Fertility and happiness in the XXI century: institutions, preferences, and their interactions

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Background

As low – and sometimes even very low – fertility has become commonplace in virtually all developed countries, traditional socioeconomic theories concerning reproductive behavior no longer adequately explain the cross-sectional and temporal variation in fertility the most developed countries. For example, the United States has repeatedly been characterized as an "outlier", with a TFR near replacement level that is difficult to reconcile with existing theoretical frameworks (see, e.g., Caldwell & Schindlmayr, 2003; Frejka, 2004). On the other end of the spectrum, fertility in Italy and Spain has reversed significantly since attaining historically low levels of lowest-low fertility in the mid to late 1990s (Kohler et al., 2002). This reversal has happened in the absence of important policy or socioeconomic changes and this increase is only partially accounted for by declines in the pace of fertility postponement (Billari, 2008; Caltabiano, 2008).

The two leading theoretical framework explaining contemporary fertility trends in Europe, with numerous variations, are the "rational choice theory" based on Becker's seminal work (Becker 1991) and the "Second Demographic Transition" (STD) framework proposed by Lesthaeghe and van de Kaa (1987). In the rational choice framework, individuals or couple maximize life-cycle well-being and by considering the quantum and quality of children in the context of various other possible allocations of scarce resources such as time and money. According to the "cultural perspective" in the STD framework, self-fulfillment is the main goal of life, and childbearing is predicted to occupy an increasingly less central role in the life of individuals and couples. As such, childbearing and marriage are often postponed until other goals in life – such as completing education and establishing oneself in the labor-market are fulfilled. Working within both theoretical frameworks, many authors have also emphasized the role of institutions in shaping individuals' and couples' reproductive choices (Brewster and Rindfuss, 2000; McDonald, 2000; DiPrete et al., 2003). Welfare support for families and for the ability to combine work and family, in particular, has been pinpointed as an explanation for fertility choices among the most developed societies. However, in our opinion none of the two perspectives, taken separately, can explain why people still have kids in contemporary advanced societies, nor why in some societies fertility

is indeed increasing. In fact, we can agree with the claim by Caldwell and Schindlmayr (2003) that theories of below-replacement fertility need to find the "commonality" providing a general enough explanation.

Theoretical framework: a macro-micro theory of fertility

In this paper, we develop a macro-micro theory of fertility in contemporary advanced societies and we present a first empirical test based on comparative data. We start from the hypothesis that, given a general baseline preference to become parents, which may be biologically rooted, the expected increase in happiness explains substantially fertility behaviors in an era with highly effective contraception.

In line with the "cultural" approach and with the economic theories of fertility mentioned earlier, we argue that, nowadays, individuals have children only as long as this is compatible with their self-fulfillment (happiness). However, what counts in decisions is the expected increase, and this is shaped by the institutional environment individuals live in. Our theoretical framework is therefore based on Kahneman's and Tversky's "prospect theory" framework (Kahneman & Tversky 1979) and on social-psychological theories of decision-making such as the Theory of Planned Behavior (Ajzen, 1991), and it incorporates recent behavioral economic and psychological findings about the determinants of subjective well-being, and how expected changes in subjective well-being determine decisions within a life-cycle framework.

Our hypothesis is completed by the idea that expected happiness increase related to childbearing is likely be shaped by the institutional context that individuals encounter during this decision-making process. In this sense we complement the approach described in the previous paragraph with fertility theories emphasizing the role of institutions. For example, family-friendly policies, but also pro-family discourse or the prospects for parenting-related happiness as compared to other kinds of happiness are institutionally-driven. These institutions affect the expected happiness from childbearing, and therefore they affect fertility.

We argue that this macro-micro theory of fertility accounts for some general differences among the developed world, answering to the call of Caldwell and Schindlmayr (2003) for a common framework in the explanation of below-replacement fertility.

Data: the Generations and Gender Survey

We use new data from the Generations and Gender Survey (GGS) to provide an empirical test of the macro-micro theory of fertility. GGS is a comparative survey effort (Vikat et al., 2007) that provides data allowing to have a first assessment of our hypothesis. GGS data, at the moment of the preparation of the present abstract, are available for six countries (Bulgaria, France, Georgia, Germany, Hungary, and Russia), with surveys having taken place between 2004 and 2006. Italian raw data are available. We expect to be able to add Czech, Norway and Romania to the final analysis.

To measure expected increase (or decrease) in happiness as related to fertility we use the answer to the question “Now, suppose that during the next 3 years you were to have a/another child. I would like you to tell me what effect you think this would have on various aspects of your life. Please choose your answers from the card.” We focus on the item *f (the joy and satisfaction you get from life).* Possible answers are much better (=1), better (=2), neither better nor worse (=3), worse (=4), much worse (=5), not applicable. This question is included in a larger battery. The GGS contains a large set of potential covariates and other related variables.

First, we will provide a description of expected increases in happiness at a cross-country level. An example is displayed in Figure 1, where answers are reverse-coded and translated so that 0 corresponds to “neither better nor worse” and the average (weighted) level is shown. France, the country with the highest fertility, displays clear positive expected increases in happiness at all parities, as opposed for instance to Germany and Russia.

Planned work

During the next months, after analyzing the descriptive results also in terms of correlated variables, we will analyze the determinants of expected increases in happiness, focusing on both macro- and micro-level factors. Cross-country variation will be mostly used. Nevertheless, given the small N in terms of countries, we will develop within-country analyses either by region or for interesting sub-groups.

Third, we will discuss expected increases in happiness as a determinant of fertility choices, by analyzing fertility intentions also using an instrumental-variable approach. Likely instruments are connected to the family of origin (for which the GGS is rich in information).

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Figure 1. Average expected increase (if positive) or decrease (if negative) in happiness if having a(nother) child within the next three years among individuals aged 18-45 by parity and country. Own elaborations from GGS standard micro-data.