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Religion, Religiousness and Fertility in the US and in Europe

Religion, religiosité et fécondité aux Etats-Unis et en Europe

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Abstract This article aims to assess the role of religion and religiousness in engendering higher US fertility compared to Europe. Religion is important in the life of one-half of US women, whereas not even for one of six Europeans. By every available measure, American women are more religious than European women. Catholic and Protestant women have notably higher fertility than those not belonging to any denomination in the US and across Europe. In all European regions and in the United States as well as among all denominations the more devout have more children. However, women in Northern and Western Europe who are the least religious have equivalent or even higher fertility than women in the US, and notably higher fertility than those in Southern Europe. This suggests that forces other than religion and religiousness are also important in their impact on childbearing. A multivariate analysis demonstrates that relatively "traditional" socioeconomic covariates (age, marital status, residence, education, and income) do not substantially change the positive association of religiousness and fertility. Finally, if Europeans were as religious as Americans one might theoretically expect a small fertility increase for Europe as a whole, but considerably more for Western Europe.

Résumé Religion, religiosité et fécondité aux Etats-Unis et en Europe. L'objectif de cet article est d'évaluer les rôles de la religion et de la religiosité comme déterminant du taux de fécondité plus élevé aux Etats-Unis qu'en Europe. La religion occupe une place importante dans la vie de la moitie des femmes américaines, tandis qu'elle n'est importante que pour 1 européenne sur 6. Quelque soit l'indicateur utilisé, les américaines sont plus religieuses que les européennes. Les

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femmes catholiques et protestantes ont une fécondité significativement plus élevée que celles sans affiliation religieuse aux Etats-Unis et en Europe. Dans toutes les régions de l'Europe et aux Etats-Unis, ainsi qu'à travers toutes les pratiques religieuses, les plus croyants ont plus d'enfants. Toutefois, les femmes d'Europe du Nord et de l'Ouest, qui sont les moins religieuses, ont une fécondité équivalente ou supérieure aux femmes américaines, et significativement plus élevée que leurs consœurs d'Europe du Sud. Ce constat suggère que des forces autres que la religion ou la religiosité ont aussi un impact important sur la fécondité. Une analyse multivariée montre que les variables socioéconomiques classiquement considérées (âge, statut marital, lieu de résidence, éducation et revenus) ne changent pas substantiellement l'association positive entre religiosité et fécondité. Au final, si le niveau de religiosité des Européennes était équivalent à celui les Américaines, on pourrait théoriquement attendre une légère augmentation de la fécondité en Europe en général, mais de manière beaucoup plus prononcée en Europe de l'Ouest.

Keywords Religion · Religiousness · Fertility · Comparative analysis · United States · Europe

Mots clés Religion · Religiosité · Fécondité · Analyse comparative · Etats-Unis · Europe

1 Introduction

In the past two to three decades, it has become evident that fertility and religiousness are higher in the United States than in Europe. This difference is considered critical because European fertility on average is considerably below replacement. A number of social scientists and theologians have interpreted this to mean that Europe "has lost the biological will to live" (Mead 2005) or even that demographic suicide is "perhaps the most urgent issue confronting Europe today" (Weigel 2005). This article explores the interrelations of fertility and religiousness in the US and Europe and whether it has contributed to the fertility differential between the US and Europe.

There is a body of research in the US that has looked at the association of fertility and religion over the last 25 years, and the subject has been investigated mainly in connection with research on the second demographic transition in Europe. To the best of our knowledge, there has been no inquiry aimed at a comparison of the US and Europe in terms of the influence of religion and religiousness on fertility.

The heart of the article is Sect. 8 which presents an empirical analysis of religion, religiousness and fertility based on data from the European Values Survey and the National Survey of Family Growth (2002). Section 2 discusses the complexities of comparing US and European fertility. Section 3 examines the importance of religion and religiousness. In Sect. 4 recent studies dealing with the association of fertility and religion and religiousness in Europe are summarized. A historical perspective of religious fertility differentials in the US is provided in Sect. 5. Section 6 reviews

theoretical analyses and beliefs on the interrelations of religion and religiousness vis-à-vis fertility. Section 7 discusses factors other than religion that explain relatively high US fertility. Following Sect. 8, the empirical research component, the article closes with a set of conclusions and final thoughts.

2 Fertility: a comparison of US and Europe

The observation that US fertility is higher than in Europe is widespread. Morgan (2003) has labeled US fertility as "the most obvious exception" to very low fertility. Wetrogan (2003) in her introductory remarks to the US Census Bureau conference on *The Direction of Fertility in the United States* asked: "Why does US fertility appear to be 'an outlier' among developed countries?" Caldwell and Schindlmayr (2003) refer to the "curiously high fertility of the United States."

Since the late 1980s, US fertility has indeed been higher than in Europe, but at least two qualifications have to be noted:

- Fertility is higher in the US compared to Europe as a whole or to the European Union; however, fertility in a number of North and West European countries was practically the same as in the US.
- The comparison of European and US fertility is different depending on how fertility is measured, whether as period or cohort fertility.

US fertility close to the replacement level was reached following a decline that lasted almost continuously for two centuries starting with an average of seven children borne by every white woman in the early 19th century (Coale and Zelnick 1963) to a TFR of 3.6 at the end of that century. The long-term decline was interrupted by a considerable unexpected increase in fertility, the "baby boom," which was at its height during the 1950s when women were bearing on average 3–4 children. Around 1960 the decline resumed and since the late 1970s US fertility has been remarkably stable at about two births per woman (Fig. 1). More specifically, the period TFR was around 1.8 from the mid-1970s to the mid-1980s. Since then it has been in the range of 2.0–2.1 births per woman. Completed cohort fertility has been at the replacement level beginning with the birth cohorts of the late 1940s through those of the 1960s.

Long-term fertility trends in European countries were similar to those in the US, but generally at lower levels. As a rule, with exceptions, pre-transition fertility during the first half of the 19th century varied between four to over five births per woman and the transition usually started late in the 19th century or even around the beginning of the 20th century. In the process of changing from traditional to modern industrialized countries, fertility declined notably between the late 19th century and the late 1930s. European countries experienced post-war baby-booms, though relatively weak ones. Subsequently, during the late 1960s and throughout the 1970s, all North, West, and South European countries experienced a considerable fertility decline. During the 1980s and especially in the 1990s period fertility stabilized, again generally at a lower level than in the US. France and Norway, for example,

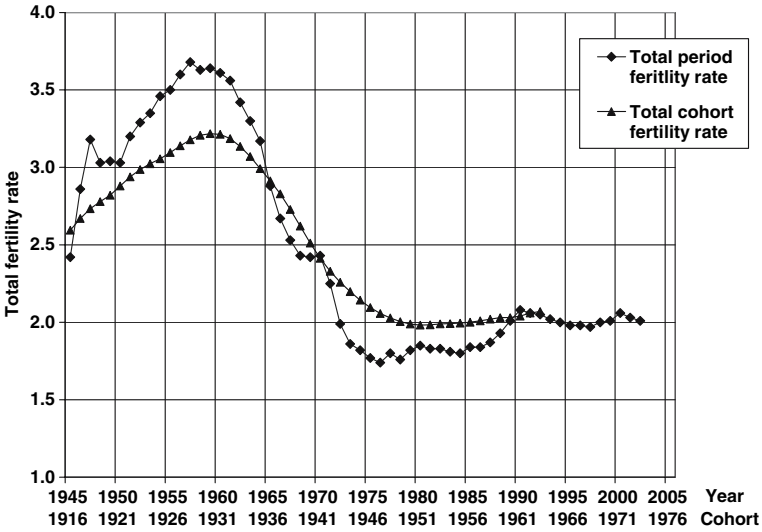

Fig. 1 Total period fertility rates 1945–2002, total cohort fertility rates lagged by average age of childbearing, birth cohorts 1918–1965, United States. *Source:* Observatoire Démographique Europeén 2006

had moderately lower fertility compared to the US. Other countries, such as Austria and Italy experienced considerably lower fertility (Table 1, Fig. 2).

Cohort fertility trends of the 20th century reveal a somewhat different picture. Women born in the late 1920s and 1930s generated the baby boom with completed fertility around 2.3–2.6 children per woman in West European countries and 3.2 in the US. A common fertility decline ensued which continued among the birth cohorts of the 1950s and 1960s in Southern Europe and in the predominantly German-speaking countries as exemplified by Italy and Austria, respectively. In the Nordic countries as well as in Western Europe the 1950s and 1960s cohorts settled with

Table 1 Total period fertility rates, selected developed countries, 1970–2002

Country	Total period fertility rate				
	1970	1980	1990	2000	2002
Norway	2.5	1.7	1.9	1.9	1.8
France	2.5	2.0	1.8	1.9	1.9
Austria	2.3	1.7	1.5	1.4	1.4
Italy	2.4	1.6	1.3	1.2	1.3
Hungary	2.0	1.9	1.9	1.3	1.3
Russia	2.0	1.9	1.9	1.2	1.3
United States of America	2.43	1.85	2.08	2.06	2.01
Europe of 15	2.38	1.82	1.57	1.50	1.50
US/Europe of 15 (in %)	102	102	132	137	134

Source: Sardon (2004)

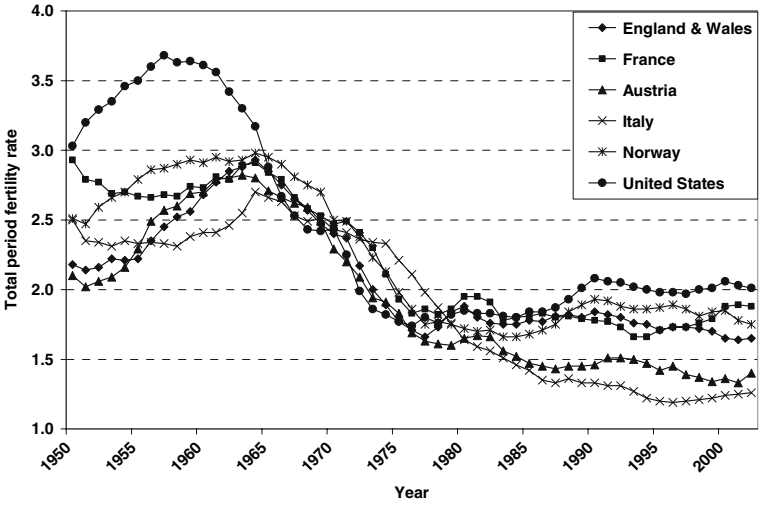

Fig. 2 Total period fertility rates, selected advanced countries, 1950–2002
Source: Observatoire Démographique Européen 2006

Table 2 Total cohort fertility rates, selected developed countries, birth cohorts 1930–1965

Country	Total cohort fertility rate					
	1930	1940	1950	1955	1960	1965
Norway	2.5	2.5	2.1	2.1	2.1	2.1
France	2.6	2.4	2.1	2.1	2.1	2.0
Austria	2.3	2.1	1.9	1.8	1.7	1.6
Italy	2.3	2.1	1.9	1.8	1.7	1.5
Hungary	2.1	1.9	2.0	1.9	2.0	2.0
Russia	n.a.	1.9	1.9	1.9	1.8	1.7
United States of America	3.18	2.73	2.03	1.99	2.02	2.07
Europe of 15	n.a.	n.a.	n.a.	1.90	1.84	1.74[a]
US/Europe of 15 (in %)	n.a.	n.a.	n.a.	105	110	118[a]

[a] 1964

Source: Sardon (2004)

childbearing patterns very similar to those in the US, close to 2.0 children born per woman (Table 2, Fig. 3).

As a proxy for the whole of Europe, the European Union as comprised by the 15 countries prior to 1 May 2004 is included in Tables 1 and 2.[1] According to the period rates, US fertility is 34% higher than in the European Union. The comparison of the latest available completed cohort fertility rates indicates that the difference between US and European fertility is only about half that amount, 18%. An

[1] Values of data for the European Union after 1 May 2004 comprised by 25 countries are almost the same, but the available time series is shorter, which is the reason why the EU 15 was included in the table.

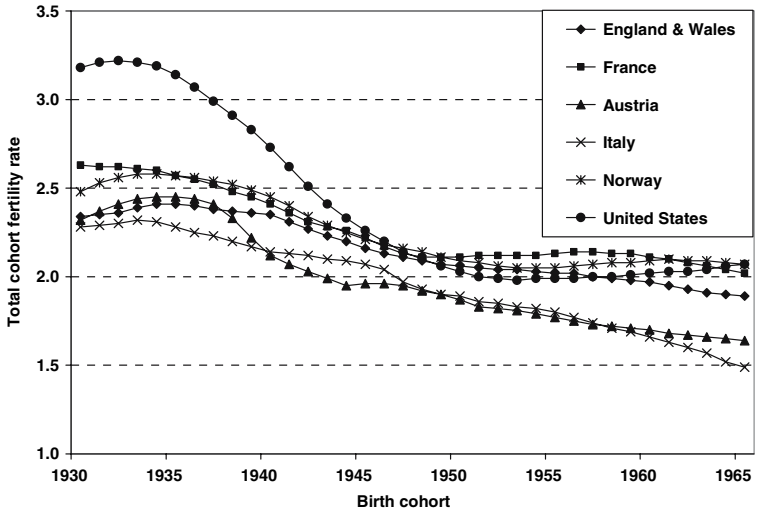

Fig. 3 Total cohort fertility rates, selected advanced countries, birth cohorts 1930–1965
Source: Observatoire Démographique Européen 2006

interaction and combination of several processes account for these differences. In the first place, considerable changes in the age patterns of childbearing were taking place during the past 30–40 years. Second and simultaneously, the quantum of fertility was declining in a number of countries (Frejka and Sardon 2004).

Compared to all the western countries, childbearing patterns and their trends during the past several decades were very different in the formerly socialist countries of Central and Eastern Europe. Typically fertility was rather stable prior to the revolutionary political, economic, and social transformations around 1990, i.e., there were some variations but generally fertility was not declining, it tended to be close to replacement levels, and the age patterns of childbearing were being moderately advanced rather than postponed. Fertility then declined sharply during the 1990s. Total period fertility rates early in the 21st century had declined to around 1.2–1.3 births per woman in almost all of these countries (Table 1). Completed cohort fertility rates of women born in the mid-1960s (Table 2) were only partially affected as these cohorts were in the prime years of their reproductive periods under the state socialist regimes. However, fertility of young women born during the 1970s was declining steadily. It is too early to determine the extent to which this is a quantum fertility decline or whether a considerable proportion of the unrealized, possibly postponed, births will be borne by these women when they are older.

To conclude, taking Europe as a whole, fertility is lower than in the United States. The difference is much greater when expressed in measures of period fertility rather than cohort fertility. If one takes individual countries or regions of Europe, there are some where fertility, especially cohort fertility is similar to that in the US. On the other hand, there are a number of countries where fertility is much lower than in the US, especially period fertility.

3 The importance of religion and religiousness in the United States and Europe

There is a considerable amount of evidence that religion and religiousness play a more important role in the lives of Americans compared to Europeans. This has to be viewed in the context of differing institutional religious constellations as they developed during the past several centuries. In Europe each country had a single denomination or possibly a limited number of churches, whereas the United States was marked by a proliferation of denominations, sects, and cults (Iannaccone 1991). Churches in Europe tended to acquire monopolistic features as, for instance, in the Scandinavian countries state run Lutheran churches dominate the religious market with clergy as civil servants. "In contrast, the United States enjoys a constitutionally mandated free-for-all in which hundreds of denominations compete and none has a special status (Iannaccone et al. 1997)." "...[r]eligion in the United States has typically expressed not the culture of the society as a whole but the subcultures of its many constituents" (Warner 1993). Scholars highlighting these differences argue that competition between denominations is a crucial reason for religious vitality in the US: "America's exceptionally high levels of church attendance and Sweden's exceptionally low levels stem from the former country's competitive religious market and the latter's state-sponsored religious monopoly" (Iannaccone et al. 1997).

While most authors agree on the relatively profound importance of religion and religiousness in the US, they disagree on numerous issues when analyzing and evaluating the facts. As will be shown, some authors point to an ongoing process of secularization in Europe, other authors dispute that. Some authors conclude that within societies the more affluent and better educated strata tend to be more secular, whereas others dispute that.

A Pew poll released in December 2002 inquired about the importance of religion in people's lives. The title of the report clearly describes the state of affairs: "Among wealthy nations US stands alone in its embrace of religion" (Pew 2002). The percentage of adults for whom religion is important was 59 in US, whereas in Europe the range was from 11% in France to 21% in Germany, 27% Italy, 33% Great Britain, and the highest was 36% Poland.

In a Pew commentary "Anti-Americanism: Causes and Characteristics" released in December 2003 it is stated: "And perhaps more than any other issue, religion has come to define the transatlantic values gap. Among wealthy nations, Pew has found, the United States is the most religious nation—in sharp contrast to mostly secular Western Europe. A 58% majority in the US views belief in God as a prerequisite to morality—just a third of Germans and even fewer Italians, British and French agree." More specifically, a positive answer to the question "whether it is necessary to believe in God to be moral" was given by 13% in France and the Czech Republic, 25% in Britain, 27% in Italy, 33% in Germany, but 58% in the US (Pew 2003).

Detailed further evidence of the religiousness differentials and the generally higher religiousness in the US is provided in the empirical analysis section below.

The progress of secularization in Europe is analyzed by Norris and Inglehart (2004) based on surveys of the Mannheim Eurobarometer Trend Files on religious

participation[2] in 13 European countries. The longest time series are available for the five core European Union countries (France, Belgium, the Netherlands, Germany and Italy). In these countries "on average about 40% of the public attended church regularly in 1970, with this proportion falling in half" by the late 1990s (p. 73).

The downward trend in religious participation is confirmed in the World Values Surveys for the period 1981–2001 in a large number of countries with one exception. In Italy responses to an analogous question on religious participation show an increase from 32% to 40% between 1981 and 2001. For comparison, according to the WVS, religious participation increased moderately also in the United States, from 43% to 46% between 1981 and 2001 (Norris and Inglehart 2004, p. 73).

Greeley (2002) denies that there is a universal decline of religiousness across Europe based on four surveys carried out between 1980 and 1998. He asserts that although religion has declined in France, the Netherlands and in Britain, it has increased in Russia, Latvia, Slovenia, and Hungary, and has remained high and stable in Ireland, Poland, Switzerland, Slovakia, and Austria, diffuse and stable in Spain, Italy, and Portugal, and low in Scandinavia and the Czech Republic. Greeley is not arguing that Europeans are devout but that the modernity trend is finished.

Also Iannaccone (1998) mustered a considerable body of evidence demonstrating "the continuing vitality of religion" mostly in the United States.

(a) American church membership rates have risen throughout the past two centuries—from 17% at the time of the Revolution to more than 60% in the 1990s;
(b) The fraction of the population employed as clergy in the US remained around 1.2 per thousand for the past 150 years;
(c) Since the 1930s US church attendance has remained stable with around 40% attending weekly;
(d) Surveyed religious beliefs have proved nearly as stable as attendance—since 1945 between 95% and 99% of Americans have professed belief in "the existence of God or a universal spirit;"
(e) Church contributions remained around 1% of the US GNP since 1955; religious volunteer work is more common than any other; and the majority of non-profit institutions are or were religiously base;
(f) Religion is not the province of the poor and uninformed; rates of religious belief and activity tend not to decline with income, and most rates increase with education;
(g) College professors are somewhat less religious than the general public, but this does not reflect a tension between faith and science; professors in the hard sciences are more religious than those in the humanities and social sciences (see also Iannaccone et al. 1998);
(h) Throughout the world, fast growing religions tend to be strict, sectarian, and theologically conservative; in the US these are growing even as liberal Protestant denominations struggle with relative and absolute losses.

[2] Religious participation is defined as a positive response to the survey question attending services "more than once a week" or "once a week."

The data from the Pew surveys as well as the conclusions formulated in the Pew reports depict the United States as an exceptionally religious country. Indeed also most of the evidence from the three waves of the WVS surveys between 1981 and 2001 which contain numerous questions on religiousness demonstrates that the majority of European countries are considerably less religious than the US. At the same time, these surveys show that "although religion in the United States is distinctive among rich nations, it would still be misleading to refer to American 'exceptionalism,' as so many emphasize, as though it were a deviant case from all other post-industrial nations, as we can observe similarities with both Ireland and Italy" (Norris and Inglehart 2004, p. 84).

There are other signs that the evidence regarding US religiousness as an outlier is somewhat ambiguous. Among other findings, the US General Social Survey (GSS) conducted annually by NORC indicated that the proportion of Americans reporting they attended church at least weekly was on the decline from the late 1980s to around the year 2000, while at the same time the proportion saying they never attended church doubled to one-fifth of all Americans (cited by Norris and Inglehart 2004, p. 92). The GSS also reported that the proportion of Americans who are secularists, reporting that they have no religious preference or identity, climbed steadily during the 1990s (Norris and Inglehart 2004, p. 93).

The differences as well as similarities between the United States and all advanced countries are found also in the relationship of religiousness and income. Data from the WVS show that religiousness is systematically related at the individual level to the distribution of income in post-industrial societies: the poor are almost twice as religious as the rich; around 30% of the least well-off income group pray daily and consider religion very important compared to between 15% and 20% of the rich. The patterns in the US are similar, but at a much higher level, for example, 66% of the lowest income group pray daily compared with 47% of the highest income group (Norris and Inglehart 2004, p. 108).

In sum, the evidence supports the notion that US religiousness is relatively high, typically higher than in European countries. It is nonetheless questionable whether the United States can be considered an exceptionally religious country as there were a number of European countries also identified as highly religious. Further, there is no consensus on the continuation of the secularization process. Norris and Inglehart argue that most countries are continuing in their secularization and even point to signs of secularization in the United States. Greeley and Iannaccone et al. argue that evidence does not support such conclusions.

4 The association of religion and fertility in Europe

Secularization and religious belief and practice are among the value items that are an essential component of the investigations related to the Second Demographic Transition (see, for instance, Surkyn and Lesthaeghe 2004). But there appear to be relatively few recent empirical analyses focusing on the interrelations of religion and fertility in European countries.

Adsera (2004) found that in Spain according to the 1985 Spanish Fertility Survey (SFS) family size was similar among practicing and non-practicing Catholics. A decade and a half later, according to the 1999 SFS, practicing Catholics displayed higher fertility than others. In the context of lower church participation, religiousness acquired a more relevant meaning for demographic behavior. The small group of conservative Protestants and Muslims had the highest fertility in Spain (Adsera 2004).

Despite ongoing secularization, religiousness remains an important factor in the spatial differentiation of fertility, family formation and dissolution and living arrangements in the Netherlands (Sobotka and Adigüzel 2003).

An analysis of the 1996 Austrian Family and Fertility Survey shows that women's denominational affiliation and religiousness affect the number of children born (Heineck unpublished).

5 Religious fertility differentials in long-term US fertility trends

The composition of the US population by religious denominations has changed over time. For centuries the United States has been a predominantly Protestant country. This might change in the near future as the percentage of Protestants in the US has been diluted because of immigration from Roman Catholic countries, immigration from the Middle and Far East, and the rise in the number of agnostics, atheists, and other non-theists. From 1972 to 1993, the *General Social Survey* of the *National Opinion Research Center* found that the proportion of Protestants was stable and constituted about 63% of the population. This declined to about 55% in 2002 (Pew Forum 2004).

The adult population consisted of four major groups as follows (selected subgroups are also identified; all numbers are percentages of the overall total):

54.7% Protestants
- 26.3% white and non-Latino Evangelical Protestants
  - 12.6% Traditional Evangelicals
  - 10.8% Centrist Evangelicals
  - 2.9% Modernist Evangelicals
- 16.0% white and non-Latino Mainline Protestants
- 2.8% Latino Protestants
- 9.6% Black Protestants

22.0% Roman Catholics

12.6% Miscellaneous religions
- 2.7% include Christian scientists, Later Day Saints (Mormons), Orthodox churches
- 1.9% Jewish
- 2.7% Other religions (Buddhists, Hindus, Muslims, etc.)
- 5.3% Unaffiliated

10.7% Reject beliefs of established religions
- 7.5% Secularists
- 3.2% Atheists and Agnostics

As already noted, fertility in the US was cut in half during the 19th century from around 7.0 to 3.6 births per woman. All religious denominations were no doubt part of this decline. According to a study by Billings (1889, cited in Goldscheider 1967) the Jewish birth rate was lower than the non-Jewish one in the 1880s. A 1905 Rhode Island census showed that the average family size of native-born Jewish women was 2.3 compared to 3.2 for native-born Catholics and 2.5 for native-born Protestants (Goldscheider 1967).

Some convergence of Catholic and non-Catholic fertility occurred between 1920 and the early 1940s when Catholic fertility declined more rapidly than non-Catholic fertility (Westoff and Jones 1979). During the post-war baby boom Catholic fertility increased disproportionately, but by the 1970s Catholic and non-Catholic fertility were almost identical (Table 3).

Among the many social changes that occurred in the post-war period, the increased variety, availability, and utilization of contraceptive methods were important. Whatever the motivations for limiting family size may have been, birth regulation was facilitated and the available means of contraception were being utilized. By the first half of the 1970s Catholic marital fertility had declined by almost one-half compared to a decade earlier, and was equal to non-Catholic fertility. Apparently all strata of the US population, including the various religious denominations were taking advantage of the available means of fertility regulation (Westoff and Bumpass 1973; Westoff and Ryder 1977).

Jewish fertility followed the general trends of American fertility but remained consistently below the average (DellaPergola 1980). On the other hand, some other small religious denominations, e.g., the Mormons, consistently maintained above average fertility. One can also mention extraordinarily small denominations with extremely high fertility, such as the Amish and Hutterites (Immerman and Mackey 2003).

Based on the results of the National Surveys of Family Growth in the 1980s, it appears that Protestant fertility began to be higher than Catholic fertility, and above the overall average (Mosher et al. 1992). Measured by total fertility rates, Catholic fertility was about one-quarter of a child below Protestant fertility: 1.64 vs. 1.91 birth per woman. Much of the differential was caused by later and less frequent marriage among Catholics.

Table 3 Total marital fertility rates[a] for Catholic and non-Catholic women based on merged data from the 1955 and 1960 GAF Studies and the 1965, 1970, and 1975 NFS

Period	Total	Catholic	Non-Catholic	Difference C-NC
1971–1975	2.20	2.27	2.17	0.10
1966–1970	2.78	3.21	2.62	0.59
1961–1965	3.45	4.25	3.14	1.11
1956–1960	3.57	4.24	3.36	0.88
1951–1955	3.26	3.54	3.15	0.39

[a] Calculated through duration 15–19

Source: Westoff and Jones (1979, p. 213)

The last section of this article will report on religious fertility differentials at the dawn of the 21st century.

6 A review of analyses and beliefs on the interrelations of religion and religiousness and fertility

In this section principal theories, observations, and conclusions of a reasonably representative sample of scholars and theologians are summarized to provide the background for a better understanding of the empirical analyses.

On a most general plane, Kertzer (2006) reminds us that one should move away from dealing with religion simply by pigeon-holing individuals into crude religious categories (Roman Catholic, Protestant, Jewish, Muslim, etc.). What matters is not only the denomination or even subdenomination, but also time and place. "To be serious about investigating the relationship between religion and fertility means having to deal with these complexities, and so to deal with shifting social, cultural, and political relationships." That is the essence of modern research on religion and fertility ushered in by Goldscheider (1971).

McQuillan (2004) focuses on the question: When does religion influence fertility? He points out that there is a need to extensively discuss this question because many studies have demonstrated significant differences in demographic behavior between religious groups, but the reasons for these differences have not been adequately elucidated. McQuillan builds on Goldscheider's work who argued in favor of a broader definition of the ideological influence of religion to include "the total content of that social organization" and "broadly based norms of family control and gender relationships," i.e., values regarding gender, sexuality and family life in addition to fertility regulation. Further, Goldscheider emphasized the importance of the status of religious groups within the social and economic order of society, in particular minority-group status (Goldscheider 1971, 1999; Goldscheider and Mosher 1991).

McQuillan extends this approach by directing attention to three elements: the nature of religious values and norms, religious institutions, and the issue of religious identity. First, religion has to articulate behavioral norms with a bearing on fertility behavior; these can be norms or rules that regulate behavior directly connected to proximate determinants of fertility, i.e., contraception, sterilization, and abortion, but also guidelines on entry into sexual unions, the promotion of large families, and even beliefs related to duties to ancestors. Certain broader issues of social organization, such as appropriate roles for men and women, may ultimately affect fertility; for instance, the segregation of Muslim women signifies a curtailment of pursuits other than motherhood. Second, the religion has to have the means to communicate these values and norms, and to promote compliance and punish non-conformity. The institutional influence of religion can be felt at three levels: in the larger society, in the community and in the life of the individual. Third, religion forms a central component of the social identity of its followers. Voluntary identification with religious faith can support correct behavior, especially when religion and nationalism blend together.

Goldscheider (2006) expanded and refined his theories: (a) He demonstrates the importance of family-level connections in the context of the roles of women (and men) and the connection of the family to the community; (b) He shows how the state can play a powerful role in altering fertility patterns; and (c) He reiterates the general lesson that changes in fertility are connected to other issues of demographic importance. In particular, he illustrates how migration can break links between the individual and the family-community of origin which has a high-fertility environment.

Kertzer (2006) also discusses the importance of the political dimension and the interaction of religious institutions and the state. Various Christian churches lobby for anti-abortion legislation or against the sale of condoms, to take just one example.

The positions of theologians in evaluating the religion-fertility nexus in Europe and the United States vary. Some take into account empirical research, others rely more on the armamentarium of faith and church dogma. Weigel (2005), a prominent Catholic theologian, is more in the camp of the latter. He comes to the conclusion that (western) Europe is in a profound, long-standing crisis of morale, with demographic suicide being "perhaps the most urgent issue confronting Europe today" (p. 5). This interpretation is supported by others, such as Hart (2004), an Orthodox theologian, who expressed the view that it is "fairly obvious that there is some direct, indissoluble bond between faith and the will to a future," and that without faith there is no future: "This is why post-Christian Europe seems to lack not only the moral and imaginative resources for sustaining its civilization, but even any good reason for continuing to reproduce" (cited by Weigel, p. 163).

Analogous considerations are, among many others, contained in the apostolic exhortation *Ecclesia in Europa* (The Church in Europe, (2003) of Pope John Paul II. Europe ought to have experienced a new burst of hope and confidence after 77 years of turmoil; yet what it seemed to be living was an experience of ambiguity that led to a loss of faith in the future; "the most urgent matter Europe faces ... is a growing need for hope, a hope which will enable us to give meaning to life and history and to continue on our way together." Among the manifestations of this loss of hope are: "weakening of the very concept of the family," and "a growing lack of concern for ethics and an obsessive concern for personal interests and privileges" leading to "the diminished number of births." "At the root of this loss of hope is an attempt to promote a vision of man apart from God and apart from Christ" (cited by Weigel, pp. 117–119).

Similar observations have been expressed by Mead (2005) when describing how conservative Americans possibly view Europe: "What you see now in much of Europe is that it has lost the biological will to live. A red state American might say that Europeans are failing to reproduce themselves and are being supplanted by Muslims who at least believe in God, even if they are of the wrong religion." ... "the relationship between the lack of fertility in Europe and the lack of religious belief" is a sentiment that is started to be heard.

Often authors do not mention fertility explicitly but imply that levels of fertility are associated with religiousness. Greeley (2004) concludes that "it can be asserted that Christian faith has *increased* in Europe as a whole." Greeley conducted his analysis using four surveys carried out between 1980 and 1998 in 23 countries. On

the one extreme he found that religion had declined in France, Britain, and the Netherlands. On the other it had increased in Russia, Latvia, Slovenia and Hungary. In the other countries religion had stayed stable, in some high in others low.

Berger (2005) does not think America is an exceptional country in the realm of religion, because "(M)ost of the world is fiercely religious, and the United States is a strongly religious society. Thus, the exception is not the United States, but rather the exception is Europe. ... I mean specifically Western and Central Europe." Berger further states there is overwhelming evidence that modernity does not necessarily lead to a decline in religion and to secularization. "What it does lead to .... is pluralism, by which I simply mean the coexistence within the same society of very different religious groups."

According to Berger (2005), what is very different in terms of religion between the US and Western and Central Europe is institutional behavior. "The major churches in Western and Central Europe, both Protestant and Catholic, are in very deep trouble by any indicator you want to take. Attendance of people at services, loyalty to the institution, recruitment of clergy, financial contributions, influence in the public realm all have declined—a reality that's very different from the one in the United States." Moreover, "you have something in America which is almost totally absent in Europe—a massive presence of Evangelical Protestantism, ranging somewhere between ... maybe 50–70 million Americans. .... There are millions of Americans who are born-again Christians of one sort or another—there is nothing like this in Europe except in very small groups."

Norris and Ingelhart (2004) analyzed the process of secularization on the basis of the World Values Study (79 country surveys) and a host of other materials. Their main conclusion is that secularization—a systematic erosion of religious practices, values, and beliefs—has been progressing, especially in advanced countries and among the more affluent strata of populations, but that this does not mean that the world as a whole has become less religious. The investigations of Norris and Ingelhart demonstrate that secularization is based on existential security. As modernization occurs, living conditions for many people are transformed reducing their vulnerability to sudden, unpredictable risks. In addition, conditions of socio-economic inequality are critical for conditions of human security. Thus, growing up in less secure societies heightens the importance of religious values, while conversely more secure conditions lessen it. At the same time, as rich societies become more secular, the status of women changes, women's options in life increase, the value of individuals rises, fertility, and population growth decline. Due to a lack of modernization and relatively low security in poor countries, fertility and population growth continue to be higher. The net effect is that religious populations are growing faster than secular populations and the proportion of religious people in the world is increasing.

There is no doubt that religiousness is high in the United States compared to Europe as a whole; however it is similar to Ireland and Italy. To some degree Norris and Ingelhart consider this a puzzle, given the degree of modernization and affluence in the US. In part, they believe, this is due to the fact that the US is one of the most unequal post-industrial societies and that relatively high levels of economic insecurity are experienced by many sectors of US society. This conclusion is based

on data showing that altogether in post-industrial societies the poor are almost twice as religious as the rich, and this relationship is similar in the US—Norris and Ingelhart explore a number of other important issues, such as the validity of the "religious market model" which postulates that religiousness is generated by the availability of a plurality of religious institutions and the activity of their leaders. They do not find support for these theories in their analyses. However, as discussed above, Iannaccone and others consider the free market nature of religion in the United States as the basis of its vitality (see also Warner 1993)

Furthermore, Iannacone (1998) states that "religion shows no sign of dying out." To support this view he cites the resurgence of evangelical Christianity in the United States, the rise of Islamic fundamentalism, the growth of Protestantism in Latin America, religious ferment in Eastern Europe, and the role of religion in political and ethnic conflicts worldwide.

The notion that religion—its presence, gradual disappearance or its absence—is a defining force in reproductive behavior continues to be a matter of attention, concern, and preoccupation. Goldscheider and McQuillan have significantly advanced the understanding of the mechanisms how religion and religiousness operate in modifying fertility. But there certainly is no consensus in describing and interpreting contemporary reality. Even on the basic issue of whether faith is increasing or declining, theologians do not agree. And it appears that the majority of them are pessimistic and consider the loss of faith and hope as a direct cause of a diminished number of births in Europe. But flourishing religiosity in the United States is considered a determinant of high American fertility. On the other hand, lay scholars are further developing the theory of secularization by providing evidence that economic conditions, relative economic security and the distribution of wealth are the defining factors of the intensity of religiousness. Frail existential security tends to intensify religiousness. Increasing economic security tends to advance secularization and by heightening the status of women diminish childbearing.

7 Factors other than religion that explain relatively high US fertility

The question of why US fertility is relatively high has attracted the attention of academicians and the media. On the other hand, the question of why European fertility is lower than that of the United States tends not to be raised. The basic consensus of the extensive literature dealing with the contemporary situation in Europe is that low fertility is here to stay for some time without specifying how long that might be (see, for instance, Goldstein et al. 2003; Hobcraft and Kiernan 1995; Lesthaeghe and Moors 2000; Macura and MacDonald 2003; van de Kaa 1987). This conclusion is based on wide-ranging research of family formation, fertility regulation, economic conditions, values and norms, gender relations, as well as family and population policy measures. In this context one should mention that relatively low Canadian fertility vis-à-vis US fertility has been the subject of comparisons and investigations (for instance, Bélanger and Ouellet 2002).

Numerous factors have been identified as having contributed to relatively high US fertility. These include immigration and ethnic composition, the institutional

constellation, the nature of the economic system, attitudinal changes, high rates of unplanned pregnancies and births related to poverty, functional illiteracy and characteristics of the health and reproductive health care delivery system, all of which are reasonably well supported by evidence (Frejka 2004).

In the remainder of this article we shall analyze available data, which regrettably have their limitations, to assess whether religious affiliation and religiousness are significant contributors to maintaining comparatively high US fertility with some limited simultaneous assessment of other determinants.

8 Empirical analyses

8.1 Sources and limitations of data and measures

The main source of data for this study for Europe is the European Values Survey conducted in 2000, which includes some 34 countries (excluding Turkey). Although the US is also included in the World Values Survey (which includes the EVS), a much larger sample with much greater detail on fertility is in the National Survey of Family Growth (2002). The basic data limitation is that the surveys that are rich in measures of religiousness such as the EVS have little information on fertility, and vice versa. One consequence of this is that we have had to confine our measure of fertility to the number of children ever born to women 18–44 years of age (younger women were not included in the EVS). A few tables are also included for women 35–44 to try to capture nearly completed fertility but this strains the sample size in the EVS which typically is limited to between 300 and 400 women of reproductive age per country.

Since the objective is to assess the comparative influence of religion and religiousness on fertility in the US and in Europe, the analysis has to be confined to measures common to both sources of data. One shortcoming of this constraint is the need to confine the comparisons to women. Another is that the measures of religiousness, extensive in the EVS, is limited to the frequency of church attendance and the importance of religion in daily life. A more extensive coverage based on the EVS is shown in Fig. 4, but the sample size of US women in that survey is severely limited so that the NSFG with much more limited measures of religiousness is the main source used here. Another limitation is the difficulty of separating period and cohort fertility differences, the importance of which has been noted earlier. Sample size and other data constraints limit the extent to which this important demographic component of timing can be isolated in the analyses.

8.2 Comparisons of religion and religiousness

As noted earlier, Protestant women (18–44) predominate in the US and in Northern Europe, Catholics in Western and especially in Southern Europe and women affiliated with Orthodox religions and with no religion are most common in Eastern Europe (Table 4). Those who declare no religion comprise 14% of American women but 30% of European women, particularly in Western and Eastern Europe.

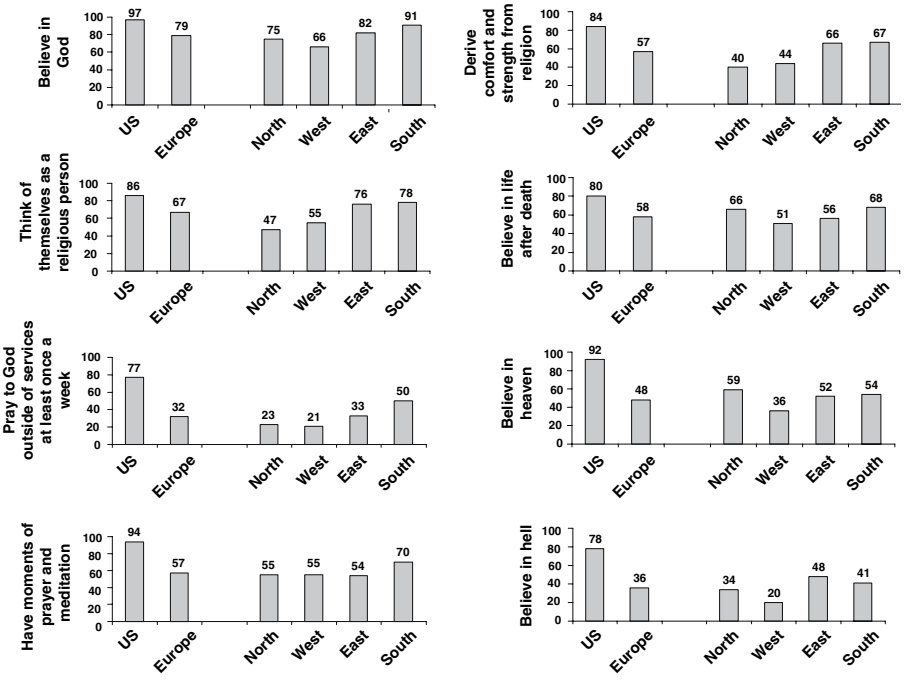

Fig. 4 Percent of women 18–44 with various religious beliefs.

Distributions of the frequency of attendance at religious services and responses to the question on the importance of religion in daily life—the two questions on the subject common to both the EVS and the NSFG—are also included in Table 4. American women generally attend religious services more frequently than European women though the women of Southern Europe are quite similar to the Americans. In contrast, over 40% of women in Northern and Western Europe never attend services, about twice the proportion in the US and in Southern Europe.

The responses to the question on the importance of religion in daily life clearly differentiate Americans and Europeans. While 50% of American women report that religion is "very important," only 16% of European women are in this category. In Northern and Western Europe, two-thirds state that religion is not important. The women of Southern Europe are the closest to American women on this measure, but there is still a substantial difference.

The same picture of stronger religious attitudes in the US is evident in Fig. 4, where the responses to eight questions on religious beliefs are depicted (the data for the US here are derived from the WVS). For every one of the eight measures, American women emerge as more religious than their European counterparts. The greatest differences are in the frequency of prayer and belief in heaven and hell. The differences in general are substantial, averaging across the eight measures by an absolute 32% difference between Americans and Europeans. Again, the Southern European women are closest to the Americans with an average difference of 21%.

Table 4 Distribution of women 18–44 by religion and religiousness in the United States and Europe

Religion	US	All	Europe			
			Northern	Western	Eastern	Southern
No religion	14	30	17	34	39	13
Catholic	29	33	19	40	16	71
Protestant	51	14	57	22	2	< 1
Orthodox	a	19	1	1	39	13
Other	6	4	6	3	4	2
Total	100	100	100	100	100	100
Attendance at religious services						
More than once a week	12	3	3	2	2	5
Once a week	21	12	9	6	11	23
1–3 times a month	17	11	5	12	10	15
Less than once a month	29	42	38	38	49	39
Never	21	32	45	42	28	18
Total	100	100	100	100	100	100
Importance of religion in daily life						
Very important	50	16	10	9	20	24
Somewhat important	34	30	26	25	32	39
Not important	15[b]	53	64	66	48	37
Total	100	100	100	100	100	100

[a] Orthodox included in other

[b] Includes women with no religion who never attend services

8.3 Fertility differences

Protestants and Catholics in the US show little difference in the mean number of children ever born, both for women 18–44 and for those 35–44 (Table 5). The fertility of women who report no religion (14% of those in the US) is substantially lower. In Europe, the fertility of Protestant women is somewhat higher than for Catholic women while women with no religion as well as those of Orthodox affiliations show the lowest fertility. A comparison of US and European fertility by religion shows higher Catholic fertility in the US, but little difference among Protestants. The aggregate category of "Protestant" obscures variations by specific denomination such as fundamentalists but, again, the comparisons are limited by the details common to both surveys.

The fertility rates in Northern Europe are mostly higher than in the US within religious categories and are frequently higher than other regions of Europe.

Fertility is fairly consistently negatively related to the frequency of attendance at religious services, both in the US and throughout Europe. There is, of course, some question about whether women as they have children become more observant as a result, rather than having more children because they are more religious. However, if the analysis is repeated on the basis of recalled religious behavior when they were

Table 5 Mean number of children ever born by religion and religiousness

Religion	18–44						35–44					
	US	Europe					US	Europe				
		All	Northern	Western	Eastern	Southern		All	Northern	Western	Eastern	Southern
Total	1.41	1.25	1.57	1.27	1.28	0.90	2.02	1.90	2.24	1.92	1.86	1.69
No religion	1.13	1.15	1.42	1.12	1.21	0.63	1.51	1.72	1.79	1.75	1.74	1.32
Catholic	1.50	1.26	1.68	1.32	1.48	1.00	2.17	2.00	2.30	2.00	2.31	1.74
Protestant	1.46	1.52	1.62	1.38	1.72	–	2.08	2.23	2.33	2.08	2.69	–
Orthodox	–	1.14	1.43	–	1.21	0.61	–	1.72	1.66	–	1.73	1.65
Attendance at religious services												
More than once a week	1.65	1.74	1.55	2.66	1.57	1.38	2.34	2.74	2.52	4.17	2.65	1.83
Once a week	1.60	1.44	1.91	1.66	1.51	1.10	2.17	2.23	2.58	2.35	2.46	1.74
1–3 times a month	1.53	1.32	1.36	1.54	1.32	1.05	2.12	1.93	2.24	1.97	1.93	1.80
Less than once a month	1.25	1.18	1.51	1.22	1.21	0.82	1.86	1.83	2.23	1.91	1.74	1.67
Never	1.18	1.19	1.55	1.10	1.28	0.58	1.70	1.79	2.16	1.68	1.81	1.44
Importance of religion in daily life												
Very important	1.61	1.52	1.46	2.07	1.49	1.25	2.20	2.27	2.54	2.88	2.19	1.90
Somewhat important	1.29	1.26	1.77	1.29	1.30	0.91	1.92	1.86	2.41	1.80	1.87	1.62
Not	1.04	1.15	1.51	1.15	1.18	0.67	1.41	1.81	2.13	1.79	1.76	1.54

Table 6 Mean number of children ever born to women 18–44 by religion and attendance at religious services: United States and Europe

Attendance at religious services	United States			
	None	Catholic	Protestant	Non-Christian
More than once a week	–	1.78	1.66	1.04
Once a week	–	1.76	1.51	1.33
1–3 times a week	2.25	1.59	1.50	1.20
Less than once a month	1.29	1.26	1.27	1.02
Never	1.00	1.26	1.46	0.94
Total	1.13	1.50	1.47	1.07
	Europe			
	None	Catholic	Protestant	Orthodox
More than once a week	–	1.81	1.53	1.75
Once a week	0.69	1.41	2.03	1.31
1–3 times a week	0.97	1.36	1.68	1.12
Less than once a month	1.14	1.10	1.47	1.11
Never	1.17	1.09	1.42	1.21
Total	1.15	1.26	1.52	1.14

around 12 years old, the same association prevails. Only a longitudinal study design could actually trace this relationship over the life cycle.

Belief in the importance of religion in daily life shows a similar pattern with fertility as that with frequency of attendance.

The major religious denomination is substituted for region in Tables 6 and 7 and the association is shown by frequency of attendance and by the importance of religion. In general, the more religious, the higher the fertility within the major affiliations.

Table 7 Mean number of children ever born to women 18–44 by importance of religion: United States and Europe

Importance of religion in daily life	United States			
	None	Catholic	Protestant	Non-Christian
Very important	–	1.74	1.58	1.23
Somewhat important	1.29	1.31	1.30	1.15
Not important	1.00	0.93	0.85	0.44
	Europe			
	None	Catholic	Protestant	Orthodox
Very important	1.35	1.57	1.71	1.34
Somewhat important	1.21	1.25	1.74	1.14
Not important	1.14	1.08	1.40	0.99

Table 8 Odds ratios of having two or more children (for women 18–44) by frequency of attendance at religious services and the importance of religion (simultaneously) with increasing number of controls

	US	Europe				
		All	Northern	Western	Eastern	Southern
Religiousness measures alone						
Attendance at services	1.32	NS	NS	1.2	NS	1.44
Importance of religion	1.48	1.31	1.17	1.5	1.31	1.76
With religion added						
Attendance at services	1.29	NS	NS	NS	NS	1.55
Importance of religion	1.46	1.35	1.23	1.46	1.45	1.71
Plus age and marital status						
Attendance at services	1.17	NS	NS	NS	NS	1.43
Importance of religion	1.36	1.27	NS	1.5	1.26	NS
Plus metropolitan residence, education, and income						
Attendance at services	1.29	NS	NS	NS	NS	1.48
Importance of religion	1.29	1.18	NS	1.49	NS	NS

8.4 Multivariate analyses

The question arises of whether the bivariate associations of religiousness and fertility are erased or diminished when other important covariates are simultaneously considered. The dependent variable in the logistic regressions is the dichotomy of 0–1 vs. 2+ children ever born to women 18–44 years of age. The covariates include religious affiliation, education, income, metropolitan residence as well as controls for age and marital status. The results are in the form of odds ratios that indicate the degree of association with fertility in the presence of other independent variables. For example, the perceived importance of religion in the US with all of the other variables considered simultaneously (last row of Table 8) yields an odds ratio of 1.29 which means that women who regard religion as important are 29% more likely to have two or more children than women who do not feel religion is important. The corresponding odds ratio for European women is 1.18. Only those values significant at least at the 5% level are shown (NS means not significant).

In Table 8, this issue is systematically examined in a step-by-step analysis with progressively more covariates included. It begins with the two measures of religiousness included alone but simultaneously. In the US, each measure is significant in the presence of the other while in Europe, the importance of religion[3] shows a more impressive association with fertility than does the frequency of church attendance. In Southern Europe, the odds ratio indicates that women who believe

[3] In the US, the importance of religion is dichotomized into "very important" (51%) and "somewhat or not important" (49%). In Europe, the dichotomy is "important or very important" (46%) and "not important" (54%). In the US, the frequency of church attendance is dichotomized into more (50%) and less (50%) than once a month. In Europe, the dichotomy is more (59%) and less (41%) than once a year.

that religion is important are 76% more likely to have two or more children than those who do not feel it is important.

In the second pair of rows, formal religious affiliation is added but this does not make much difference in the association of the two religious measures with fertility.

In the third pair of rows in Table 8, controls for age and marital status are added to the equation in the second rows. This addition weakens the association in Northern and in Southern Europe but not elsewhere.

The bottom pair of rows completes the full model and adds to the preceding equation metropolitan residence, education, and income. The result is weakened only slightly (for Eastern Europe).

The conclusion of this exercise is that religiousness as measured by the frequency of church attendance and the importance of religion in daily life is essentially independent of the covariates in the US but in Europe only the importance of religion remains significant though slightly diminished. The covariates are religious affiliation, age, marital status, metropolitan residence, education, and income. In Europe, frequency of church attendance is a factor only in Southern Europe where it remains significant in all of the equations.

Table 9 Odds ratios of having two or more births for women 18–44

	US	Europe				
Religion		All	Northern	Western	Eastern	Southern
Attend religious services regularly	1.28	NS	NS	NS	NS	1.48
Religion important	1.25	1.18	NS	1.49	NS	NS
No religion	1.00	1.00	1.00	1.00	1.00	1.00
Catholic	1.22	1.18	NS	NS	1.56	NS
Protestant	NS	1.67	NS	0.59	4.12	NS
Orthodox	–	0.78	NS	NS	NS	NS
Muslim	–	1.6	NS	NS	2.24	NS
Other	NS	NS	NS	NS	NS	NS
30 years of age older	4.37	6.02	4.87	3.75	7.97	10.22
Ever married	6.38	8.31	4.85	10.19	8.78	49.54
Lives in metropolitan area	NS	0.63	0.76	0.82	0.5	NS
Had at least secondary education	0.39	0.62	0.4	0.53	0.77	0.42
Income						
Lowest third	1.00	1.00	1.00	1.00	1.00	1.00
Middle third	0.54	0.87	0.74	NS	NS	NS
Highest third	0.54	0.89	NS	1.34	NS	0.71
Number of women	5,553	9,024	2,301	2,094	2,860	1,769
χ^2	1,827	3,461	803	801	1,089	978
R^2	0.238	0.28	0.255	0.278	0.28	0.435

The details of the full model are shown in Table 9. Religious affiliation shows mixed effects. In the US, only Catholics show a significant effect but that obscures the higher fertility of some of the Protestant denominations. In Europe, the Orthodox shows a negative association with fertility in contrast to the other religions. The pattern is mixed in the different regions with non-significant values being the most common.

The other covariates of interest are metropolitan residence, which is inversely correlated with fertility except in the US and in Southern Europe. Having had at least a secondary education is also negatively associated with fertility in all of the populations. Income is also independently negatively associated with fertility in the US and in Europe as a whole, but not consistently across the four regions.

8.5 Estimates of the effects of religiousness on US–Europe fertility differences

The last set of analyses is an effort to quantify the hypothetical implications for European fertility if European women were as religious as American women. The procedure, in effect, is to standardize European fertility rates by the distribution of the frequency of church attendance and the perceived importance of religion observed for American women. If European women attended religious services at the higher levels that American women report or were to regard religion as important as their American counterparts, how much higher might European fertility be? The estimates in Table 10 only reflect the two measures of religiousness and not any of the covariates that might be involved. The estimates are calculated

Table 10 The percent that European fertility would be higher theoretically if European women had the same frequency of attendance at religious services or the same attitude toward the importance of religion as women in the United States

	Frequency of attendance		Importance of religion	
	18–44	35–44	18–44	35–44
Europe	14	10	13	12
North	1	4	0	11
West	19	19	38	30
East	5	12	9	11
South	4	0	22	6
Austria	4	–	37	–
France	35	–	43	–
Germany	9	–	39	–
Great Britain	0	–	9	–
Greece	21	–	23	–
Italy	0	–	21	–
Netherlands	24	–	32	–
Slovenia	10	–	24	–
Spain	17	–	33	–

for the four regions of Europe for women 18–44 as well as the subset 35–44 and for a few low fertility countries for the entire age range (because of sample size considerations).

For Europe as a whole, the estimate is that the fertility of women 18-44 would theoretically be 14% higher than its current level if church attendance were the same and 13% higher if the same importance were attached to religion. The theoretical increases are lowest for the North and highest for the West. The general picture is approximately the same for women 35–44 but only in the West is a substantial increase suggested (of 30%). The effects in different countries are a function of the differences in religiousness compared with the US, differences in current fertility and in the strength of the association between religiousness and fertility.

Focusing on the importance of religion, estimates for selected individual countries show the greatest hypothetical "effects" for France, Germany, Austria, Netherlands, and Spain.

These calculations can logically be reversed to estimate how much lower US fertility would be theoretically if American women attended church or attached the same importance to religion as European women. The estimates for women 18–44 are that US fertility would be 7% lower with the same church attendance and 23% lower with the same perceived importance of religion. For women 35–44, the estimate for church attendance is 6% lower and 18% lower for the importance of religion.

9 Conclusions

This study originated with the question of why fertility is higher in the US than in Europe. One of the hypotheses pointed to the possible effects of differences in religiousness which is the focus of this article.

There is no doubt, whatever its origins, that American women are more religious than European women regardless of how it is measured. Whether that difference, which is demonstrated here in terms of attendance at religious services and the importance attached to religion in daily life as well as other measures, is growing or diminishing over recent decades is an interesting and researchable question but it is not the focus here. The question we have pursued is whether religiousness is currently related to fertility in both Europe and America and whether the association is sufficient to explain some of the differences in fertility.

Taking into account the described weaknesses of the available data, our empirical analysis confirms what surveys and lay as well as ecclesiastical scholars have observed:

- Religion is an important component of daily life among one half of the US women, whereas it is important not even for one out of six Europeans. Even among the relatively highly religious Southern Europeans the proportion of women that does not consider religion important is over twice that in the United States.
- Catholic and Protestant women have notably higher fertility than those not belonging to any denomination in the US and across Europe.
- Higher fertility in the US compared to Europe is associated with greater religiousness.

The latter association is not straightforward but rather complex. Moreover, the available data are not appropriate to explore whether a causal relationship can be established.

It is obvious that in practically all countries/regions and among all denominations, the more devout have more children.

The inter-regional comparisons present a more complex picture. The less religious regions in Europe have relatively high fertility and vice versa. Women in Northern and Western Europe who are the least religious have equivalent or even higher fertility than women in the US, and notably higher fertility than those in Southern Europe. This indicates that forces other than religion apparently override the impact of religiousness.

A multivariate analysis has demonstrated that relatively "traditional" socio-economic covariates (age, marital status, residence, education, and income) do not substantially change the picture revealed above. However, the multivariate analysis does not incorporate factors that have been identified as important in shaping US–Europe fertility differentials, such as immigration and ethnic composition, the institutional constellation, the nature of the economic system, attitudinal changes, high rates of unplanned pregnancies and births related to poverty, functional illiteracy and characteristics of the health and reproductive health care delivery system.

To conclude, we have tried to answer the basic question by estimating how much higher European fertility might be theoretically if Europeans were as religious as Americans. The overall answer, in brief, is that one might theoretically expect a small increase for Europe as a whole but considerably more for Western Europe.

This article discusses aspects of the association of fertility, religion and religiousness in contemporary advanced societies. It is conceivable that higher US religiousness is one of the factors why US fertility is higher than in most European countries. The article does not address the question why this might be so. Further research needs to uncover whether there are mechanisms in contemporary societies through which religion and religiousness impact on the decisions, conscious or subconscious, of couples to have a(nother) child.

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