizes, rather than attack the enemy's fleet. Admirals could get away with this sort of behavior compared to colonels in the army, because their ships were propelled by wind and their targets moved about. The institutional solution for the Navy was a complicated set of rules and patronage.
34. Also different were the mechanisms used to police commercial ventures of the time. See Avner Greif (1989, 1993) or Milgrom, North, and Weingast (1990) for examples of how medieval traders were able to self-police cheating.
35. Patronage was not identical in all European countries, of course, but the general principle was the same. Consider, for example, the system of appointments in England during the eighteenth century. In 1726 there were only 179 peers in the country, and with such a small number politics could not help but be personal. At the top of the civil service was the King's Household which included all the Crown's ministers at the pleasure of the King. "The Court was the heart of political and social life, for all decisions taken, all places promised, from a turnkey to a bishopric, had to be discussed and argued with the King"[Plumb, p. 50, 1963]. Ministers and members of Parliament would control different parts of the government depending on their influence. Powerful ministers possessed massive amounts of control. Patronage was passed down level by level: minister to court official, deputy lieutenant, sheriff, and justice of the peace. From these positions other positions of local government were then handed out to those in favor [See Aylmer, 1961, p. 69, for a description]. The result was a very clannish form of administration, but one where "patrons were careful to select members whose views would not compromise their relations with the government…" [Plumb, 1963, p. 41].

    The entire system depended on the goodwill of its members and the ability to trust one another in exchanges where direct monitoring was almost always absent.
36. Woolrych notes that "…the political revolution which had cut off the King's head was not to develop into a social revolution, of a kind that would radically alter the whole social basis of power in the state" (1983, p. 14).
37. The latter group believed the English Revolution would usher in the 1,000 year rule of Christ, and had considerable influence at various times.
38. Aylmer (1973), p. 10.
39. (Aylmer 1973, p. 61). With respect to these committees, Woolrych states that "…the well-to-do gentry chafed because their traditional authority as justices of the peace and in other local commissions had been largely usurped by upstart committee-men who took orders from Westminster" (p. 4, 1983).
40. Woolrych (1983), p. 22.
41. Sherwood (1977), p. 151.
42. Aylmer (1973), p. 82.
43. Aylmer (1973) puts it this way:

    > The Commonwealth was a revolutionary regime. It had come to power through civil war and military force, and its legality was not universally recognised in the country. This put a premium on political or ideological reliability, and meant that loyalty to the government was something which

> patrons needed to stress, and appointing bodies to satisfy themselves about. It also led to a formidable battery of tests and oaths.... over and above loyalty and morality, we find emphasis on men's actual fitness for the work in question. It could mean a particular skill in writing, accounting or foreign languages, or a more all-round ability. (pp. 61–62)

References

Alchian, Armen. "Uncertainty, Evolution, and Economic Theory." *Journal of Political Economy* 58, 3, 1950: 211–221.

Allen, D.W. "What Are Transaction Costs?" *Research in Law and Economics* 14, Fall 1991: 1–18.

———. "Order in the Church: A Property Rights Approach." *Journal of Economic Behavior and Organization* 27, 1, 1995: 97–117.

———. "Compatible Incentives and the Purchase of Military Commissions." *Journal of Legal Studies* 27, 1, 1998: 45–66.

———. "Transaction Costs." In *Encyclopedia of Law and Economics*. Volume 1: *The History and Methodology of Law and Economics*, edited by Boudewijn Bouckaert and Gerrit De Geest. Chelthenham, UK: Edward Elgar, 2000, pp. 893–926.

———. "The British Navy Rules: Monitoring and Incompatible Incentives in the Age of Fighting Sail." *Explorations in Economic History* 39, 2002: 204–231.

Allen, D.W. and Clyde Reed. "The Duel of Honor: Screening for Unobservable Social Capital." *American Law and Economics Review* 8, 2006: 81–115.

Aylmer, G.E. *The King's Servants: The Civil Service of Charles I*. London: Routledge & Kegan Paul, 1961.

———. *The State's Servants: The Civil Service of the English Republic 1649–1660*. London: Routledge & Kegan Paul, 1973.

Camerer, C. "Gifts as Economic Signals and Social Symbols." *American Journal of Sociology* 94, Supplement, 1988: 180–214.

Churchill, W. *Marlborough: His Life and Times*. Chicago: University of Chicago Press, 2002.

Coleman, J. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94, Supplement, 1988: 95–120.

Coontz, Stephanie. *Marriage, a History: From Obedience to Intimacy, or How Love Conquered Marriage*. New York: Viking, 2005.

Dasgupta, P. and I. Serageldin (eds.). *Social Capital: A Multifaceted Perspective*. Washington, DC: World Bank, 1999.

Francois, Patrick. *Social Capital and Economic Development*. New York: Routledge, 2002.

Greif, Avner. "Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders." *Journal of Economic History* 49, 4, 1989: 857–882.

———. "Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders' Coalition." *American Economic Review* 83, 3, 1993: 525–548.

———. *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade*. Cambridge: Cambridge University Press, 2006.

Iannaccone, Laurence R. "Sacrifice and Stigma: Reducing Free-Riding in Cults, Communes, and Other Collectives." *Journal of Political Economy* 100, 2, 1992: 271–291.

Iannaccone, Laurence R. and E. Berman. "Religious Extremism: The Good, the Bad, and the Deadly." *Public Choice* 128, 1, 2006: 109–129.

Janssens, P. and B. Yun-Casalilla. (eds.) *Aristocracies and Colonial Elites: Patrimonial Management Strategies and Economic Development, 15th–18th Centuries*. Aldershot, UK: Ashgate, 2005.
Klein, B. and K. Leffler. "The Role of Market Forces in Ensuring Contractual Performance." *Journal of Political Economy* 89, 1981: 615–641
Milgrom, P., D. North, and B. Weingast. "The Role of Institutions in the Revival of Trade: The Law Merchant, Private Judges, and the Champagne Fairs." *Economics and Politics* 2, 1, 1990: 1–23.
North, Douglass. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press, 1990.
Plumb, J.H. *England in the Eighteenth Century*. New York: Penguin Books, 1963.
Sherwood, R. *The Court of Oliver Cromwell*. London: Croom Helm, 1977.
Smith, A. *An Inquiry into the Nature and Causes of the Wealth of Nations*. New York: Modern Library, 1965 (1776).
Woolrych, A. *England without a King: 1649–1660*. London: Methuen, 1983.

IV

Theocracy, Economic Development, and Islam

9

Learning and Imitation by Theocracies

Amihai Glazer

9.1 Introduction

A fruitful approach in the analysis of democracy is to view each voter as aiming to maximize his utility, and candidates who want to maximize the chances of winning election. These assumptions form the basis of the Downsian model. In contrast, a dictator can be viewed as maximizing power (see Wintrobe, 1998). Ideological regimes, such as perhaps some communist ones, may aim to maximize the number of people believing in its ideology (see Bernholz, 2001). This view may accord with our view of some theocracies. But theocracy may involve more than substituting one objective for another. True believers, for example, may want to do God's will, fearing great punishment if they do not.

This chapter, however, takes a different approach. Rather than viewing a theocracy (or more generally, religious believers) as pursuing a different objective than do other regimes, I view belief as imposing constraints on which views to accept and which to reject. In particular, a theocracy may devalue the views of nonbelievers. Indeed, almost by definition, an infidel cannot become a leader of a theocracy, and cannot hold high office. To give one example, the Islamic Republic of Iran would not allow a Jew to become its Supreme Leader. And in the oligarchic theocracy of the Paraguay Jesuits, only Indians converted to Catholicism were admitted as permanent members of the community.

9.2 Literature

9.2.1 Beliefs

This chapter combines several strands of thought—the incentives to innovate, free riding when imitation is possible, and the ideological views of

decision makers. On this point, several authors look at what citizens or decision makers believe. Kuran (1995) supposes that peer-group effects restrict the beliefs an individual may hold—if most citizens of a Communist country believe that capitalism is evil, then no one individual wants to express the contrary opinion, and a different view of capitalism may be lost to the public. Bernholz (2001) has a leader's utility increase with the number of believers and decline with the number of persons not converted.

The limitations on acceptable opinions, and limitations on the sources of legitimate opinions, also appear in other ideologically driven regimes.[1] The Nazis explicitly opposed the theory of relativity because a Jew discovered it; instead they favored "German Physics" (see Walker, 1989).

Imperial China commonly avoided foreign ideas. Landes (2006, p. 18) writes that the Chinese policy of superior indifference to Western things has been traditionally summed up in the dismissive letter of the Qienlong emperor (reigned 1736–1795) to George III, rejecting the British request of 1793 for trading rights and a permanent legation in Peking: "We have never set much store on strange and ingenious objects, nor do we need any more of your country's manufactures." It was by no means the only such contemptuous dismissal or trivialization of foreign art and artifices during these centuries of active contact (1550–1900). Judaism limited imitation by limiting contact between Jews and gentiles. Jews were prohibited from intermarriage and from any sexual relationship with non-Jews, were prohibited from eating together with gentiles, and were discouraged from any social intercourse with them (Katz, 1961, p. 27). These prohibitions, of course, would limit each side from imitating the other.

Islam, despite initial innovation and borrowing,[2] shows a reluctance to borrow from others. The Koran says "Believers, do not make friends with any but your own people. They will spare no pains to corrupt you. They desire nothing but your ruin" (3: 118) and "Do not be deceived by the fortunes of the unbelievers in the land. Their prosperity is brief. Hell shall be their home, a dismal resting place" (3: 196). A *hadith* (authenticated saying) of the Prophet Muhammad warns Muslims against imitating nonbelievers: "He is not one of us, he who imitates others. Do not imitate either the Jews or the Christians."[3] Jones (2003) refers to conservative sects which opposed innovation or borrowings from the infidel. And the powerful Muslim Institution in the Ottoman Empire gave the Sheikh of Islam or his mufti power to declare any act of the sultan religiously unacceptable, which worked against novelty and Western influence.

The Muslim avoidance of foreign ideas is highlighted by Lewis (2002, p. 101): "In the Muslim perception, there is no human legislative power, and there is only one law for the believers—the Holy Law of God." Some in the Muslim world have the related idea that all truth comes from the Koran and Islamic tradition. Lakoff (2004) claims that because Khomeini and other Muslim theologians view God as the sole source of all law, it is blasphemous to suppose that human legislatures can decide what is lawful by majority rule. In Iran, the clerical jurisprudent is the ultimate interpreter

of God's will. Muhammad Abduh (1849–1905), a founder of Islamic modernism, argued that responsibility for the present decadence of Muslims lay with foreign elements who corrupted and distorted Islam, and that the validity of Islam remains, as ever, unquestionable (see Fakhry, 1954). Lewis (2002) reviews how the Ottomans avoided learning from the West. Ibn Khaldun (1332–1406), the most important political writer in Islam, favored divine legislation or theocracy because it is not directed solely at earthly needs, but also at happiness in life to come. He further saw it inspired by the Omniscient Lawgiver, who knows what is best for man.

Moreover, the Muslim reluctance to learn from the West is not limited to religious issues. Whereas the Christian Gospels tell the faithful to render unto Caesar what is Caesar's and unto God what is God's, Muslims learn from their scriptures that Muhammad was at once God's messenger, the font of civil and political authority, the tax collector, the arbiter of civil justice, and the commander of armies (Lakoff, 2004). The 2002 *Arab Human Development Report* states that the Arab world translates about 330 books annually, which is only a fifth of the number of books that Greece translates. The cumulative total of translated books since the ninth century is about 100,000, or about the same as for Spain alone.

9.2.2 Imitation and Innovation

The importance of imitation in improving performance is studied in firms and in government. A nice example of copying involves the California Fair Trade Law of 1931, which was copied verbatim by ten other states, including two serious typographical errors (Walker, 1971). The benefits of copying have long been recognized. In 1888 Bryce wrote that "Federalism enables a people to try experiments in legislation and administration which could not be safely tried in a large centralized country. A comparatively small commonwealth like an American state easily makes and unmakes its laws; mistakes are not serious, for they are soon corrected; other states profit by the experience of a law or a method which has worked well or ill in the state that has tried it" (Bryce [1888] 2004, p. 257). A half-century later, U.S. Supreme Court justice Louis Brandeis saw states as laboratories of democracy, writing in 1932 that "It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country." (*New State Ice Co. vs. Liebmann*, 285 U.S. 262, at 311 [1932]). Using an economic approach, Oates (1999) gives an optimistic view of "laboratory federalism," where many jurisdictions simultaneously engage in policy experiments and where jurisdictions learn from the experience made by others. Electoral considerations can strengthen the incentives for a local policymaker to innovate. Kotsogiannis and Schwager (2005), building on Rose-Ackerman (1980), show how the incentive to signal above-average ability to the electorate can motivate politicians at the local level to implement new policies with uncertain outcomes. On the other hand, when outcomes are correlated across states, learning involves

an externality—the information one state obtains can be used by another, and therefore each policymaker has an incentive to free-ride on each other's innovative efforts (Strumpf, 2002).

In studying the behavior of firms, Vega-Redondo (1997), and Schlag (1998 and 1999) consider workers imitating others who had previously obtained high payoffs. Empirical work confirms the importance of peer-group effects. Ichino and Maggi (2000) find that the effect explains part of the gap between labor productivity in northern versus southern Italy. Further evidence of peer effects is given by Falk and Ichino (2006), who compare output of workers working in isolation to those working alongside others.

In studying government, a seminal paper is Besley and Case (1995), who look at tax-setting when voters make comparisons between jurisdictions to overcome political agency problems, forcing incumbents into a (yardstick) competition in which they care about what other incumbents do.

Alesina and La Ferrara (2005) develop a theoretical model in which the gains from heterogeneity come from variety in production. The costs come from the inability to agree on common public goods and public policies. I see the same benefits, but with the cost as arising from insufficient learning across groups. A cost of ethnic fragmentation on productivity is found by Easterly and Levine (1997), who argue that, ceteris paribus, racial fragmentation reduces growth, and that this effect is a major cause of Africa's poor economic performance. La Porta et al. (1999) and Alesina et al. (2003) find that countries with high ethnic fragmentation show low quality of public services, as measured by infrastructure quality, literacy, school attainment, and infant mortality.

In the following I shall model how a reluctance to imitate affects the incentives to innovate by a theocracy, the incentives to innovate in a secular state that can learn from innovations made in a theocracy, and how growth may accordingly differ between theocracies and secular states.

9.3 Assumptions

Let the quality of discoverable policies follow the cumulative distribution function $F(x)$. Suppose one country is theocratic, and the other is secular. Each country can spend K in searching for a policy. A theocracy (or a theocrat) adopts the best policy it found. A secular country (or a secularist) adopts the best policy found by any country, including a theocracy. We can generalize the model by allowing imitation across types to be less effective; for example, when the best policy in a theocracy is x, the benefit to a secularist is σx, with $\sigma < 1$.

In this model a theocracy avoids imitation regardless of the benefit from imitation. Although not pursued here, the analysis could be extended to allow a theocracy's adoption decision to depend on the benefit it would thereby gain—a great foreign idea will be imitated, whereas one which is only a bit better may not be.

The timeline follows:

1. Each country decides whether to spend K searching for a policy.
2. Nature determines the results of the search.
3. The secularist can imitate the policy the theocrat found.
4. The benefits are realized.

9.4 Quality of Policies Adopted

9.4.1 Incentives to Search

Let the benefit from the status quo be 0. Then the theocrat will search if $\int xf(x)\,dx > K$. To make the problem interesting, I suppose this inequality holds.

I must determine if the secularist searches when the theocrat does. If the secularist does not search, and the theocrat does, then the secularist gets $\sigma \int xf(x)\,dx$. Under the assumption that $f(x)$ is uniform on $(0,1)$, the expected benefit to the theocrat who searches is $-K + \frac{1}{2}$. The expected benefit to the secularist who does not search is $\sigma/2$.

Now suppose the secularist searches, at a cost of K. With probability $f(x)$ he discovers x. Whenever the theocrat's policy has value x/σ or better, the secularist will imitate the theocrat; this event happens with probability $f(x)(1 - F(x/\sigma))$. Otherwise, the secularist will take x. We must determine the expected value of the policy the secularist imitates, given that he imitates. Using Bayes' Theorem, the probability that a discovered policy has value z given that $z > x/\sigma$ is

$$\frac{f(z)}{1 - F(x/\sigma)} \tag{1}$$

The expected benefit to the secularist if both he and the theocrat search is

$$-K + \int_0^\infty f(x)\left[F(x/\sigma)x + (1 - F(x/\sigma))\int_{x/\sigma}^\infty \sigma z \frac{f(z)}{1 - F(x/\sigma)}\,dz\right]dx \tag{2}$$

If the secularist does not search while the theocrat does, the secularist's expected benefit is

$$\int_0^\infty \frac{x}{\sigma} f(x)\,dx \tag{3}$$

The secularist will therefore search if (2) exceeds (3). For a specific application, suppose that $F(x)$ is uniform on (0, 1), or that $F(x) = x$ and $f(x) = 1$. Then the expected utility of the secularist when both he and the theocrat search is

$$-K + \int_0^\sigma \left(\int_0^{x/\sigma} z\,dz + \int_{x/\sigma}^1 \frac{\sigma(1+z)}{2}\,dz\right)dx + \int_\sigma^1 x\,dx \tag{4}$$

Evaluating this expression yields

$$-K - \frac{\sigma^2 - 2\sigma - 6}{12} \tag{5}$$

An interesting case has the theocrat search, while the secularist does not. The theocrat searches if $K < \frac{1}{2}$. If the secularist does not search, his expected utility is $\sigma/2$. Thus, expected utility without search exceeds expected utility with search if

$$K > \frac{6 - \sigma^2 - 4\sigma}{12} \tag{6}$$

A necessary condition for the theocrat to search is that $K < \frac{1}{2}$. When $\sigma = 0$ the right-hand side equals $\frac{1}{2}$. As σ rises, the right-hand side declines (since its derivative is negative). Therefore, when σ is sufficiently high, the secularist does not search when the theocrat does, and yet it is optimal for the theocrat to search. Notice that under such a solution, the theocrat has better policies than the secularist, but his utility is lower because he incurs the cost K.

This result may mean that when σ is high (i.e., the secularist can easily imitate), the secularist will not innovate, but simply imitate. But as the theocrat gets more insulated, reducing the value of σ, the secularist searches, but will also sometimes imitate the theocrat. The secularist will then forge ahead.[4] If indeed economic growth benefits from innovation and imitation, and if indeed Muslim countries are less willing to imitate than are other countries, then the result is broadly consistent with the findings by Barro and McCleary (2003) that, even after holding constant attendance at religious services and religious beliefs about heaven and hell, economic growth is lower in countries with large shares of Muslims. In this volume, Pryor (chapter 11) documents the poor economic performance of Iran following the Islamic revolution. Also in this volume, Paldam (chapter 10) finds that economic development in Muslim states is lower than in other states. Consistent with the model in my chapter, Paldam (chapter 10) argues that growing divergence between the West and Arab countries arises from greater technological imitation in the West.

In my model a secular state can imitate, and therefore should search less than does a theocracy. But if innovation comes in steps, with further progress requiring past progress, then the secular state which innovated and copied will also innovate more. Dynamically, matters could get even worse. Suppose the secularist, or infidel, discovers a good idea. Then, sometime later, a theocrat discovers the same idea. The theocrat may then view the idea as tainted, and so will not accept it.

The analysis above supposed that only one country is a theocracy. What if several countries are theocracies? The multiplicity of theocracies might allow imitation from one theocracy to another, thereby improving the performance of each. But a different effect may also appear. Suppose that one

of ten theocracies discovered a policy which appears effective. The one theocracy may fear that if no other theocracy discovered the same policy, that policy is inconsistent with the common theology, and therefore should not be adopted. Innovation may then decline.

9.4.2 Concern about Relative Position

The gap between the countries can become even greater when *relative* performance matters, as in military innovation. If the secularist imitates the theocrat, then the theocrat gains little from innovation, whereas the secularist gains much because he is not imitated by the theocrat. The secularist then benefits more from innovation than does the theocrat, leading to a wide gap in their performances.[5]

9.4.3 Yardstick Competition

The analysis presented above can be modified to give a different interpretation—a secularist evaluates his policy by comparing it to the other country's policy, while a theocrat makes no comparison to the other country. This idea relates to yardstick competition.

We can think of comparisons in a two-period model. In period 1 each country searches for a policy and implements it. A country is unsure, however, of the distribution from which the policy is drawn. We can think, for example, that it is unsure whether the distribution lies on the interval (a,b) or instead on the interval (a,c), where $c>b$. Let the prior probability that the policy space lies on (a,b) be β; let the cumulative distribution function when the policy space lies on (a,c) be F_{ac}. Suppose the theocrat discovers policy x. Clearly, if $x>b$, then the policy space must lie on (a,c). The probability that policy lies in (a,b) given that $x<b$ is

$$\frac{\beta}{\beta+(1-\beta)F_{ac}(b)} \tag{7}$$

which is necessarily greater than β. That is, an observation that $x<b$ makes the posterior probability that policy lies on (a,b) greater than the prior probability that policy lies on (a,b). So even without imitation, the secularist can learn from the theocrat. If the theocrat finds a policy less than b, then the secularist may avoid search; if the theocrat finds a policy greater than b, then the secularist will search. Note that this means that the secularist may advance less than the theocrat, because the secularist chooses not to search. But because the secularist avoids the cost K, his welfare is higher.

9.5 Conclusion

Innovation and imitation are central to progress. History shows that theocracies can thrive, the expansion of Islam offering an important example.

Nevertheless, a theocracy which is unwilling to learn from states not belonging to the same religion suffers disadvantages—it must spend more on innovation to compensate for the lost benefits of imitation, and it is less well informed about whether search for new policies is worthwhile, and it suffers even greater welfare losses if what matters is relative rather than absolute performance.

The avoidance of foreign ideas may have to do with esteem or reputation—if the other religion has good ideas, then maybe God favors them. And if the people of the other religion are conquered, then the conqueror may be more willing to imitate from them or to learn from them—the conqueror is proven superior, and it was God's will that they be conquered and their innovations adopted. Perhaps that explains why the Romans imitated the Greeks, and why Muslims were initially willing to learn from their Hellenistic subjects.

Notes

1. The idea that theocratic characteristics can appear in secular states is not novel. It is well expressed, e.g., by Wittman (chapter 7) in this volume.
2. E.g., Jones (2003) says that for a time the Arab culture was most innovative: the "Arab Agricultural Revolution" brought crops from India as far west as Spain, and Muslims absorbed scientific and technological knowledge from as far away as India and China. Muslims in Spain translated Greek classics.
3. Fattah and Butterfield (2007), p. 54.
4. It may also be that a theocratic country wants to do what God wants. A theocrat who fails to find a good policy may decide that God does not want him to pursue that goal. Of course, the opposite may happen: a theocrat who finds a good policy may believe that God desires such success, and so he searches even more.
5. In this volume, Salmon (chapter 3) also discusses competition between governments, but does not consider imitation.

References

Alesina, Alberto and Eliana La Ferrara. "Ethnic Diversity and Economic Performance." *Journal of Economic Literature* 43, 3, 2005: 762–800.

Alesina, Alberto, Arnaus Devleschawuer, William Easterly, Sergio Kurlat, and Romain Wacziarg. "Fractionalization." *Journal of Economic Growth* 8, 2003: 155–194.

Barro, Robert J. and Rachel M. McCleary. "Religion and Economic Growth Across Countries." *American Sociological Review* 68, 5, 2003: 760–781.

Bernholz, Peter. "Ideocracy and Totalitarianism: A Formal Analysis Incorporating Ideology." *Public Choice* 108, 2001: 33–75.

Besley, Timothy and Anne Case. "Incumbent Behavior: Vote-seeking, Tax-setting, and Yardstick Competition." *American Economic Review* 85, 1, 1995: 25–45.

Bryce, James Viscount. *The American Commonwealth*, volume 1. Indianapolis, IN: Online PDF Liberty Fund, 2004 (1888).

Easterly, William and Ross Levine. "Africa's Growth Tragedy: Policies and Ethnic Divisions." *Quarterly Journal of Economics* 111, 4, 1997: 1203–1250.

Fakhry, Majid. "The Theocratic Idea of the Islamic State in Recent Controversies." *International Affairs* 30, 4, 1954: 450–462.

Falk, Armin, and Andrea Ichino. "Clean Evidence on Peer Effects." *Journal of Labor Economics* 24, 1, 2006: 39–57.

Fattah, Moataz A. and Jim Butterfield. "Muslim Cultural Entrepreneurs and the Democracy Debate." *Critique: Critical Middle Eastern Studies* 15, 1, 2007: 49–78.

Ichino, Andrea and Giovanni Maggi. "Work Environment and Individual Background: Explaining Regional Shirking Differentials in a Large Italian Firm." *Quarterly Journal of Economics* 115, 2000: 1057–1090.

Jones, Eric. *The European Miracle*. Third edition. New York: Cambridge University Press, 2003.

Katz, Jacob. *Exclusiveness and Tolerance*. London: Oxford University Press, 1961.

Kotsogiannis, Christos and Robert Schwager. "On the Incentives to Experiment in Federations." CESIfo Working Paper No. 1585, 2005.

Kuran, Timur. *Private Truths, Public Lies: The Social Consequences of Preference Falsification*. Cambridge, MA: Harvard University Press, 1995.

La Porta, Rafael , Florencio Lopez de Silanes, Andrei Shleifer, and Robert Vishny. "The Quality of Government." *Journal of Law, Economics and Organization* 15, 1, 1999: 222–279.

Lakoff, Sanford. "The Reality of Muslim Exceptionalism." *Journal of Democracy* 15, 4, 2004: 133–139.

Landes, David S. "Why Europe and the West? Why Not China?" *Journal of Economic Perspectives* 20, 2, 2006: 3–22.

Lewis, Bernard. *What Went Wrong? The Clash between Islam and Modernity in the Middle East*. New York: Oxford University Press, 2002.

Oates, Wallace E. "An Essay on Fiscal Federalism." *Journal of Economic Literature* 37, 3, 1999: 1120–1149.

Rose-Ackerman, Susan. "Risk-taking and Reelection: Does Federalism Promote Innovation?" *Journal of Legal Studies* 9, 1980: 593–616.

Schlag, Karl. "Why Imitate and If So Why? A Boundedly Rational Approach to Multi-armed Bandits." *Journal of Economic Theory* 78, 1998: 130–156.

———. "Which One Should I Imitate?" *Journal of Mathematical Economics* 31, 1999: 493–522.

Strumpf, Koleman S. "Does Government Decentralization Increase Policy Innovation?" *Journal of Public Economic Theory* 4, 2, 2002: 207–241.

Vega-Redondo, Fernando. "The Evolution of Walrasian Behavior." *Econometrica* 65, 1997: 375–384.

Walker, Jack L. "Innovation in State Politics." In *Politics in the American States*, edited by H. Jacob and K. Vines. Boston: Little Brown, 1971, pp. 354–387.

Walker, Mark. "National Socialism and German Physics." *Journal of Contemporary History* 24, 1, 1989: 63–89.

Wintrobe, Ronald. *The Political Economy of Dictatorship*. New York: Cambridge University Press, 1998.

10

An Essay on the Muslim Gap: Religiosity and the Political System

Martin Paldam

Development is the process of a *Grand Transition* that consists of a set of interacting transitions in almost all fields of society. Many of these transitions are well-known: The demographic transition, the urban transition, the human capital transition, the sectoral transition, and such. Together all transitions change society profoundly, but the changes are also necessary for development. This essay deals with the problems caused when a culture resists key parts of the Grand Transition.

I concentrate on two transitions, which I have discussed at some length elsewhere: The *democratic transition* and the *religious transition*.[1] As countries go through the Grand Transition, they normally turn into secular democracies. Both transitions have an important exception: They are much weaker in the Muslim world. This is a deliberate choice that acts as a brake on development. By "deliberate choice" I mean that we are dealing with outcomes resulting from opinions held by large fractions of the population in these countries.[2]

This essay concentrates on the three large trends listed in table 10.1. In the past fifty years, the world has seen an unprecedented increase in income, in democracy, and a considerable secularization as well. The most powerful explanation of the increase in democracy and the fall in religiosity is the growth of income.

The nature of the Muslim Gap is thus that while rising income in the world turns other countries into secular democracies, the Muslim world has a stationary low level of democracy and a weak secularization. Consequently, the *Muslim Gap* to the rest of the world is widening.

Traditional societies were/are different from each other, and they had/have typically been stable for many centuries. Thus, they had/have well established traditions and corresponding beliefs and opinions. Some traditional cultures are close to modern society and flexible, while others are

Table 10.1 The Main Stylized Facts Discussed

Trend	*Transition*	*World*	*Muslim countries*	*Section*	*Data used*
(t1)	Income	Increasing	Smaller increase, lower level	10.1	Maddison's gdp data
(t2)	Democracy	Increasing	No change, low level	10.2	Polity and Gastil indices
(t3)	Religiosity	Decreasing	Smaller decrease, high level	10.3	World Value Surveys

further away and protected by taboos making adjustment difficult. The latter may cause institutions to become stuck in the past and to develop into development barriers. One argument that will be pursued below is that Muslim society has stronger and more well-defined traditions than most other cultures, and that they are relatively difficult to adjust to development.

Any attempt to explain the Muslim Gap quickly hits the gulf separating two levels of analysis:[3] (L1) The "hard" *social sciences* measure the Gap and study its dynamics at the *operational* level of statistics and data. This provides a solid, but shallow, analysis. (L2) The level of the "soft" sciences of the *Arts* provides a web of speculation about perceptions of facts. It is *deeper*, but also *cheaper,* as little is testable and cumulative—even the perceived facts are dubious.[4] It is difficult to bridge the gulf and attach the hard operational explanations to some parts of the web, but this is what we try to do.

Perhaps I need to state that I discuss the reduced forms relations between the said three sets of "big" variables. The purpose is not to model all channels between these variables. This is an attempt to see the forest, not a study of the leaves on the trees.

Sections 10.1, 10.2, and 10.3 establish the stylized facts on the trends in income, democracy and religiosity respectively. Section 10.4 considers the explanations at the level of *the Arts*. Section 10.5 looks at some additional items from the World Value Surveys. Finally, section 10.6 concludes.

10.1 The Path of Income: A Slow Muslim Divergence

This section looks at the trends in income and uses the Millennium dataset from the OECD (Maddison, 2001, 2003, net), which we have linked to the PPP data in the World Development Indicators (see WDI, net): ***gdp*** is GDP per capita, measured in 1990 International Geary-Khamis dollars. ***Income*** is $\ln gdp_{it}$, where i is country and t time.

The Maddison data start year 1500, but with few countries only. From 1950, the data cover most countries. As we go backwards in time from 1950 to 1500, the data are based on gradually less evidence. When the whole data set is considered, the gdp has a minimum level of $ 300–350.

Table 10.2 Four Groups for the 141 Countries and the C/T Group

	Name	*Includes*	*Income*	*Polity*
(1)	***West***	Western Europe, Australia, Canada, Israel, New Zealand, and USA	21	21
(2)	***ONM***	**O**ther **N**on **M**uslim, residual group	81	68
(3)	***Arab***	The 17 Arab countries are often referred to as ***Arabia***	17	16
(4)	***OM***	**O**ther **M**uslim	22	22
(5)	***CT***	Before 1990: 16 countries **C**ommunist	16	16
		After 1990: 5 are **C**ommunist and 29 are in ***T***ransition	34	34

Note: The table 10.12 (appendix B) shows how the countries are grouped. The two right hand columns show the number of countries in the data used. Polity is the democracy index used in most of the analysis.

Most of the analysis considers the *four country groups*—West, ONM, Arab and OM—listed in table 10.2. If not explicitly stated, the fifth group (CT) is excluded. This group provides a unique historical experiment, which will be discussed separately.

10.1.1 The Very Long Run: The Relation between the West and Three Large Asian Cultures

Figure 10.1 gives the economic gap between Western Europe and the three large old Asian cultures: China, India, and Arabia (only Egypt and Morocco) from the year 1500. Japan is added to show a successful convergence. The underlying data show the *Grand Transition* where GDP rises 30–40 times through an increase in production for the West and Japan. The non-European countries are *Traditional* societies with essentially zero economic growth till late. The large old cultures did generate GDP's well above the minimum necessary to sustain the population, but most of the population was poor.

The Grand Transition can also be described as a *modernization* process. The data claim that the GDP of Western Europe was growing by 0.15 percent p.a. for the three-and-a-half centuries from 1500 to 1850, so it must be a steady state where all growth represents *technical progress*. If these trends are projected backwards, they hit the minimum level around year 1000, so the *low growth steady state* of Western Europe lasted at most only 1–2 centuries more than shown. The data thus contend that the West was ahead by 2–2.5 times in 1800. After 1850, the *Industrial Revolution* increased the difference.

These numbers point to the low level of R&D before year 1800. The Golden Age of culture and science in the Muslim World in the twelfth to thirteenth century was created by a few handfuls of researchers and

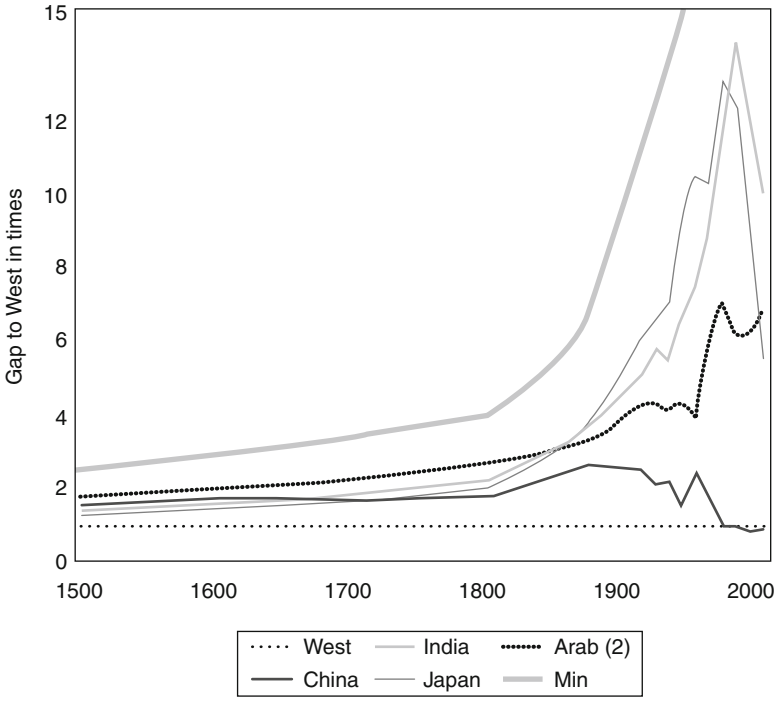

Figure 10.1 The Development of the Gap to the West

Note: Straight lines interpolate between available observations. Arab (2) is the average of Morocco and Egypt.

scientists and so was the Renaissance in Italy in the fifteenth century. The research establishment in Italy during the Renaissance corresponds to the R&D division in a middle sized modern company today.

The data shown include two Muslim countries only—both Arabian. However, for some of the time, India was ruled by the Muslim Mogul Dynasty, so the picture shown may be fairly representative. The important point is that the growing gap was due to changes in the West, while the rest of the world stayed constant. Even though the change in the West was slow in the beginning, the process of divergence started before year 1500. Figure 10.1 shows the consequences in the form of a relative gap: Japan catches up fully with Western Europe. India and China both turn the last 30 years, but have a long way to go. Arabia does not catch up.

10.1.2 The past Fifty Years: Data for 135 Countries Divided into Four Groups

For the past fifty years, the full data set covers 160 countries. The ratio between the richest and poorest decile comes to almost fourteen times (see table 10.3). The poorest decile has an average that is the same as the average for Asia in 1500–1800.[5] The oil shock caused a reduction in the growth

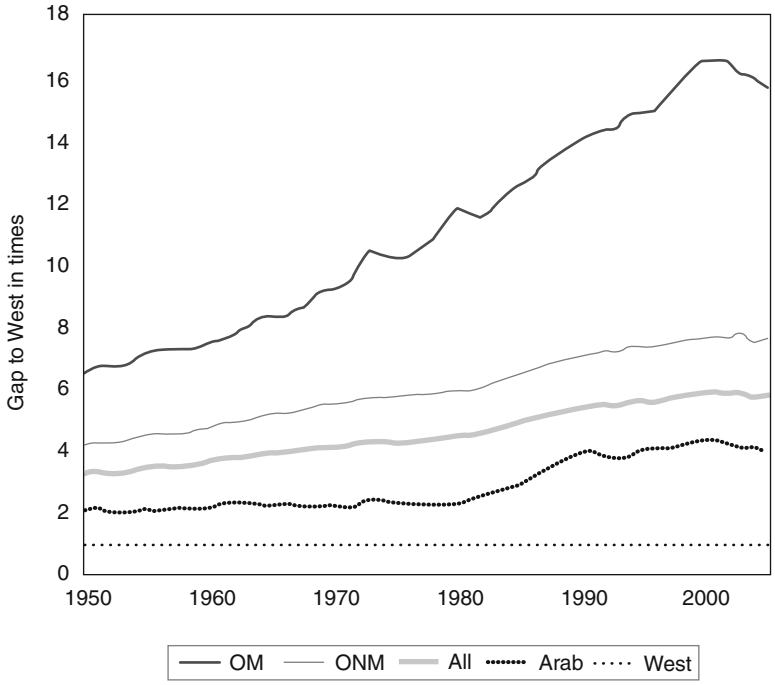

Figure 10.2 The Development of the Gap to the West, 1950–2005

of all four groups, but the reduction is least in the West and strongest in the two Muslim groups. Until the oil shock, all four groups grew nicely, but after that, the two Muslim groups have had essentially zero growth.

Figure 10.2 is drawn as figure 10.1. It only starts in 1950, but the lines now represent the four country groups we want to compare. The economic gap between the West and the Muslim world was considerable in 1950, and it has kept growing. The data for the Arab countries contain a set of oil countries that quickly covered some of the gap by a one-time jump in income. These countries got rich from resource rent, not from production.

10.1.3 The Transition of Gender Roles

A reason for the slower development in the Muslim world seems to be a strong resistance to one of the most important transitions: The transition of gender roles. It is due to five mechanisms (M1) to (M5) that appears quite general. The first four mechanisms explain why development reduces the number of pregnancies and births:

(M1) Rising incomes allow people/societies to be able to afford more medical care, clean water, etc. Thus, child mortality drops, and the number of births necessary to produce an adequate amount of offspring falls. (M2) Income growth causes financial deepening, and the tax base relative to GDP rises. With the advent of financial institutions, and with rising tax

revenues, both private and public social security become a realistic possibility for the population, and hence the number of children necessary for the social security of parents falls. (M3) With rising income the range of feasible consumption goods increases. (M4) Rising production demands much human capital, and the informal education provided within families becomes less and less adequate. Thus, the costs of children rise relatively. With fewer pregnancies and births, the workload of women decreases. In addition: (M5) Rising income reduces the relative costs of household mechanization.

The mechanisms (M1) to (M5) are independent of culture, and they greatly reduce the traditional workload of women. Hence, a new division of labor between the genders becomes possible and *indeed economically desirable*. This has large effects on *gender relations*.

The Muslim culture has strong traditions for a strict separation of the genders and the protection of traditional gender roles. With economic growth, modernization has spread in the Muslim world, and for example, a rapid urbanization is taking place. Modern westernized elites have emerged in the large cities of most Muslim countries. This has created tensions and an Islamist movement in many Muslim countries, trying to preserve, and indeed return to, traditions. It blames the West for the "immorality" of the gender role transition.

10.1.4 Convergence (σ): Two Convergence Clubs, the West and Arabia

As shown, the West and the two Muslim groups diverge. We now turn to the convergence within the groups by calculating the *σ-measure for convergence from 1950 to 2005*.

$$\sigma(t, G) = \mathrm{SD}(y_i), \text{ where } y = \ln gdp, G \text{ is a country group, and } i \in G \quad (1)$$

The paths of the σs are given in figure 10.3. The pattern of convergence shows the two well-known facts of a convergence within the West and a divergence for the world. Unsurprisingly, the 81 countries in the *ONM-group* follow the curve for all countries closely. Also, the *OM*-curve essentially follows the same pattern of slow divergence. Hence, it is interesting to note the strong—though somewhat erratic—path of convergence for the Arab countries. The convergence happens both within oil countries and within non-oil countries and between the two groups (an appendix with these calculations is available from the author).

The data thus have two convergence clubs: The West and Arabia, which diverge from each other. Convergence has to be to an *attractor*. Economic theory suggests that *attractors* are levels generated by common technologies and institutions. The attractor for the West is international best practice technology.

However, the attractor to which the Arab countries converge is much less clear. We know that the Arab countries do have a great deal of interchange of ideas, and that tradition is strong in this group. This leads to the

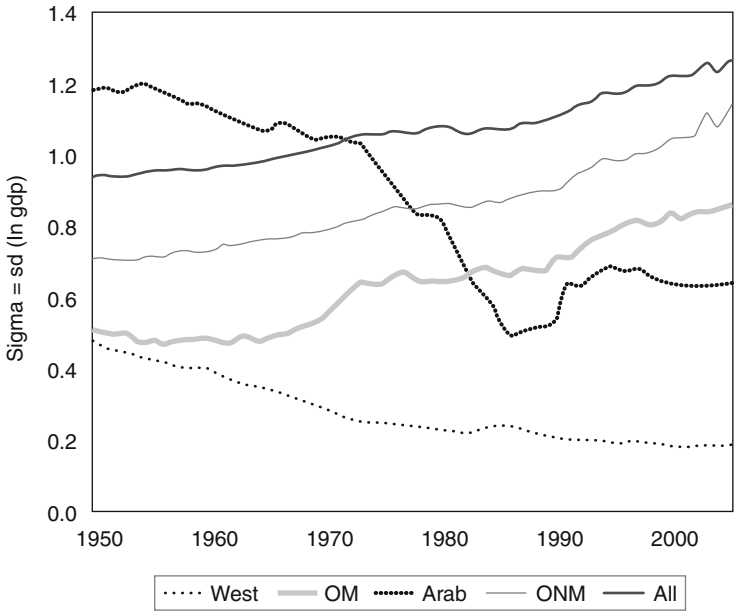

Figure 10.3 The σ-Measure of Convergence within the Four Groups

following two hypotheses:

(**H1**) The attractor, to which the Arab countries converge, is modern technology and the changes it necessitates in society to the extent it is possible given tradition.

(**H2**) Tradition is conservative, so (H1) causes a slow divergence from the West.

These two hypotheses are broad and thus hard to prove. If they are true, they demonstrate why Western convergence stops at the shores of the Mediterranean and only crosses the sea by jumping to islands such as Malta, Cyprus (G) and to Israel. From (H1) and (H2), it follows that Islamic tradition constitutes a brake on development, and thus modernization generates a steadily increasing pressure on tradition, as is further discussed in section 10.4.

10.1.5 The Forward and Backward Reaction to Modernization and Divergence

In 1853–1854, the Japanese discovered that by a process of stagnation and deliberate isolation, they had been overtaken by the West. This was a main reason for the Meiji Restoration in 1868. It led to a determined process of learning Western technologies in all fields, and as a consequence, Japan did catch up, see figure 10.1. This process has been replicated by the four Asian Tigers, and it is now in China as well. One reaction to discovering that you are behind is thus to make a large effort to learn and catch up—this is the "*forward reaction*."

However, there is an alternative "*backward reaction*": To blame the one ahead, and turn inward to your own roots. In the Muslim case, this results in a return to the ways of life and worship of the seventh century. This will not, of course, solve a development problem in the twenty-first century, but rather increase the size of the problem. It leads to a third hypothesis:

(**H3**) The Muslim, and notably the Arab, reaction to the large and growing economic gap is to a considerable extent backward as defined above.[6]

It is easy to give examples of forward reactions in the Muslim world as well. Many rulers have been determined modernizers. However, the Islamist movement that is so prominent today is a radical backward reaction. The gulf between beliefs and the changes generated by the Grand Transition creates tensions in the society and existential problems for the individual. We hypothesize that it should lead to frustrations and show up in the empirical welfare measures available, see section 10.5.4:

(**H4**) Life satisfaction is lower in the Muslim countries than in comparable countries.

10.1.6 The Oil Complex and Dutch Disease

The final point deals with the Oil countries which become rich without going through the Grand Transition. The literature on the effects of resource wealth discusses the longer run effects on society of such wealth. The popular name for the effects is the *Dutch Disease*. Countries with great non-produced wealth inevitably get a wage level that allows people to purchase the import the country can afford. This wage level is (much) higher than productivity, so all other exports, except the resource, become uncompetitive.

To preserve social tranquility, governments have to pass on a fair amount of the resource rent to the native population, who then become *rentiers* living on resource rent. Consequently, the natives can pay foreigners to come and do the work necessary, giving natives a life of leisure. This allows them to live a traditional life devoted to religion, and at the same time enjoy the goods of the rich countries. We formulate this as a fifth hypothesis:

(**H5**) Oil allows some countries to combine *tradition* with a modern pattern of consumption. Thus, oil has the reverse effect on social change than has the Grand Transition.

10.2 The Democratic Transition: A Muslim Divergence in Outcomes

Section 10.5.1 looks at the preferences for democracy as found by the World Value Surveys. Muslims express the same high preference for democracy as everybody else. However, political outcomes differ. Political outcomes are measured by two data sets (see net): ***Polity***, from CIDCM at the University of Maryland. ***Gastil,*** from Freedom House (average of democratic rights

and civil liberties). These indices compete, they use different scales, see table 10.3, and others. However, they both have the pattern discussed, and, for the overlapping thirty-three years, they have a cross-country correlation of -0.90 ± 0.02.

10.2.1 The Democratic Transition—Summary of Prior Results

Table 10.3 looks at income in the poorest and the richest deciles, which differs by 40 times. This corresponds to a rise in democracy with about half the range of either index—the results are very close to the regression results on all data given in table 10.4.

The change in democracy is best explained as a Democratic Transition due to the change of income.[7] Gundlach and Paldam (2008) demonstrate that in the long run all causality is from income to democracy. This is the case even when the long run is created by interactions that look like two-way causality. The theoretical explanation of these facts is given in Paldam and Gundlach (2008).[8]

The estimates of the effects of Islam and Oil suffer from two problems: (a) There are few observations before 1950. (b) There is some multicollinearity between the effects of Islam and Oil since a rather large fraction of the oil-countries is Muslim. When there are more than three of either Muslim or Oil countries in the regression, the coefficients to either variable are always significant. The next section concentrates on the effects of Muslim culture on the averages for the two democracy indices.

Table 10.3 The Data for the Grand Transition 2001, based on Income Deciles

	Averages for income deciles		*Difference*	*Democracy scale*	
	Lowest	*Highest*			
gdp, GDP per capita[a]	557.7	22002	39.5 times	Perfect	Perfect
Income: Ln gdp	6.32	10.00	3.68 points	autocracy	democracy
Polity index	1.25	9.19	7.94	−10	+10
Gastil index	4.88	1.38	−3.50	7	1

Notes: [a]Source for gdp, Maddison (2003). Made for all available countries—high overlapping.

Table 10.4 Summary of Regressions: Comparison of Results

Column Equation	*Typical of Gastil results (7)*		*Typical Polity results (7)*	
	Gastil scale	*Polity scale*	*Polity scale*	*Gastil scale*
Conversion		$P = (40–10G)/3$		$G = (40–3P)/10$
Income: Ln gdp	−1.1	3.6	3.2	−1.0
Muslim	1.7	−5.7	−3.2	0.9
Oil	1.4	−3.3	−6.2	1.9

Notes: The Gastil index is termed *G* and the Polity index is *P*.

Sources: Paldam (2007). Jensen and Paldam (2007), Borooah and Paldam (2007), and Gundlach and Paldam (2008).

10.2.2 Exceptions to the General Pattern

The Democratic Transition is thus a fine explanation of the steady democratization of the world. However, the estimates of relation assume that country heterogeneity is random. Consequently, it is important to look for "clubs" of countries which are so similar that they provide non-random deviations from the pattern. Tests for about 10 such clubs representing different cultures, economic systems etc. are given in Paldam (2007). Most were insignificant once the relation was controlled for income. However, three exceptions have been found:

(1) *Socialist* countries—that is, countries where public ownership dominates—is a small group today. Communist countries in particular and socialist countries in general have less democracy than other countries at the same level of development.
(2) Countries that are so *resource rich* that they reach a high standard of living without going through the Grand Transition. The most evident example is *Oil* Countries, which form an interesting case as they are less democratic than other rich countries.
(3) By far the largest exception in the world today (where socialism is vanishing) is the Muslim groups of countries, which are less democratic than other countries at the same level of income. The Arab group is the original Muslim group, where we expect Muslim traditions and political ideas to be most entrenched. As we shall see, they do deviate in a striking way from the general picture.

10.2.3 The Paths of the Two Democracy Indices for the Four Groups

Figure 10.4 shows the Polity index covering the full century. Around 1960, the coverage increases, but for the first half of the century, only the West has an almost full coverage, though Finland, Ireland and Israel became independent in 1917, 1920, and 1948 respectively. The path of the West has a clear upward trend, but it is upward censored as one country after the other reaches the maximum of +10.

The data shown on the two graphs are exclusive the CT-countries, so the democratic advance in the world from the late 1980s to the mid 1990s is not due to the Transition from Socialism in the 1990s. It may reflect that the West won the Cold War, but only indirectly, as some countries may have changed political system to accommodate the winners.

Note also that the large increase in incomes took place in the 1960s in many countries, while the large increase in democracy came with a lag. The Democratic Transition is a process with much inertia.

10.2.4 The Muslim Gap: The Trends in the Differences

When the gaps in political systems between the groups are considered, it appears that in most cases it grows between the non-Muslim and Muslim groups. However, there are some fluctuations, and in table 10.5 we test the

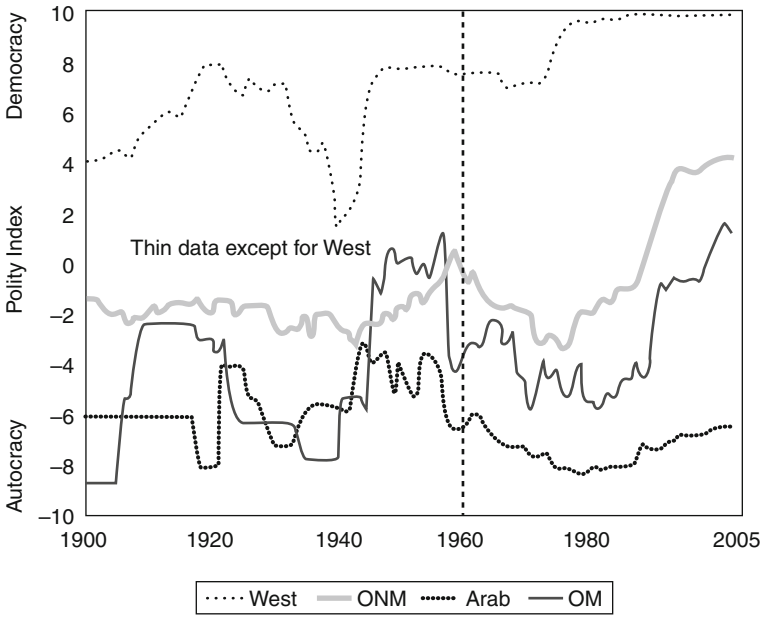

Figure 10.4 The Paths of the Polity Democracy Index for the Four Groups, since 1900

Table 10.5 The Significance of the Gaps and Trends on Figures 10.4 and 10.5

From	*Index*	*Between*	*Period*	*Average*	*t-ratio*	*Slope (year)*	*t-ratio*
(5b)	Polity	Arab-West	1900–2004	−13.59	−47.7	−0.070	−10.8
(5b)	Polity	OM-West	1900–2004	−11.35	−48.9	−0.024	−3.2
(6b)	Gastil	Arab-ONM	1972–2004	−1.59	−15.0	−0.056	−11.9
(6b)	Gastil	OM-ONM	1972–2004	−1.11	−15.4	−0.035	−8.7
(6b)	Gastil	Arab-West	1972–2004	−4.34	−78.3	−0.029	−11.5
(6b)	Gastil	OM-West	1972–2004	−3.85	−63.3	−0.008	−1.4

Note: Gaps are scaled to be negative, indicating that the Muslim group is less democratic. Hence, if they grow, the slope is negative, indicating a rising problem.

significance of the trends in the gaps. All gaps tested are growing. From looking at the lines drawn, the reader can see that it is possible to find periods where the Muslim gap is closing, but the overall picture is the one of a widening gap.

We are most interested in the development in the last part of the period, where data are adequate. That is the tests done with the Gastil Index. Here the gap between the ONM-group and the two Muslim groups increase with 1¼ to 1½ Gastil points. On a scale with a range of 6 points, this is substantial. From figure 10.5 it is clear that this is due to the trend towards democracy in the rest of the world, which does not exist in the Muslim world.

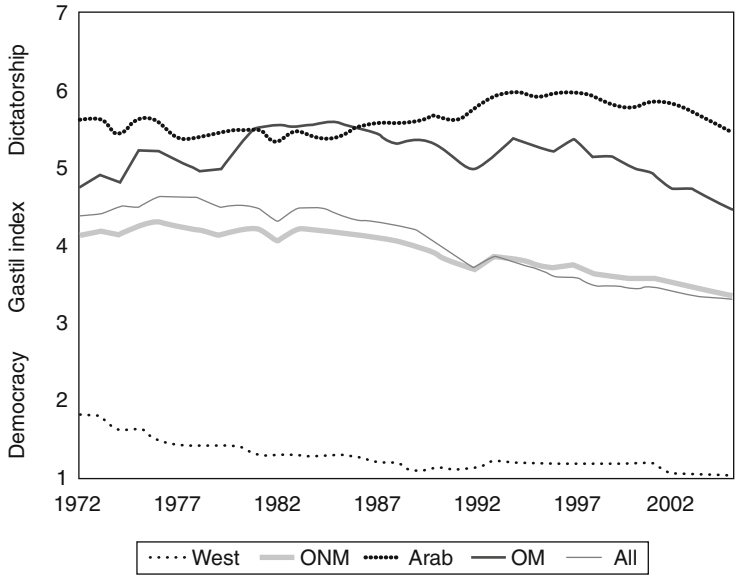

Figure 10.5 The Paths of the Gastil Democracy Index for the Four Groups, 1972–2005

10.2.5 The Transition from Socialism: The Experiment of the CT-Countries

The data include thirty-three countries with a Communist government before 1990. Five still have a Communist regime, but the remaining twenty-eight countries form the Transition group. It contains no Arab country, and though some of the transition countries are rapidly becoming Western, they started out very differently. So we have divided in two groups only: Muslim (Arab and OM) and Others (West and ONM). And the 28 transition countries are similarly divided in Muslim T and Others T.

The countries in the Transition group experienced the political change in 1988–1991 as a sudden collapse of the old political system and the central control. In the cases of the Soviet Union and Yugoslavia, even the state as such disintegrated. The development of the new political order in these countries thus provides a fine historical experiment.

Figure 10.6 shows what has happened: The five remaining Communist countries even tighten their dictatorships—probably due to the dramatic collapse of Communism in the 28 Transition countries. The Muslim Transition countries had a short democratic "spring" in 1990 to 92, and then they moved to the typical Muslim level of democracy (around 5.5). Finally, the Other transition countries moved toward the other countries in that group.

The group of Other transition countries has made great strides toward democracy. The most Western countries in the group are the richest in the group. They are already at an almost Western level of democracy. Consequently, the countries quickly converged to the position in the big

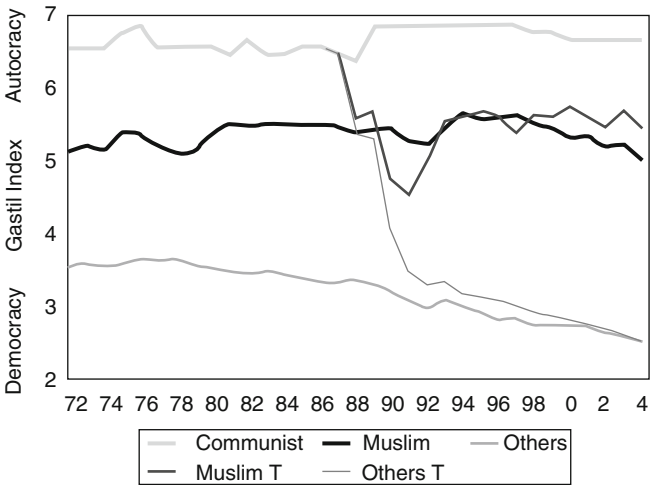

Figure 10.6 The Transition from Socialism of Twenty-eight Countries

pattern where they would have been without the previous Communist regimes.

10.3 The Religious Transition: A Muslim Divergence

A total of eleven items in the *World Value Surveys* (net) measure aspects of religiosity. They are listed in table 10.6 as x1 to x11. All items are scaled so that when they rise, it is natural to say that religiosity increases. The surveys cover 83 countries (see table 10.12), including 21 Western and 13 Muslim countries of which 6 are Arab.

10.3.1 The Country Averages of the World Value Survey Data on Religiosity

The WVS data are in percentages of all respondents. The average scores—the right hand column of the table—are thus measured in ***pp***, that is, percentage points. That is, when item x3 gives a score of 36.8 pp, it means that 36.8 percent of all respondents say that religion is very important in their life. We use the average of the column, that is, 55.8 pp, as an order of magnitude to compare with when we calculate the effects of income and culture below.

Gundlach and Paldam (2009) contains a factor analysis of the eleven items on the largest possible balanced and unbalanced (pairwise) correlations of these observations—the results are the same for the two analyses. Factor 1 has an eigenvalue of ca. 8, while Factors 2 and 3 have eigenvalues of 1.2 and 0.4 only. Thus, it is reasonable to say that the eleven items are dominated by Factor 1, which we hence term religiosity.

Column 2 of table 10.6 gives the factor loadings to the dominating factor, and the 11 items are sorted by their loading. The fact that religiosity

Table 10.6 The Eleven Measures of Religiosity: Number of Observations and Average Score

	Fac. 1 load	*Content wave*	*Number of countries where the item was used*										*Avr Score*
			81/82		*89/90*		*94/95*		*99/00*		*Sum*		
			All	*Mu*	*All*	*Mu*	*All*	*Mu*	*All*	*Mu*	*All*	*Mu*	*pp*
x1	0.94	God is very important in life	20	0	37	1	51	5	69	13	177	19	60.1
x2	0.927	Important teach children faith	21	0	43	1	53	4	68	13	185	18	31.6
x3	0.907	Religion is very important in life	0	0	42	1	53	4	69	13	164	18	36.8
x4	0.883	Churches give answer to social problems	0	0	35	0	0	0	67	13	102	13	40
x5	0.865	Churches answer problems of family life	16	0	35	0	0	0	67	13	118	13	50.8
x6	0.832	Believes in God	19	0	35	0	50	5	67	13	171	18	82.1
x7	0.826	Is a religious person	21	0	42	1	50	4	68	13	181	18	68.6
x8	0.804	Churches answer moral problems	16	0	35	0	0	0	67	13	118	13	55.2
x9	0.777	Attend services at least once a month	21	0	40	1	51	4	69	13	181	18	39.9
x10	0.75	Churches give answer to spiritual needs	16	0	35	0	0	0	67	13	118	13	69.3
x11	0.658	Belongs to religious denomination	21	0	41	0	52	5	69	12	183	17	79.9
		Sum	171	0	420	5	360	31	747	142	1698	178	55.8

Note: Fac. 1 is the first factor. *Mu* indicates that the country is Muslim. The precise wording and the way the scores are calculated are given in Inglehart et al., 2004. The 11 items x1,…, x11 are the following items: f063, a040, a006, f038, f036, f050, f034, f035, f028, f037, f024.

data is dominated by one factor allows us to merge the data and run stacked regressions which use all observations. It ties the coefficients, so it does not fully explore the data, but most of the regressions have been made for each item. They look as expected.

10.3.2 Explaining Religiosity: Regressions (1) and (2) in Table 10.7

Table 10.7 gives the basic analysis of religiosity. We first consider (1) and (2) of the table. These regressions use all 1698 religiosity observations, and consequently they reach high levels of significance. The effect of income is negative and has t-ratios of 14–15.[9] The results in column (2) of the table have been used to calculate Table 10.8.

Table 10.8 shows that the full religious transition is 35 pp. This is substantial relative to the average religiosity of 56 percent (from table 10.6). It

Table 10.7 Explaining Religiosity by Stacked OLS Regressions

	(1) All		*(2) All*		*(3) Muslims*	
	Coeff	*(t-ratio)*	*Coeff*	*(t-ratio)*	*Coeff*	*(t-ratio)*
Ln *y*	**−8.9**	(−13.2)	**−10.38**	(−15.7)	**−3.27**	(−2.0)
West	**−10.66**	(−7.1)	**−6.97**	(−4.7)		
Muslim	1.39	(0.8)	**4.11**	(2.4)		
Controls for other countries and groups						
Arab	**6.01**	(2.3)	**6.52**	(2.6)	**5.65**	(2.5)
Trans	**−22.19**	(−20.0)	**−21.5**	(−20.5)	**−22.9**	(−8.5)
Orient	**−21.98**	(−12.7)	**−18.67**	(−11.1)		
United States			**26.84**	(9.9)		
Catholic			**6.85**	(7.5)		
Scandinavian			**−8.17**	(−5.3)		
Fixed effects for items x7 and x10 omitted						
Item x1	**−8.92**	(−5.7)	**−8.76**	(−5.9)	**12.19**	(3.2)
Item x2	**−37.01**	(−23.8)	**−36.89**	(−25.2)	**−16.18**	(−4.3)
Item x3	**−32.23**	(−19.8)	**−32.18**	(−21.1)	−5.86	(−1.6)
Item x4	**−29.96**	(−15.6)	**−30.01**	(−16.6)	**−20.83**	(−4.9)
Item x5	**−18.31**	(−10.1)	**−18.37**	(−10.8)	**−12.55**	(−2.9)
Item x6	**13.18**	(8.3)	**13.25**	(8.8)	**17.19**	(4.4)
Item x8	**−13.97**	(−7.7)	**−14.03**	(−8.2)	−6.53	(−1.5)
Item x9	**−28.61**	(−18.3)	**−28.57**	(−19.4)	**−31.45**	(−8.2)
Item x11	**11.45**	(7.3)	**11.5**	(7.8)	**15.97**	(4.1)
Fixed effects for waves, Wave4 omitted						
Wave1	**−2.79**	(−1.8)	**−3.21**	(−2.2)		
Wave2	**−2.98**	(−2.8)	**−3.21**	(−3.2)	**−12.25**[a]	(−2.0)
Wave3	**−3.30**	(−2.9)	**−3.24**	(−3.0)	−1.36	(−0.5)
Constant	**161.84**	(27.8)	**170.46**	(30.5)	**109.55**	(8.4)
R^2 adjusted	0.640		0.682		0.666	
N	1698		1698		178	

Note: The dummies for x7 and x10 are very close in all three regressions when made with all items dummies and no constant. Coefficients with t-ratios above 2 are bolded, and if they are between 1.65 and 2, they are bold and in italics.

[a] Covers only Turkey.

means that the Grand Transition decreases religiosity from above 70 percent to below 40 percent in the average country.

In addition to income, there is also the effect of culture. Here, the West has a negative coefficient of about 10 pp, while Muslim and especially Arab countries differ to the other side. When the effect of culture is added to the one of income in table 10.8, a gap of 30–40 pp appears between the West and the Muslim (notably the Arab) countries.

The two other country groups included are the oriental and the transition groups, which have small values of religiosity. Clearly, the anti-religious propaganda in the Communist countries did work. We also notice that Catholic countries are a little more religious than others, while the Scandinavian countries are less religious.

Table 10.8 Calculations in Percentage Points (pp) based on Table 10.7

Between	*And*		*Excess religiosity in poorest group in pp*		
		Gap in income	*Effect of income*	*Effect of culture*	*Total effect*
		Times	*Pp*	*Pp*	*Pp*
Richest 10%	Poorest 10%	40	35	—	35
West	Arab	3	11	18	29
West	ONM	20	29	12	41
United States	Arab	3.25	11	−10	2
United States	Scandinavia	1.2	2	−35	−37

Note: All "pp" values are calculated from estimates (1) and (2), using average values of the estimated coefficients. Note from table 10.6 that the average religiosity score is 56 percent.

The United States is outstandingly religious. There is only a small difference in religiosity between the Arab countries and the United States, in spite of the large difference in income. Hence, controlled for income, the United States is significantly more religious than the Arab world.

All three fixed effects for waves in regressions (1) and (2) are similar and negative. Religiosity has increased from the early 1990s till 2000 by about 3 pp. Thus, the "wave" of religiosity in the new century is rather small.

The author is aware that it is controversial in the sociology of religion if the religious transition is a fact. Using the WVS, it is not dubious at all: It is a strong fact.

It appears a common hypothesis in the field that man has constant religious needs that must be satisfied one way or another. Thus, it is only a question of measurement to find out how. This hypothesis appears to be suspiciously close to a tautology. Having lived in poor and rich countries, I find it unreasonable as well.

10.3.3 Muslim Countries Only: Regression (3) in Table 10.7

No Muslim country is represented in wave 1, and only Turkey was included in wave 2, so we have rather limited possibilities for analyzing the dynamics of religiosity in these countries.

The last regression presented in table 10.7 is for the 178 observations for the Muslim countries alone. For the Arab and transition variables, the results are the same as before. However, the secularization effect of income drops to one-third. In view of the growth of the Islamist movement, one should expect a large jump in the coefficients to the waves. This effect fails to show up, but this may be due to lack of data.

It is tempting to conclude that the reason for the lack of democracy and the relatively weak economic development in the Muslim world is religiosity, but then the case of the United States becomes a problem.[10] We are hence forced to conclude that the difference is due to some property of the actual religions—not to the difference in religiosity.

10.4 Some Theories: Why Are These Gaps Emerging?

The world's two largest monotheistic religions, Christianity and Islam, as well as Judaism, originated 1200 kilometers apart in the Middle East, among peoples speaking related Semitic languages. They have common roots.[11] While Christianity is easy to combine with democracy, Islam is not. It is not obvious why, though it is easy to speculate, and many ideas have been presented.[12] As usual, we distinguish between two types of explanations:

Fundamental differences are due to factors that are so central to the religion that they are not likely to change. ***Transitory*** differences are due to dynamic processes set into motion by *historical accidents*, which may be replaced by other accidents causing them to go away.

10.4.1 Some Characteristics of Muslim Tradition

Traditional Muslim society is deeply influenced by the way of life in the seventh century Mecca, in the form of the *Hadith*. It is a set of *generally accepted stories* centered on the life of Muhammad (570–632). Together with the *Koran* (610–632), the *Hadith* defines the traditional way of life, *Sunnah*, of the Muslim. The *Sunnah* is based on a set of religious and social rules and duties. Also, there is the traditional legal system of *Sharia Law* with swift and strict punishment for crime, which includes a number of deviations from the Sunnah, such as heresy, adultery and homosexuality. One part of Sunnah demands a complete separation between the genders outside the family.

The *Sunnah* is both well-defined and protected by taboos. Also, the non-adherence to *Sunnah* is easy to observe for others in society. Consequently, it is eminently suited for generating social cohesion and stability in low income societies. Due to the codification, the *Sunnah* gave/gives considerable unification so that village life in Morocco, Afghanistan, and North Nigeria is similar. In the most distant parts of the world of Islam, such as Indonesia and the Muslim enclaves in China, the *Sunnah* used to be less well-known. However, with the rise of modern means of communication, e.g. the enormous rise in the participation in the annual *Hajj* to Mecca, the knowledge of *proper traditions* has spread.

10.4.2 Divergence in Another Language

Section 10.1 showed that the data describe an economic divergence of the West from the Muslim world for 5–700 years that has created a wide economic gap. The data show that the changes took place in the West, and that the Muslim world simply failed to catch on.

One of the leading scholars of Middle East history, Bernard Lewis, forcefully argues (see Lewis, 2002)[13] that a process of intellectual divergence started with the Renaissance in the West. Lewis claims that before the Renaissance, the Middle East was intellectually similar to the West. But

at that time, the Middle East entered a long period of stagnation, while the West became more dynamic. The approach of Lewis is qualitative and based on examples from his vast readings, but it appears that Lewis describes a process of divergence very much as in section 10.1.

It is easy to document that in relation to science and culture, a wide gulf exists between the Muslim world and the West: One would be hard pressed to mention any major scientific or technological progress that has emerged from the Muslim world in the last 400 years. The Nobel prizes in the sciences have been given annually since 1901, and nobody from a university in a Muslim country has got one till now. The various lists of the 200 or 500 best universities in the world have never included one in the Muslim world, etc.

However, as always, it is difficult to find out precisely when the emergence of this gap started and why. The data in section 10.1 suggest that it started in the fourteenth century as is also the impression of Lewis. Consequently, it seems reasonably clear that the period from the fifteenth to late in the nineteenth century was a period of stagnation in the Muslim world.[14] Even now, it is not catching up.

10.4.3 Fundamentals: The Words of God versus Scientific Thinking

One argument claims that the difference is due to fundamentals: It looks at the spirit of science: It is in its nature critical and thrives in pulling arguments apart and subjecting everything to as much logical and empirical testing as possible.

(A) It is an article of faith in Islam that the Koran is the words of God, spoken by His Messenger, and faithfully written down by his followers. So to the extent that a subject is mentioned in the Koran, it is the final word for the believer.
(B) The Koran clearly states that Muhammad was a human being, but collections of stories of his life in the *Hadith* certainly describe an extraordinary person.

Thus, Muslim culture is firmly anchored in the early Middle Age in a small town far away in the desert. Contrast this with the Bible. The Old Testament is a motley collection of very old texts that allow many interpretations. The New Testament is four stories about the life of Christ by his disciples, though it is unclear how much the texts have been edited later. While Christians believe that the Bible is the key source to moral and religion, few take it as a guide to everyday life. The hypothesis emerging from these observations is thus:

(**H6**) The Muslim sees the Koran as God's words, and the original tradition is well documented. This makes science relatively constrained in Muslim countries.

10.4.4 The Religious Transition: Reducing the Realm of Religion

One way to view the religious transition starts from the idea that religion is a way to deal with the unknown and dangerous. The Grand Transition

means that the unknown and various dangers are reduced in two ways:

(a) The Grand Transition causes the unknown to be far less dangerous—that is, it has doubled the expected lifespan at birth. As seen on figure 10.1, it causes the distance between the gdp of countries, and the minimum for survival to increase dramatically. So, economic fluctuations become less dangerous. Investments, insurance and savings reduce the necessities of prayers and offerings to obtain security.
(b) The Grand Transition causes/necessitates a large increase in education and research. Science is an alternative way to explain the unknown. The scientific revolution has thus reduced the unknown a great deal. The progress in medicine has thus reduced the role of evil spirits and magic spells, etc. as the cause of diseases, and this has changed the ways people are dealing with many diseases.

It is obvious—also to ordinary people—that it is not better prayers, but better boats, radios, and weather forecasts that have given sailors and fishermen a normal life expectation. So, if a religion insists that it provides *all* the answers, then the religion gets into trouble. It is forced to fight science and development as such.

10.4.5 Political Traditions from the Start

In addition, there is a great difference between Jesus and his disciples on the one side and Muhammad and his followers on the other side:

Jesus was an itinerant preacher and, like his disciples, poor and powerless. They lived in a distant province, and they had bad relations with both the local elite and the colonial regime. In the end, Jesus was executed. Surely, the political system in the Jewish Colony of the Roman Empire in the first century is no Christian ideal. Christianity soon started to spread, but for the first 300 years, it was a religion for the powerless and poor.

Muhammad was a wealthy and successful man before he started to preach (in 610). He later became both a military leader and a political reformer.[15] Within one century after his death, his followers conquered most of the world they knew. Thus, we know a great deal about the institutions preferred by the Messenger of God and his disciples.

During its first three centuries, Christianity was thus the religion of poor outsiders. Islam, on the other hand, was the religion of a political elite that created a system of institutions which were unusually successful for 700 years. It seems obvious that these institutions need large revisions to be used by rich and complex societies 1400 years later. However, the main point made by Islamists is precisely that all Muslim countries should return to these institutions.

(**H7**) While Christianity was not associated with political and military power, Islam was from the start fully integrated into political and military power.

Both believers and opponents of Islam have pointed to rather ferocious quotes from the Koran that belong in the mouth of a warrior, and to

descriptions in the *Hadith* where Muhammad the warrior put nonbelievers to the sword after a victory. It is clear that Islam has a side that can be made out as a defense for violence and war. However, there are other more peaceful parts, and Muhammad's main role was as a religious innovator and reformer.

After the first 300 years also Christianity developed institutions with considerable political power; but there is no story in the New Testament where Jesus appeared as a politician or a warrior, so the authority of the Church was not so easy to justify.

10.4.6 Clarity of Rules

Many observers have noted that Islam is a religion with a remarkably clear set of rules. Adherence to the rules is easily observable and thus highly suited for social control. Consequently, Muslims easily bond and come to stand out from others.

Since the rules are so clear, it is not as easy as in many other religions to reinterpret and renew the rules. Thus, it is perhaps not surprising that Islam is a conservative religion. Also, a great effort is currently taking place within Islam, defending the religion and all its traditions against critique and even discussion.

All these arguments may or may not catch something important. In order to see how important they are, we have turned to the World Value Survey and looked for 3 types of items:

(A) Items regarding religiosity, notably items describing the importance of religion for the individual in his/her daily life. This was discussed in section 10.3.
(B) Items regarding the political values, and in particular regarding the desired importance of religion in politics. This will be discussed in section 10.5.
(C) Items regarding gender relations. Some such items will also be discussed in section 10.5.

Finally, we are adding an analysis of welfare, using the happiness and life satisfaction items.

10.5 Political System Preferences, Gender Relations, and Life Satisfaction

The analysis of the additional items from the WVS is done using the same regression framework as in table 10.7, though for the individual items.

10.5.1 Preferences for Political Systems, Table 10.9, and Regressions (1) and (2) of Table 10.10

Table 10.9 covers 4 items about the political system preferred by the respondents. A full 90 percent of all respondents around the world prefer democracy. However, the answers to the questions become a bit more complex

Table 10.9 Preferences for Different Types of Regimes (Only in Wave 2000)

	(1)		*(2)*		*(3)*		*(4)*	
Variable	*Strong man*		*Army rule*		*Democracy*		*Do after faults*	
Ln *y*	**−4.62**	**−4.39**	**−5.39**	**−6.39**	−0.88		**2.03**	**1.88**
(*t*-ratio)	(−1.9)	(−1.9)	(−2.3)	(−3.8)	(−0.9)		(1.8)	(1.7)
West	−8.45	**−10.99**	−6.56		**5.10**	**4.42**	3.77	**4.62**
(*t*-ratio)	(−1.5)	(−2.3)	(−1.2)		(2.3)	(3.1)	(1.4)	(2.0)
Muslim	**−8.66**	**−12.33**	**15.37**	**14.49**	2.20	**4.02**	3.58	**4.06**
(*t*-ratio)	(−1.6)	(−2.6)	(2.8)	(3.1)	(1.0)	(2.3)	(1.3)	(1.8)
Controls for other countries and groups								
Arab	−6.89		−10.33		2.65		0.22	
(*t*-ratio)	(−0.8)		(−1.1)		(0.8)		(0.1)	
Transition	3.39		−5.74		−1.24		−1.38	
(*t*-ratio)	(0.9)		(−1.6)		(−0.8)		(−0.8)	
Orient	3.48		**21.82**	**25.02**	1.16		−2.04	
(*t*-ratio)	(0.6)		(3.7)	(4.7)	(0.5)		(−0.7)	
United States	4.81		4.50		−2.34		−3.65	
(*t*-ratio)	(0.4)		(0.4)		(−0.5)		(−0.6)	
Fixed effects for waves (only asked twice)								
Wave 3	1.45		0.61		−1.17		0.79	
(*t*-ratio)	(0.5)		(0.2)		(−0.9)		(0.5)	
Constant	**76.77**	**77.85**	**64.37**	**69.21**	**96.67**	**88.10**	**68.44**	**69.13**
(*t*-ratio)	(3.7)	(3.94)	(3.2)	(4.6)	(12.2)	(117)	(6.9)	(7.3)
N	120	120	119	119	119	119	117	117
R^2 adj	0.15	0.17	0.30	0.30	0.07	0.08	0.10	0.13
Average	35.1		17.5		89.8		87.2	
Standard deviation	18.1		19.3		6.7		8.4	

Note: Full questions are given in Inglehart et al. (2004). Items are E114, E116, E117, E123.

once the questions are contrasted with items about the satisfaction with the status quo. People often express high approval rates for the system they have, even if it is quite far from democracy, and they also profess great sympathy with democracy.

If we look at the preferences for *strong men* and *military rule*, the same thing appears. There are mixed signs that Muslims/Arabs prefer either (overlapping) kinds of government. Both Muslims and Orientals have some preferences for army rule, while few Westerners show any sympathy for this type of rule. Note also that the USA is a typical country as regards the 4 items in table 10.9.

The two leftmost items in table 10.10 look at the demand for a religious factor in politics. This is done by considering items F102 and F104. These questions are symmetrical, as they are both formulated to see if the respondents want a religious factor in politics. It shows the same secularization effect as in tables 10.7 and 10.8. But note the extra effect of Islam. Clearly, Muslims want a religious factor in politics, while Westerners prefer politics not to have a religious factor.

Table 10.10 The Role of Religion in Politics and Two More Items

	(1)		*(2)*		*(3)*		*(4)*		*(5)*	
	Role of religion in politics				*Gender/family items*					
Variable	*Nonbelievers fit for office*		*Strong believers unfit for office*		*Jobs are scarce reserve to men*		*Women need children*		*Homosexuality is never justified*	
Ln *y*	**8.97**	**8.99**	**9.49**	**11.38**	**−7.36**	**−8.46**	**−8.57**	**−8.57**	**−13.64**	**−13.29**
(*t*-ratio)	(4.0)	(4.1)	(3.5)	(6.4)	(−5.5)	(−8.6)	(−4.2)	(−4.2)	(−7.9)	(−7.8)
West	**21.07**	**21.01**	8.59		−1.66		**−15.55**	**−14.21**	**−13.72**	**−16.51**
(*t*-ratio)	(3.7)	(3.9)	(1.3)		(−0.6)		(−3.5)	(−3.4)	(−3.8)	(−5.3)
Muslim	**−12.66**	**−15.05**	**11.7**		**21.01**	**20.27**	**11.12**	**13.38**	**17.2**	**17.32**
(*t*-ratio)	(−2.3)	(−3.3)	(1.6)		(6.3)	(6.2)	(2.1)	(2.9)	(3.6)	(3.7)
Controls for other countries and groups										
Arab	−5.11		**−17.88**		**23.2**	**22.73**	5.56		**14.51**	**13.63**
(*t*-ratio)	(−0.7)		(−1.9)		(4.4)	(4.3)	(0.7)		(1.8)	(1.7)
Transition	**19.44**	**19.71**	3.619		2.38		**11.98**	**11.55**	**4.4**	
(*t*-ratio)	(4.8)	(5.1)	(0.7)		(1.1)		(3.7)	(3.6)	(1.7)	
Orient	1.531		2.204		**11.12**	**11.45**	7.354	7.852	3.25	
(*t*-ratio)	(0.2)		(0.3)		(3.5)	(3.9)	(1.6)	(1.7)	(0.8)	
United States	**−37.88**	**−37.88**	**−34.85**	**−33.49**	−2.82		**−17.91**	**−18.25**	**18.2**	**17.7**
(*t*-ratio)	(−3.1)	(−3.1)	(−2.4)	(−2.3)	(−0.5)		(−2.1)	(−2.1)	(2.6)	(2.5)
Fixed effects for waves (most items are not asked in some waves)										
Wave 1							3.48		**14.32**	**15.97**
(*t*-ratio)							(0.8)		(3.9)	(4.5)
Wave 2					**9.21**	**9.1**	**5.54**	**6.02**	**13.73**	**15.54**
(*t*-ratio)					(4.3)	(4.3)	(1.7)	(2.1)	(5.1)	(6.2)
Wave 3					**3.71**	**3.84**	−3.21		**−4.17**	
(*t*-ratio)					(1.9)	(2.0)	(−1.0)		(−1.6)	
Constant	**−40.21**	**−40.35**	**−46.77**	**−58.89**	**92.97**	**103.1**	**136**	**134.9**	**175.6**	**173.5**
(*t*-ratio)	(−2.1)	(−2.2)	(−2.1)	(−3.8)	(8.2)	(11.5)	(7.8)	(7.9)	(11.8)	(11.8)
N	64	64	63	63	165	165	185	185	182	182
R^2 adj	0.73	0.74	0.41	0.4	0.63	0.63	0.55	0.55	0.66	0.66
Average	48.4		40.7		36.2		60.4		56.2	
Standard deviation	22.9		18.5		17.2		24.5		23.3	

Note: Full questions are given in Inglehart et al. (2004). Items are F102, F104, C001, D019, F118.

In the opinion of many observers, this is the key factor explaining the large difference between the level of democracy in the Muslim and Western countries. Under Islam, all governments are at least partly theocracies. This causes the opposition to be the enemies of God, and thus democracy is difficult.

There is one main problem with this view: Americans deviate from other Westerners in precisely the same way as Muslims. This pattern is consistent with the much higher religiosity of the Americans than of other Westerners. However, both democracy indices have the USA as a full democracy, and the indices that reach back two centuries show that the USA actually was the first country to reach this status.

10.5.2 Gender and Homosexuality: Regressions (3), (4), and (5) of Table 10.10

Three items are used to analyze the cultural factor in the gender values: One considers the attitude to women's labor market participation, and one the perceived need of women to have children. Here, the gap between the West and the Muslim world is large; and the United States does not deviate from other western countries.

In addition, we consider the item F118 about intolerance to homosexuality. This item supplements E036 in table 10.8 about *family life problems*. It appears that the Koran speaks rather clearly in the matter, and in most Muslim countries, homosexual practices are punished. For this item, we find the largest gap between the West and the Muslim world: No less than 75 pp. Once more, the United States deviates to the same side as the Muslims, but here the effect of income easily outweighs the effect of religion.

For all items considered, nearly all have significant income effects. The largest of these is for the intolerance to homosexuality, where also a large negative trend occurs. The reader may wonder—as do the author—why these effects are so strong.

It is well-known that both Muslims and Westerners find the prevailing view at the other side of the cultural divide deeply immoral. Also, the Muslim view is based on rather clear passages in the Koran, so adjustment will not be easy; but due to the large income effect, this is a field where the traditional views of the Muslim are coming under increasing pressures.

10.5.4 Happiness and Life Satisfaction: Table 10.11

Finally, table 10.11 considers two closely related welfare questions. A large literature deals with the family of "happiness questions" of which the "life satisfaction" item at the right hand side in the table is normally preferred (Frey and Stutzer, 2002).

We note that the two items give a rather different picture, even when they have a correlation of 0.65. At closer inspection, it turns out that the deviations are due to a few extreme deviations in poor (mainly African) countries that report high happiness, but little life satisfaction. Also, it gives credibility to the life satisfaction item that here the fixed effects for waves matter little. So we confirm the findings in the literature that life satisfaction is the better welfare measure.

One of the few findings that generalize to both items is that Muslims are less happy. If we calculate the difference between the West and the Muslim world in life satisfaction (using the methods of table 10.9), a rather large gap appears. It confirms the impressions of many observers that Muslims are rather frustrated with the way the world develops, and thus our hypothesis (H4) above.

It is often alleged that religion makes people happy and more satisfied with their lot. Our findings basically reject this idea—religious Americans are not

Table 10.11 Two Subjective Welfare Measures

Variable	*(1)*	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
	Very happy				*High life satisfaction*			
Ln *y*	−1.34		0.67		**7.5**	**7.19**	**10.82**	**10.16**
(*t*-ratio)	(−1.0)		(0.5)		(5.14)	(5.1)	(6.6)	(6.4)
West	1.06		3.16		**9.3**	**10.89**	**9.98**	**10.53**
(*t*-ratio)	(0.4)		(1)		(2.96)	(4)	(2.9)	(3.6)
Muslim	**−6.68**	**−7.74**	**−6.7**	**−9.6**	**−7.43**	**−7.88**	**−7.57**	**−8.76**
(*t*-ratio)	(−2.0)	(−3.0)	(−2.0)	(−3.3)	(−2.0)	(−2.5)	(−2.0)	(−2.7)
Controls for other countries and groups and for religiosity: x1								
Arab	−7.5		−7.37		−3.4		−3.78	
(*t*-ratio)	(−1.4)		(−1.4)		(−0.6)		(−0.6)	
Transition	**−22.7**	**−22.49**	**−18**	**−20.09**	**−17.92**	**−17.31**	**−12.78**	**−13.77**
(*t*-ratio)	(−11.1)	(−13.3)	(−6.3)	(−11.0)	(−7.7)	(−7.9)	(−4.0)	(−5.0)
Orient	−1.09		4.82		−3.23		0.29	
(*t*-ratio)	(−0.4)		(1.2)		(−1.0)		(0.1)	
United States	8.35		3.45		−0.91		−7.3	
(*t*-ratio)	(1.6)		(0.6)		(−0.2)		(−1.2)	
Item x1			**0.124**	**0.095**			**0.167**	**0.134**
(*t*-ratio)			(2.3)	(2.7)			(2.8)	(2.7)
Fixed effects for waves								
Wave 1	**−7.44**	**−6.34**	***−5.01***		1.05		4.63	
(*t*-ratio)	(−2.6)	(−2.4)	(−1.7)		(0.3)		(1.4)	
Wave 2	**−4.63**	**−3.83**	−2.87		3.21	***3.47***	**5.32**	**4.5**
(*t*-ratio)	(−2.2)	(−2.0)	(−1.3)		(1.4)	(1.7)	(2.1)	(2.1)
Wave 3	−1.82		−1.37		−0.95		−0.37	
(*t*-ratio)	(−0.9)		(−0.7)		(−0.4)		(−0.2)	
Constant	**46.71**	**34.26**	18.18	**26.58**	−6.39	−4.98	**−49.04**	**−40.68**
(*t*-ratio)	(4.2)	(28.3)	(1.2)	(11.1)	(−0.5)	(−0.4)	(−2.9)	(−2.6)
N	186	186	174	174	187	187	174	174
R^2 adj	0.49	0.49	0.48	0.48	0.67	0.67	0.69	0.69
Average	24.8		25.3		57.5		57.7	
Standard deviation	14.5		14.5		20.4		20.7	

Note: Full questions are given in Inglehart et al. (2004). Note that some of the effect of x1 is due to multicollinearity. The items are (A008) and (A170).

happier than other Westerners. And irreligious Westerners are happier than the religious Muslims, also when the relation is controlled for income.

However, when we include the Item x1 which has the highest loading to the religiosity factor in table 10.6, it does generate a significantly positive coefficient, though it is fairly small compared to the contrary evidence given.

10.6 Conclusions: Will the Muslim Gap Close?

Above, we have looked at two parts of the Grand Transition of countries from poor to wealthy: The democratic transition and the religious

transition, also known as the secularization. In both processes, the Muslim world forms an exception. It has no democratic transition, and secularization is weak. In the two fields, the gap between the Muslim countries and the rest of the world is large and widening.

The main reason for the widening gap is the adjustment of values and opinions in the rest of the world due to rising income. These adjustments are an important part of economic development. However, while the rest of the world gradually adjusts, the values and opinions of the Muslim world are more rigorous and conservative as they are tied to the Koran and traditions going back to the seventh century. This causes a slower economic development and considerable frustrations as is evident in the significantly lower life satisfaction.

We know that there has been considerable attempt of adjustment in the Muslim world as well. It is easy to point to important political leaders such as Mustafa Kemal Atatürk, Gamal Abdel Nasser, the two Shahs of Iran, etc., who strove hard to modernize their countries (though not toward democracy). However, their efforts are hard to document in the data.

During the past 20–30 years, there has been a large Islamist backlash in many Muslim countries. It demands a return to original Islam and its rigorous moral standards, especially as regards family life. At present, it appears that the backlash has generated a movement in the direction desired. Waves as the present Islamist one are typically transitory, but we have found no clear indications that the backswing has peaked yet.

So in addition to the long-run problem causing a growing gap, there is a medium-run tendency for the gap to grow.

Appendix B

Table 10.12 The World Value Survey: Countries Covered and Classification Used

		W1	*W2*	*W3*	*W4*	*W*	*M*	*A*	*O*	*T*
1	Albania			1	1		1			
2	Algeria				1		1	1		
3	Argentina	1	1	1	1					
4	Armenia			1						1
5	Australia	1		1		1				
6	Austria		1		1	1				
7	Azerbaijan			1			1			
8	Bangladesh			1	1		1			
9	Belarus		1	1	1					1
10	Belgium	1	1		1	1				
11	Bosnia			1	1					1
12	Brazil		1	1						
13	Bulgaria		1	1	1					1
14	Canada	1	1		1	1				
15	Chile		1	1	1					

continued

Table 10.12 continued

		W1	*W2*	*W3*	*W4*	*W*	*M*	*A*	*O*	*T*
16	China		1	1	1				1	
17	Colombia			1						
18	Croatia			1	1					1
19	Czech Re		1	1	1					1
20	Denmark	1	1		1	1				
21	Dom Re			1						
22	Egypt				1		1	1		
23	El Salvador			1						
24	Estonia		1	1	1					1
25	Finland		1	1	1					
26	France	1	1		1					
27	Georgia			1						1
28	Germany	1	1	1	1					
29	Greece				1					
30	Hungary	1	1	1	1					1
31	Iceland	1	1		1	1				
32	India		1	1	1					
33	Indonesia				1		1			
34	Iran				1		1			
35	Iraq				1		1	1		
36	Ireland	1	1		1	1				
37	Israel				1	1				
38	Italy	1	1		1	1				
39	Japan	1	1	1	1				1	
40	Jordan				1		1	1		
41	Korea S	1	1	1	1				1	
42	Kyrgistan				1					
43	Latvia		1	1	1					1
44	Lithuanea		1	1	1					1
45	Luxemburg				1	1				
46	Macedonia			1	1					1
47	Malta	1	1		1	1				
48	Mexico		1	1	1					
49	Moldova			1	1					
50	Morocco				1		1	1		
51	Netherlands	1	1		1	1				
52	New Zealand			1		1				
53	Nigeria		1	1	1					
54	Norway	1	1	1		1				
55	Pakistan			1	1		1			
56	Peru			1	1					
57	Philippines			1	1				1	
58	Poland		1	1	1					1
59	Portugal		1		1	1				
60	Puerto Rico			1	1					
61	Romania		1	1	1					1
62	Russia		1	1	1					1
63	Saudi Arabia				1		1	1		
64	Serbia			1	1					1
65	Singapore				1				1	

Table 10.12 continued

		W1	*W2*	*W3*	*W4*	*W*	*M*	*A*	*O*	*T*
66	Slovakia		1	1	1					1
67	Slovenia		1	1	1					1
68	South Africa		1	1	1					
69	Spain	1	1	1	1	1				
70	Sweden	1	1	1	1	1				
71	Switzerland		1	1		1				
72	Taiwan			1					1	
73	Tanzania				1					
74	Turkey		1	1	1		1			
75	Uganda				1					
76	UK	1	1	1	1	1				
77	Ukraine			1	1					1
78	Ulster	1	1		1	1				
79	Uruguay			1						
80	USA	1	1	1	1	1				
81	Venezuela			1	1					
82	Vietnam				1				1	
83	Zimbabwe				1					
		21	43	54	70	21	13	6	7	19

Note: The 4 waves are W1 (81/82), W2 (89/90), W3 (94/95) and W4 (99/00). The country classifications are W for Western, M for Muslim, A for Arab, The OM group is thus those who are M but not A. O is used for Oriental, which means Far Eastern. T is the transition group.

Notes

I wish to thank the co-authors of the papers that prompted the present one: Peter Sandholt Jensen, Vani Borooah, and Erich Gundlach, as well as Meliha Mestrebasic, who has reestimated the relations discussed in section 10.2 on the Vanhanen democracy index, and many others with whom I have discussed these intriguing matters. This chapter has benefited from the discussions when earlier versions were presented at the Danish Public Choice Meeting (January 2007) and at a seminar at Humboldt University, Berlin (February 2007) and at the UCSIA Workshop on the Political Economy of Theocracy in Antwerp (June 2007). I am grateful to Luisa Giuriato and other participants at the workshop.

1. The *democratic transition* is discussed in Borooah and Paldam (2007), Paldam and Gundlach (2008), and Gundlach and Paldam (2008). It is often termed Lipset's Law after Lipset (1959; 1994). The *religious transition* is discussed in Gundlach and Paldam (2009). It is often termed the *secularization,* but the term is used in several ways. We use the term *transition* to indicate a systematic change caused by development.
2. The values and beliefs differ strongly between countries due to historical processes that started to diverge a long time ago, so the "deliberate choice" is not, of course, made from a clean slate at any point in time.
3. A famous discussion of the dichotomy between the hard and soft sciences is found in Snow (1959; 1963).
4. One may consider the wry comment of Niels Bohr, who argued that theory often started from "deep theory," where "deep theory" is ideas with the property that their negation is also "deep theory."

5. The latest group of rich countries—the Asian Tigers—grew 30–40 times to join the rich countries, but they did so in a period of little less than half a century.
6. This point is expressed in many ways: One is to speak about "wounded civilizations," or to use the concept of "pride." Another argument is—if you have the right beliefs and the unbelievers are doing much better, then perhaps you are not as faithful as you should be. So the solution is to try harder to be a good Muslim.
7. A large literature uses the degree of democracy to explain growth, and hence eventually income levels. It has found small effects which are borderline robust. However, the orders of the finding make them unable to explain more than a small fraction of the correlation observed (see Borooah and Paldam, 2007).
8. The Grand Transition view is contradicted by the Primacy of Institutions view of Acemoglu, Johnson, and Robinson (see AJR 2005 and AJR and Yared 2008). The theories are surveyed in Paldam and Gundlach (2008).
9. When regressions (1) and (2) in table 10.7 are run for the eleven individual items, the effect of income is significantly negative in all cases.
10. The Scandinavian countries and the United States have the same scores on the democracy indices and virtually the same income, while they differ by 37 pp in religiosity. This goes together with unusually high Scandinavian values of honesty (Transparency International corruption index), life satisfaction, and mutual trust (WVS).
11. Christianity is claimed to be a version of Judaism, which was put right by God's son Jesus, who is not recognized by the Jews. Islam is claimed to be the final version of the religion, in the form of the Koran, which was revealed by the Messenger of God, Muhammad, who is not recognized by the Jews and the Christians.
12. This section is based on many, but less systematic, sources including about two-and-a-half years of travel and residency in seventeen Muslim countries. Some of the more general information is based on standard textbooks on Islam in Danish (Østrup, 1914, and Asmussen, 1981), and narratives such as Naipaul (1981).
13. It is an interpretative essay based on a dozen books of scholarly research in the history of the Middle East. The analysis of Lewis has been subjected to a great deal of controversy, though it is difficult to make sense of the subject discussed. The most well-known critique is the one of the late Edward Said, who argued that Lewis underestimates the sinister role of Western imperialism, and that he does not really understand all the nuances of Middle Eastern culture, which can only be understood by an insider. This does not explain the gap, and it is difficult to use the short episode of Western imperialism to explain a gap that was already big and growing long before any Middle Eastern country was included in a Western empire.
14. An independent source confirming that the gap was large in the eighteenth century is the dairies of a Danish expedition 1761–1767 to Egypt and along the cost of the Arabian Peninsula to Yemen, which have been the source of Hansen (1962) and recently republished.
15. His new religion was at first badly received by the rulers of Mecca, and he had to flee (622) to Medina; but after several battles he returned as the ruler of the town (730). At that time, the Muslim army was already the strongest military force in Arabia.

References

References A: The Project of the Author

Borooah, V.K. and M. Paldam. "Why Is the World Short of Democracy? A Cross-country Analysis of Barriers to Representative Government." *European Journal of Political Economy* 23, 2007: 582–604.

Gundlach, E. and M. Paldam. "A Farewell to Critical Junctures: Sorting Out Long-Run Causality of Income and Democracy." Accepted for publication in the *European Journal of Political Economy*, 2008.

———. "The Religious Transition." Forthcoming as a Working Paper, 2009.

Jensen, P.S. and M. Paldam. "The Pattern of Democracy in the 20th Century. A Study of the Polity Index." In *Public Choice and the Challenges of Democracy*, edited by J. Casas and P. Schwartz. Cheltenham, UK, and Northampton, MA: Edward Elgar, 2007, 255–276.

Paldam, M. "The Big Pattern of Democracy. A Study of the Gastil Index." In *Democracy, Freedom and Coercion: A Law and Economics Approach*, edited by A. Marciano and J.-M. Josselin. Cheltenham, UK, and Northampton, MA: Edward Elgar, 2007, 103–129.

Paldam, M. and E. Gundlach. "An Essay on Two Views on Long-Run Growth: The Grand Transition vs. the Primacy of Institutions." *Kyklos* 61, 2008: 65–100.

References B

Acemoglu, D., Johnson, S., and Robinson, J. "Institutions as the Fundamental Cause of Long-Run Growth." In *Handbook of Economic Growth*, edited by P. Aghion and S. Durlauf. Amsterdam: North-Holland, 2005, 385–472.

Acemoglu, D., Johnson, S., Robinson, J., and Yared, P. "Income and Democracy." *American Economic Review* 98, 2008: 808–842.

Asmussen, J.P. *Islam* (In Danish). København: Politikens Forlag, 1981.

Frey, B.S. and A. Stutzer. *Happiness and Economics: How the Economy and Institutions Affect Human Well-being*. Princeton, NJ: Princeton University Press, 2002.

Hansen, T. *Det Lykkelige Arabien. En Dansk Ekspedition 1761–67* (In Danish). København: Gyldendal, 1962.

Huntington, S.P. *The Clash of Civilizations and the Remaking of World Order*. New York: Simon & Schuster, 1996.

Inglehart, R., M. Basáñez, J. Díez-Medrano, L. Halman, and R. Luijks, eds. *Human Beliefs and Values. A Cross-Cultural Sourcebook Based on the 1999–2002 Value Surveys*. Mexico, D.F.: Siglo XXI Editiones, 2004.

Lewis, B. *What Went Wrong? Western Impact and Middle Eastern Response*. London: Weidenfeld & Nicolson, 2002.

Lipset, S.M. "Some Social Requisites of Democracy: Economic Development and Political Legitimacy." *American Political Science Review* 53, 1959: 69–105.

———. "The Social Requisites of Democracy Revisited: 1993 Presidential Address." *American Sociological Review* 59, 1994: 1–22.

Maddison, A. *The World Economy: A Millennial Perspective*. Paris: OECD, 2001.

———. *The World Economy: Historical Statistics*. Paris: OECD, 2003.

Naipaul, V.S. *Among the Believers: An Islamic Journey*. New York: Alfred A. Knopf, 1981.

Snow, C.P. *The Two Cultures and the Scientific Revolution. And a Second Look*. Cambridge: Cambridge University Press, 1963 (1959).

Østrup, J. *Islam. I Kortfattet Fremstilling* (In Danish). København: Gad, 1914.

References C: Net links

Arab league is at: http://www.arableagueonline.org/las/index.jsp (English site under construction)

Author's unpublished papers are at: http://www.martin.paldam.dk

CIA sourcebook is at: https://www.cia.gov/cia/publications/factbook/index.html

Gastil is at: http://www.freedomhouse.org/

Maddison's data set is at: http://www.ggdc.net/maddison/

OPEC is at: http://www.opec.org/home/
OrgaOrganization of the Islamic Conference is at: http://www.oic-oci.org/
PolitPolity is at: http://www.cidcm.umd.edu/inscr/polity
WDI is at: http://devdata.worldbank.org/dataonline/
Wikipedia is at: http://en.wikipedia.org
World Values Survey is available from: http://www.worldvaluessurvey.org

11

The Political Economy of a Semi-industrialized Theocratic State: The Islamic Republic of Iran

Frederic L. Pryor

Iran has been the only long-lasting, semi-industrialized theocratic state in world history.[1] This chapter uses the case of Iran to explore three propositions: in major respects the government of a semi-industrialized theocracy is essentially similar to a secular dictatorship, even though its social goals may differ; the government's institutional and economic policy innovations have been *primarily* guided, not by Islamic economic doctrines, but by the desire of the top religious leaders to maintain the political power of the clergy over the nation; and the most important unique feature is the guiding of political and economic affairs by dual governmental and clerical hierarchies, which are overlapping and have conflicting interests.

An inductive approach to argue these propositions raises a serious methodological problem. Iran represents only a single case and the analysis may be biased by the special historical circumstances in which the country found itself after the revolution in 1979. Therefore, it is necessary to specify carefully the religious, historical, and economic context before beginning the analysis of what happened during the reign of the theocrats. Discussion then turns to the economic institutions introduced after the revolution in 1979 and to the macro- and micro-economic policies that government has pursued. For lack of accurate information, I cannot deal with the important informal elements of the economy that may have had an important impact on economic performance.[2] This chapter ends with some speculations about future industrialized theocracies.

11.1 The Iranian Religious Context

11.1.1 Islam, Theocracy, and the Origins of Clerical Power in Iran

As shown by Martin Paldam (chapter 10) and Pryor (2007b), nations with large share of Muslims in the population manifest a lower level of

democracy (political rights and civil liberties) than other developing nations, holding other causal factors constant. And using data from the World Value Study, Paldam also shows that the populations in predominantly Islamic nations have a higher preference for strong-man or army rule than in other nations, other causal factors held constant. So in predominantly Islamic nations theocracy might find a fertile soil without doctrinal justification. Nevertheless, except in the early years of Islam, theocracies have not existed in most Muslim nations.

During Muhammad's lifetime, the Muslims "became at one a political and religious community, with the Prophet as head of state. As such he governed a place and a people, dispensed justice, collected taxes, commanded armies, waged war, and made peace" (Lewis, 2003, pp. 5–6). Although the next few leaders after his death (the "Four Righteous Caliphs") followed this tradition, thereafter the situation changed. A majority of those following the Sunni tradition have accepted the rule of a succession of secular caliphs or other rulers, particularly because such a system provides order to a society. Those following the Shia tradition, however, have placed more emphasis on divinely inspired justice, sometimes contesting the legitimacy of secular rulers. Both branches of Islam, however, believe that Islamic jurists play an important role in dispensing justice, particularly in regulating and resolving family matters and disputes between families according to *Sharia* principles.

Religious doctrines on the separation of mosque and state rest on certain texts such as Muhammad's statement (Al-Suhrawardy, 1941, Hadith 312: 97) "I am no more than man; when I order you anything respecting religion, receive it, and when I order you anything about the affairs of the world, then am I nothing more than man." On this basis many religious figures supporting the Iranian revolution believed that the clergy should not play the predominant role in the political affairs of Iran.

Nevertheless, since the late nineteenth century, religious figures have played a visible and sometimes critical role in Iranian politics (Mottahedeh, 2000); and the late Ayatollah Rouhollah Khomeini drew upon this tradition to argue for expanding this political role of the clergy (and, incidentally, his own political power). In his writings (e.g., 1985) he emphasized that only those learned in Islamic law and theology are suitable to lead, summarized in the phrase *velayat-e faqih,* which means government by the religious jurisconsult, that is, theocracy.

In Iran, arguments about the desirability of theocracy were fierce immediately after the flight of the Shah in January 1979. Nevertheless, the final draft of the new draft of the constitution, announced in November of that year and approved by a referendum shortly thereafter, enshrined the principle that religious leaders had the final authority in affairs of state.[3] Despite the fact that a variety of groups played critical roles in bringing about the revolution, by 1981–1982 political power was centralized in the hands of the *ulema* (religious-legal scholars), while the other groups participating in the revolution had been politically marginalized.

Bernard Lewis' summary (2003, p. 20) captures the situation: "Classical Islam . . . did not recognize a separate institution, with a hierarchy and laws of its own, to regulate religious matters. Does this mean that Islam is a theocracy? In the sense that God is seen as the supreme sovereign, the answer would have to be yes indeed. In the sense of government by a priesthood, most definitely not. The emergence of a priestly hierarchy and its assumption of ultimate authority in the state is a modern innovation and is a unique contribution of the late Ayatollah Khomeini of Iran to Islamic thought and practice."

Article 110 in the November constitution allots to the Supreme Leader such powers as: delineation of general policies of the Republic; supervision of their proper execution; supreme command of the armed forces; declaration of war and peace; appointments to the Guardian Council, selection of the supreme judicial authorities, the heads of radio and TV stations, and the commanders of the armed forces; resolution of problems which cannot be solved by conventional methods; setting up elections; and, with the Guardian Council, vetting the electoral candidates and, if necessary, dismissing the President of the Republic. Under this and other constitutional rules, it is impossible legally for the clergy to be removed from, or voted out of, political leadership.[4]

11.1.2 Islam and Economics

Islamic nations do not have economic institutions much different from those of other developing nations. Underlying this claim is a study (Pryor, 2007a) of forty-four economic institutions (twelve product market institutions, six labor market institutions, ten enterprise institutions, ten government institutions, and six finance institution) in sixty-two developing nations. The result, holding other possible causal factors constant, is that the percentage of Muslims in the population are significantly related to only one relatively unimportant economic institution relating to the training of factory workers. Difficulties in obtaining credit, an imperfect proxy variable for the prohibitions against interest, were not significantly related to the percentage of Muslims.

Traditional Islamic doctrines about governmental social and economic policymaking are vague. For instance, one tradition tells how Muhammad declined to set price controls during a famine when prices were soaring.[5] In an erudite analysis Maxime Rodinson (1978) presents doctrinal evidence that Islam has a bias toward capitalism and relatively free markets, although others suggest that Islam does allow a minimal interference by the government in the economy.[6] However, Islamic practice in general, and Iranian policies in particular, do not seem to have followed such relatively liberal economic practices. For instance, in comparison with other nations, Islamic countries have promulgated significantly more regulations hindering the ease of doing business, other things equal.[7]

On a very micro-level, Islam's four important and general requirements for specific economic policies are—interest-free banking; special offerings

for charity (*zakāt*); avoidance of speculative activities (*gharar fāhish*); and prohibitions against certain goods and services such as pork, liquor, and prostitution. In addition, a number of other economic prescriptions, which are less far ranging, deal with how to do business, special contributions to the clergy, and so forth.

In practice, none of the four general requirements has had a critical influence on the economic behavior of Muslim economies. For instance, various recent studies (summarized by Pryor, 2007a) show that in the early part of the twenty-first century, Islamic banks played a very minor role in all but a handful of predominantly Muslim nations, of which one is Iran. Moreover, an overwhelming majority of loans issued by these Islamic banks yield a "profit," a "mark-up," or a "fee" in lieu of interest. Savings accounts in such banks often receive an "advance profit," which is akin to an interest rate. Government bonds in Iran and other Muslim nations pay a fixed return and in Iran a *fatwa* (a decree by an individual religious figure) declared such payments to be "not interest."[8] Other examples of discrepancies between dogmas and policies are easily found.[9]

11.1.3 Iranian Leaders and Economic Values

As in many developing countries, the economic preferences and values of the key leader often determine the general course of economic policy. In Iran this was particularly evident in the early years after the revolution in the low priority that Ayatollah Rouhollah Khomeini gave to economic issues affecting the general standard of living.[10]

Khomeini's successor, Ayatollah Ali Khamene'i, was once president of the country and had more experience in worldly affairs, but he has lacked his predecessor's charisma and authority. He has been willing to accept a series of pragmatic economic reforms to moderate some of the irrationalities in the Iranian economy, such as the multiple exchange rate. As a result, economic performance has taken an upturn. At the same time he has gradually but significantly strengthened the political power of the Office of the Supreme Leader and its subsidiary organizations, such as the Supreme National Security Council, thus tightening clerical control of the economy (Gheissari and Nasr, 2005) and he has worked to develop strong ties with a variety of other organizations such as the Revolutionary Guards and the Basij Volunteer Morality Squad. From this developing power base Khamene'i has, more than his predecessor, increasingly intervened in both big and small matters of state in the economic sphere. In July 2006, for instance, he ordered the government to hand over 80 percent of the shares of large state-owned firms to low income people in a type of focused voucher privatization scheme ("Justice Shares"), but implementation of this program has run into difficulties; since a large number of these state-run firms lost money, the values of such shares have been low.

Iran's President has less power in determining overall economic strategy than the Supreme Leader, but more power in less important policies. Mahmoud Ahmadinejad advocated a full-scale populist program in his

electoral campaign for president in 2005, and he has taken a number of steps to implement these ideas. For instance, to subsidize the poor, he has reallocated significant funds from the Oil Stabilization Fund to numerous Islamic groups; and he has also increased subsidies on certain consumption goods. Unfortunately, populist programs often lead to higher prices and inflation. Iranian prices, which had fallen somewhat in the last two years of the Khatami government (but were still in the low double-digits) began to pick up shortly after Ahmadinejad became President. According to the central bank (Bank Markazi, Web site), between February 2006 and 2008, the general price index and food prices increased respectively 16.0 and 16.8 percent annually (in contrast respectively to 13.4 and 10.4 percent in the previous year).

11.2 The Iranian Economic Context

11.2.1 The Economic Legacy of Shah Reza Pahlavi

The Shah's "white revolution" began about 1960, and by the eve of his overthrow, table 11.1 shows that Iran had experienced almost two decades of rapid economic growth. Such development was fueled by a rapid increase of both physical capital and total factor productivity (Mohaverhosseini, 2003) and was financed in major part by increasing exploitation of the country's oil resources. An agrarian and relatively stagnant economy was gradually transformed into a promising developing economy. By the late 1970s, agriculture accounted for only 12 percent of the GDP and about 30 percent of the labor force (Amuzegar, 1993). The rural population amounted to slightly less than half of the total population.

The government played an active role during this development process. Financed in large part by rising oil revenues, government consumption as a share of GDP rose from 8.5 to 22.9 percent from 1960 through 1977 (data from sources cited in table 11.1); and in the 1970s government investment accounted for slightly more than half of total (current prices) investment (Bank Markazi, Web site). Moreover, state intervention into the economy was extensive, both directly by state-owned enterprises and indirectly by its regulations and incentives (Karshenas, 1990, esp. Chapter 7). At the end of the Shah's reign, the state sector in Iran was large and, it was said, accounted for roughly 35 percent of the GDP. It provided a tempting target for the revolutionaries.

Some have questioned whether economic growth under the Shah was viable in the long-term because of the incipient emergence of certain symptoms of the "Dutch disease" (overvalued exchange rate with regard to non–oil production). Regarding his economic policy, some, such as Khomeini (1985, p. 258) were concerned that oil reserves were being exhausted and, moreover, claimed that the "agrarian economy was ruined and that we are reduced to depending on the outside world for all our essential needs" (cited by Moghadam, 1996, p. 191). Many complained about unfairness,

Table 11.1 Economic Performance under the Shah and the Islamic Republic

	Shah's white revolution	*Islamic government*	*Khomeini period*	*Khamene'i period*
Part A: Average annual growth rates (1997/1998 prices)				
	1960–1977	**1980–2003**	**1980–1988**	**1988–2003**
Population	2.9%	2.2%	3.6%	1.6%
GDP	10.2	3.2	0.7	4.2
Non-oil GDP	10.1	3.1	0.0	4.6
Inflation (national income deflator)	3.6	20.6	15.5	21.9
Gross fixed investment	14.6	2.3	−3.4	5.6
Exports of goods and services	10.9	6.1	7.0	3.3
Value added:				
Agricultural, hunting, forestry, fishing	4.7	4.1	5.0	3.5
Manufacturing	12.6	6.3	3.6	6.9
Part B: Per capita levels in 1997/1998 prices, all normalized at 1977 = 100				
	1960	**1977**	**1980**	**1988**	**2003**
GDP	33.6	100.0	68.1	52.1	85.4
Non-oil GDP	32.4	100.0	92.1	63.9	96.4
Gross fixed investment	17.7	100.0	53.9	28.5	63.6
Exports of goods and services	33.5	100.0	17.4	27.6	48.3
Agriculture, hunting, forestry, fishing	80.0	100.0	106.1	112.8	163.9
Manufacturing	20.1	100.0	79.2	80.6	204.8

Note: The population data come from World Bank (2006b); the GDP data for 1960–2000 come from Bank Markazi (2006) and for 2000–2004, from Bank Markazi (annual-b, 2003/2004).

as manifested by the increasing inequality in the income distribution during the 1970s.

Although views about the alleged failures of the Shah's economic policy varied among different groups opposed to the Shah, the binding force between them was a profound antipathy toward the arbitrary political power exercised by the Shah and his regime, and his use of a repressive secret police (SAVAK) to buttress his political position. For perspective, it must be noted that under the subsequent theocratic government, SAVAK morphed into the Ministry of Intelligence and Security, which has operated many of the same prisons and has employed many of the same brutal methods of enforcement. Most importantly, this ministry serves the same functions of repression and strengthening the political power of the state leaders as it did under the Shah.

Table 11.1 covers not just the last seventeen years of the Shah's rule, but also the next quarter century of the rule of the *ulema*[11], which is divided into the periods covering the Supreme Leaderships of Khomeini and Khamene'i. It is clear that economic performance has deteriorated dramatically under

the theocrats: growth was much slower, inflation was much higher, and the level of per capita GDP had not yet recovered its 1977 level by 2003.

11.2.2 Exogenous Shocks to the Economy

By the end of 1979 the theocratic regime was consolidating, but with a per capita GDP that was 32 percent lower than in 1977. Moreover, from 1980 through 1988, the economy experienced a series of negative shocks, none of which having much to do with the direct economic policies of the *ulema* but which had an adverse influence on economic performance. These included:

11.2.2.1 The Iran-Iraq War

Iraq invaded Iran in 1980 and, although the Iranians were able to drive the Iraqis out of most of their territory by 1982, the theocrats spurned several opportunities for a peace agreement around that time, and, thus, were in part responsible for the enormous physical and human costs of the conflict, which dragged on for another six years. Because war mainly took place in the oil-rich province of Khuzestan, vital exports fell and a major portion of the government's revenue was lost.

11.2.2.2 Emigration of Educated Iranians

After the revolution, a number of businesses were seized and nationalized and many of the managers fled, along with a large segment of other educated Iranians. According to Zangeneh (1999), almost 640,000 academics, physicians, artists, writers, entrepreneurs, and managers with their families had left the country. The impact of this loss in human capital was high.

11.2.2.3 Immigration of Several Million Uneducated Refugees

The Soviet occupation of Afghanistan in the 1980s and the subsequent civil war, plus Saddam Hussein's pressure on Shia in Iraq, brought a stream of about 2.4 million refugees into Iran (WHO, 2005, p. 10). Most of these newcomers were poorly educated and untrained for modern factory work. Though many of them could work to replace agricultural workers who left for the cities or were called into the army, assimilation of so large a group of new immigrants posed obvious problems.

11.2.2.4 Decline in Foreign Investment

The uncertainties generated by the new regime, combined with the regime's general fear of foreign domination and its restrictive laws on foreign investment, led to a fall in foreign capital. Some might add to this list the impact of the U.S. economic sanctions on Iran, in part as a result of the hostage crisis. Two detailed studies (Hossein et al., 2001 and Torbat, 2005) estimate that the overall impact on Iran was, however, relatively minor (1–2 percent of the GDP in 2000) and that the real loss came primarily from the financial impact of U.S. actions, for instance, monetary transfers were made more

difficult, loans from international organizations markedly decreased, and Iranian assets in the United States were frozen for several years. Only many years after the revolution did small amounts of foreign capital, mainly in the form of joint ventures, begin to return to Iran.

11.3 Institutional Changes in the Iranian Economy since the Revolution

The institutional changes introduced by the clerical government provide the strongest evidence for the proposition that Iran's theocratic government has ruled in a similar manner as secular dictatorships and that its policies have been guided by the desire to maintain power, not Islamic doctrines.

11.3.1 Parallel Clerical/Governmental Hierarchies

Because Khomeini strongly distrusted Iran's governmental hierarchy and also the leading personnel of the private enterprises, his creation of organizations parallel to those of the secular authorities was an important means for maintaining clerical power. These new organizations, which carried out the same functions as their parallels in the government sector, were dominated by religious leaders beholden to the Supreme Leader and not to the secular government.

For instance, under Khomeini's leadership Iran soon had two armies (the Revolutionary Guards and the official army), two police forces (the Revolutionary Committee and the official police), two ministries of agriculture (the Ministry of Reconstruction and the secular Ministry of Agriculture), two ministries of housing (the Housing Foundation of the Islamic Revolution and the official Ministry of Housing and Urban Development), several management organizations for the universities (the Council for Cultural Revolution and usual education hierarchy), a legislature (*majles*) constrained by the unelected clerical Guardian Council, and two judicial systems (official and religious). In the economy, there have been private enterprises, state-owned enterprises, and the large enterprises run by foundations (singular, *bonyad;* plural, *bonyadha*; these are sometimes mistakenly called "parastatal" organizations), which are mostly (but not entirely) religious and are discussed in greater detail below. In addition, there are various revolutionary neighborhood committees and other "self-propelling organizations," whose actions have been generally in accord with the ideas of the *ulema* and which have taken over various social and political functions from the government, especially in the early years following the revolution. Governmental agencies must also contend with interference in their policy making and other activities by the Expediency Council (see note 4). Most of these parallel structures have lasted up to the present day and are a key distinguishing feature of the system.

11.3.2 Nationalization

Article 44 in the new constitution foresaw the state having a dominant role in the economy. This meant both taking over the existing state enterprises and nationalizing many private enterprises as well. Such nationalization without compensation usually involved straightforward political motives because, in many cases, the expropriated enterprises were either owned by the Shah, his family or his entourage, or those believed to be associated in some way with the Shah. In other cases they were factories whose managers had fled the country. According to Rashidi (1994, p. 54) by the early 1990s, "the public sector, including the government, public organizations [FP: these included the foundations] and institutions considered to be part of the government, directly or indirectly control some 70 percent of the GDP and spend 75–80 percent of foreign exchange earned by the country…the 'government' employed about half of the labor force in cities, and 31.8 percent of the total manpower of the country." This included a major portion of the large-scale modern industry and the entire banking and insurance system.

The Second Development Plan (1995–1999) spoke of transferring part of the state-owned enterprises back to the population, and this policy was explicitly mentioned in the next two five-year development plans as well. Some nationalized companies—or at least shares in these companies—have actually been sold off. Although this privatization process seems to be accelerating, at the time of writing it is still limited. Some of these denationalized enterprises went to the foundations (who did not seem to have been touched by the privatization) and not to the population (Maloney, 2000: 166).

11.3.3 The Foundations (Bonyadha)

The *bonyadha* have been a cornerstone of the parallel economic institutions and were created or expanded by taking over the bulk of the nationalized assets after the revolution. Most of these foundations are religious and are modernized versions of the traditional Islamic foundation, the *waqf*. They differ, however, in three major respects: they are larger and operate in a wider range of activities; they have much more flexibility in their activities; and the ultimate authority over these foundations is usually the Supreme Leader or his designates, although a few foundations work closely with various local clerical groups or, in particular cases, with ministries. These entities, tax-free until recently, have been the largest recipients of government subsidies and Central Bank credits; they operate without public scrutiny; and they publish few detailed reports of their activities.

One of the richest *bonyadha* is the Foundation for the Oppressed and Self-Sacrificers (*Bonyad-e Mostazafan va Janbazan*)/ It reportedly controls $12 billion in assets from 800 to 1500 enterprises in agriculture, trade, manufacturing, housing, and construction, transportation, and tourism, and which employ 400,000–700,000 workers (Maloney, 2000). Other

newly established foundations ended up owning hundreds of private companies, farms, hotels, and theaters. These *bonyadha* appear to account for somewhere between 20 and 30 percent of the GDP of Iran[12] and their holdings dwarf those held by the government (Saeidi, 2004).

Given their secrecy, it is not surprising that assessing their impact is difficult. Saeidi (2004) argues that they "reinforce the financial authority of religious leaders without accountability" and represent "a major source of distortion and obfuscation in resource allocation, a major financial drag on the economy, and one of the main obstacles to rational reform." Given their important role in maintaining clerical power, the Central Bank has not been easily able to deny them loans. Since their budget constraint is soft, many have alleged that their refusal to repay certain loans is one of the major causes for the excessive printing of money, the end result being an average annual increase in the GDP deflator of 20.6 percent (table 11.1). Some of the *bonyadha* have worked closely with the Iranian security apparatus and have also played a certain political role, such as offering a reward to kill Salman Rushdie or smuggling weapons to Hamas and Hezbollah.[13]

11.3.4 Problems of Coordination of the Parallel Hierarchies

The overlapping authorities between the two parallel governmental/economic hierarchies, of course, has given rise to an enormous number of jurisdictional conflicts which could only be decided by higher religious authorities closely associated with the top leadership. This has meant that the preferences of a small number of religious authorities has had a magnified impact on key economic policy issues, without these clergy having to participate in the day-to-day affairs of the particular organizations.

Some striking examples of these conflicts arising from parallel hierarchies are readily at hand. For instance, in its first decade the parliament of the new republic had 48 percent of its legislation vetoed as un-Islamic by the conservative Guardian Council (Entessar, 1992). At a lower administrative level Shakoori (2001: 138) provides evidence that the competition between state and religious organizations administering certain aspects of the land reform led to confusion and inefficiencies, with the result that little was accomplished.[14] According to Zangeneh and Salam (1992, p. 209), "…a fundamental problem [facing] the Islamic regime in Iran from the beginning…in almost every aspect of the country, be it political, economic, legal, etc.…has been a lack of real economic prioritization beyond rhetoric. When a plan or program is pronounced by the government, it does not necessarily mean it will be adhered to by different levels of the bureaucracy. It seems as if the government's orders and policies are suggestions to be discussed and decided by individuals, rather than orders to be carried out."

Another aspect of the coordination problem appears in the sphere of social services, where *bonyadha* also operate. According to Esfahani (2005) these foundations provide various services to almost 15 percent of the total population and receive about 30 percent of the government's budget for

health care, social insurance, and welfare. This overlap has some beneficial effects. For instance, Esfahani comments on this competition between agencies, arguing that the Imam Khomeini's Emdad Committee is more effective in the area of welfare and poverty reduction, while the competing government bureau, the State Welfare Organization performs better at rendering rehabilitation services. Nevertheless, one negative aspect is the politicization of welfare services. For instance, as Messkoub (2005, p. 217) points out: "Since the revolution access to some social welfare payments has become an important instrument of social control."

11.3.5 A Broader View

The importance of Iran's parallel government/economic hierarchy makes its economic system unique. Labeling it as "collectivistic" is misleading, because the *bonyadha* are controlled, not by the government or by self-governing worker councils, but by an unelected clerical establishment responsible only to itself. Although Iran has a five-year plan, most goals are stated only in general terms and it cannot be considered to have a "planned economy."

The parallel government/economic hierarchies and the major economic and political roles of the *bonyadha* have, as far as I can determine, no doctrinal justification. Rather, these organizations have been an important means by which the *ulema* have maintained their decision-making power, not just over the state bureaucrats but the entire economy. The close relationships between the *ulema* and the *bonyadha* might lead some to consider Iran as an example of "crony state capitalism." For perspective, other dictatorships also employ special economic entities beholden only to the ruling elite, for example, certain factories in Cuba and Pakistan owned by the army; or the factories in Taiwan held by the Kuomintang. However, Iran has followed the logic of this type of power-maintenance very much further.

11.4 Macro-Economic Policies

Traditional Islamic doctrines seem silent on macro-economic policymaking. The post-revolutionary government gutted the Shah's macro-economic strategy and tried a much different approach, which has had four major aspects.

11.4.1 Priority of Private Consumption over Public Consumption

As shown in table 11.2, by 2003 per capita GDP was still 13 percent below the 1977 level, but per capita personal consumption was up 18 percent. In absolute terms, this increase in personal consumption was in large measure matched by a fall of public consumption. The model of Wintrobe and Padovano (chapter 4) predicts a fall in public expenditures when a theocracy takes power. In this case, the major causes were a decline in defense expenditures and administrative expenditures of the ministries (Bank Markazi, 2006).

Table 11.2 Expenditure Data and Welfare Indicators

Indicator Name	*1960*	*1977*	*1980*	*1988*	*2003*
Part A: Per capita national account data, normalized at 1977 = 100					
Gross domestic product	33.6	100.0	68.1	52.1	85.4
Consumption:	34.2	100.0	85.9	65.0	90.0
Households	47.5	100.0	91.1	79.1	118.4
General government	12.5	100.0	77.2	41.3	42.9
Gross capital formation	14.5	100.0	55.0	28.6	57.4
Fixed capital formation	17.7	100.0	53.9	28.5	63.6
Changes in inventories	0.8	100.0	59.7	28.8	30.4
Exports of goods and services	33.5	100.0	17.4	27.6	48.3
Imports of goods and services	11.3	100.0	48.5	22.4	33.9
Part B: Welfare Indicators					
Population in urban areas	[i]33.9%	[i]47.7%	[i]49.9%	[i]55.6%	[i]66.8%
Unemployment rate	[i]4.4%	9.8%	12.8%	14.9%	16.6% (2001)
U.N.'s human development index	n.a.	[i]56.9	57.0	64.4	73.4
Infant deaths per 1000 births	[i]167.1	[i]108.3	[i]90.5	67.8	44.2
Life expectancy at birth	[i]49.5	[i]56.2	58.9	61.4	69.4
Gross enroll. 1° and 2° levels	[i]29%	69%	68%	77%	84%
Illiteracy rate, 15–24 population	n.a.	n.a.	25.6	[i]16.9	5.9 (2000)

Note: n.a. = not available; superscript i = derived by interpolation or extrapolation.

Sources: For sources of part A, see table 11.1. For part B, data on urbanization come from Zangeneh (2004); on unemployment rate, from Bank Markazi (annual-a, various years) and ILO (annual, various years); on human development index, from United Nations, annual (2005, p. 16); on infant mortality and life expectancy, from United Nations (annual, various years) and U.S. Bureau of the Census (2006); on gross enrollment rates in primary and secondary schools, from UNESCO (annual, various years) and (2006); and on illiteracy of population aged 15 through 24, from United Nations (annual, 1999). Data from the same UN source in earlier years gives illiteracy in 1960 and 1977 as [i]75.3 and [i]42.0 respectively, but this series does not seem comparable to the one presented above.

Although the improvement in per capita personal consumption, albeit slight over a quarter century period, has undoubtedly helped to stabilize the internal political situation, large segments of the Iranian population were still sufficiently dissatisfied with their incomes to elect Mahmoud Ahmadinejad as president who, as noted above, ran on a program promising much greater governmental efforts to improve the prosperity of low-income citizens.

11.4.2 Lower Priority Given to Foreign Trade

Most of the parties making the revolution criticized Iran's dependence on the world market and its reliance on oil exports. As noted above, to preserve the integrity of their religion, the leading clerics wished to reduce contact with the secular West and economic self-sufficiency was even enshrined in Article 3, paragraph 13, of the constitution.

Petroleum exports, which accounted for about 90 percent of export receipts, fell dramatically after the revolution; crude petroleum exports never reached more than one-half the 1977 level in the 1980s and in some years they were less than a quarter.[15] Fortunately for Iran, the rise in the international price of oil acted in part to offset loss of revenues from lower production. Nevertheless, by 2003 per capita export revenues had not yet reached the 1977 level, measured in constant dollars, current dollars, or constant rials. Despite the worries of the various instigators of the revolution that the country was too dependent on oil, oil exports in the period from 1988 through 2006 accounted for roughly 85 percent of all exports. Investment in oil production lagged and, according to one observer (Reed, 2006) "without substantial upgrades in facilities, production at Iran's core fields . . . could go into precipitous decline."

Oil sales have been the most important source of government revenues and have provided the government with a cushion to pursue many of its favored policies. A decline in oil sales would have a seriously adverse impact, not just on the economy but also on the stability of the government.

The high volume of foreign oil sales has also induced the government for "political reasons" to heavily subsidize domestic gasoline sales and, in recent years, such domestic consumption has realized an average annual growth of more than 10 percent. Domestic refining capacity has not met domestic demand, in part because it does not seem profitable (Stern, 2007), so Iran must now import about 40 percent of its domestic needs for gasoline. This share seems likely to increase in the future unless investment in the refining industry greatly increases. The policy steps in May and June 2007 to raise the price of gasoline 6 U.S. cents a gallon and to ration its distribution led to severe rioting.

If the country were to become less dependent on oil exports, it would also have to increase domestic production of previously imported manufactured goods. Industrial production, as shown in table 11.1, increased at a dramatic rate under the Shah. It fell in an equally dramatic fashion thereafter because of the economic disorder and only began to achieve a respectable rate (7.3 percent annually) between 1988 and 2004. Although per capita manufacturing was considerably higher in 2003 than in 1977, such an increase covered only about one-fifth of the decline in imports since 1977. In brief, Iran has not invested sufficiently in manufacturing to carry out successfully an import substitution policy.

11.4.3 Lower Priority to Investment and Its Effectiveness

Even though the ratio of investment to the GDP during the 1980–2003 period averaged (in current prices) 26 percent (Bank Markazi, 2006), table 11.2 shows that on a per capita basis gross capital expenditures were much lower in the early years of the twenty-first century than in the last few years of the Shah's rule. Indeed, in constant rials, total such investment expenditures did not exceed the level achieved in the mid-1970s until 2000.

This can be attributed to several factors:

1. In the 1970s, gross fixed capital investments were abnormally high, averaging (in current prices) about 33 percent of the GDP (Bank Markazi, 2006).
2. Export receipts, which were a major source of finance for government investment, fell, and, as a result, government investment (this did not include the *bonyadha*) plunged—even faster than private investment (Behdad, 2000, pp. 106–107). Nevertheless, in the 1990s, oil revenues still accounted for slightly more than half of government revenues (Hakimian and Karshenas, 2000, p. 46) and were a key source of government finance, so their decline meant that the government had to cut its expenditures, both current and capital.
3. Foreign investment fell, not just because of the passage of a number of laws making it more difficult for foreigners to invest, but also because the future course of Iran's economy was so uncertain, particularly in the years following the revolution. Some of these legal measures against foreign investment were reversed after 1988 and free-trade zones were created, but they have elicited relatively little foreign response, at least up to the end of the century (Dadkhan, 2003). The Ahmadinejad government has also revoked or forced renegotiation of a number of investment agreements with foreign firms, which has increased the risk to these foreign partners (Stern, 2007). Although domestic private investment initially fell, as a share of GDP it has remained at roughly the same percentage as in the period from 1960 to 1977.
4. Dynamic efficiency (the efficiency with which investment is used) fell dramatically, as measured by the incremental capital/output ratio, until after the death of Khomeini; thereafter it gradually began to recover almost to previous levels.[16]

11.4.4 Unconstrained Increase in the Money Supply

From 1980 through 2005 the money supply increased at an annual average rate of 20 percent (IMF, various years), roughly the same annual increase as the GDP deflator (table 11.1) and the consumer price index (IMF, various years). This has been primarily due (a) to the large government deficit in most years and (b) to the nonpayment of loans by the *bonyadha*. Contributing to the problem has been a low interest rate which (for the few years such data are available from the IMF) has been lower or around the same rate as inflation. Monetary policy and the low interest rate were a major focus of a scathing attack on the economic policies of Ahmadinejad by fifty-seven university economists in Iran in June 2007 (BBC, 2007).

11.4.5 A Broader View

Iran was certainly not the only developing country in the world to have a lower per capita GDP in the early years of the twenty-first century than it did a quarter century before. Between 1977 and 2003, for instance, roughly one-quarter of the nations of the world, including a few oil-rich nations, experienced the same fate.[17] Iran was also not the only developing country in the world to experience a long-term inflation.

In considerable measure the personnel policy of Iranian leaders underlay these results, a policy giving greater emphasis to religious qualifications, rather than technical expertise, has had a high priority. The top Ayatollahs have continually emphasized "the appointment of pious officials to the administrative posts" (cited by Henderson, 2005), and this has led to administratively inexperienced *ulema* occupying leading economic positions. This has been the Iranian equivalent to the "red-not-expert" policy found in some Communist nations during their early years of power consolidation. The fifty-seven Iranian economists attacking Ahmadinejad pointed to governmental incompetence as the major cause of Iran's poor macro-economic performance.

Nevertheless, the reallocation of the GDP away from government expenditures and investment toward personal consumption was an important policy to buttress the political strength of the theocrats. The only influence of Islamic ideology, which says little about macro-economic policies, was the relative shift away from exports and the placement of pious men, rather than competent but secular technocrats, into those positions making macro-economic policy.

11.5 Important Micro-economic Policies

11.5.1 General Intervention into the Economy

During the Iran-Iraq war the government introduced food rationing; it also tried to control prices by subsidizing certain necessary products to ease the plight of the poor, and by regulating economic transactions in other ways. According to Amuzegar (1993, p. 19), the underlying motive was proclaimed: "Private business activity has to be healthy, humane, self-sacrificing, and in conformity with the Islamic criterion of social justice. In a word, it has to be *responsible*."

The goals of many microeconomic measures have often been subverted by the administrative chaos brought about by the dual political/economic hierarchies. Other microeconomic problems have arisen because of the rapid shifts in regulation and because many of these measures were ill-conceived. Several aspects of these problems deserve brief consideration.

One important implication of the administrative chaos of the dual government/economic hierarchy has been frequent changes in policy as different groups jockeyed for influence. This is shown in Afghah's (2000) survey of Iranian managers to learn what they considered their greatest problems. These industrialists claimed that their biggest obstacle to production was the frequent revision of laws and regulations. On average, the 138 producers answering this question rated the importance of this problem as 4.1 (where 4 = quite important and 5 = very important).

The rapid change of laws and confusion about them has, of course, led to considerable corruption as well. Transparency International (2004) reports that on a scale of 0 (highly corrupt) to 10 (highly clean), Iran scored 2.9.

For perspective, eighty-four nations scored less corrupt than Iran, while fifty-seven nations scored more corrupt. Such behavior seems hardly consistent with the religious ideals proclaimed by the government.

Of the important but ill-conceived micro-economic policies, two deserve brief mention, the exchange rate and labor law. During the war with Iraq the government introduced a multiple exchange rate, allowing favored institutions to import at the official low rate while others paid much higher rates. The black market premium for foreign exchange rose from 200–300 percent in the early 1980s to 500–600 percent by the mid-1980s to 2000 percent by 1989 (Pesaran, 2000, p. 81).[18] It was only in 2002 that the exchange rates were unified so that the black market premium for foreign exchange was small and many economic distortions could begin to be reduced.

The labor law introduced after the revolution has made it very difficult to fire unsatisfactory workers, and also seems ill-conceived. In Afghah's (2000) survey, the 139 managers answering a question about the importance of the difficulties arising from the labor law gave it an average rating of 3.8, where 3 = important and 4 = quite important. One respondent to the survey wrote, "Because we have not the right to discharge a delinquent worker, we prefer not to employ more workers." Similar sentiments were voiced by others.

After the war with Iraq economic planning, which had originally been instituted by the Shah, was begun again in earnest. The first two five-year-plans (for the period 1989–2000) foresaw a gradual liberalization of the economy, but many of the key goals were unaccomplished by the end of the period. For instance, the first attempt to unify the exchange rate failed completely and the country ended up with $30 billion more in foreign debt. An Iranian survey of 174 government officials after the end of the five-year period revealed that, on average, they felt these administrative reforms had been successfully implemented somewhere between "to a slight extent" and "to a moderate degree" (Henderson, 2005).

By the early years of the twenty-first century some state regulations have been dismantled (discussed in detail by Behdad, 2000, pp. 112–131). By 2005, however, the business climate was still adverse and the World Bank's (2006a) index for ease of doing business shows Iran comparing unfavorably to the average for Middle East and North African countries. Although some state enterprises have been denationalized, the *bonyadha* have been largely untouched and retain their commanding position, including the maintenance of most of their special privileges, such as special access to credit. An important step in economic policy was taken when the exchange rate was finally unified in 2002. Other liberalization steps, such as reducing subsidies, are difficult to assess because the published subsidy data are inconsistent and incomplete.[19]

In brief, the alleged turn from populism to liberalism that some have claimed appears quite incomplete. Two decades after the war with Iraq, the economy is still highly regulated. This state of affairs seems hardly

consistent with the Islamic doctrines discussed above that urge caution in interfering with market forces.

11.5.2 Population Policies

To comply with *Sharia* rules, the legal age of marriage was reduced (for women, from 18 to 9) and polygamy increased (Ladier-Fouladi, 1997; Amuzegar, 1993, p. 67). Although some religious leaders discouraged contraception, Khomeini issued a *fatwa* in 1980 permitting its use. Nevertheless, because of the deaths in the war with Iraq, births were encouraged, and in the early 1980s the reported rates for both marriage and births increased (partly due to the recording of early marriages which had previously escaped official notice). The activities of family planning centers were also deliberately cut back in these early years (Akhajanian and Mehryar, 1999). As a result, the population growth rate soared in the early and mid 1980s (see table 11.1), which, in turn, gave rise to unemployment problems in the early years of the twenty-first century. By 1986, however, the fertility rate had begun to turn down, abetted a few years later by a reversal of previous policies and a renewed emphasis on family planning programs, administered through 15,000 rural and urban centers. In the fifteen years following 1988, the population increase fell considerably and by 2000 was lower than that needed to maintain a constant population. This was a triumph of economic pragmatism over ideology.

11.5.3 Priority to the Agricultural Sector

The Shah's government had paid considerable attention to agriculture and had carried out an important, albeit incomplete, land reform. This reform included a transfer of land owned by the state, the Shah, and certain large private landowners to cultivators, which reduced the importance of sharecropping and had a particularly favorable impact on medium-size peasant farms and agrobusinesses (Moghadam, 1996), although it did little to help the hired agricultural workers. Nevertheless, in terms of land redistribution to smallholders and tenants, the Shah's land reform must be considered a success by international standards (Majd, 1992). A number of other steps, such as credits and extension services, were inadequate (especially to the needs of smaller farms) or poorly administered. Nevertheless, both production and productivity in agriculture grew rapidly.

Initially the theocratic government exhibited ambivalence about land reform, but finally it intensified the effort, albeit with different policies focusing more on small-scale agriculture. These included somewhat more land redistribution to peasants (although this, according to Shakoori [2001, p. 70] affected only 6 percent of the rural households), more government-supplied technical services to the agricultural sector, somewhat more (in absolute amounts) government investment and loans to agriculture, and introduction of various measures that have raised the rural standard of living. The rapid increase in agricultural production has been trumpeted as an

outstanding success of the Islamic regime, although it must be noted that agricultural production during the time of the Shah between 1960 and 1977 had increased at a somewhat faster annual rate, as shown in table 11.1.

In rural villages where reform programs of the Islamic state were more completely implemented, Shakoori (2001, Chapter 5) presents data showing that they now have greater inequalities of income and of well-being than those where such implementation was less extensive. He concludes that although the programs were targeted at the poor, it was the richer peasants who gained most from the government's efforts.

11.5.4 Social Programs

11.5.4.1 Income Inequality and Poverty

In the last two decades of the Shah's reign, the inequality of income was roughly in line with that of other developing nations. Nevertheless, as noted above, inequality had been increasing since 1960 and, more particularly, urban incomes were rising at a considerably faster rate than rural incomes. After the revolution the government and various clerics stressed the need to reverse these trends.

Evaluating inequality of income or consumption in post-revolutionary Iran is difficult, because reported estimates differ considerably.[20] The most recent and extensive estimates are by Salehi-Isfahani (2006) and indicate that absolute poverty has declined in both the urban and, especially, the rural population. For the 1972–2003 period Salehi-Isfahani also shows that income inequality as a whole, as measured by the Gini coefficient, did not greatly change. His data for inequality of expenditures for both urban and rural households, also measured by Gini coefficients, show only a slight downward trend between 1983 and 2004.

The gap between urban and rural households in per capita expenditures closed considerably in the 1980s and, since then, has widened slightly. Similar generalizations can be made for household earnings. Nevertheless, Salahi-Isfahani (2006) also emphasizes that the rural-urban gap in basic services has narrowed. For instance, access to electricity has risen from 16.2 percent of rural households in 1977 to 98.3 percent in 2004; similarly, access to piped water rose from 11.7 to 89.0 percent.

11.5.4.2 Urbanization

As shown in table 11.2, urbanization has continued apace, although at a somewhat slower rate than during the 1960–1977 period. This population shift toward the cities has taken place even though the theocratic government has taken pains to increase rural incomes in an effort to keep people on the land.

One result of this movement is a growing urban housing shortage, which the government has not effectively addressed. More specifically, as a percent of GDP, government expenditures on housing have increased but still remain minuscule.[21] It is possible that housing expenditures by the *bonyadha* may have made up for some of the low governmental funding for housing.

11.5.4.3 Unemployment

Related to rising urbanization and the lower priority given to labor intensive investment has been high unemployment, especially among the youth born during the baby boom of the first half of the 1980s. However, a high unemployment rate has been a constant feature of the Iranian economy since the late 1960s, and Valadkhani (2003) notes that in no year since 1968 has the official rate dropped below 10 percent, and some argue that the official rate considerably understates actual unemployment rates. He presents econometric evidence that it has been exacerbated by economic disequilibrium, as measured by black market activity. He also argues that given the inefficiencies of the *bonyadha*, the unemployment problem will increase unless private investment is given greater encouragement, which would, in turn, require changes to the Iranian constitution. This assessment seems unduly pessimistic since, in 2004/2005, the unemployment rate dropped a few percentage points to 12.2 percent (IMF, 2006, p. 23) without such changes.

11.5.4.4 Health and Education

One of the social goals of almost all parties to the revolution was improvement of the health and education of Iranians, especially the poor. The theocratic government has remained true to its promise to promote health and education, and their achievements in this respect are impressive.

The United Nations' human development index (HDI) reveals a noteworthy 1.1 percent average annual increase between 1980 and 2003 in Iran, and this is reflected in individual health and education indicators. Although Iran had one of the fastest-growing HDI's in a sample of twenty countries with roughly similar per capita GDPs, by 2003 its overall score still ranked the fifth lowest in this group. In brief, Iran has been engaged in a catch-up operation. It is also noteworthy that for most of the indicators discussed below, Iran progressed faster between 1980 and 2003 than during the last two decades of the previous government.

Despite the emigration of many physicians after the revolution, the theocratic government has a very creditable health record. By 2003 the infant mortality rate was 44.2 per thousand, which, while relatively high in comparison with other countries of roughly the same per capita GDP,[22] represents considerable progress. Moreover, the infant death rate was reduced somewhat faster in the two decades after the revolution than in the two decades before. In 2003 life expectancy in Iran was roughly the same as in other countries with a comparable income and, since the revolution, had risen faster than in most of these other comparable nations. As a percentage of GDP, government expenditures for health increased from an average of 2.5 percent in the 1970s to 4.7 in the 1990s (Messkoub, 2005).

Education has also shown considerable advance since the revolution, with government expenditures as a share of GDP rising from 3.9 percent in the 1970s to 4.7 percent in the 1990s. (Messkoub, 2005). Although he argues that real per capita governmental expenditures for education have fallen since the

revolution, table 11.2 shows that enrollment rates in primary and secondary schools have continued to rise at a considerable rate. As a result, the percentage of those between fifteen and twenty-four who are illiterate has fallen dramatically, and, moreover, at a considerably faster rate than during the time of the Shah. University enrollment has soared since the revolution, rising at an average annual rate well over 10 percent, which is considerably higher than in the two decades preceding the revolution.[23] Most notably, the gap between educational achievement of men and women at all levels has gradually narrowed, so that the country is moving away from the norm prevailing in other predominantly Muslim nations of less education for women.

11.5.4.5 Virtue

The ruling clerics took steps to increase "virtue." Women have been forced to dress in a fashion deemed more modest, behavior between unmarried men and women has been more regulated, and women have been removed from jobs considered unsuitable to their sex, for example, judicial posts. The government has also reduced the frequency of behavior considered immoral, for instance, unmarried men and women spending time together alone, drinking of alcoholic beverages, smoking or taking of drugs, and listening to music or dancing.[24] The Iranian dress and behavior regulations have not, as some Westerners might assume, led to great unhappiness, at least according to international surveys of happiness collected in 2000 and standardized by Veenhoven's (2006).

11.5.5 A Broader View

Most of the micro-economic policies of the Iranian government seem more a response to particular economic problems than as either a means to increase the government's power or as a direct consequence of Islamic doctrines. The government's general intervention in the economy has represented more an exercise in power, rather than attempt to gain or consolidate power; and, as I argued, seem to run counter to the traditional concerns about such interference in market forces. The government's population policy, which originally seemed to be derived from traditional doctrines, was soon reversed and a more pragmatic view about such policy matters became dominant. Its stress on agriculture continued the emphasis of the previous government, albeit using different policy tools.

Like many governments—dictatorial and democratic—the Iranian theocrats have used social policies to increase their support from the population. Poverty reduction was a humanitarian intervention that undoubtedly increased loyalty to the regime. The dramatic improvement of health indicators showed that popular needs were being seriously addressed, which also served the same purpose. And underlying the increase in education was certainly the attempt to inculcate loyalty to the regime of the young population. Since all of these social measures can also, of course, be justified by religious injunctions, it is difficult to determine the relative importance of the power-enhancement and the religious motives.

11.6 An Overall Assessment of Iran as a Theocracy

A usual type of dictatorship and a theocracy differ in certain obvious ways. The political leaders are recruited from different segments of the population; some of the means on which they rely to generate loyalty (local branches of political parties versus local churches) are different; and certain non-political goals vary, such as the type of "new man" they wish to create.

But both types of government are similar in that their political leaders wish to maintain their power without allowing their sovereignty to be seriously challenged by the citizens, and they repress popular resentment by such means as secret police, judicial coercion, and control of the media. The fact that Iran has elections (in which all candidates are extensively vetted by the ruling elite) and allows certain expressions of discontent of policies not central to its position of power (such as the critique of Iranian university economists of economic policies of their country) should not blind us to the major areas in which popular sovereignty is suppressed so that it is impossible for the citizens legally to overthrow the clerical rule.

In a theocracy the ultimate ends of government are derived from scriptural or other authoritative sources. But these ends are usually stated in such general terms that their applicability to specific policy options is a matter of interpretation, and differing interpretations become a major source of political conflict. The pronatalist policies pursued in the first few years is an example of vague religious considerations taking precedence over practical problems, although in this case the policy was reversed relatively quickly, probably because its immediate consequences became apparent in a few years.

Above all, the clerical government justly feared the potential resistance of the existing governmental bureaucracy. By setting up parallel institutions and by assigning top management duties to the various *bonyadha*, whose leaders were either members or allies of the *ulema*, they could maintain crucial control over the economy, albeit at the price of inefficiency and wastage. The fact that the deficits of the *bonyadha* had to be financed by inflationary means took second place to the fact that the *ulema* could rely on the *bonyadha*, for not only economic but also, as noted above, certain political services which the government would find it difficult to carry out openly. In brief, the *ulema*'s fear of subversion by its secular enemies and their means to suppress it has taken precedence over economic performance.

Leaving aside the regime's attempt to instill virtue in its citizens, I see little in the economy, the economic institutions, and most of the economic policies that are specifically Islamic, or guided by Islamic doctrines. Certainly the institutions in the parallel government/economy are not specified in Islamic doctrine, many of the doctrines regarding particular types of economic activity such as the avoidance of interest or speculative activities have been circumvented, and particular Islamic doctrines about the role of

government, such as taxation and government intervention into the economy, have not been followed. The fact that the Iranian religious leadership has also felt it necessary to insulate many of its economic activities from public oversight by means of the *bonyadha* suggests only that these leaders have little faith in their subjects.

11.7 Iran as a Model of Future Theocracies in Industrial or Industrializing Nations?

It is possible that Iran may not be the last theocratic government in an industrialized or semi-industrialized nation. Some might object to this assertion and point to the fashionable argument that modernization is inseparable from secularization and, therefore, we should not expect any new theocracies. Some, such as Casanova (2006), have cogently argued that currently accepted theory of inevitable secularization needs a thorough-going reformulation.

Some might argue that any future theocratic government in an industrialized nation would face serious political resistance requiring strong police measures to control. This is because the populations of modern nation states are becoming increasingly heterogeneous, due in part to the rapid influx of immigrants in recent years, in part to rising prosperity which has allowed citizens to develop different styles of life. Many of the subgroups in a heterogeneous state might violently oppose the religious ideas of the theocrats; other groups, formerly accustomed to democratic elections, might violently resist the idea of an unelected clergy holding the reins of power. But it must be noted that Iran also has a large minority population[25] and yet has been able to maintain its power.

Would certain institutions of Iran arising from the parallel governmental/economic hierarchies be carried over to future industrialized theocracies? Given the resistance to a theocracy in a heterogeneous state, it seems likely that Iran's innovation of parallel bureaucracies would have a considerable appeal, especially since the struggle to maintain power might be the single most important determining element of the systemic and economic policy changes the future theocrats would make. If the power position of the theocrats were less tenuous, other arrangements are conceivable.[26]

The only definite conclusion we can reach on this topic is that whatever form a partial or full-fledged theocracy might take in the future, the economic costs of creating a "republic of virtue" in an industrialized nation are likely to be quite high.

Notes

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1. Afghanistan was still in a premodern stage of development when the Taliban took control, and, moreover, this government lasted for only a few years. Some consider Saudi Arabia as a theocracy, even though it is not ruled by clerics, because of the strong role of religious leaders in shaping the laws and social customs. I follow, however, a narrower definition of theocracy as a government with primary power held by the clergy. It can also be argued that North Korea under Kim family or Albania under Enver Hoxha have been theocracies, with Marxism playing the role of a religion. In this chapter I speak of religion in a more conventional sense.
2. With the existence of price controls and the wide and long-lasting difference between the official and unofficial exchange until recently, it should not be surprising that Iran has had a large informal economy. Khalatbari (1994) summarizes the evidences and estimates that in 1990 the informal economy amounted to more than 25 percent of the official economy. Dreher and his coauthors (2007) also present estimates that corruption increased considerably from the mid-1970s to 1997.
3. These powers are particularly emphasized in Articles 57, 72, and 96 of the Constitution http://www.iranonline.com/iran/iran-info/Government/constitution.htm). Other articles drive the point home that religious officials are not responsible to the public and have the final authority in determining whether any measure or action is in accordance with Islamic law.
4. This can be easily seen. The unicameral legislature (Majles) is elected by universal suffrage, but candidates must first be vetted by the Council of Guardians. The Assembly of Experts is similarly elected and its members, who must be members of the clergy, are also vetted by the Council of Guardians. The Assembly can select (and remove) the Supreme Leader. The Council of Guardians consists of twelve members, half selected by the Supreme Leader, half by the Majles; it can reject measures of the Majles that it deems violate the *Sharia*. It is also more powerful than the President and was able to block many of the proposed policy reforms of President Mohammad Khatami. The Expediency Council is appointed by the Supreme Leader to mediate disputes between the Council of Guardians and the Majles; it also advises the Supreme Leader and is one of the most powerful governing bodies. After being vetted by the Council of Guardians, the President is elected by universal suffrage, but is outranked by the Supreme Leader (e.g., Ayatollah Ali Khamen'ei vetoed President Mahmoud Ahmadinejad's proposal to set aside a section of the Tehran soccer stadium for women).
5. He did, however, preach to the businessmen at that time that price raising was a sin and "before long" prices came down. These and other related policy issues are discussed in greater detail by Pryor (1985).
6. For instance, Abdul-Rauf (1979, p. 14) claims that: "The Islamic doctrine of economics permits degrees of individual freedom and state intervention, but leaves the determination of these degrees to the wisdom and conscience of those involved, who should take current conditions into account."
7. This claim is based on the World Bank's (2006a) index of the "ease of doing business," which draws upon thirty-nine indicators of government regulation (e.g., number of procedures to obtain a license, cost of hiring, rigidity of employment, investor protection, time (days) to import, time to enforce a contract, etc.). Regression experiments using a sample of 141 nations show in countries with a Muslim majority, businesses face much more government regulation when the logarithm of per capita GDP is held constant. No other significant explanatory variables could be found. In this comparison, Iran does not stand out from other Islamic nations.
8. Regarding the three other injunctions, scattered evidence (summarized by Pryor, 2007a) shows that charity expenditures have been a very small percentage of the GDP and certainly no greater than such contributions in other countries. The prohibition of speculative activities raises many difficult theological issues, especially

regarding insurance, futures markets, or entrepreneurial activity, but this prohibition seems to have little practical impact in most Muslim nations including Iran. Injunctions against certain foods and drinks have no macro-impact on economic activity.

9. With regard to the welfare state and personal charity we read: "That person is not a perfect Muslim who eateth his fill, and leaveth his neighbours hungry" (Al-Suhrawardy, 1941: p. 78). Yet I couldn't find any data suggesting that either private or state charity is any greater in Muslim nations than elsewhere. Similarly, with regard to private property, we are told: "Muslims are brothers in religion and they must not oppress one another, nor abandon assisting each other, nor hold another in contempt…and all the things of one Muslim are unlawful to another: his blood, property, and reputation" (p. 75). And yet, as I note below, in Islamic Iran public property has greatly increased at the expense of private property. Similarly Muslims are taught that "Monopoly is unlawful in Islam"(p. 97), and yet we find both state and private monopolies in many Muslim countries including Iran.

   In brief, given the ambiguity of Islamic teachings on wealth and the frequent disjuncture between doctrine and practice, it seems fruitless to look for direct connections between Islam, values held in Islamic nations, and the economic actions and attitudes of its adherents, a situation similar to that encountered when studying the economic impact of Christianity.
10. Many examples of his disdain for a high standard of living are available. For instance, he told the Iranian president, Bani-Sadr, that the American embargo during the hostage crisis would not be detrimental to the population, "In the time of the Prophet, they ate only one date a day" (cited by Halliday, 1982, p. 188). On another occasion he off-handedly remarked that the revolution was not made to provide the people with cheap melons (ibid.). In the summer of 1979, a few months after the revolution, he remarked: "Some persons have come to me and said that now that the revolution is over, now we must preserve our economic infrastructure. But our people rose for Islam, not for the economic infrastructure. What is this economic infrastructure anyway? Donkeys and camels need hay. That's economic infrastructure. But human beings need Islam" (cited by Bina and Zangeneh, 1992, p. ix).
11. The mullahs are the Shiite clergy in general; the *ulema* covers a smaller group of religious jurists. Given the absence of a single formal organizational hierarchy (such as found in the Roman Catholic Church), various religious titles such as Ayatollah are gained through reputation and promotion within various Islamic institutions such as schools.
12. According to Esfahani (2005) this range covers the "usual" estimates, usually based on a rough calculation of the assets they received after the revolution. I have seen other estimates of the *bonyadha* share of the GDP as low as 10 percent and as high as 40 percent. Various official statistics usually classify the *bonyadha* as belonging to the private sector, so the extent of their economic activities cannot be easily determined. The businesses owned by the Revolutionary Guard, which, according to Gheissari and Nasr (2005) have billions of dollars in sales, are yet another sector and are not considered either as *bonyadha*, state-owned, or private enterprises.
13. These political roles are discussed briefly by Maloney (2000) who, however, also has a positive view of the economic impact of the *bonyadha*. She claims that they have developed "into conglomerates oriented toward capital accumulation with their proclaimed ideological objectives distinctly subordinated." This economic assessment is, however, a minority viewpoint.
14. Esfahani (2005) has convincingly argued that, in theory, the existence of dual hierarchies does not *necessarily* lead to inefficiency. This is because a hierarchy operating outside the government has much greater flexibility and can handle certain tasks more expeditiously. Nevertheless, the division of labor between the

government and parallel organizations must be carefully thought through so that they complement each other; and this usually takes considerable thought and a long time. Whether Iran has yet reached this point is an open question.

15. The data are from various issues of the IMF's *International Financial Statistics*.
16. These remarks are based on rough estimates from a simulation model and the spread of the numbers given in the text provides the high and low estimates of the incremental capital/output ratio.
17. This datum comes from the 122 nations surveyed by the World Bank (2006a) and the 180 nations surveyed by the United Nations (2006).
18. In its *International Financial Statistics* (various years), the IMF reports a much lower exchange rate premium.
19. For instance, the United Nations reports that the ratio of subsidies to GDP amounted to 1.4 percent in 2002; while the IMF has a ratio of 4.1 percent for the next year. These data neither include the special transfers to the *bonyadha* to cover losses, nor the cross-subsidization within the individual *bonyadha* themselves to losing enterprises under their administration. Moreover, these data also do not include the implicit subsidies for domestic sales of fuels, which are sold much below the international market price, a practice which has led to a much higher ratio of energy use per dollar of GDP than one finds in most other countries.
20. According to the calculations of Doessel and Valadkhani (1998, 416) the Gini coefficient of household expenditures fluctuated considerably (from about 0.37 to 0.50), which means that comparisons between any two years may be misleading. Unfortunately, they provide no data on the years for which these data apply. The estimates of Salehi-Isfahani (2006), which I use, are more up to date and cover a longer period.
21. The underlying data come from Bank Markazi (2006). Messkoub (2005, p. 204) calculates government expenditures as a much higher percentage of GDP and shows a decline from 1.5 percent in the 1970s to 0.9 percent in the 1990s.
22. For infant mortality in Iran I use the estimates of the U.S. Census Bureau (2006), which are considerably higher than that found in other sources. Unfortunately, no sources I consulted provide the basis of their estimates.
23. According to data from UNESCO (annual, various years) and UNESCO, Institute for Statistics (2006), between 1980 and 2003 university enrollment increased at an average annual rate of 14.8 percent, in comparison to 8.4 percent a year between 1960 and 1977. Unfortunately, the comparability and consistency of these series are not clear, especially with regard to whether students in technical schools and other post-secondary educational establishments are included.
24. Khomeini proclaimed; "[T]he unveiling of women has been the ruin of female honour, the destruction of family and the cause of untold corruption and prostitution.... Those schools, mixing young girls and young passion-ridden boys, kill female honour and the power of manly virtue.... [M]usic rouses the spirit of love-making [and] of unlawful sexuality and, giving free reign to passion, at the same time it removes audacity, courage, and manly valour" (cited by Omid, 1994, pp. 24–25).

    Such extension of state power into the personal lives of the population is not unknown in countries that are not theocracies. Other Muslim nations, such as Saudi Arabia and Pakistan, have also enforced standards of dress and behavior; France (in 2004) banned women from wearing a *hijab* in certain public buildings; at one time Canada banned the wearing of turbans in certain circumstances; and in 2006 British political leaders tried to discourage the *niqab* (the veil covering the entire face except for the eyes).
25. Ethnic Persians consist of only slightly more than half of the population in Iran. The degree to which many of the ethnic minorities have assimilated is strongly

disputed so that the seriousness of Iran's "minority problem" is difficult for me to judge.

26. If we consider Marxism a secular religion and the communist party as its priesthood, then it is noteworthy that the party leaders in East Europe did not find it necessary to institute a two-sector economic system in order to maintain their political power. I suspect that the major difference with Iran may lie in the fact that entry into the party in East European nations was relatively easy, in comparison to entry into the clergy in Iran, which required considerable educational qualifications. Thus, the Iranian clergy have been a smaller and more exclusive group, with more divergent interests with the general population.

References

Abdul-Rauf, Muhammad. "The Islamic Doctrine of Economics and Contemporary Economic Thought." Offprint from *Conference on a Theological Inquiry into Capitalism and Socialism*. Washington, DC: American Enterprise Institute, 1979.

Afghah, Seyed Morteza. "The Effect of Non-economic Factors in the Process of Production in Iran." In Alizadeh, 2000, pp. 204–229.

Akhajanian, Akbar and Amir H. Mehryar. "Fertility Transition in the Islamic Republic of Iran, 1976–1996." *Asian-Pacific Population Journal* 14, 1, 1999: 21–42.

Al-Suhrawardy, Allama. *The Sayings of Muhammad*. London: John Murray, 1941.

Alizadeh, Parvin (ed.). *The Economy of Iran: The Dilemmas of an Islamic State*. New York: I.B. Tauris, 2000.

Amuzegar, Jahangir. *Iran's Economy under the Islamic Republic*. New York: I.B. Tauris, 1993.

Bank Markazi (Central Bank of the Islamic Republic of Iran). Quarterly. "Statistics." *Economic Report and Balance Sheet*. Tehran: Bank Markazi.

———. Annual-a. *Economic Report and Balance Sheet*. Tehran: Bank Markazi.

———. Annual-b. "Statistics." *Annual Review*. Teheran: Bank Markazi.

———. Web site: www.cbi.ir/default-en.aspx, accessed August 2006.

BBC (British Broadcasting Corporation). "Fifty-seven Iranian Economists Have Launched a Scathing Attack. On President Mahmoud Ahmadinejad" http://news.bbc.co.uk/2/hi/middle_east/6744841.stm, accessed August 2007.

Behdad, Sohrab. "From Populism to Liberalism: The Iranian Predicament." In Alizadeh, 2000, pp. 100–141.

Bina, Cyrus and Hamid Zangeneh. *Modern Capitalism and Islamic Ideology in Iran*. New York: St. Martin's Press, 1992.

Casanova, José. "Rethinking Secularization: A Global Comparative Perspective." *The Hedgehog Review* 8, 1/2, 2006: 7–23.

Coville, Thomas (ed.). *L'economie de l'Iran islamique*. Louvain: Diffusion Peeter, 1994.

Dadkhan, Kamran M. "Iran and the Global Finance Markets." In Mohammadi, 2003, pp. 85–106.

Doessel, D.P., and Abbas Valadkhani. "Economic Development and Institutional Factors Affecting Income Distribution: The Case of Iran, 1967–1993." *International Journal of Social Economics* 25, 2/4, 1998: 410–423.

Dreher, Axel, Christos Kotsogiannis, and Steve McCorriston. "Corruption around the World: Evidence from a Structural Model." *Journal of Comparative Economics* 35, 3, 2007: 443–467.

Entessar, Nader. "The Challenge of Political Reconstruction in Iran." In Bina and Zangenah, 1992, pp. 217–233.

Esfahani, Hadi Salehi. "Alternative Public Service Delivery Mechanisms in Iran." *Quarterly Review of Economics and Finance* 45, 2/3, 2005: 479–525.

Gheissari, Ali, and Vali Nasr. "The Conservative Consolidation in Iran." *Survival* 47, 2, 2005: 175–190.
Hakimian, Hassan and Massoud Karshenas. "Dilemmas and Prospects for Economic Reform and Reconstruction in Iran." In Alizadeh, 2000, pp. 29–63.
Halliday, Fred. "The Iranian Revolution: Uneven Development and Religious Populism." *Journal of International Affairs* 36, 2, 1982: 187–202.
Henderson, Keith. "The Quest for Indigenous Administration: Asian Communist, Islamic Revivalist, and Other Models." *Public Administration Review* 8, 1, 2005: 55–67.
Hossein, Askari, John Forrer, Hildy Teegan, and Yang Jiawen. "U.S. Economic Sanctions: Lessons from the Iranian Experience." *Business Economics* 36, 5, 2001: 7–20.
International Labour Organization (ILO). Annual. *Yearbook of Labour Statistics*. Geneva: ILO, various years.
International Monetary Fund (IMF). "Islamic Republic of Iran: Statistical Appendix." IMF Country Report no. 06/129, 2006.
———. *International Financial Statistics Yearbook*. Washington, DC: IMF, various years.
Karshenas, Massoud. *Oil, State and Industrialization in Iran*. New York: Cambridge University Press, 1990.
Karshenas, Massoud and M. Hashem Pesaran. "Exchange Rate Unification." In Coville, 1994, pp. 141–176.
Khalatbari, Firouzeh. "Iran: A Unique Underground Economy." In Coville, 1994, pp. 113–141.
Khomeini, Ruhollah. *Islam and Revolution: Writings and Declarations*. Translated by Hamid Algar. London: KPI, 1985.
Ladier-Fouladi, Marie. "The Fertility Transition in Iran." *Population: An English Selection* 9, 1997: 191–213.
Lewis, Bernard. *The Crisis of Islam*. New York: Random House, 2003.
Majd, M.G. "On the Relationship between Land Reform and Rural-Urban Migration in Iran, 1966–1976." *Middle East Journal* 46, 3, 1992: 440–455.
Maloney, Suzanne. "Agents or Obstacles? Parastatal Foundations and Challenges for Iranian Development." In Alizadeh, 2000, pp. 145–177.
Messkoub, Mahmood. "Constitutionalism, Modernization, and Islamization: The Political Economy of Social Policy in Iran." In *Social Policy in the Middle East*, edited by Massoud Karshenas and Valertne M. Moghadam. New York: Palgrave Macmillan, 2005, 190–222.
Moghadam, Faremeh E. *From Land Reform to Revolution: The Political Economy of Agricultural Development in Iran, 1962–1979*. New York: I.B. Tauris, 1996.
Mohammadi, Ali (ed.). *Iran Encountering Globalization: Problems and Prospects*. New York: RoutledgeCurzon, 2003.
Mohaverhosseini, Farshid. "An Inquiry into the Sources of Growth and Stagnation in the Iranian Economy." *International Centre for Economic Research Working Paper* no. 12. Turin, Italy, 2003.
Mottahedeh, Roy. *The Mantle of the Prophet: Religion and Politics in Iran*. Oxford: One World Press, 2000.
Omid, Homa. *Islam and the Post-revolutionary State in Iran*. New York: St. Martin's Press, 1994.
Pesaran, M. Hashem. "Economic Trends and Macroeconomic Policies." In Alizadeh, 2000, pp. 63–99.
Pryor, Frederic L. "The Islamic Economic System." *Journal of Comparative Economics* 9, 2, 1985: 197–223.
———. "The Economic Impact of Islam on Developing Economies." *World Development* 35, 11, 2007a: 1815–1835.

Pryor, Frederic L. "Are Muslim Countries less Democratic?" *Middle East Quarterly* 14, 4, 2007b: 53–59.
Rashidi, Ali. "De-privatisation Process of the Iranian Economy after the Revolution of 1979." In Coville, 1994, pp. 37–68.
Reed, Stanley. "Surprise: Oil Woes in Iran." *Business Week*, December 11, 2006: 48–49.
Rodinson, Maxime. *Islam and Capitalism*. Translated by Brian Pearce. Austin: University of Texas Press, 1978.
Saeidi, Ali A. "The Accountability of Para-governmental Organizations (*Bonyads*): The Case of Iranian Foundations." *Iranian Studies* 37, 3, 2004: 479–499.
Salehi-Isfahani, Djavid. "Revolution and Redistribution in Iran: How the Poor Have Fared 25 Years Later." http://www.filebox.vt.edu/users/salehi/Iran_poverty_trend.pdf#search=%22%22Tabibian%22%20%22Poverty%20*%20Income%20Distribution%22%22. Accessed August 2006.
Shakoori, Ali. *The State and Rural Development in Post-Revolutionary Iran*. New York: Palgrave Macmillan, 2001.
Stern, Roger. "The Iranian Petroleum Crisis and United States National Security." *Proceedings of the National Academy of Sciences of the United States* 104, 1, 2007: 377–382.
Torbat, Akbar E. "Impacts of the US Trade and Financial Sanctions on Iran." *World Economy* 28, 3, 2005: 407–434.
Transparency International. 2004. "Corruption Perceptions Index 2004." http://ww1.transparency.org/cpi/2004.en.html. Accessed July 2006.
United Nations. Annual. *Human Development Report*. New York: UN.
UNESCO. Annual. *Statistical Yearbook*. Paris: UNESCO.
UNESCO, Institute for Statistics. 2006. *Statistical Tables*. http://stat.uis.unesco.org/ReportFolders/ReportFolders.aspx?CS_referer=&CS_ChosenLang=eng. Accessed August 2006.
U.S. Census Bureau. *International Data Base*. 2006. http://www.census.gov/ipc/www/idbprint.html. Accessed August 2006.
Valadkhani, Abbas. "The Causes of Unemployment in Iran." *International Journal of Applied Business and Economic Research* 1, 1, 2003: 21–33.
Veenhoven, Ruut. "Inequality-Adjusted Happiness in 91 nations 1995–2005, World Database of Happiness, Rank Report 2006–4." 2006. www.worlddatabaseofhappiness.eur.nl. Accessed August 2006.
World Bank. "Doing Business Database." 2006a. http://www.doingbusiness.org/CustomQuery/. Accessed August 2006.
———. "World Development Indicators." 2006b. http://devdata.worldbank.org/dataonline. Accessed August 2006.
World Health Organization (WHO). "Country Cooperation Strategy for WHO and the Islamic Republic of Iran 2005–2009." 2005. www.who.int/countryfocus/cooperation_strategy/countries/ccs_irn_final_en.pdf. Accessed August 2006.
Zangeneh, Hamid. "Economic Consequences of Student Unrest in Iran." *Journal of Iranian Research and Analysis* 15, 2, 1999: 132–141.
———. "Socioeconomic Trends in Iran: Successes and Failures." *The Muslim World* 94, 4, 2004: 481–493.
Zangeneh, Hamid and Ahmad Salam. "An Analytical Model of an Islamic Banking Firm." In Bina and Zangeneh, 1992, 189–214.

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