



European
Research Area

EUROPEAN POLICY BRIEF



Reproductive decision-making in a macro-micro perspective

Ongoing project / First half of the project

SUMMARY

Objectives of the research

The main objective of the REPRO project is to upgrade the existing knowledge and to generate new scientific and policy-oriented knowledge on the factors that drive changes in the birth rates and influence reproductive decision-making of contemporary Europeans.

Scientific approach / Methodology

At the macro level, we describe recent fertility trends observed across Europe. At the micro level we use the social-psychological Theory of Planned Behaviour to analyse reproductive decision-making. The macro-micro analytical link is given by considering individuals clustered into macro-level contexts.

New knowledge and/or European added value

The new integrated macro-micro approach sheds additional light on the impact and interrelatedness of a variety of factors that influence Europeans' reproductive decisions and hinder their fulfilment of initial childbearing intentions.

Key messages for policy-makers, businesses, trade unions and civil society actors

Evidence shows that there is a gap between people's intentions to have children and their actual reproductive behaviour. Policies may aim particularly at alleviating obstacles which impede the realisation of individuals' fertility intentions.

Objectives of the research

The main objective of our project is to fill gaps in knowledge on the factors which drive changes in fertility rates and generate new scientific and policy-oriented knowledge on the reproductive decision-making of contemporary Europeans.

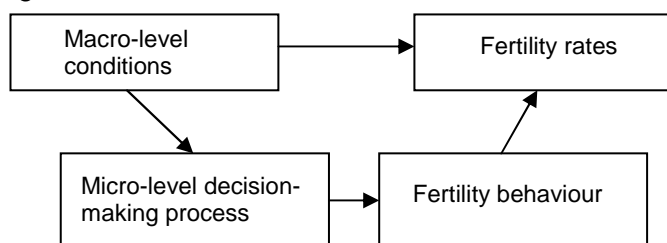
The main objective is specified into six specific goals:

- Analyse fertility trends and their links with important economic, cultural, and policy-related determinants
- Analyse reproductive decision-making at the micro-level using the socio-psychological Theory of Planned Behaviour
- Analyse fertility decisions and their behavioural outcomes
- Use qualitative data for a detailed understanding of the reproductive decision-making process
- Examine the impact of various macro-level factors on micro-level decision-making and behaviour
- Infer policy implications

Scientific approach / methodology

The REPRO theoretical kernel is a conceptualisation of fertility as a macro-micro problem, schematically represented in the following figure :

Figure 1:



In a macro-micro model of fertility and its determinants, fertility rates depend on the macro-level conditions in a society, but this is not a direct effect. Rather, macro-level conditions impinge on the decision-making processes of individuals and couples with regard to fertility. Fertility behaviour itself is the outcome of this decision-making process. Finally, fertility rates in a society are the macro-level result of the aggregation of myriads of fertility decisions taken by individuals and couples.

Macro-level analyses are based on the use of econometric models and the elaboration of a fertility database and a family-policy database. Reproductive decision-making is analysed using the socio-psychological Theory of Planned Behaviour. Data from the Generation and Gender Surveys, the European Social Survey and the Eurobarometer as well as data from qualitative surveys are used. Multilevel statistical techniques are applied for a micro-macro approach to link individual-level and societal-level factors that drive fertility behaviour.

New knowledge and European added value

With respect to the first half of the project, the six objectives were condensed into two tasks.

1. *To provide a macro-level informational background for the study of fertility rates and analyse macro-level social and economic factors that are crucial for understanding fertility levels and fertility change.*

The REPRO partners initiated the construction of a Human Fertility Database (HFD) which contains fertility data for various countries. All these data have the same structure and thus permit the direct construction of indices, which users may utilise for their specific purposes. The HFD is available online:

www.humanfertility.org

In addition, a macro-level database on fertility, family policies and workplace practices was elaborated. This database contains information on fertility trends, contextual indicators on household structures and living arrangements along with detailed information on the policy support received by families in order to compensate the economic costs of children and/or to combine work and family life. Some aggregated indicators on the labour market and poverty outcomes were also included. The information was derived from various sources and international databases, above all from the OECD database. It is available at: <http://www.oeaw.ac.at/vid/repro/databases.html>

Work in progress reports a link between fertility and the GDP per capita for the European countries: when the GDP per capita increases, fertility declines; however, when it reaches higher values, fertility shows a temperate increase again. Does a very high GDP per capita imply higher fertility?

Figure 2:

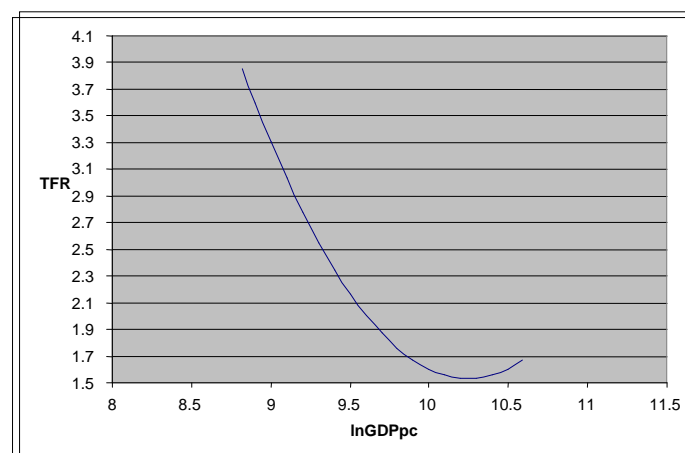


Figure 2 illustrates that the total fertility rate declines when the logged GDP per capita increases up to approx. 10,000 Euros and increases again above that value. This link remains to be

checked for the existence of causal relations.

2. *To get more insight into the way people develop fertility intentions and to create knowledge about individual characteristics and macro-level factors driving the formation of childbearing plans and their subsequent realisation.*

Along with this task, the REPRO team started analysing how people develop childbearing intentions. Fertility intentions are usually measured over the entire lifespan (in which case they inform about intended family size) or over shorter periods of time such as three years. Short-term intentions are particularly suitable for applying the Theory of Planned Behaviour (TPB), which studies intentions as an immediate forerunner of the corresponding behaviour. It also views intentions as being formulated under the immediate impact of three groups of factors: (a) personal positive and negative attitudes towards the behaviour, i.e. having a child, (b) subjective norms, i.e. the perceived social pressure to engage or not to engage in the behaviour; and (c) perceived behavioural control, i.e. the ability to perform the behaviour which may depend, for example, on the availability of housing, income or other different resources.

The REPRO team invested a sizeable amount of work into using the TPB as a key to understanding how fertility intentions develop. Its application of these models yielded important findings. Ordered logistic regression was used to compare the effect of the three main blocks outlined in the TPB: personal attitudes, subjective norms and perceived behavioural control for five countries with relevant data. The results indicate that all these blocks have a significant effect on the construction of intentions. A particularly important finding was that subjective norms have an effect on intentions. This is somewhat surprising because ideational changes are frequently discussed as enforcing desires to self-realisation and achieving personal autonomy, especially with respect to institutions and norms. Norms continue to be of primary importance in reproductive decision-making.

The findings about the significance of social norms in the study of the TPB are reinforced by the micro-level research based on qualitative data.

The European Social Survey data showed that social norms with respect to the lowest or highest age for having a child do not differ much across Europe. However, Europeans differ significantly with respect to the disapproval of voluntary childlessness. For example, rates of disapproval of female voluntary childlessness vary from 86 per cent in the Ukraine to 4 per cent

in Sweden. Further, multi-level models were used to examine differences across countries: some 5 per cent of the overall variance can be explained with country differentials while the remaining part of the variance is attributed to differences across individuals. Some findings: individuals who are highly educated, less religious and value personal autonomy highly are less likely to disapprove of childlessness.

The realisation of fertility intentions was examined using panel data. Respondents who had declared in wave 1 that they intended to have a child during the subsequent three years were classified into three groups according to the way their child-bearing intentions were realised three years later:

- *Intentional parents* are respondents who had realised their intentions to have a child.
- *Postponers* are respondents who did not fulfil their intention to have a child but indicated in the second panel that they intended to have a child during the subsequent 3-year period.
- *Abandoners* are respondents who did not realise their intention to have a child and declared in wave 2 that they no longer intended to have a child during the subsequent 3-year period.

Table 1:

Fertility outcomes in %	Netherlands	Switzerland	Hungary
Intentional parents	75	55	40
Postponers	15	27	42
Abandoners	11	18	18
Total	100	100	100

Table 1 shows the distribution of respondents in these three groups. It reveals a striking contrast in the fulfilment of intentions among the three countries: the Dutch are the most likely to realise their intentions.

Another comparative study conducted in Hungary and Bulgaria showed that aside from demographic factors (e.g. union status and age) important reasons for the non-fulfilment of intentions are such structural factors as employment and being a student. In addition, traditional gender roles prevent the fulfilment of women's childbearing intentions.

**Key messages for
policy-makers,
businesses,
trade unions and
civil society actors**

Our key message is that reproductive decision-making is essential for understanding childbearing behaviour and fertility trends. Hence policies will benefit from focusing explicitly on the components of reproductive decision-making, and fertility intentions in particular. Policies may help particularly in alleviating obstacles—where this is feasible—which impede the realisation of people's intentions to have children. In this sense, our preliminary findings have shown that possible important areas of intervention are: job insecurity, gender equality and the reconciliation of work and family.

The application of the TPB helps identify policy approaches towards providing support for the *realisation* of fertility intentions. Conventional policy instruments, such as child allowances and parental leave, support the individual by providing time and finances for child care. Theoretically, they support the TPB's block of *perceived control*.

However, our application of the TPB shows that two other blocks, namely *subjective norms* and *personal attitudes to having a child*, play an important role in the construction of childbearing intentions. Hence policy support to perceived behavioural control may be insufficient to stimulate the construction of intentions to have a child.

We observed that the process of taking the decision to have a child is quite complex, and that there are differences not just in intentions, but also in the importance of different factors that contribute to the decision, and in the relative influence of attitudes, perceived norms and perceived control across European countries. By the end of the first half of the project, we were aware that while these differences appeared to reflect economic, socio-cultural and policy differences across countries, such macro-level environmental factors do not entirely account for the similarities and differences amongst countries. Such a complex scenario points out that policies which may work in one country or for one group of people in one country will not necessarily translate well into another country or group.

Our discussion that policies and social actors may aim to help people realise their childbearing intentions does not have anything in common with pro-natalist needs of a society. Support for the fulfilment of individuals' or couples' intentions is a service to people, which is provided to avoid cases such as *postponers* or *abandoners* who might feel distressed by not being able to have their intended baby. Similar services have no particular macro-level aims such as an increase in the birth rates. Support in fulfilling such intentions is needed independently of whether or not an increase in birth rates is desirable. Apparently the increase of births is a desirable by-product when societies are worried about birth rates being too low.

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Consortium	<ul style="list-style-type: none"> - Vienna Institute of Demography of the Austrian Academy of Sciences - Institut National d'Etudes Démographiques - Netherlands Interdisciplinary Demographic Institute - Carlo F. Dondena Centre for Research on Social Dynamics, Università Commerciale Luigi Bocconi - Max Planck Institute for Demographic Research (first half) / University of Lausanne (second half) - Demographic Research Institute - Budapest - Norwegian Statistical Bureau - Co-ordination Research Centre for Social Research and Social Euro-integration at the Bulgarian Academy of Sciences - Institute for Social and Economic Research at the University of Essex
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Further reading	<p>Ajzen, I. (1991). "The theory of planned behaviour." <i>Organisational Behaviour and Human Decision Processes</i> 50: 179-211.</p> <p>Gauthier, A. (2007). "The impact of family policies on fertility in industrialized countries: a review of the literature." <i>Population Research and Policy Review</i> 26(3): 323-346.</p>
Related websites	
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