Title: Religious Differences in Women's Fertility and Labour Force Participation in France
Nitzan Peri-Rotem

Recent studies across Europe and North America point to the persistent relationship between various dimensions of religion and social and demographic behaviour. Higher level of religiosity is found related to stronger attachment to marriage and a larger family size, which may be linked to religious differences in female labour force participation and investments in education. Moreover, socioeconomic factors may be influenced by religious values, which emphasize the role of women as mothers and wives and promote traditional gender division of labour. The purpose of this paper is to examine the interrelationships between fertility, educational attainment and labour force participation among religious and non-religious women in France. The data for this study are taken from the French Generations and Gender Survey, which was carried out in 2005 on a representative sample of over 10,000 people aged 18-79. The findings show that the link between education and fertility varies by level of religiosity; while a negative relation is found among the non-religious, there is a U-shaped relation for the more religious women. In addition, highly educated religious women are less likely to participate in the labour force, while all other things being equal.

In the past decade there has been a growing interest in the role of religion within demographic, social and economic spheres. Findings from recent studies across Europe and the United States have pointed to the important role of religion in family behaviour, showing that religious individuals prefer marriage over cohabitation, have lower divorce rates and bear more children on average (Adsera, 2006; Berghammer, 2010; Frejka and Westoff, 2008; Lehrer, 2004; Philipov and Berghammer, 2007). The differential fertility patterns of religious groups may have specific negative implications on women's socioeconomic characteristics, such as educational attainment and labour market activity. Furthermore, religion can affect socioeconomic factors directly, through a promotion of traditional gender roles, which emphasize the role of men as providers and women's primary role in child rearing (Heaton and Cornwall, 1989; Inglehart and Norris, 2003; McQuillan, 2004).

Goldscheider (1971, 2006) has argued that the relationship between religion and fertility should be interpreted with regard to the wider social context, including the social norms and the gender role perceptions that are related to a particular religious group. Thus, he suggests that the reinforcement of family values and segregated gender roles by some religious systems, form the major mechanism that shapes the relationship between religion and fertility. Therefore, religious institutions are not only related to promoting values on the centrality of the family, but may also have implications on economic behaviour and gender inequality.

In this context, the role of education is of special interest, since it is considered to be a strong predictor of women's employment and a source for elevating women's social position by increasing their economic independence and their power in household decision-making processes (Orbuch and Eyster 1997). However, the empowering effect of education will influence women's social position only if it is translated to paid employment, while in some religious groups this is not necessarily the case (Goldscheider, 2006). Read and Oselin (2008) for example, have found that education is weakly related to employment among Arab American women. This finding was interpreted by the way female education is perceived in this group - as a collective family resource, which ensures proper socialization of the children and maintenance of religious identity, rather than a means to increase women's position in the labour market.

Other studies use an economic approach to the weak relationship between education and employment in adjacent to high fertility, which was found among religious sects such as radical Islamists, Ultra-Orthodox Jews and Christian Anabaptist sects in North America (Berman, 2000; Berman and Stepanayan, 2003). According to Berman and Stepanayan, education in these religious sects acts as a signal for the level of commitment to the group, and as such it should have low market returns.

The current paper examines the relationships between religion, educational level and labour force participation among women in France. It is hypothesized that the more religious women will show higher levels of fertility and that socioeconomic factors such as educational attainment will have a weaker effect on their fertility levels in comparison to non religious

women. In addition, it is assumed that educational attainment will also have a differential effect on religious and non religious women's participation in the labour force, due to higher priority that is given to family roles over economic endeavours among the former group.

France is a particularly interesting study case for the relationships between religion and socioeconomic behaviour; on the one hand, it is considered to be a secularized society, with decreasing numbers of regular church goers and increasing proportion of those who consider themselves as having no religion over the passing generations (Régnier-Loilier and Prioux, 2008). On the other hand, the vast majority of population in France today (80%) define themselves as "Roman Catholic", and a relatively small proportion are not affiliated with any religion (11%).[1]

The data for this study are taken from the French Generations and Gender Survey (GGS). This survey is part of the Generations and Gender Programme - a system of representative national surveys from 15 European countries as well as Australia and Japan, which is co-ordinated by the United Nations Economic Commission for Europe. The French version of the GGS was carried out in 2005 and includes a sample of 10,079 residents (4,731 men and 5,708 women) aged 18 to 79. The GGS consist of data on religious affiliation as well as frequency of attending at religious services. In addition, it includes detailed information on varied socioeconomic and demographic indicators.

The first part of the paper presents descriptive data on the number of children ever born to women by level of religiosity and birth cohort. It is shown that while non religious women had a sharp decline in fertility levels, the religious women experienced some decline but then returned to high fertility levels. It is also shown that when educational level is control for, the fertility gap between religious and non religious women is largest among the highly educated women, since fertility declines with education only among the non religious group. The religious women with high level of education also have a much lower proportion of labour force participation compared to other women.

---

[1] For comparison: the proportion of non-affiliated in Austria is 15%, in Germany 24%, and around 44% in the Netherlands. These figures were calculated from the Generations and Gender Surveys (see more details below).

On the second part, a generalized ordered logistic regression is used to examine the relationships between religion and women's employment. The sample for the regression analysis includes women aged 24-50 who live with a partner (either cohabitating or married) of all religious groups. The dependent variable has three ordered categories of: full-time work, part-time work and non employment. The explanatory variables include religious denomination, level of religiosity, educational attainment, number of children ever born and the presence of children under age 6 in the household, partner's employment status, geographical area (urban/rural), age and age squared. In addition, the model includes an interaction between religiosity and education, to test whether education has a different effect on the employment of religious and non religious women.

The results show a significant negative interaction effect for the highly educated religious women on the likelihood of being employed full-time and on general participation in the labour force. A negative effect on labour force participation is also found among Muslim women in comparison to women with no religion.

These results support the hypothesis of lower returns to education among religiously devoted women. However, since the largest employment gap between religious and non religious women is found among the highly educated group, it may indicate that these women had chosen to leave the labour force, or move to part-time job in order to allocate more time to the family, rather than being forced to stay at home. The differential effect of education on religious women's family size and their attachment to the labour force may also explain their persistent high levels of fertility in comparison to the sharp decline among the non religious women.

References

Adsera, A. (2006). Religion and changes in family-size norms in developed countries. *Review of Religious Research, 47*(3), 271-286.

Berghammer, C. (2010). Family life trajectories and religiosity in Austria. *European Sociological Review, 28*(1), 127-144.

Berman, E. (2000). Sect, subsidy, and sacrifice: An economist's view of Ultra-Orthodox Jews. *The Quarterly Journal of Economics, 115*(3), 905-953.

Berman, E., and Stepanyan, A. (2003). Fertility and education in radical Islamic sects: Evidence from Asia and Africa, NBER working paper. NBER Labor Studies, USC and UC San Diego.

Frejka, T. and Westoff, C.F., 2008. Religion, Religiousness and Fertility in the US and in Europe. *European Journal of Population/Revue europeenne de demographie, 24*(1), pp. 5-31.

Goldscheider, C. (1971). *Population, modernization, and social structure*. Boston: Little, Brown and Company.

Goldscheider, C. (2006). Religion, family and fertility: What do we know historically and comparatively? In Derosas, R. and van Poppel, F. (Eds.) *Religion and the decline of fertility in the Western world* (pp. 41-57). Dordrecht: Springer.

Heaton, T. B., and Cornwall, M. (1989). Religious group variation in the socioeconomic status and family behavior of women. *Journal for the Scientific Study of Religion, 28*(3): 283-299.

Inglehart, R. and Norris, P. (2003). *Rising tide : Gender equality and cultural change around the world*. Cambridge : Cambridge University Press.

Lehrer, E.L. (2004). Religion as a determinant of economic and demographic behavior in the United States. *Population and Development Review, 30*(4), 707-726.

McQuillan,K. (2004). When does Religion Influence Fertility? *Population and Development Review, 30*(1), 25-56.

Orbuch, T. L. and Eyster, S. L. (1997). Division of household labour among Black couples and White couples. *Social Forces, 76*(1), 301-332.

Philipov, D. and Berghammer, C. (2007). Religion and fertility ideals, intentions and behaviour: A comparative study of European countries. *Vienna Yearbook of Population Research,* pp.271-305.

Read, J. G. and Oselin, S. (2008). Gender and the education-employment paradox in ethnic and religious contexts: The case of Arab Americans. *American Sociological Review 73*, 296-313.

Régnier-Loilier, A. & Prioux, F. (2008). *Does religious practice influence fertility behaviour in France?*, Annual Meeting of Population Association of America 2008, New Orleans, April.