The Economics of Religion: A Survey of Recent Work

INTRODUCTION

The past three decades have witnessed dramatic growth in the domain of economics. Economists now study such diverse subjects as education, fertility, discrimination, voting, marriage, health, crime, and addiction. Even so, few economists have applied their analytic tools to the study of religion. Secular economists tend to ignore religion altogether or else view it as an exogenous characteristic like race or sex. Christian economists too, despite much work on economics *and* religion, have said little about the economics *of* religion. They have critiqued economic theory and economic policies from the standpoint of moral and religious values and have analyzed religiously motivated pronouncements such as the Catholic Bishops' Pastoral from the standpoint of economic logic. But rarely have they used economic theory to account for religious practice or religious institutions.

It is not for lack of precedent that contemporary economists shun the economics of religion. Adam Smith devoted some twenty-five pages of *The Wealth of Nations* to the analysis of religious institutions, arguing that established religions face the same incentive problems as other state monopolies (Smith [1776] 1965, p. 740). Although Smith's analysis laid the foundation for a theory of religious markets, two centuries passed without any serious attempts to build upon it.

Our personal experiences suggest that secular and religious economists often avoid the economics of religion for opposite reasons. Secular economists, together with the majority of academics and intellectuals, tend to see religion as an uninteresting vestige of pre-scientific times. Despite the 1980's resurgence of evangelical fundamentalism, most secular economists view religious belief, behavior, and institutions as increasingly unimportant aspects of modern life. They therefore greet work on the economics of religion with a mixture of amusement, apathy, and disdain. For religious economists, the situation is almost exactly reversed. Religion is so important, its truths so profound, that it inevitably transcends social-scientific inquiry. There is therefore a natural tendency to question the validity of an "economics of religion." The very idea strikes many as naive, futile, or even offensive.

Collegiate skepticism notwithstanding, a handful of economists recently have turned their attention to the economics of religion. Their work employs the same methodology that characterizes other attempts to expand the domain of economics, and their substantive concerns tend to mirror those in the sociology of religion (i.e., understanding the determinants of religious behavior and the characteristics of religious institutions). As is the case with sociologists of religion, these econo-

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mists are not uniformly religious or irreligious, but rather bring to the subject a variety of perspectives, convictions, and motivations.

This essay is designed to familiarize readers with the economics of religion, make its literature more accessible, and encourage further contributions to that literature. We begin by outlining work on the religious behavior of individuals and households, proceed to analyses of religious groups and institutions, and conclude with work on religious markets. Along the way, we attempt to maintain a relatively neutral perspective. Since most readers will have read few if any of the papers we describe, a methodological critique or defense seems premature. Moreover, given our own enthusiasm for the subject, any critique would be half-hearted, and any defense, self-serving. Suffice it to say that our goal is not to reduce religion to a purely economic phenomena, but rather merely to illuminate some aspects of it. We would place our efforts on the same level as other social-scientific studies of religion and hope that people of faith approach them in the same way that they approach research in the sociology, psychology, and anthropology of religion.

INDIVIDUALS AND HOUSEHOLDS

Contemporary research on the economics of religion begins with Azzi and Ehrenberg's (1975) analysis of household religious activity. Azzi and Ehrenberg develop a model of religious participation that is for the most part a straightforward application of the "new home economics" pioneered by Gary Becker (1976). Individuals are assumed to allocate time and goods to maximize the utility derived from a set of household commodities, one of which happens to be religion.

In Azzi and Ehrenberg's framework, the primary motivation for religious participating is assumed to be "afterlife consumption." This amounts to a strong restriction on the way religious commodities enter household utility functions. Together with the assumption that the marginal product of inputs devoted to religion is independent of age, the restriction implies that religious participation increases with age. Efficiency conditions also require that households with lower values of time produce religious commodities in a more time-intensive manner, and that within a given household, relatively more time be supplied by members with lower alternative wages (typically, wives).

The empirical support for Azzi and Ehrenberg's predictions is mixed. Their own regression analysis of survey data tends to confirm their predictions, as does additional analysis by Ehrenberg (1977). But surveys analyzed by Long and Settle (1977) and Ulbrich and Wallace (1983, 1984) find no evidence that "afterlife consumption motives" causes religious participation to increase with age, nor that women's higher rates of religiosity can be explained in terms of lower alternative wages (c.f. DeVaus, 1984). Sullivan's (1985) simultaneous equations test of the relationship between church contributions and attendance finds weak support for Azzi and Ehrenberg's model.

Researchers also have questioned Azzi and Ehrenberg's theoretical assumptions, most notably the assumptions that afterlife consumption is the major motivator of religious activity and that religious commodities are simple functions of goods and time. The standard goods-time framework abstracts from the collective side of religious activity, suggests statistical models little different from those employed by sociologists, and has little to say about the strongest predictors of individual participation: denomination, personal belief, and family background.

Iannaccone (1984, 1980) attempts to

overcome the limitations of the goods-time framework by extending Azzi and Ehrenberg's model to incorporate the accumulation of "religious human capital." The extended model explains age trends in terms of experience effects and habit formation rather than afterlife concerns. The model also generates predictions concerning denominational mobility, religious intermarriage, and conversion ages. Other extensions of the Azzi and Ehrenberg model are presented by Redman (1980), who models the production of "personal salvation" as more time-intensive than "social welfare," and by Neuman (1982, 1986, c.f. Neuman and Grossbard-Shechtman 1984), whose analysis of time devoted to religious practice takes account of (myopic) habit formation. Greely and Durkin (1991) have developed a model of religious choice under uncertainty that views "faith" as a type of human capital.

RELIGIOUS GROUPS AND INSTITUTIONS

Most recent research shifts its focus from individuals and households to groups and institutions. Simple models of isolated utility maximizers, constrained only by personal income and commodity prices, have given way to models that emphasize the role of specialized firms or clubs in the production of religious commodities. These models may overcome shortcomings in the earlier work which, though designed to predict church attendance, never really addressed the existence of churches.

The papers that fall into this category are diverse. However, most share the working assumption that religious activity can be viewed as rising out of the interaction of (clergy) producers and (lay) consumers of religious commodities. Hence, most draw heavily on the theory of the firm. A few papers emphasize religion as a collective activity and so take club theory as their starting point.

By modeling churches as firms, researchers attempt to explain the development of religious doctrine, the organizational structure of religious institutions, and the evolution of religious practices. For example, Ireland (1989) examines the role of entrepreneurship in the formation of new religions, and Dolin, Slesnick, and Byrd (1989) explain the organizational structure of contemporary denominations in terms of a franchising model. Finke and Stark (1989) argue that the explosive growth of the Methodist and Baptist denominations in nineteenth century America was due to their clergy's superior marketing and incentives relative to those of the Congregationalists, Presbyterians, and Episcopalians.

Ekelund, Hebert, and Tollison (1989) use the model of a monopoly firm to explain the medieval Catholic church's usury doctrine. Here rent seeking is the primary motivation of the church hierarchy. The central church's monopoly position allowed it to extract rents from downstream producers (the clergy) and from input suppliers (banks) by controlling the borrowing and lending interest rates.

If churches act as producers, then it is natural to ask about the commodities they produce. A key insight from this research is that important church products are public goods. Indeed, this research argues that the collective nature of religious production explains many differences in church structure, doctrine, and organization.

Bold and Hull (1989, 1991; c.f. Hull and Bold 1989) stress property rights enforcement and appropriate social behavior as critical, albeit unintended, collective goods in the church's product mix. They test this hypothesis with cross-sectional data comparing rates of religious adherence and criminal activity and data on religious characteristics across cultures. Their model explains aspects of churches as diverse as church building architecture and priestly clothing. Davies (1986) also emphasizes church provision of collective goods like social insurance and appropriate individual behavior using the Mormon

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Anderson (1989; 1989b) views the medieval Catholic church as a powerful, profit maximizing monopoly that benefitted from well-defined property rights. Anderson argues that property rights issues shaped the Church's application and modification of doctrines concerning penance in this life and heaven, hell, and purgatory in the next. Arguing in a similar vein, Hull (1989) shows how changes in Catholic church teachings about hell and purgatory were innovative methods of enforcing property rights in the High Middle Ages, a time when nation states had not yet assumed responsibility for property rights enforcement in the newly emerging cities.

Although religious institutions manifest many firm-like characteristics, the standard distinction between producer and consumer is only partially applicable to churches. Congregations, like families, combine the functions of production and consumption. Aside from a few full-time religious professionals and a handful of benchwarmers, most church members act as both producers and consumers of religious commodities. Moreover, many religious activities, especially acts of public worship and charity, generate public benefit. These facts have motivated some economists to model churches as economic clubs rather than neoclassical firms. McChesney (1987) models churches as producers of congestable, impure public goods. Hence, his analysis focuses on issues of optimal number of clubs in a society. Halteman (1988) draws on public choice theory to address a similar set of issues. Both of these papers predict an inverse relationship between church size and contribution rates. Lipford (1990) uses a similar approach but reports empirical results that contradict McChesney's and Halteman's implications. Other economists interested in religious clubs and free-rider problems include Sullivan (1985), Pautler (1977), and especially, Wallis (1990, 1991).

Iannaccone (forthcoming) develops a different kind of club model, one that assumes positive returns to "participatory crowding." In this model, which assumes that the increased paticipation of one member raises the utility of other members, apparently gratuitous sacrifices can function to mitigate free rider problems. Perfectly rational individuals may thus find it in their interest to join so-called "sects" and "cults" that demand stigma, self-sacrifice, and bizarre behavioral standards. At the same time, other people will find it optimal to form less demanding groups, such as mainstream churches. The distinction between demanding "sects" and mainstream "churches" is also analyzed in Iannaccone (1988) and Schaefer (1988).

RELIGIOUS MARKETS

The introduction to this essay noted that Adam Smith devoted some twenty-five pages of *The Wealth of Nations* to the analysis of religious institutions. Approaching the subject from the market level, Smith argued that established religions face the same incentive problems that plague other state monopolies:

> The teachers of [religion]. . . , in the same manner as other teachers, may either depend altogether for their subsistence upon the voluntary contributions of their hearers; or they may derive it from some other fund to which the law of their country may entitle them . . . Their exertion, their zeal and industry, are likely to be much greater in the former situation than the latter. In this respect the teachers of new religions have always had a considerable advantage in attacking those ancient and established systems of which the clergy, reposing themselves upon their benefices, had neglected to keep up the fervor of the faith and devotion in the great body of the people . . . (Smith [1776] 1965, pp. 740-741).

Smith's analysis lays the foundation for a theory of religious markets, a theory in which self-interest motivates clergy just as it does secular producers; market forces constrain churches just as they do secular firms; and the benefits of competition, the burdens of monopoly, and the hazards of government regulation are as real as in any other sector of the economy. Anderson (1988) reviews Smith's theory in some detail. Posner (1987) and McConnell and Posner (1989) apply Smith's insights to an analysis of the first amendment's impact on religion in America. Iannaccone (1991) uses the contemporary theory of regulation to extend Smith's analysis.

Levy (1978, 1988) also refers to Smith but uses Smith's treatment of morals and religion to model the church as a provider of information and behavioral restrictions that can increase individual utility. The model assumes that individuals have limited information and non-convex utility functions, from which it follows that individuals' efforts to maximize their utility often lead to local, rather than global, maxima. Under these circumstances, a church's religious and moral teachings can function as exogenous constraints that steer people toward their true optimum.

Smith's theory has also been subjected to empirical tests. Iannaccone (1991) examines contemporary data from eighteen countries to see if competition stimulates religious activity. He finds that among Protestants, church attendance, belief in God, and the perceived importance of religion are all greater in countries with numerous competing churches than in countries dominated by a single church. Finke and Stark (1988) and Stark and McCann (1989) draw similar conclusions based on the analysis of contemporary and historical data across cities in the U.S. Finke (1988) reviews the impact of "deregulation" in American religious history, showing that rates of church membership rose as the colonial pattern of established churches and de facto religious monopoly gave way to a free religious market. Hull and Moran (1989) draw similar conclusions based on their analysis of a colonial church membership time series. As many of these authors emphasize, the economic approach to religious markets yields predictions that contradict the longstanding sociological assumption that religious pluralism undermines religiosity and facilitates secularization.

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CONCLUSION

The nexus of religion and economics is complex and multi-faceted. The economics of religion as defined and reviewed in this essay is but one approach to that nexus. It is not our intent to tout it imperialistically. Nevertheless, the approach deserves serious, scholarly attention. To sociologists of religion, the economic approach offers a new theoretical orientation, more systematic, and perhaps more fruitful than the diverse generalizations previously used to explain religious behavior and institutions. To economists of faith, the economics of religion provides a new way to apply professional skills to a subject of great personal importance. And even to secular economists with no particular interest in religion, the topic holds out the tantalizing prospect of their discipline illuminating yet another area of human behavior. ■

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