

New Empirical Evidence on *The Low Fertility Trap Hypothesis*

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It has recently been suggested by Lutz and Skirbekk (2005) and by Lutz, Skirbekk and Testa (forthcoming) that there may be self-reinforcing mechanisms of social change that could lead to a downward spiral in the level of fertility in countries that fall below a possible threshold level (see McDonald 2006 who assumes that such a threshold could be at around a TFR of 1.5). The idea has been called the "Low Fertility Trap Hypothesis" (LFTH) because of the involuntary nature of such a possibly irreversible demographic regime change. The attached paper describes and discussed in quite some detail the assumed three mechanisms: negative demographic momentum, declines in ideal family size as a consequence of low actual fertility in the generation before, and declining relative income of young couples.

The paper wants to discuss some new empirical evidence that is relevant for further testing of the hypothesis. In particular we want to analyze the brand new results from the Eurobarometer 2006 which asked many of the same questions as the 2001 Eurobarometer on which Goldstein et al (2003) and the above cited writings on LFTH were based. In addition, we want to present new empirical information on the changing relative income of young adults versus their parents generation with data from the Luxembourg Income Study.

The sociological mechanism of the Low Fertility Trap Hypothesis (LFT 2 in Figure 1), is that the assumed is that young people are socialized in a way that they internalize the family size norms which they experience around them in term of actual fertility. This suggests that ideals will decline about one generation length after the decline in TFRs. This timing fits quite well to the German speaking countries which were the first to enter a steep fertility decline in the 1970s and which in the 2001 Eurobarometer are the first to show significantly lower personal family size ideals for the younger age groups. A recent article written by Testa and Grilli (2006) gives empirical foundation to the hypothesis of falling family size ideals in the regional contexts characterized by very low fertility levels among the generations of the parents, and this association becomes very relevant at very low levels of actual fertility.

If the hypothesis is right, one would also expect the ideals in the Southern European countries to start falling some years after the German speaking countries because their fertility decline was somewhat later.

Indeed a first look at the new 2006 Eurobarometer data suggests that the stated ideal family sizes of women in the age group 25-39 had a declining tendency in Italy, Spain and Greece as compared to 2001 (Table 1). To make firmer statements, however, requires a much more careful analysis which will be done by the time of the PAA.

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Table 1 Mean personal ideal family size of women aged 25 to 39 in 2001 and in 2006 in the Mediterranean EU countries

	2001	2006	Difference 2006-2001
Greece	2.36	2.31	-0.05
Spain	2.21	2.04	-0.17
France	2.51	2.48	-0.03
Italy	2.11	2.02	-0.09

The economic mechanism of the LFTH (LFT3 in Figure 1) which is based on the first part of Easterlin’s relative income hypothesis (assuming that fertility is dependent on the relationship between aspirations—approximated by income in the parental home and expected income) describes how lower relative income growth and less social security for the young in many European countries increases the gap between aspirations and expected income, which in turn leads to later childbearing and lower lifetime fertility.

In this paper we will use additional data from the Luxemburg Income Study (see www.lisproject.org) which allows us to study differences in earnings by age, and how they change over the life cycle. We study data on earnings by age, gender and education for full time workers over time. As can be seen by Figures 2 and 3, individuals aged 20-34 earn the least. The Figures also show that the young have profited less from the economic growth relative to the other age groups, and that in Canada they actually experienced a decrease in real wages (while other age groups had a rise) since 1981. In the UK women aged 20-34 had a positive, but relatively slow wage growth, where the 35-49 year have a 66% higher wage growth than those aged 20-34. The negative development of income for women in their peak-childbearing years may represent one reason why that fertility timing is postponed and fertility outcome is lowered.

In the paper we will then discuss how this new empirical information can inform our evaluation of the LFTH, what additional data will be necessary to further test the validity of the hypothesis and what are the policy implications. If there is indeed convincing evidence that the forces of LFTH are at work in some of the very low fertility countries then this implies a great urgency for birth enhancing policies particularly in countries in which the “regime change” is just in its onset. If the LFTH forces are considered unlikely that policy makes would be advised to take more of a “wait and see” attitude. Hence the urgency of pro-birth policies does depend crucially on the testing of the validity of LFTH.

Figure 1. The demographic (LFT-1), sociological (LFT-2) and economic (LFT-3) mechanisms that constitute the Low Fertility Trap Hypothesis. Source: Lutz et al. (forthcoming)

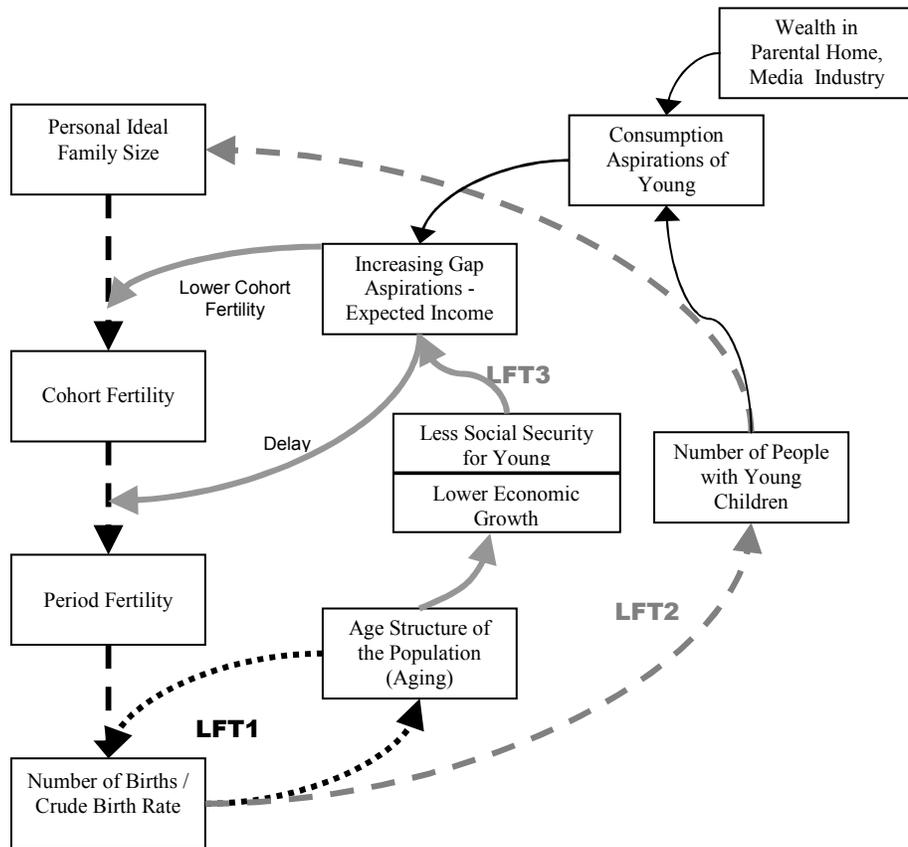


Figure 2. Real Wages (2000 prices) Tertiary educated women. Canada.

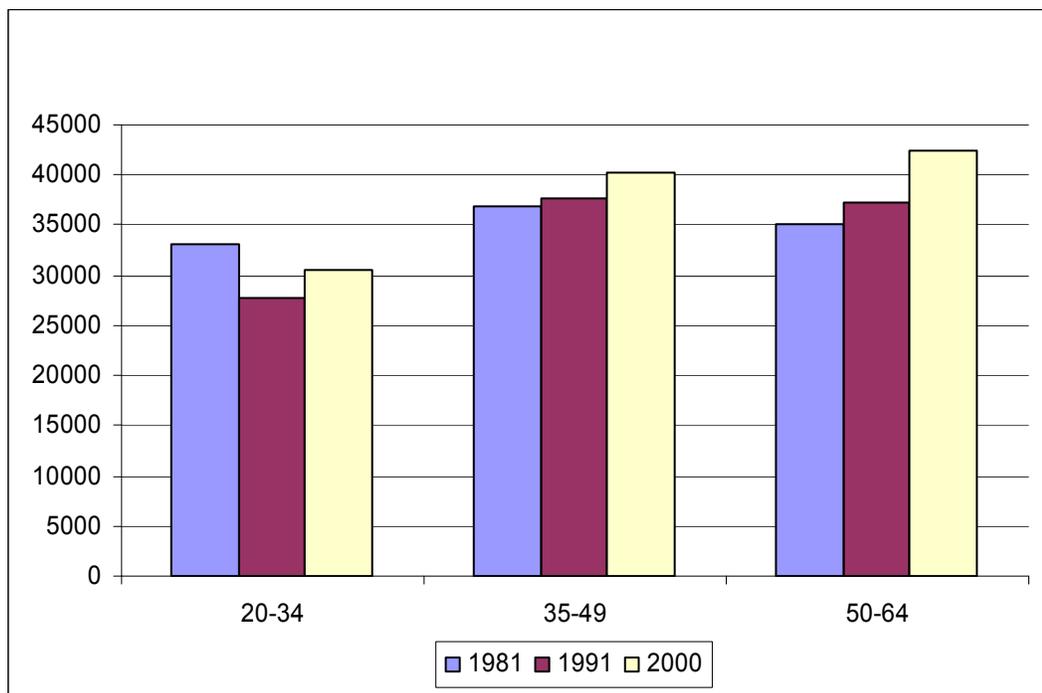
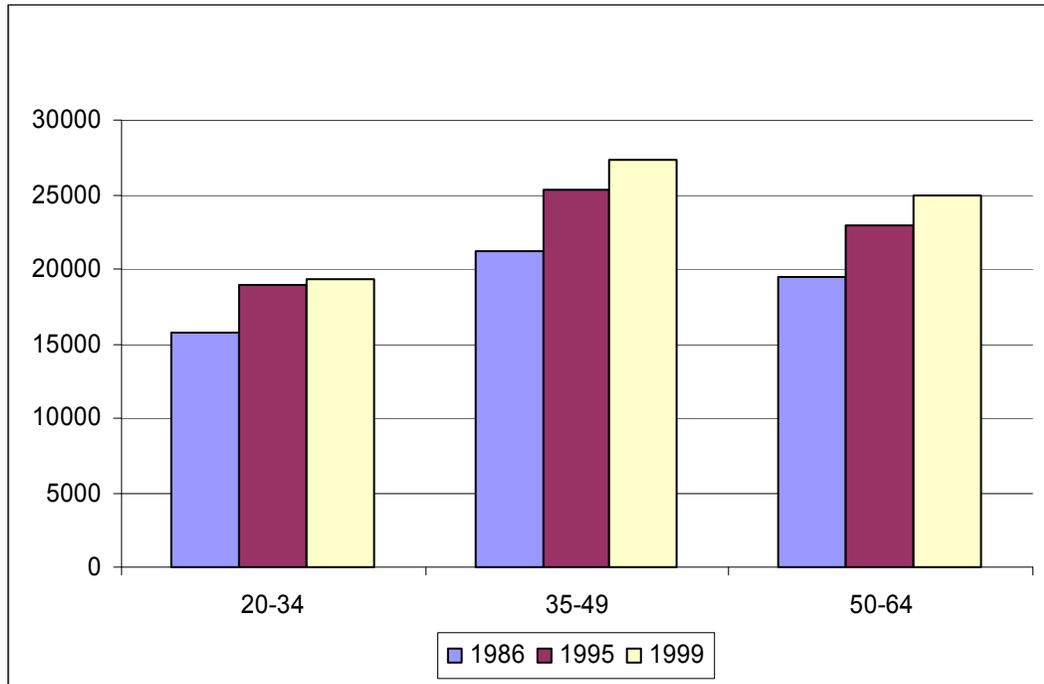


Figure 3. Real Wages (2000 prices) Tertiary educated women. UK.



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