Department of Social Sciences

Economics Working Papers

WOULD YOU BUY A USED CAR FROM THIS PRIEST? AN ECONOMIC THEORY OF RELIGION AND THE CHURCH

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July, 1985

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Preliminary draft. Not to be quoted.

30 July 1985

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Preface

Material presented in this paper neither promotes nor refutes the veracity of religion in general or any particular religion. Much of the paper draws upon the Roman Catholic Church for examples, a choice reflecting its importance in western history and familiarity to the authors. The authors welcome examples from other religions and churches consistent or inconsistent with arguments offered here.

1. Introduction

Religion is one of the most pervasive phenomena in the human experience. Since it is difficult to name any society throughout history without some religious activity,[1] it is surprising that so little investigation of religion has been undertaken by economists. A few investigators, including Meng and Sentence (1984) and Tomes (1985), compare religion and individual earnings in a effort to establish whether religions have different attitudes toward investment in human capital. In a recent short jocose article, Dixit and Grossman (1984) show how a limited number of positions in heaven can result in rent-dissipating activity by consumers.[2]

Non-economists might explain our neglect of religion as a subject for study by claiming that behavior connected with religion is somehow separate and different from the maximizing behavior asserted in economics. However, the behavioral propositions of economics are silent about limits to their applicability. Gary Becker, for one, sees no such boundaries: "Indeed, I have come to the position that the

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[1]We intentionally offer no formal definition of what constitutes religious activity. Any reasonable definition can be used without effect on this paper's conclusions.

[2]Several important applications of economic theory to human behavior completely ignore the role of religion, North and Thomas (1973) and Posner (1980).

economic approach is a comprehensive one that is applicable to all human behavior."[3]

In fact, economics offers an enticing apparatus to explain behavior of the entity known as the church: the theory of the firm. The fundamental behavioral postulate of the theory of the firm is that firms maximize wealth. To the non-economist it may seem offensive and absurd to ascribe such crass behavior to these benevolent non-profit institutions. Nonetheless, economists have good reason to expect that the wealth maximizing postulate leads to reliable explanations and predictions. For one, the continued survival of any institution requires it to face the possibility of bankruptcy. To continue to operate, an organization must maintain earnings in excess of opportunity cost. Organizations that survive over time necessarily are those that have been able to maintain positive net revenue.[4]

A possible objection here is that in societies with a single church, the absence of competition between churches means a church need only maintain non-negative wealth and is not obliged to maximize.[5] The response to this argument is that although the church may not be faced with competition

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[3]Becker (year), p. 8.

[4]This follows ideas presented by Armen Alcian in "Uncertainty, Evolution, and Economic Theory" and Becker (1962).

[5]The debate about whether a monopoly or, for that matter, any firm acts to maximize profit is almost endless. For a sample of the views see Alcian (1965).

from other churches, it is faced with competition from secular organizations in at least some markets. Further, all firms, churches included, compete for resources and are therefore forced to manage their activities in a manner identical to wealth maximizing behavior in many respects. The proposition of wealth maximizing behavior applied to churches may become more palatable by remembering that increased wealth affords an expanded opportunity set for the church.

In addition to the assumption of wealth-maximization, applying the theory of the firm to activities of churches requires understanding the products they produce and sell. Churches offer a number of products to the faithful and the analysis of these classes of products forms the heart of this paper. As is shown, churches are at times uniquely qualified to provide certain of these products.[4] In other cases, churches provide products available in other markets. Changes in other institutions also cause changes in products offered by churches.

In changing proportions over time and in different cultures, churches offer four classes of products. In this paper, these products are labelled temporal bliss, social goods, infinite consumption stream, and altered fate. Temporal bliss is a set of products that bring happiness in this earthly vale and are also produced in other markets,

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[4]Religion could be defined as this set of products. The church is the firm organized to provide these products.

products like fellowship and entertainment. The church only has limited ability to exclude potential competitors in offering these products. Entry by competing producers has predictable effects on church behavior.

Social goods are products and activities characterized by significant positive external effects or have public goods characteristics. Included are enforcement of valuable property rights and good moral behavior. Under some circumstances, the church is uniquely qualified to provide these products. The rise of temporal authority in the form of a centralized government reduces the relative advantage of church production of social goods.

An infinite consumption stream, the promise of eternal life, is a central feature in most religions. Eternal life has the characteristic that a contract of sale is unenforceable, since the buyer cannot know whether the price paid is appropriate, or whether information about the product is accurate. As expected, the church adopts techniques similar to other firms offering products with this characteristic, including use of non-disposable capital and an organized priesthood.

Churches also offer the promise of favorably altering the course of events that might otherwise be described as random. The use of prayer or priestly intercession to alter fate is a common feature of churches. This product is similar to eternal life in that a contract of sale is difficult to monitor. In addition, as the boundaries of

fate's definition shrinks, the ability of churches to sell alterations of fate is reduced.

The next sections of this paper address each of these classes of products in turn. A final section addresses additional issues, including the economics of monotheism and product variety.

Temporal Bliss

Ask an individual why he or she attends a particular church. One reason given, perhaps the most important reason,[7] is the fellowship of its members, some difficult-to-define quality of the church and its membership which appeals to the individual. Separate from any religious doctrine, the church is providing members an enjoyable atmosphere.[8]

Fellowship is one example of a set of valuable products provided by churches titled here temporal bliss. This valuable set of products might also be termed entertainment, defined as a wide spectrum of activities which increase consumer utility in this life. That religious ceremony and church activities have entertainment content in no way demeans their religious importance or sacredness, it simply describes characteristics of church activities that are of value to individuals and allows application of economic theory to make predictions about church behavior.

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[7]This conclusion is a result of an unscientific survey conducted while one of the authors was teaching sunday school some years ago.

[8]For an example of Roman Catholics changing parishes to find desired characteristics, see Ingrassia (1982).

Churches offer a variety of types of entertainment. Entertainment in its highest sense is offered by churches in the form of sacred music and art. Other forms of entertainment include activities as diverse as potluck dinners, dances, and bingo. The church has served throughout history as a center for social activities particularly in smaller communities.

Religious festivals in both ancient and modern times are in large part pure entertainment. The entertainment aspect of religion is glaringly evident each year beginning shortly before Thanksgiving when mistletoe is first hung. At least two of the important Christian holy days, Christmas and Easter, contain elements from religious festivals predating Christianity and have little connection to Christian doctrine other than entertainment.

Christian liturgy contains frequent reference to "celebration," "celebrating mass" being an example. Even the term used suggests the importance of entertainment. In defense of their activities, religious leaders often argue entertainment is used to attract potential converts or make the message more palatable. The statement acknowledges the value to consumers of the entertainment offered by churches.

Even the pastoral sermon, whose official purpose is instruction, contains undeniable entertainment content. Describing a pastor's weekly presentation as "a good sermon" means more than simply sound religious content. It means

quality story-telling, drama, excitement--in a word--entertainment.

Pastoral sermons and religious ceremonies are not always characterized by pleasant distraction. Some cultures practice physical mutilation for religious reasons.' Many church services are noted for the use of fearsome threats, the Puritan sermons being a classic example. While at first blush these activities seem not be be classed as entertainment, it is instructive to compare them to contemporary activities offered as entertainment outside the church. The cathartic effect of a rousing hell-fire sermon is certainly equal to that of a quality horror movie.

As can be inferred from the preceding discussion, one important aspect of the various products called temporal bliss is that, to a greater or lesser extent, they can be provided in private markets. Entertainment and fellowship in most of their incarnations are not the unique purview of the church. It is this potential for entry and competition by other producers which yields implications about church provision of temporal bliss.

That the church is only one <u>possible</u> producer of temporal bliss doesn't mean the church eschews attempts to become or remain the only <u>actual</u> producer. The church, as

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'Can physical mutilation have entertainment value? Surely not in our enlightened age.

much as other firms, has incentive to create and enforce a monopoly on production of its product.[10]

Churches have engaged in a number of activities, one of whose interpretations might reasonably be monopoly maintenance. From time to time churches have proscribed dancing, alcohol, gambling, dating, movies, makeup, and video games, all forms of entertainment available outside the church. To the extent that such restrictions are successful, the church maintains its position as sole producer of entertainment. In at least one case, the church promotes an activity within the church and discourages the same activity outside the church, even managing to obtain state enforcement: bingo gambling.

As mentioned, the church has no unique ability to offer temporal bliss. As personal income increases and entertainment technology improves, entry by competing producers of temporal bliss likely occurs.[11] Entry of substitutes to church entertainment causes predictable changes in church behavior. Churches must increase quality of the valuable observable products they offer. Church buildings become more stylish architecturally, church services are offered at more convenient hours, church

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[10]The most obvious example of efforts to maintain dominance in religious power are religiously inspired wars. These are not addressed here since they arguably have little to do with ensuring a monopoly in production of entertainment.

[11]Entry by competing churches is discussed later.

survives take less time and may be flashier. The use of music and other entertainment increases.[12]

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[12]The authors are aware of a church in Minneapolis which offers three simultaneous services, each of a different character, but asserting no difference in official doctrine.

Social Goods

Lightly bump a fellow passenger in an elevator. Chances are good that the fellow passenger responds with a polite "excuse me." Chances are better that the fellow passenger expects an identical polite response. All cultures have social rules encompassing the spectrum of behavior from accidental bumping to murder. Throughout history, religions and churches have been a central force in creating and perpetuating social rules. These social rules and some important group activities are here termed social goods. This section reviews some of these social goods, considers their value, introduces reasons why churches provided them historically, and explains why churches have lost much of their importance in providing these products.

Religions typically include as part of their doctrine a set of behavioral guidelines. The Ten Commandments are the basic behavioral guidelines of the Judeo-Christian religions. Although studying and categorizing a society's social rules is appropriately the purview of anthorpologists, a substantial portion are amenable to economic analysis. These rules of behavior provide several economically valuable functions.

Most importantly, religious rules are a low-cost method of establishing and enforcing property rights.[13] In the simple view, these property rights include rules of ownership and trade that facilitate individual maximizing behavior. For example, religious rules commonly define the distribution of property at marriage. Such a clear definition of property rights reduces the cost of trade between and within families. The social rules defining legal and illegal theft is also an example of useful social rules defining property rights. A well-defined set of property rights are essential to wealth maximization by voluntary trade.

The importance of well-defined rules of social behavior cannot be underestimated. Voluntary transaction simply cannot take place without agreed rules of exchange. The lower the cost of establishing rules of exchange, the more likely valuable trading takes place. The economic significance of religious doctrine is not limited to defining property rights, however.

More generally, religious rules reduce the cost of the whole universe of social interaction by providing a consistent set of standards to all members of a culture.

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[13]That social rules and traditions reduce transactions costs has been asserted by other economists, Cheung (1972) and Posner (1980, p. 26).

This aspect of religious rules can be viewed as defining property rights in their broadest sense.[14]

Religions also encourage or include in their doctrine a variety of behavioral requirments that arguably benefit society but are not best described as defining property rights. Two examples of these social activities are income redistribution and health standards.[15] In these cases, religions encourage individual behavior which benefits the group.

By most social welfare functions, poverty[16] makes society worse off and a redistribution of income makes society better off. A common characteristic of church doctrine is the encouragement of redistribution of income. Members of churches are encouraged to engage in charitable activities directly, or to donate money to support charitable activities organized by the church.[17] To the extent that churches succeed in mitigating the adverse

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[14]The relative success of religious versus non-religious communes shows the advantage of having the ability to enforce and encourage good social behavior in a situation where achieving proper individual incentives is very difficult.

[15]Other examples include preservation of knowledge, some kinds of scientific research, education, and dispute mediation.

[16]Poverty here can refer to both an unequal distribution of income and to a segment of the population which is at subsistence level or less.

[17]Churches are also notorious for adopting the double standard of supporting income transfer to poor within the church and discouraging income transfer to heathens. Such is the arbitrary nature of what constitutes the boundaries of society in a social welfare function.

effects of poverty, society is better off. Churches provide a valuable product, ultimately benefitting rich and poor alike.

A second example of a social good provided by the church is health standards. Various forms of church imposed rules of cleanliness, medical treatment, food preparation, and sanitation are common. The benefit to society of such rules is obvious. All members of a society gain by engaging in activities which reduce the possibility of the spread of disease. Kosher rules of eating are an excellent example of church rules whose effect is arguably to assure proper nutrition and reduce the spread of disease.[18]

Surely a number of examples can be found of church health rules which make society worse off. Church bans on eating certain nutritious food, or church adoption of dangerous medical practices are examples. Although in retrospect such standards are dangerous to society, likely these standards were originally adopted in the sincere belief of their benefit.

The social rules discussed above share important characteristics. These rules are characterized as public goods or possess significant external effects. For example, an individual engaging in good health practice is directly better off because of the reduced probability of disease.

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[18]One obvious implication here is that, ceterus paribus, regions with greater population density or greater tendency to support disease should have churches with more complicated health rules than other regions.

In addition, all other members of the community are also better off since the given individual is less likely to spread disease to them. This second, indirect effect, is an external effect since the direct benefit to the individual is smaller than the benefit to the entire community. The second effect is a public good since all members of the community benefit collectively from the action of the single individual. The same reasoning is applied to describe income redistribution and other social goods as either creating positive externalities or being public goods.

In private markets, public goods and goods with positive external effects tend to be underproduced. Individuals have difficulty appropriating the value of the good to other members of the community and so are less inclined to produce it. Enter the church. The church possesses characteristics which give it unique abilities in encouraging production of public goods and goods with external effects. The relative ability of the church to encourage production of these goods is not identical in all cultures, however, and predicting church behavior requires understanding a stylized set of cultures. Given the standard stylized cultures considered here, the theory predicts religion is most effective in producing social goods in cultures with communities of substantial size but which are relatively poor and possess an underdeveloped central government.

Members of a very small community recognize the social loss of poverty and are more inclined to act to reduce it. These cultures often rely on close family groups and often practice some form of communal behavior where wealth sharing is an explicit part of the organization.

In larger communities, the rich are less likely to see the social cost of poverty and less likely to participate since any one person's gain is smaller than the social gain from transferring income to the poor. Community size is large enough that interaction takes place outside family groups. Religious requirements of income transfer are important to continue provision of this valuable social product.

Private markets find provision of goods with significant external effects or public goods difficult. In larger communities, especially those with an underdeveloped central government, the church can encourage production of these social goods. The church encourages production of these goods first by enforcing its prescription for behavior in the same manner chosen by secular authorities by using techniques like incarceration and torture.

Religions have two additional low-cost enforcement tools: the threat of social ostracism and the the threat of unavoidable and severe punishment after death. In the Catholic Church, for example, excommunication carried both the loss of social status in the community and eternal

damnation.[19] The specifics of punishment after death vary from religion to religion. In some, an offender may be condemned to the fires of hell, in another, the offender may be reincarnated as a person of low caste or as an animal.

Hell or punishment is treated differently than heaven. Also treated separately are those who are ignorant or too young to conform to behavioral standards. Heaven is a product desired by consumers and produced by most churches. Hell is certainly not desired by consumers and is less often a feature of church doctrine. Hell punishes sinners, those who misbehave.

In recent history many of the functions of religions to provide social goods have been provided by secular authority: the government. An implication is that the general decline in the importance of religion in general and hell in particular may be due to technological developments having the effect of altering the relative costs of different methods of property rights enforcement and monitoring behavior.[20] This is the explanation presented by North and Thomas (1973).

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[19]In the Mormon religion (real name) an additional reward for good behavior or punishment for bad behavior is that all of a person's relatives may achieve heaven if a person converts. In those religions which feature heaven or hell as predestined, the church has relatively little power to enforce good social behavior.

[20]It is not immediately clear what these innovations were. Certainly important was the ability to organize and maintain a sizeable standing police force or army. Not that Henry VIII is reputed to have been an exceptional military and civil leader, exactly the requirements necessary to supplant the authority of the Pope.

Religion is a substitute for secular authority. This enforcement of property rights operates first through explicit prescription for behavior (like the Ten Commandments). Second, while churches often possessed the authority to enforces these prescriptions in the same manner that secular authorities have, religions are characterized by a unique instrument of low-cost enforcement. This the the threat of unavoidable and severe punishment by devine force after death.

This line of argument suggests that problems in enforcement would result in societies with two or more religious views of devine retribution after death. Difficulties would arise not so much out of conflicting behavioral prescription, but out of reduced perceived probability of enforcement. It is more likely that there are more doubters about the inevitability of devine retribution if a large number people are telling a different story. An implication is that crime rates are higher the greater the religious heterogeneity. Such religious heterogeneity also makes secular authority relatively more appealing to enforce good social behavior.

Another possibility is that increases in individual income mean there is more for secular authority to take away as punishment for breaking laws. The loss of eternal life is relatively more important for a poor person than for a rich person, thus the threat of loss of income is a greater deterrent for wealthy people. This implication requires the

assumption of positive time preference for consumption even after death. The assumption also requires that consumers cannot take wealth with them when they die. In religions where wealth is carried into death, religious authority maintains the relative threat of eternal damnation in the face of increasing income. The relative strength of the Egyptian theocracy is an example.

Increases in temporal wealth also reduce the attractiveness of heaven. This may explain why less emphasis placed on heaven in modern religions. In some modern religions people are believed to go to heaven automatically.

The longstanding objection by religions to the practice of usury may be another example of an external effect which creates divergence between private and social cost. The socially optimal discount rate may be lower than the discount rate chosen by lenders in the market. Until recently, the absence of the corporation prevented lenders from pooling or diversifying risk or from perpetuating assets over the lifetime of one individual. The short lifetime of individuals might make them unwilling to invest in projects of long duration and might incorrectly estimate the cost to society of death of one individual.

Perhaps a more important reason for churches to object t usury is that the practice encourages a positive discount rate. As mentioned, a positive discount rate reduces the

cost of punishment after death relative to punishment before death.[21]

A society gains if its members produce the sort of social goods discussed here. The church has advantages in encouraging production of these products because of its unique enforcement tools. However, like any firm, the church must maintain positive net income to support these valuable activities. In concluding this section, a couple of comments on church finance are in order.

For some services it offers, the church charges a direct fee and only those paying the fee receive the service. Examples of direct fees include admission to some church events, membership fees for some churches, and indulgences. A second and more common revenue source is member voluntary donations. Donations are considered voluntary since the product is provided to the individual whether or not a donation is made. For most modern churches, membership requires no donations.

That donations are not required, does not mean they can freely be withheld. Church doctrine and social pressure combine to encourage member donation. This social pressure is particularly important in providing financial support for

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[21]An implication is that individuals with low individual rates of time preference are more likely to be law-abiding and church members, heaven being relatively more valuable (and hell relatively more costly) than for individuals with high rates of time preference. The same should hold comparing cultures with different rates of time preference.

public goods, since non-payers for public goods still benefit.

In some ways, the church is particularly well-adapted to earn revenue from members. In particular, the church can price discriminate with relative ease. Conditions for successful price discrimination include the ability to identify consumer willingness to pay and prevent resale. For the first condition, the typically long relationship between members and the church and the information available from other members, means information about income, for example, is readily available to a church. In the second category, the church has special advantage since many of its products, like eternal life, are non-transferrable.

The ability to price discriminate in part solves the problem of financing public goods. Optimal provision of public goods requires vertical summation of demand curves.[22] Perfect price discrimination serves this function.[23]

A second method used to obtain finance for public goods is by combining sale of a public good with sale of another good. the use of this tie-in sale is a technique discussed by economists in the literature on voluntary clubs and trade associations.[24]

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[22]For the traditional treatment see Stigler (1954, 1955).

[23]Buchanan (1967).

[24]For a survey see Sandler (1980). The classic treatment of public goods production is by Olson (1965).

Infinite Consumption Stream

List the ten most important works of art. Look at books describing history's most important buildings. The examination shows that throughout history, the single most important institution supporting architecture and art is religion. Cathedrals, temples, and shrines surely stand as awesome and impressive tributes to the commitment and power of religious belief.

The magnitude of the enterprise of building cathedrals makes the practice especially fascinating from an economic perspective. Several non-exclusive explanations for this practice may be offered within the context of wealth maximization. Cathedrals are a disposition of wealth in a form that not only is functional (generates revenue and serves as shelter for services) and durable, but cannot be stolen for gain by the less reverent. Another obvious function of using wealth in this manner is for advertising.

Another related explanation is that cathedrals serve a quality-assurance function in a manner described by Klein and Leffler (1981). This last hypothesis not only explains construction of cathedrals, but explains a variety of the characteristics shared by church institutions and activities. Understanding this theory requires returning to the central theme of this paper: churches provide several

important classes of products, the nature of which permit behavioral predictions.

One product provided by religions is an infinite consumption stream, the promise of eternal life. Some form of eternal life is a feature of each of the modern world's major religions and is a common feature in religions throughout history. The product eternal life shares important characteristics with products produced in non-religious markets and the techniques used to predict behavior in these markets can describe church behavior as well.

Although of limited interest for the theory presented here, one characteristic shared by the product eternal life and other products is price. A money price is used for most non-church goods. For eternal life, a money price or direct payment is common[25] but not universal. More often, eternal life is a results from adopting certain beliefs or engaging in certain actions.[26] For a few religions, heaven is assured for all or predestined and so beyond individual control.

However, the important characteristic of eternal life as a product is the difficulty in assuring consumers of the accuracy of information provided by churches. It is this

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[25]Payment for forgiveness of sin (indulgence) was common in the Roman Catholic church. In some religions, a consumer can buy heaven for others, alive or dead.

[26]Actions required often benefit society, that is, produce the social goods discussed in the previous section.

characteristic which allows application of economic theory and derivation of implications about church behavior.

Nelson (1970, 1974) characterizes consumer products as possessing search qualities and experience qualities. Search qualities are readily apparent upon inspection and before purchase. Attributes like color, price, and size can be determined before purchase. By contrast, experience qualities cannot be determined until after purchase. For example, the taste of food and durability of products can only be determined after purchase.

Darby and Karni (1973) introduce a special class of experience qualities called credence qualities. These attributes cannot be determined even after purchase. The service of a doctor has credence attributes. A consumer may not be able to tell if the service (an operation perhaps) is needed, may not be able to tell if the operation is performed, and may not be able to tell if the operation achieves the desired result. Other products which possess credence characteristics include the services of lawyers and auto mechanics.[27]

Special problems are associated with provision of credence goods (products dominated by credence attributes). In particular, producers of credence goods have incentive to

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[27]That used autos have some credence characteristics is the source of this paper's title.

cheat consumers by providing products of inferior quality[28], or not providing the promised goods at all. Note that the problem exists because consumers cannot perceive characteristics of the good even after purchase. The problem disappears if consumers are trained to perceive the characteristics or can produce the product themselves. In these cases, the special methods the market adopts are not necessary.

This same reasoning applies to achievement of eternal life. For some churches, individuals are encouraged to discover or confirm for themselves the means to achieve eternal life. The Protestant Reformation held as one key precept reading the bible to determine for oneself its messages. By contrast, traditional Roman Catholic doctrine relied on specialists (priests) to provide information about achieving eternal life. To the extent that information about it is provided by experts, eternal life takes on characteristics of a credence good.

Given the potential for abuse by experts providing credence goods, why rely on priests to provide information about eternal life? For the same reasons specialists produce virtually every good: the advantages of specialization and gains from trade. A specialized priest class reduces the cost of obtaining information about

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[28]For another treatment of the problems in providing what amounts to credence goods and some other market solutions see Akerlof (1970).

eternal life and allows individuals to specialize in activities in which they have a comparative advantage.

The advantages of priestly specialization are particularly relevant in pre-literate agricultural societies, pre-literate here meaning societies where a written language exists but is not widely known. A written language preserves religious literature but has no other value to the average consumer. The opportunity cost to that same consumer of learning to read and interpret religious literature is substantial, however, involving as it does the sacrifice of time required for subsistence farming.

The implication here is that organized priesthoods should reach their height of power in pre-literate agricultural societies. The relative strength of the Catholic Church in the third world is consistent with this implication. The argument holds to a lesser degree in societies with considerable specialized religious activity but without written language.

Both consumers and honest producers of credence goods gain if methods are found to assure product quality, quality defined as providing promised product characteristics or accurate information. Specialized producers[2] of eternal life use a number of tools, similar to those used for other credence goods, to ensure product quality.

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[2]The church does not actually produce eternal life, obviously, but does provide information on actions required to achieve eternal life.

In the case of information about eternal life, churches have two specific objectives. First, the church wishes to assure consumers that priests sincerely believe in their doctrine, and so are less likely to knowingly lie for personal gain. Second, the church wishes to assure consumers that priests and the church have scant opportunity to embezzle donations, thus reducing the incentive to misrepresent doctrine and exploit believers.

Churches use a number of tools to convince buyers of eternal life that priests sincerely believe[30] in their product and will not intentionally cheat consumers. Members of a priesthood typically cannot be ordained without a long apprenticeship, characterized by intense religious teaching and great personal sacrifice. Note that the purpose and character of the apprenticeship is more than simple learning of doctrine. The physical and emotional sacrifice goes beyond that required to learn religious doctrine but does serve as a selection process. Those unwilling to make the sacrifices or accept the precepts of the religion are eliminated during the apprenticeship. The apprenticeship serves to select only quality experts and thus assures consumers that priest provide accurate information. Both the church and consumers gain by this quality assurance.

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[30]While it may be impossible to prove the existence of life after death, it is possible to assure consumers that churches <u>believe</u> there is life after death and that certain steps must be taken to achieve it.

A similar argument is used by Leffler (1978) to explain the strict and apparently punative internship and residency requirements and various medical school restrictions. Leffler shows how these entry-restricting activities serve to assure product quality, vital for the credence good called medical care.[31]

Requiring of priests unusual and demanding behavior need not end with the apprenticeship. The prospect of continued demanding behavior serves to select quality priests as well. Requirements for unusual dress, beards, hairstyle, and physical mutilation of apprentices and priests can be considered quality-assuring.

Restricting entry by using a demanding apprenticeship helps assure consumers that priests are true believers. Churches also adopt policies that reduce incentive on the part of priests to embezzle donations for personal gain. Many priesthoods require poverty and chastity. In addition to being another demanding screening device, these requirements reduce the ability of priests to obtain personal income from believers, again assuring consumers of product quality. Chastity or celibacy[32] reduces the ability

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[31]Versions of this selection process can be observed in other professions with credence characteristics, including law. Another view on the role of training in assuring quality is Spence (1973), who asserts such training provides information about labor quality to an employer.

[32]Celibacy has not always been a requirement of Roman Catholic priests but was adopted in 1215 A.D. For a summary of Christian celibacy practices see Encyclopaedia of Religion and Ethics.

and incentive of a priest to obtain money to pass to heirs. The requirement by some churches that priests dress in particularly poor clothing is another example.

The church also often encourages good deeds and volunteer activity as an alternative to direct donation. Presumably cash payments would be a more efficient method of payment considering the opportunity cost of foregone wages for volunteer labor. Aside from potential tax advantages, such volunteer activities also assure a transfer of wealth in a form that cannot be readily embezzled by church authorities. Such protection again assures high quality production of a credence good.

Suppliers of eternal life use other techniques to assure consumers that the product is authentic. Cathedrals have attributes which serve to assure high quality. Cathedrals are a disposition of wealth in a form that has little alternative use. Ornate structure, not adapted for commercial use, and unique symbols built into the structure, not useful for another religion or commercial activity, are examples. Klein and Leffler (1981) use the idea of non-disposable capital to describe use by producers of assets which assure quality by having limited alternative use. Because of the substantial investment involved, consumers are assured that the church is not about to receive this

Sunday's offerings and then slip out of town. Nor can the priest sell the church and flee with the earnings.[33]

Cathedrals are only one type of non-disposable asset used by churches. Many church-endowed art is of a non-disposable form. Sculpture is often built in a building in a form that prevents its removal. Sacred art often depicts events unique to a religion and of no value to other religions. Art is often tied to shrines or cathedrals. Wall paintings and tile floors are two examples of art built into a building in a non-disposable form.

Even religious clothing and jewelry has arguably non-disposable characteristics. Priestly clothing[34] is often very specialized and distinctly different from secular garb. Often the clothing is ornate and expensive. Such clothing is a form of church wealth that is not readily convertible to alternative use and so assures product quality. The same argument holds for much religious jewelry, whose value in alternative use would be a small fraction of its value in primary use. Another example is churches which record sacred literature in an expensive manner, the illuminated bibles of the middle ages being one case.

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[33]Churches <u>are</u> sold and put to alternate use occasionally. The important point is that the sale price is only a small fraction of the value of the church in its primary use. Thus the value of the church is largely non-disposable and is sacrificed upon sale.

[34]Note that even in those religions where priestly clothing is poor, it is usually of a specialized design or color not easily adapted to alternative use.

To review. In cases where consumers rely on expert priests to provide information of the credence good eternal life, churches adopts several techniques to assure consumers that the church and its priests is not misrepresenting itself. These techniques include an apprenticeship which selects quality priests, policies which prevent wealth accumulation by priests, and methods of preserving church wealth in a form which, like a cathedral, has limited alternative use. These techniques are not adopted in religions where individual consumers are able to or encouraged to determine product quality on their own.

As an illustration, consider behavior of the Roman Catholic Church in the middle ages, a period of considerable church strength. In this era, priests were the sole source of information about eternal life. This period is characterized by substantial accumulation of non-disposable capital in cathedrals, art, and jewelry. Priestly celibacy began in this era as well.

In contrast, consider behavior of the modern Quaker church. Quaker's do not rely on priests, and in fact have no formal religious leaders. Not surprisingly, Quaker meeting houses are disposable in the extreme, often being converted from some other use, or are even homes.

In an intermediate position are modern Protestant, and to some degree, modern Catholic churches. Here ministers are viewed as teachers rather than experts. Behavior of ministers is monitored by the local parishioners who are

considered competent to make decisions on church doctrine, a process sometimes made in conventions open to non-specialists. Non-disposable capital is less important and priestly training emphasizes simple education over quality assurance.

As an alternative hypothesis, the Roman Catholic Church may be viewed as a franchise operation with the parent organization in some central location. In this case, central control and management assures consumers uniform quality by enforcing behavior standards on all priests.

As with other franchises there are several issues of managerial control[35] which arise within the church. One practice of the Catholic Church may be explained as a method to restrict wealth leakage. The requirement of celibacy of the priests would prevent inheritance of church property out of the church. Why then did Protestant religions not adopt the same practice? At their inception they has little wealth to lose. Further, they were faced with the severe difficulties of entering a highly monopolized market with little working capital. One low-cost way to attract

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[35]Questions of managerial control are not restricted to franchises. Managerial control refers to methods by which employee behavior is directed into desired areas. Of particular importance in this respect is the method by which employees are paid. A familiar example is the effect of paying by the load versus paying by the hour on the speed at which a truck driver runs his vehicle. The way in which priests are paid is clearly an interesting question. In the salary fixed per year? Is the salary set and paid for by the congregation or by a higher level in the church organization? Is salary related to church earnings or membership?

employees (ministers) would be to offer them freedom from the celibacy vow. George Stigler once claimed that no monopoly has persisted for as long as one hundred years, but he overlooked the Catholic Church whose monopoly persisted for over a thousand years.[36] In this context, Martin Luther may be viewed as the outstanding market entrant of all time.

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[36]'Stigler ignores the Jewish religion which might, in any case, be treated more as a fringe firm rather than a competitor during the height of the Catholic Church's power in Europe.

Altered Fate

The world is an uncertain and, in many ways, frightening place. A plethora of events surrounding and influencing our lives seem beyond our control, even beyond our ability to anticipate. That having some notion of the course of future events is valuable to individuals is not surprising. One look at the horiscopes and prognostications filling pages of popular literature confirms the value of precognition. Even less surprising is the fact that the ability to influence life's moments is also valuable to individuals. Religions and churches have throughout history played a crucial role in providing these valuable services to consumers.

Altered fate is the term used in this paper to describe several valuable and related products produced by religions. For one, churches offer explanations of events beyond human control. By offering answers to questions beyond obvious understanding, the church seeks to satisfy the human desire to bring order to the world. Explanation of the origin of the universe is an example.[37] Another valuable product is predictions of future events. Again,

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[37]The at times angry debate between the biblical and scientific views of the universe's creation is an example of the value humans place on information defining an orderly universe, even when that information arguably has no direct effect on those same humans.

the church provides valuable information in cases where temporal sources are insufficient. The prophetic books of the Bible are an example of church prediction. The church also offers to change the future, to influence the course of events in a manner of use to believers. Priestly intercession, laying on of hands, and charmed objects are church methods of altering future events. Similarly, the church provides information about actions, like prayer and sacrifice, believers must take to alter events.

That the church offers the set of products listed here does not imply the church is the only firm offering these products. As with most of the other classes of products discussed in this paper, the church faces competition from other producers. Most significantly in the case of altered fate, competition comes from scientific knowledge.[38] Scientific predictions, scientific explanations, and scientific techniques are the main alternative to the church for these products. Other competing sources include good-luck charms, tarot cards, horiscopes, superstition,[39] and quack medicine, to name a few.

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[38]The authors offer no formal definition of scientific knowledge and pray that variation in reader definitions has insignificant effect on this paper's conclusions. Defining scientific knowledge as being exclusive of supernatural knowledge may be as useful, although as arbitrary as any definition. In addition, the authors do not wish to imply that scientific explanations are in any way superior or inferior to non-scientific explanations.

[39]Churches constantly oppose as instruments of evil most of these alternative sources of altered fate. Such a policy both assures the quality of church information and restricts entry by competing producers.

The presence of competing sources of the set of products labelled altered fate certainly affects church behavior. In particular, scientific advances have changed the boundaries of what is commonly perceived as the purview of religious explanation. As an example, the dramatic growth in medical science has resulted in a significant reduction in church medical activity. No modern church promises cures for disease exclusive of scientific medicine.[40] Not surprisingly, church efforts against disease are commonly directed to those diseases (like terminal cancer) where scientific medicine has limited application.

Despite the presence of competing sources of altered fate, however, churches are a significant force in providing these products. That the church successfully offers these products is not surprising. As with other products discussed in this paper, the church is uniquely qualified to provide altered fate. In fact, the discussion of altered fate as a church-produced product is basically a review of material presented earlier.

In the first case, most products in the class altered fate have significant credence qualities. Accuracy of church information cannot be confirmed even after the information is obtained. Explanations of the origin of the universe are an example of valuable information that has

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[40]Christian Scientists believe scientific medicine does cure or prevent disease but oppose scientific medicine as a matter of religious principle.

credence qualities. Church provision of credence goods was discussed in a previous section. If consumers rely on expert priests to provide information, the church uses a demanding priesthood[41] and non-disposable capital to assure product quality.

Altered fate contains several products, each with a different degree of credence quality content. Not, surprisingly, we would expect the church to specialize in production of those at which it has a comparative advantage, those with the greatest credence content. If consumers have some ability to confirm the information provided, the church is less likely to provide expert help and more likely to encourage individual production. As an example, churches should encourage individuals to pray for a cure for disease rather than rely on an expert, since the result of the action is observable. By contrast, information about the origin of the universe is more likely provided by expert priests.

In addition to credence qualities, altered fate often has characteristics of a public good. Information in general is non-rival in consumption, its use by one person does not reduce the quantity available to others. In addition, changes in future events or predictions often affect a number of people simultaneously.

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[41]One direction for research is to consider to what degree scientists (experts) are similar to priests in providing information about products with credence qualities.

One obvious example of such a public good is seasonal weather prediction.[42] In agricultural and pastoral cultures, information about seasonal changes is valuable. Because of its public good characteristic, private markets may produce too little of this information. In the absence of a central government, the church can provide this information. As discussed, the church can price discriminate, use tie-in sales, and apply social pressure to obtain support for production of public goods. That churches in pre-literate cultures commonly create and preserve calendars appears to confirm this implication.

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[42]In this, as in some other cases, the boundary between prediction and alteration is fuzzy. A church may come to believe it is altering weather when in fact it is predicting weather. For example, a church may come to believe a human sacrifice is necessary at a certain phase of the moon each year to bring a change in weather for planting. The technique always works.

Some Other Issues

Monotheism

Pertaining to a discussion on scarcity, Professor Steven Cheung once asked the rhetorical question: "Why aren't there more gods?" Of course at one time there was quite an abundance of gods throughout the world. A more appropriate question for Cheung to have asked in this context is why are monotheistic religions so predominant throughout the world now?

Two factors operate to reverse the process of god proliferation. The obvious one is that better (i.e. "natural") explanations of the phenomena ascribed to godly activity are devised. The second is that there are economies of scale with monotheism especially if the various gods require separate worship. This suggests that there will be a move to monotheism as the value of labor time increases.

Presumably the development of agriculture resulted in one of the first major wide-spread increases in the value of labor time. On would expect, therefore, a reduction in the number of gods coincident with the development of agriculture. If this explanation is correct, we should find monotheistic religions developing in areas of twelve-month agriculture before it occurs in other locales. Similarly,

at a moment in time, we should find monotheistic religions in higher proportion in areas of twelve-month agricultural activity tan in other areas. In the far north, the long winters would result in extended periods of time during which the value of labor was low and therefore the development of monotheistic religion would be expected to occur at a later date.

The second historic episode resulting in substantial changes in the value of labor is the industrial revolution. The implications should apply to this as well.

Sects and Product Variety

Religion is different from other products in part because consumers gain limited value or even lose value from increases in product variety. Consumers value the existence of religious sects (subgroups of a given religion) but lose value in the presence of additional religions. Addition of new religions may attract some new believers but threatens the religious fabric of the society.

Additional religions increase uncertainty about requirements for eternal life and altered fate but increase the variety of such products as entertainment. As mentioned earlier, enforcement of social goals is more difficult when the potential threat of hell is reduced throughout multiple standards.

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