

# Implications of the Economics of Religion to the Empirical Economic Research

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## Abstract

This paper collects most recent developments in the emerging economic sub-area *Economics of Religion*. According to "secularization thesis", the importance of beliefs and religious activities should weaken as education, scientific knowledge and economic welfare increases. That hypothesis has been previously proofed false, but it continues to affect people's attitudes. This survey analyzes the economic consequences of religion, the two-way interrelationship between religious and economic activities and the present state of economic scrutiny on the subject, exploring the emerging sub-field of economics, which appends our notion of factors behind the economic behavior and growth, by including religious activity as an important factor in economic development. Changes in belief systems, which in many cases will be forms of religion, also can significantly influence individual behavior along with the maximization of individual profit and utility. The finding that economic growth depends also on the productivity of the religious sector, offers interesting future research opportunities.

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# 1 Introduction

Economics of religion is one emerging sub-area of contemporary economics. That kind of analysis may enhance modern economic science by generating new information on "non-market" behavior. There has been a growing interest into recognizing a larger role for cultural influences in economic performance. Microeconomics is based on the derivation of utility functions of the economic agents. By appending those functions with beliefs, norms and values gives a more realistic picture of the behavior of human beings. Religion, moral and culture affect economic attitudes and activities, but those factors are usually neglected in economic scrutiny.

The modern business company is shaped not only by its formal wage, salary and other incentive systems but also by the content of its belief system. The internal structure of informal incentives created by a business culture may have a major impact on the ability of the firm to make efficient use of its resources. Similar things are now being said of whole national economic systems. Besides relying on the inputs of capital and labor and the structure of property rights and other legal arrangements, the functioning of a national economy may depend on a host of less well defined factors involving elements of culture, which are a short distance to religion. Economists today are being pushed to accept that they may have to take up the role of religion if they want to understand the full workings of economic systems (Nelson 2001, p.205-207). Religion is often a decisive influence on the form of "social capital" of a society, which can be a key explanatory factor along with physical and human capital in determining national economic outcomes.

Contrary to the popular notion in liberal "post-Christian" era Western-European countries, importance of religions has not been fading away. As contemporary examples we should note the explosive growth of protestant and charismatic Christianity in Latin America, expansion and political importance of Islamic fundamentalism and continuing importance of evangelical Christianity in the world's largest economy, in the US. This emphasis is

deepening due to the presidency of G.W.Bush<sup>1</sup>. Additionally, the religious ferment continues in Russia and Eastern-Europe.

Religion of economics is usually (Iannaccone 1998, p.1466) divided into three major lines of scientific scrutiny:

- Analysis of economic consequences of religions.
- Analysis of religious behavior from an economic perspective, applying microeconomic theory and econometric techniques.
- Analysis and critique of the development of economic theory and practice from the perspective of theology and sacred writings. This sub-area is also called *religious economics*.

The last one, religious economics, is pretty much an area of its own, which covers huge amount of writings by Christian theologians (analyzing for example problems of usury, private ownership, economic concepts in the writings of Bible, etc.) and Islamic economists (analyzing banking, taxation, income distribution and finance based on Qur'an and Sunna).

Additionally, one interesting line of study is the way of seeing economics as the basis for a contemporary religion, as economists can be seen to serve as the priesthood of a modern secular religion of economic progress that serves many of the same functions in contemporary society as earlier Christian and other religions did in their time (Nelson 2001). This field of analyzing economic's rhetoric aspects could be called *economic theology*. According to this view, we live in a world in which science has replaced religion as the most powerful of orthodoxies. Economics is not value-free, but contains hidden metaphysics.

In this paper, the analysis concentrates on discussing the current state of economic scrutiny concerning the economic consequences of religion. Religion is defined (Iannaccone 1998) as any shared set of beliefs, activities

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<sup>1</sup>see cover story "Bush and God" in Newsweek, March 10 issue, 2003

and institutions premised upon faith in supernatural forces. This definition excludes purely individualistic spirituality and systems of metaphysical thought, including some variant beliefs, which border on pure philosophy.

Nowadays, studies on economics of religion are appearing on for example nature of religion, the determinants of individual religiosity, participation rates, religious mobility, commitment, evolution of religious institutions, secularization, socioeconomic correlates of sect membership, church-state problems and economic consequences of religion. Economics of religion sustains at least four international journals, four associations, three annual meetings in the US and Europe. These new market models of religious activity have already been characterized as a new paradigm. Most AEA conferences now include sessions on religion.

Religion continues to be of importance in people's lives. So called "secularization thesis", which came to function as the principal paradigm for the social-scientific study of religion states that religion is merely a survival from man's primitive past<sup>2</sup>, and will disappear during the development of science and human race. One prominent developer of that kind of positivist view was sociologist Gerhard Lenski<sup>3</sup>. The hypothesis implies that religious activity must decline as science and technology advance. Increasing level of education makes individuals less religious and more skeptical on faith-based claims. The same argumentation leads to notion that membership in deviant religious groups (sects, cults, etc.) is the consequence of indoctrination leading to aberrant values, or abnormal psychology due to trauma, neurosis or unmet needs. That kind of argumentation is still common, even when decades of research has repeatedly proved them false (Iannaccone 1998, pp.1468-1472).

Larson, E. and Witham, L. (1998,1997) have examined the religious activity among the American scientists. They find out that anti-religious opinions are not much more common among the highly educated professors, except

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<sup>2</sup>the origin of the secularization thesis can be traced at least to Marx and Weber

<sup>3</sup>Lenski, Gerhard E. 1963. *The Religious Factor*. Rev.ed.Garden City, NY:Doubleday.

among the social sciences (psychology, anthropology, sociology), where secularization thesis has gained more popularity. Nevertheless, American scientists generally are not found to be less religious now as in 1916 (Larson & Witham 1997). Eminent US psychologist J.H. Leuba, made a survey on this topic in 1914<sup>4</sup>, and found out that 58% of 1,000 randomly selected US scientists expressed disbelief or doubt in the existence of God. Leuba repeated the study in 1934<sup>5</sup> and found that percentage had increased to 67. In 1997 study, Larson and Witham repeated the study and found out that percentage was 61, implicating no major increase in disbelief. On the other hand, when the study was restricted to include only US "top" scientists (Larson & Witham 1998), members of the National Academy of Sciences (NAS), percentage of disbelief into existence of personal God was clearly higher, 72%.

This survey focuses on empirical analysis on themes of economics of religion, so the focus is mainly on Judeo-Christian type of beliefs, as that is the dominating basis on religious activities in Western hemisphere. That means also that the data is almost entirely available and collected among Western countries. Availability of religious data in the US has previously been somewhat limited and unreliable. The situation in Finland is better than in most other countries as we have a one common state-church which has been collecting data from its parishioners (covering almost entirely the whole population) for centuries. Overall, religious data is more abundant than maybe economists have previously realized and surely far more extensive than those pertaining to many other "non-market" activities, such as clubs, sport activities, social movements and other third-sector institutions.

## 2 Religion and economic behavior

The founding writing on the economic consequences of religion is Max Weber's *Die Protestantische Ethik und der Geist des Kapitalismus*, where he ar-

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<sup>4</sup>Leuba, J.H. 1916. *The Belief in God and Immortality: A Psychological, Anthropological and Statistical Study*. Sherman, French&CO., Boston

<sup>5</sup>Leuba, J.H. 1934. Harper's Magazine 169, 291-300

gues that the Protestant Reformation made possible the advance of modern capitalism. Protestantism made a previously unseen emphasis on individual responsibility, personal diligence and approved risk-taking and financial self-improvement (Weber 1904, engl. 1930). Nevertheless, there is mixed empirical evidence backing the Protestant Ethic thesis. On the contrary, it has been shown<sup>6</sup> that most capitalist institutions preceded the Protestant Reformation. During the beginning of modern capitalism, it also seem to be that economic progress in Europe was uncorrelated with Protestant religion, in a sense that in Netherland, Catholic families had more wealth than Protestants. Nevertheless, several scholars<sup>7</sup> note that Christian religion overall has enabled rapid economic growth, versus the economic and intellectual development in Islamic countries for most of millennium. This is explained to depend on Islam's static world-view. Especially Protestantism is found to be positively correlated with growth and development<sup>8</sup>. It should also be remembered, that the empirical evidence only rejects the specific channel proposed by Weber (Guiso, Sapienza & Zingales 2003), not a more general link between the Protestant ethic and the development of a capitalist attitude.

Weber's (1904, engl. 1930) main thesis was that religion may be a significant positive or negative force on economic development. The effect would be positive if religion looked favorably on the accumulation of material wealth,

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<sup>6</sup>Samuelsson, K. 1993. *Religion and Economic Action. The Protestant Ethic, the Rise of Capitalism, and the Abuses of Scholarship*. U of Toronto Press;

Anderson, and Tollison, R., 1992. *Morality and Monopoly. The Constitutional Political Economy of Religious Rulers*. Cato J., 12:2;

Delacroix, 1992. *A Critical Empirical Test of the Common Interpretation of the Protestant Ethic and the Spirit of Capitalism*. Int. Assoc. Business & Society, Belgium;

Tawney, R.H., 1926. *Religion and the Rise of Capitalism*. New York

<sup>7</sup>Greif, A. 1994. *Cultural Beliefs and the Organization of Society*. J.of Political Economy, 102:5;

Kuran 1997. *Islam and Underdevelopment*. J.of Instit.&Theor.Econ.153:1;

Kuran 1995. *Private Truths, Public Lies*. Harvard University Press;

Chiswick, B. 1983. *The Earnings and Human Capital of American Jews*. J.Human Res., 18:3

<sup>8</sup>Grier 1997

perhaps in conjunction with rewards obtained in an after-life. This argumentation could fit into Calvinist Protestantism. Weber argued that the Protestant ethic is inherently about applying religious meaning to economic behavior, as for example, labor was seen as a moral duty. However, as Keely notes (Keely 2003, p.286), Weber otherwise downplayed the role of religious beliefs in determining economic performance. He claimed that capitalism did not rely on the Protestant ethic, but rather needed only the initial push of the ethic and afterwards any work ethic remaining is devoid of religious meaning.

The logic of effect mechanism is that a cultural trait affects certain values or beliefs, and those beliefs in turn influence one's economic decision-making and thus economic outcomes. The possible association of cultural factors (religion as a proxy with good data resources for empirical analysis purposes) with differences in economic performance is assumed.

Religion can also increase economic development by promoting a positive attitude toward honesty. Religion may increase levels of trust and reduce levels of corruption and criminal activity, increase a nation's openness to strangers and thus make the economy more open to foreign investments and employees. Religion may encourage thrift, which would stimulate saving, investments and therefore economic growth. At the same time, religion may lead to better health levels (by discouraging "sinful" activities as drugs, over-eating, gambling, alcohol, etc.). Higher health levels in the society would raise productivity through labor force efficiency.

Negative factors could be religious restrictions on capital accumulation, profit-making, credit markets and interest. Religion may also increase resource allocation towards church activities (cathedral building) and therefore removing resources from free market activities. Violent behavior or civil unrest may either increase or decrease because of religion.

At the same time it has been found that at the level of individuals and households, economic behavior and outcomes do correlate with religion. Even more stronger links exist between religiosity and a wide range of economi-

cally relevant social behavior, such as criminal activity, drug and alcohol consumption, physical and mental health, marriage, fertility and divorce. US Jews have an average significantly higher wages and income as Christian population, largely due to their high levels of education<sup>9</sup>. Brenner and Kiefer (1981)<sup>10</sup> argue that in response to long-continuing persecution, Jews emphasize the value of education, as it is portable and non-expropriable versus land or physical capital. Chiswick (1983, 1985) notes that Jews acquire high levels of education because of their high rate of return on schooling. This high rate of return is due to large investments in child quality, seen in small family size and mothers' tendency to stay home when raising children. Also Guiso, Sapienza and Zingales (2003) find out that religious beliefs, especially Christian religion, are positively associated with attitudes conducive to economic growth, free markets and better institutions. On the negative side, religious people are found to be more intolerant and less sympathetic to women's rights.

Religious effects on economic behavior are found to be substantively large and statistically significant (Iannaccone 1998, pp.1475-1476), but the possibility remains that religion's statistical effect is spurious. There exists underlying characteristics that form both religious and other activities. Well-behaving children may avoid drugs, stay in school and go to church. People with liberal values will probably stay away from conservative denominations. Nevertheless, there exist plausible *a priori* arguments for religion's impact. Freeman (1986)<sup>11</sup> has noted that churchgoing positively affects the allocation

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<sup>9</sup>Chiswick, B. 1983. *The Earnings and Human Capital of American Jews*. Journal of Human Research. 18:3, 313-336;

Chiswick, B. 1985. *The Labor Market Status of American Jews. Patterns and Determinants*. American Jewish Yearbook, 85. 131-153

<sup>10</sup>Brenner, R. and Kiefer, N.M. 1981. *The Economics of the Diaspora. Discrimination and Occupational Structure*. Econ.Develop.Cult.Change. 29:3. 517-534

<sup>11</sup>Freeman, R.B. 1986. *Who Escapes? The Relation of Churchgoing and Other Background Factors to the Socioeconomic Performance of Black Male Youths from Inner-city Tracts*. In *The Black Youth employment Crisis* by Richard B. Freeman and Harry J. Holzer, (eds.) Chicago and London. University of Chicago Press, pp.353-376

of time, school attendance, work activity and the frequency of socially deviant activity (crime, drugs, alcohol) and that at least some part of the churchgoing effect is the result of an actual causal impact. Several other economists<sup>12</sup> have observed significantly lower rates of violent and nonviolent crime in geographical areas with higher rates of religious membership.

There exists a large empirical literature on the relationship between religion and different forms of sociological deviance<sup>13</sup> (including crime, suicide, divorce, drugs, non-marital sex, etc.). Typical result from these analyzes is that youth raised in highly religious homes are less likely to engage in criminal activity, use drugs or alcohol, or engage in premarital sex. Effects are found to be especially strong for children raised in strict denominations or religiously homogenous communities. Empirical studies consistently find that high rates of religious activity and commitment are linked with mental health, reduced stress and increased life satisfaction. Religious effects seem to persist even after controlling the models for age, income, gender, education, etc. Several epidemiological studies on statistically significant religious effects are reported in several medicine journals. Members of strict religious groups (Mormons, 7th Day Adventists, etc.) seem to enjoy longer lives and lower rates of cancer, stroke, hypertension and heart disease, because they follow several health-related every-day restrictions. Broader correlations between health and religiosity have many causes, including a negative link between faith and stress, or a positive link between church involvement and social support<sup>14</sup>.

A significant relationship between religion and economically relevant behavior does not straightforwardly imply similar relationship between religion

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<sup>12</sup>Lipford, McCormick, R. and Tollison, 1993. *Preaching Matters*. J. Econ Behav. Organ. 21:3;  
Hull and Bold, F.(1995). *Preaching Matters – Replication and Extension*. J. Econ Behav. Organ. 27:1

<sup>13</sup>for a good survey on literature, see (Iannaccone 1998, p.1476-1478)

<sup>14</sup>Levin, J.S. 1994. *Religion and Health. Is there an Association, is it valid and is it causal?* Soc.Sci.Med. 38.11.pp.1475-1482

and economic attitudes. The degree of religiosity is not found to influence consumer's attitudes concerning capitalism, socialism, income redistribution, private property, free trade and government regulation. Every religious tradition and sacred literature seem to contain enough ambiguity to justify any number of economic positions. Iannaccone (1998) notes that despite media hype concerning the conservatism of the "Religious Right", opinion polls consistently find that the economic attitudes of those groups are no more conservative than those of other Protestants. On several dimensions (income redistributions, aid to the poor) they are significantly less conservative than the average American. Their conservatism is expressed in a set of theological, moral and social issues (school prayer, abortion, sexual conduct), but which are independent of their economic attitudes.

Religions economic impact seems to be significant, but not uniform. Religion affects strongly some behavioral outcomes. Life satisfaction is related to levels of religious belief and physical health and deviance is strongly related to levels of involvement. On the other hand, religious activity has no uniform or equally strong effect related to some other variables (earnings, education, economic attitudes). Many effects vary across denominations, which are usually strongest in sectarian groups. This lack of uniformity is seen as a proof against spurious correlation due to any simple form of omitted heterogeneity. Religious effects do not reduce to a single unobserved factor, such as goodness, conservatism, credulity or risk aversion, which implies a need for more sophisticated models of religious behavior and economy (Iannaccone 1998, p.1478).

Barro and McCleary (2002) find out that macroeconomic development (measured as GNP) has a negative correlation with religious activity, measured both by church attendance and various religious beliefs. Nevertheless, when other development indicator were held constant, relation between GNP and church attendance was positive, but not statistically significant. But using individual dimensions of economic development, as education, gives a different picture. They found a clearly significant positive coefficient for

education in all regressions (using SURE-system estimation technique) for church attendance and beliefs. This means that beliefs do not rely on ignorance or non-scientific thinking (contrary to Hume (1757)). Beliefs require capacity, gained by education, for abstraction, as beliefs are based on faith and non-materialized assumptions. Barro and McCleary (2002) test also for the presence of secular trends in religiosity for given values of the economic variables. The only statistically significant trend is a positive trend for belief in hell.

Life expectancy was also found to have a negative relation with religiosity. People defer investments in churchgoing when they are far away from their anticipated deaths. But church attendance does not carry over to religious beliefs in this time. Life expectancy had a positive relation to religious beliefs (beliefs in heaven, hell and an after-life). The individuals who are further away from death may have low incentives to spend time at church, but they apparently need not have low levels of religious conviction. Analyzing the effects of the age structure has been pretty ambiguous. The higher population share of children in the society is found to be positively related to church attendance, but no relation is found with religious beliefs. Old-age fraction was, somewhat surprisingly, not significantly related to church attendance (Barro & McCleary 2002). This finding is in line with the ambiguity in the theory, whereby the elderly would wish to attend church more often because of their impending deaths, but at the same time, would face high costs for attending church meetings. Additionally, the share of elderly population was negatively related to religious beliefs, which is not explained in a theory.

### **3 Religion and economic growth**

According to Barro (Barro & McCleary 2002, p.15), the current state of economic growth analysis is such that explanations of economic performance have to go beyond narrow measures of economic variables to encompass political and social factors. The empirical growth research reveal impor-

tant influences on growth from policies and institutions. Economic growth models should also include variables for nation's culture, moral and ethics (Barro 2000). Probably the best proxy for that is religion, as it is well documented for a long time in all western economies, making quantitative empirical data available and closely measuring quantifiable dimensions of culture.

Based on the previous economic growth models by Barro<sup>15</sup>, in Barro and McCleary (2002) the growth rate of per capita GDP is analyzed by using religious variables as explanatory variables. The first finding was that differences in the composition of the population among the major religious denominations (Muslim, Protestant, Hindu, Eastern, Jewish, Orthodox, other) have only little consequence for economic growth. Other, and more interesting, finding is that religion seems to affect economic growth (but not the other way around). In Barro's growth model, coefficient on church attendance was significantly negative, whereas that on beliefs was significantly positive. The implication is that the main growth effect is a positive response to an increase in religious believing *relative* to religious attending. This finding is understandable if believing is seen as the fundamental output of the religion sector. Economic growth is then positively related to the productivity of the religion sector in the sense of the level of belief expressed relative to sectoral inputs, which include the level of church attendance. The analysis support the notion that an increase in religious beliefs or a decrease in church attendance tend to stimulate also economic growth.

## 4 Conclusion

The contemporary research literature on the economic effects of religion can be divided into macro and micro studies. Macro analysis focuses on cross-country studies, but their drawback is that there are too many institutional differences across countries and too few degrees of freedom to identify the

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<sup>15</sup>Barro 1997,2000

specific effects of religion separately. On micro level, the effects of religion on economic outcomes are analyzed inside one country area. Problems with these studies contain endogeneity of religious variables, unclear causality property and poor generalization of the results to other countries. Additionally, they focus on the correlation between religion and outcomes, not attitudes.

The greater study activity of religious influences on national economic outcomes, as part of the accepted subject matter of professional economic science, has many important implications. Inclusion of religious activity and beliefs offer insightful addition to traditional analysis of economic behavior and growth. The finding that economic growth depends also on the productivity of the religious sector (Barro & McCleary 2002), offers interesting future research opportunities. When extended to country level (as for Finland with good amount of data available), understanding on the nature and amount of interrelationship between economics and religions will be improved. It would also be interesting to study further how the process of economic development influences the role of organized religion in a country's political and legal structure, including the propensity to have state religious.

## References

- Barro, R. (2000), 'Inequality and growth in a panel of countries', *Journal of Economic Growth* pp. 5–32.
- Barro, R. & McCleary, R. (2002), 'Religion and political economy in an international panel', *Working Paper, Harvard University* pp. 1–69.
- Guiso, L., Sapienza, P. & Zingales, L. (2003), 'People's opium ? Religion and economic attitudes', *Journal of Monetary Economics* **50**, 225–282.
- Hume, D. (1757), *The Natural History of Religion*, Oxford University Press.
- Iannaccone, L. (1998), 'Introduction to the Economics of Religion', *Journal of Economic Literature* **36**, 1465–1496.
- Keely, L. (2003), 'Comment on: People's opium ? Religion and economic attitudes', *Journal of Monetary Economics* **50**, 283–287.
- Larson, E. & Witham, L. (1997), 'Belief in God and immortality among American Scientists: A historical survey revisited.', *Nature* (386), 435–436.
- Larson, E. & Witham, L. (1998), 'Leading scientists still reject God', *Nature* (394), 313.
- Nelson, R. (2001), *Economics as Religion. From Samuelson to Chicago and Beyond*, Pennsylvania State University Press.
- Weber, M. (1904, engl. 1930), *Die Protestantische Ethik und der Geist des Kapitalismus*, engl. *The Protestant Ethic and the spirit of Capitalism*. translated by Talcott Parsons edn, London, Allen and Unwin.