Relative Affluence and Fertility: Reviewing the Easterlin's Hypothesis via Subjective Survey Data from Eurobarometer

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Abstract

The aim of the research is to examine the subjective economic self-evaluations of households as an explanation of fertility behaviours. Following the theoretical path traced by Easterlin on the so called relative income hypothesis, we assume that fertility results from the combination of aspirations and expected income, i.e. from what has been called the "relative affluence" of individuals and households. We use survey data from the 2007 Eurobarometer wave to indicate this dimension of subjective "relative affluence". This measure shows a strong European country-level correlation with fertility; a comparison of the effect of this measure on TFR with the effect of traditional macro-level measures of socio-economic conditions (GDP, unemployment, etc.) is also carried out. A discussion on the possible theoretical and policy level consequences of this analysis, and the possibility of further analytical development, is finally carried out.

1. Theoretical Background: Easterlin's "Relative Income" concept

In modern societies, fertility has been explained both by economical and cultural/institutional factors (Kohler *et al.* 2002). One of the most powerful explanation of fertility connecting individual behaviours to macro-level variables has been the so called Easterlin's hypothesis (Easterlin 1980).

In his seminal work, trying **to explain fertility by the "cohort size" argument**, Easterlin makes two strong assumptions:

1) That the relative size of cohorts has a strong effect on their fortune, i.e. that if a cohort is smaller in size with respect to the one of their parents, it will profit of better economic and social conditions, while if it is larger, in worst economical and social conditions;

2) That fertility is mainly driven by what he called the "relative income" of young couples, giving a very precise definition of the concept, on which we will be back later.

As noted also by Lutz *et al.* (2005), these two assumptions are **independent** one from the other. In his framework, Easterlin used the "relative income" argument as a connection to link cohort size to fertility; in this perspective, the complete Easterlin's hypothesis about fertility aims to explain fertility growth as a function of the relative size of cohorts. The "cohort size" argument, in Easterlin's perspective, is a very general feature of a society, and has important consequences on a variety of social phenomena.

As pointed out by the extensive review of the literature sprung from the Easterlin ideas made by Pampel and Peters (1995), it seems that the complete "cohort size" argument has been valid probably only of the United States, and maybe some other English-speaking countries, and only during the period 1945-1980. The limitation of the "cohort size" argument validity was prospected by Easterlin as well in 1980, and it is indeed a consequence of the powerfulness of the concept itself: while its action is contemporary with other social and economic processes, its full apparency can only be evident while the other concomitant processes are constant.

Apart from the relative fortune of the complete "cohort size" argument, it is

noticeable that the concept of **"relative income"** has continued to be of interest for demographers, as proved by the use made by Lutz *et al.* (2005) in their well-known theory of the "low-fertility trap".

Easterlin gave a fairly formalised definition of relative income:

Relative income = Earning potential of couple / Material aspirations of couple

With Easterlin's words (1980, p.39):

"… an important factor affecting a young couple's willingness to marry and to have children is their outlook for supporting their material aspirations."
"If the couple's potential earning power is high in relation to aspirations, they will have an optimistic outlook and will freer to marry and have children. If their outlook is poor relative to aspirations, the couple will feel pessimistic and, consequentially, will be hesitant to marry and have children."

Easterlin himself recognises that other factors apart from this "relative income" can be important in determining actual fertility levels, but he anyway claims that this is one of the most relevant.

The **earning potential** of a couple is clearly the amount of money they can prospect to have in their future lifetime. Easterlin assumes that this quantity can be well indicated by the experience in the job market of the man at the beginning of his career, assuming that the man is (was) the main income earner of the couple, and that from his early years in employment he can have enough clues to make assumption and forecast on his future career. He concedes that many other factors can have a role in determining the earning potential, such as the individual's energy, ambition, education, "connections", etc., but he claims that the early job market experience is the most relevant one.

The **material aspirations** of the couple are clearly the level of income, material possessions, and variety of experiences that the couple aim to realise during their future lifetime. Here, Easterlin assumes that they could be indicated by the "life-style" of the family of origin of the components of the couple, assuming implicitly

that the individuals aim to have a better material assets than the family of origin. Here as well, Easterlin concedes that other factors, such as religious training, formal education, neighborhood environment, peers, relatives, etc., can be relevant in determining the level of material aspirations. Nevertheless, he supposes that the life-style of the family of origin is the most relevant variable, being also the explanation of most of the other concurrent supposed causes of the material aspirations.

Finally, Easterlin operationalises his concept of relative income in the following way:

Relative income = Earning potential of couple / Material aspirations of couple =
= Recent income experience of young man / Past income of young man's family

This operationalisation, as explained by Easterlin himself, was due mostly to limitation in data available at the time, and he explicitly hoped for a better operationalisation of his concept. Moreover, Easterlin's primary aim was to use the "relative income" argument to support the "cohort size" one.

As stated above, the role of Easterlin's "relative income" argument is still relevant in the modeling of fertility behaviours. Thus, our research focuses on exploring the possibility of an operationalisation of the concept of "relative income" based to **subjective survey data**. Even if this is not a new type of approach for this concept, it has not been the most common one, given that most of the research carried out on this subject has been adherent to the early operationalisation given by Easterlin himself, i.e. focusing on actual income/ employment and parental income (Macunovich 1998). We will focus then in an operationalisation of the dimension that substantially differ from the usual ones. As we have seen describing the original formulation of the argument by Easterlin, this perspective is not that far from the main concept as can seem at first sight. Just to differentiate our perspective from the usual ones, we will call our dimension "Relative Affluence".

2. Relative Affluence: A Discussion about the Desired Properties of the Concept

From the above discussion on Easterlin's "relative income" concept, we argue that a useful Relative Affluence variable should have the following **characteristics**:

– it should be an intermediary variable between the social/ economic context and the individual/ couple fertility behaviour

– it should be a high level variable, useful to explain other behavioural determinants of fertility, as postponement, etc.

– it should be independent from strictly cultural factors such as the social acceptability of the childlessness, or others

– however, is should contain cultural features linked to material aspirations

– being an individual level variable, it should explain individual behaviour, and than it should be measurable at individual level

– to properly test its effect on fertility behaviours, appropriate outcome variables (starting a cohabitation, marrying, childbearing) should be measured on the same individual

We assume the same earlier definition of Easterlin's "relative income":

Relative Affluence = Earning potential of couple / Material aspirations of couple

Thus, measuring the Relative Affluence of a couple or an individual at a given time *t* should mean to measure their "Earning potential" and their "Material aspirations" (a good discussion on the different ways used in literature to measure the complete Easterlin's hypothesis in a survey context has been carried out by Macunovich (1998)).

Two main issues to confront with in measuring both the "earning potential" and the "material aspirations" are the **reference unit** and the **reference time**. In Easterlin's framework, it is obvious that both the "earning potential" and the "material aspirations" are referred to the couple, and not to the individuals. For the sake of simplicity, he then refers only to the male earning potential and the male's parents' income. The issue of the reference unit is strictly linked to the reference

time.

If the Relative Affluence is supposed to be a predictor of fertility behaviours such as starting a cohabitation, having the first child, or having more children, it is then supposed to predict events happening in time, and the time of the measurement should be consistent with the timing of the event to be predicted.

Thus, "earning potential" and "material aspirations" should be measured on the individuals to predict the formation of the marital, or cohabiting, couple, while they should be measured on the couple for the childbearing decisions. It is apparent that the measurement of such concepts for a couple is far from being straightforward, but our aim here is not to address to this problem.

The time-related issue is also relevant with regard to the survey methods: in this context, it is evident that only a panel survey is able to test properly the effect of such a Relative Affluence on fertility behaviours.

Another relevant point regarding the measuring properties of these concepts regards the **"earning potential"** concept. From a logical point of view, this concept can be considered as **"objective" or "subjective"**. Indeed, it can be estimated, as Easterlin did, via macro level data regarding the income of a population, or it can be considered of what the subjects/ individuals themselves think it is.

This is a relevant point, because if we think that the relative income or affluence is a property of the individuals (or couples) it is straightforward to operationalise it as a property that have to be known to the individuals themselves: if the Relative Affluence of a couple/ individuals have to affect their fertility behaviours, the components of this Relative Affluence, i.e. the earning potential and the material aspirations, have to be at least at some level be more or less conscious to the individuals/ couples affected. On the other side, if the individuals/ couples have no ideas of their earning potentials and of their material aspirations, their fertility behaviours have to be completely independent from those concepts, even if they could be measured in some way (independently by their will).

Anyway, in a subjective perspective, it is clearly very difficult to ask directly to people "what is the amount of money they can prospect to have in their future

lifetime", that is the direct meaning of the "earning potential" concept. Indeed, if we look at the questions used to test the complete Easterlin's hypothesis via questionnaire in the past (in appendix of Macunovich (1998)), no question has ever been posed to directly measure this quantity. All the questions used were both operationalisation of Easterlin's concept of relative income in terms of current income and parents' income or questions that aimed at qualitatively catching the overall meaning of relative income, without decomposing it in its two components.

This difficulty in the operationalisation of the "earning potential" concept could be indeed a signal of misspecification of the concept underlined, and/ or of some logical difficulties in the causal chain that should link it to the predicted behaviour.

On the contrary, the concept of **"material aspirations"** seems to be more straightforward, at least at a first theoretical step: it can simply be the sum of all the expenditures the individuals/ couple will need to carry out to fully accomplish their lives. Anyway, here as in the case of the "earning potential", difficulties arise when coming to operationalise the concept into a survey context. Moreover, even if the "sum of all the expenditures" seems to be a unidimensional concept, it clearly appears that the type of expenditures are qualitatively different one from the others, and they easily become a multidimensional concept.

In addition, it is well known that the classical economic theory assumes that material aspirations tend to be infinite, thus opposing against any quantification of this concept.

It can also be controversial if expenditures relates to cohabiting and childbearing should be counted in this concept, while, as a result, the concepts of cohabiting and of childbearing will be present both in the explanans and in the explanandum.

Finally, once having a quantitative measure both for the earning potential and for the material aspirations, we can think at the Relative Affluence index (RA) as a quantity centred on 1 or zero, for which:

–   if RA>1 or 0, individuals/ couple have more earning potential than material aspirations:

  ✓   they can realise almost all of their material aspirations, or at least many of them

- ✓ they are freer to decide what to do with their income, given a scale of preferences, they can also go living together/ have children/ have more children (if this is high in their preference rank)
- ✓ they are people that are "freer" to do more things that imply expenditure/ freer to spend
- if RA<1 or 0 individuals/couples have less earning potential than material aspirations/ have more material aspirations than earning potential:
  - ✓ they cannot realise "all" their material aspirations
  - ✓ they have to give up so some object of consumption they would like to reach
  - ✓ they are less free to decide what to do with their income, given a scale of preferences: they are people that have more constraint on their budget
  - ✓ if going living together/ have children/ have more children is not really high in their preference scale, they will tend not to go living together/ having children/ having more children

It is clear enough that its explanatory power will be not restricted to fertility behaviours, but that such a measure could contribute in the explanation of a variety of behaviours. The fertility case will then be a special case of application of this measure.

We argue that the hypothetical measure of Relative Affluence described could be a necessary condition in explaining fertility, but not a sufficient one. Individuals/ couples who have a high Relative Affluence simply are or feel freer to manage their money in the way they want, and an high level of Relative Affluence by itself does not imply directly high fertility. High fertility will be implied if:
- the individuals/ couples have an high level of Relative Affluence,
- and, in their scale of preferences, cohabiting or childbearing have a relevant place,
- or the social acceptability of childlessness is not that spread.

From a more general perspective, Relative Affluence could be an element of confidence and control of their lives that individuals and couples can have or not, in the context of the economic aspects of live regarding income and expenditure.

3. A Tentative to Measure Relative Affluence via Eurobarometer data

The measure of Relative Affluence we present here is far from the ideal we described in the last section. However, we think it is worth analysing and discussing it because it seems to be a good proxy for it.

This measure of Relative Affluence is computed at national level, for 28 European countries, via Standard Eurobarometer 67 data.

Eurobarometer[1] is a programme of public opinion surveys carried out by the European Commission since 1973. The 2007 wave (Standard Eurobarometer 67) was carried out in 31 European countries, for a total sample of 30.231 individuals aged 15 and above (between about 500-1.500 individuals per country), face-to-face interviewed.

The wave 67.1 (February-March 2007) contained the following two questions:
QB2: "In your opinion, what would be the very lowest net monthly income that your household would need to have in order to make ends meet, given the present circumstances and composition of your household? Net income is after tax and social security contribution have been deducted.", with open answer.
QB3: "Is the total net monthly income of your household higher, lower or more or less the same as this figure?"; the possible answers were "Much higher", "Higher", "More or less the same", "Lower", "Much lower".
These questions were also included in the Standard Eurobarometer 56.1. (September-October 2001), on a subset of 15 countries. See table 1 and 2 at the end of the text for the complete answers at these questions in 2007.

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1 http://ec.europa.eu/public_opinion/

Fig. 1. Income needed to make ends meet (average, in Euro), and Relative Affluence as difference of the proportion of people who say that their income is higher that the minimum needed and who say that is lower. 28 European countries, 2007 (500-1,500 individuals per country)
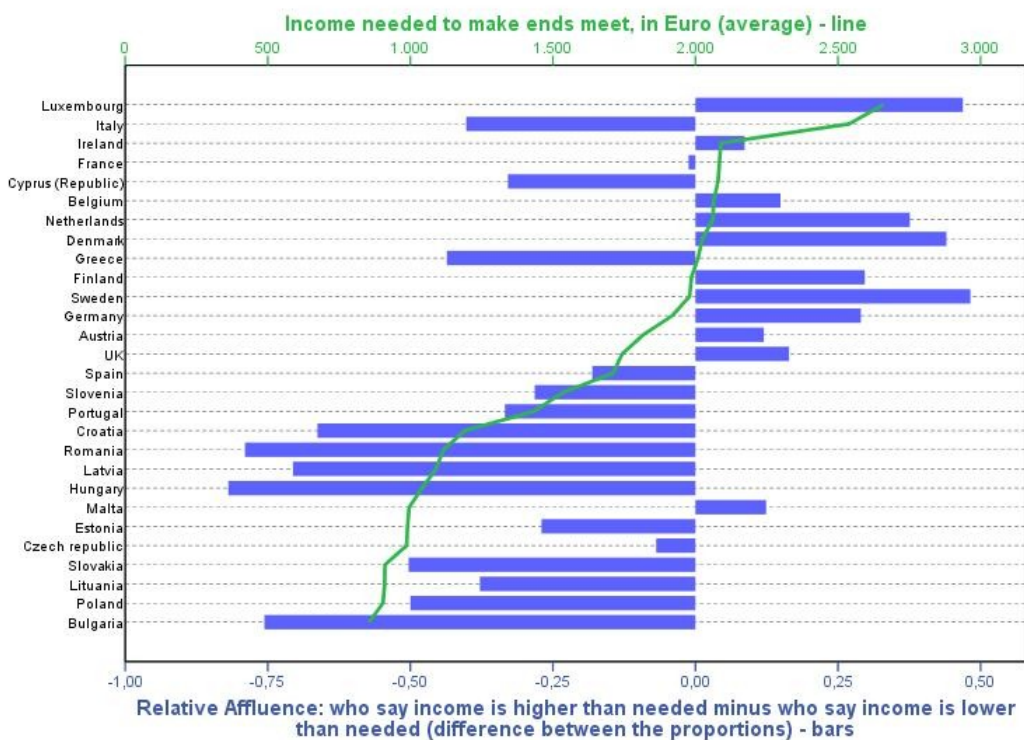
Source: our elaborations on Eurobarometer 67.1 data. See tables 1 and 2 at the end of the text for the complete data.

Even if not perfect, we consider QB3 as a good indicator of a concept of Relative Affluence, as described above. Indeed, it represents a subjective evaluation of the congruity of the actual income towards a desired/ needed one: first the interviewer asks to the respondent the minimum needed income for an household as his/ her own, then he/ she asks if their **actual** income is higher or lower that the minimum needed.

In particular, we consider QB3 as a balance variable, i.e. as the difference between people who say their actual income is higher of the minimum needed minus who say actual income is lower.

Four extreme cases emerge (see fig.1):

1) The level of the minimum income needed is relatively high, and the proportion of people who say their income is higher of this amount is bigger than people that say it is lower: this is primarily the case of Luxembourg, Sweden, Denmark, the Netherlands, and other countries. These are countries in which people need a relatively high level of expenditure, and thus of income, to make ends meet, and in which the majority of people can cope with this expenditure without any particular stress: both because they consider a relevant proportion of expenses not strictly necessary, or because they actually have a large income.

2) The level of the minimum income needed is relatively high, and the proportion of people who say their income is lower of this amount is bigger than people that say it is higher: this is typically the case of Italy, Greece, and the Republic of Cyprus. In this countries people say they need a relatively high level of income to make ends meet, but the majority of them declare they actual income is lower than that level. This is a typical case of economic stress: the expenditure threshold of what is "socially" accepted as a level of consumption is set so high that only a minority of people can cope with that, both because of the impossibility to renounce to a certain quantities of expenses, or because they actually not earn enough to face that.

3) The level of the minimum income needed is relatively low, and the proportion of people who say their income is lower of this amount is bigger than people that say it is higher: this is primarily the case of Bulgaria, Romania, Hungary, Latvia, Croatia, and other countries. In these countries the level of income to make ends meet is not that high; however, the majority of people cannot even reach that low threshold.

4) The level of the minimum income needed is relatively low, and the proportion of people who say their income is lower of this amount is not so different from who say it is higher: this is typically the case of Malta and the Czech Republic, and partially of Estonia.

According to construction of the Relative Affluence concept, we expect that this measure will be correlated to the TFR at national level.

The index built upon the Eurobarometer QB3 variable can be seen as approximation of the concept of Relative Affluence, in the following terms:

– when people are asked about the "very low minimum income needed to make ends meet" they need to focus to a quantity that can be seen proportional or proxy to the "material aspirations"

– after that, they area asked to compare that amount to their income capability at the moment, that can be seen as something proportional or proxy to the "earning potential"

– then, answering to QB3, they are implicitly comparing their "earning potential" to their "material aspirations", and then revealing their Relative Affluence with their answer.

However, there are noticeable differences between the desired definition of Relative Affluence given in the above section, and the operationalisation given here:

– the "very low minimum income needed" is a clearly different definition than the "material aspiration": we can assume than usually these latter have to be higher than a "very low minimum income";

– the actual income could be different from the hypothetical "earning potential", if such a concept could be measured;

– moreover, Eurobarometer is not a panel survey, and the demographic information that contains is limited, such as hinder a complete study of the effect of this variable to fertility.

4. Relationship between Relative Affluence and TFR at European Country Level

The next chart presents the bivariate relation between the measure of aggregate Relative Affluence (RA) presented in the last section to the Total Period Fertility Rate (TFR).

Fig. 2. Total Fertility Rate (2006) and difference between who said actual income is "Much higher" or "Higher" than needed income and who said it is "Much lower" and "Lower" (2007), in 27 European countries.
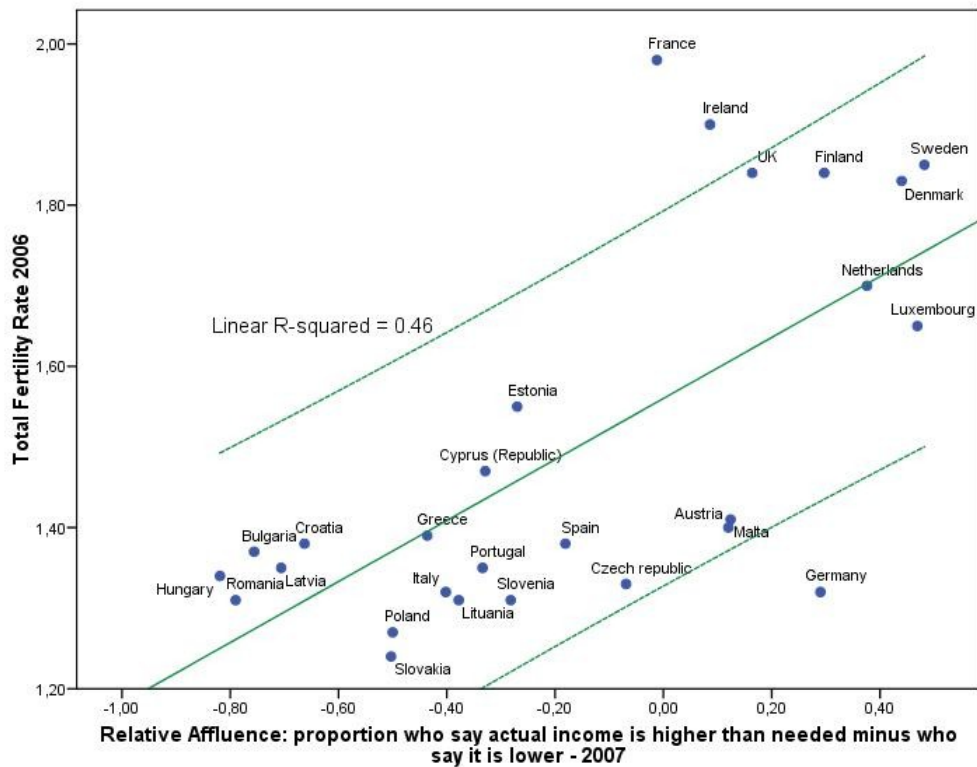
Sources: TFR: Eurostat (Italian TFR is 2005, Belgian data not available); difference between "Income is higher than needed" and "Income is lower than needed": our elaborations on Standard Eurobarometer 67.1 data

The basic finding of our research is the strong correlation of our measure of Relative Affluence and the TFR at country level. A correlation analysis carried out with the 2007 dataset on the 27 European Union countries shows a R-square of

0.46 between QB3 and 2006 period TFR (Total Fertility Rate). Thus, the subjective evaluation of the household economic stress is a good predictor of the fertility rate at European country level.

Moreover:

− The difference in TFR between Mediterranean countries and Nordic ones is well explained by the subjective evaluation measure.

− The subjective evaluation measure seems to well explain why relatively rich country as Italy and Spain have a fertility level similar to relatively poor country as Bulgaria and Romania.

Noticeable distance from the predicted values of TFR are Germany, France, and Ireland.

Notwithstanding the high correlation between TFR and our measure of Relative Affluence, the chart is well clear about the lack of a straightforward linearity. In particular, the existence of a linear relation would suppose the presence of some countries with Relative Affluence between 0 and 0.20 and TFR around 1.60, and this is not the case.

Moreover, it is fairly clear that this correlation happens to be an ecological one. A proper causal effect can only be measured at individual level, and possibly via panel data.

According to our interpretation of the possible relation between Relative Affluence and TFR, the relevant distance from the predicted values of France, Ireland, and Germany should be explained by the relevance that in these countries cultural factor such an higher preference for childbearing (France and Ireland) and a higher level of social acceptability of childlessness have (Toulemon *et al.* 2008; Dorbritz 2008).

Being also measured by Eurobarometer in 2001, we have attempted to carry out a longitudinal analysis. First results show a lack of time dependence between the growth of TFR and of Relative Affluence at aggregate national level. Anyway, in 2001 the questions were posed in 15 countries only, being them the first 15 European Union members, thus the richest ones.

An attempt at a regional levels analysis with the 2007 data has been also carried

out. Going down to regional level, however, the correlation between TFR and Relative Affluence seems to weaken. The regional level analysis suffers anyway of highest statistical errors regarding the measures of Relative Affluence, being this based on national representative samples of the size of about 1,000 respondents.

5. Other Possible Indexes of Economic Prosperity/ Stress and the TFR

To assess the robustness and validity of our index of Relative Affluence, in this section we will compare its explanatory power on TFR against other measures of affluence or economic stress.

Table A. Correlation of Total Fertility Rate with Relative Affluence (2007), per capita Gross National Product at purchasing power parity, growth of volume of Gross National Product, unemployment, and Consumer Confidence. 27 European countries 2006

	R	R-squared
Relative Affluence	0.68	0.47
Per capita GDP at purchasing power parity	0.55	0.31
% growth of volume GDP	-0.28	0.08
Total unemployment rate	-0.43	0.18
Female unemployment rate	-0.44	0.19
Unemployment rate <25 year-old	-0.29	0.08
Consumer Confidence	0.52	0.28

Notes

Relative Affluence is the variable described above.

Consumer Confidence is a survey index produced by the European Commission (2007). It is used to monitor the economic confidence of citizens. See the Appendix for the explanation of how it is measured. Correlations between TFR and Consumer Confidence is computed among 26 countries, as Consumer Confidence is not available for Croatia. Table 3 at the end of the text shows national data for the variable here listed.

Sources: Relative Affluence: our elaborations on Eurobarometer data, as above explained; others: Eurostat.

It is apparent that the measure of Relative Affluence we have proposed is a better cross-sectional predictor of fertility than GDP levels, unemployment rates, and consumer confidence in Europe in 2007.

Among the other measures tested:

– per capita GDP expressed in purchasing power parity and the Consumer Confidence Index are the second best explanatory quantities;

– total and female unemployment rates can explain fairly well TFR, while youth unemployment rate is not;

– growth in GDP is negatively correlated to TFR.

6. Discussion of the Results

In this paper, we have discussed the Relative Affluence concept proposed by Easterlin (1980) as an explanation of fertility. While Easterlin was using the Relative Affluence argument in the context of the "cohort size" explanation of individual welfare in general and fertility in particular, we have focussed our attention on the Relative Affluence in itself.

Relative Affluence as a concept could have a relevant role in explaining both fertility and other relevant social and economic behaviours. After having discussed the desired property of such a concept, we have shown a possible operationalisation of this concept via survey data from Eurobarometer. This operationalisation can consistently explain cross-sectional fertility differences among European countries in 2007, having a better explanatory power of other standard prosperity measures.

From theoretical considerations and from some empirical evidence, we then argue that the Relative Affluence argument first used by Easterlin can be extremely useful when used in a proper subjective manner, i.e. measured via survey instruments. Its role could be relevant in modelling future levels of fertility, and it could be a relevant instrument in studying other social and economical factors as well. However, further research is necessary, in particular in the form of panel studies, to properly test the concept in a longitudinal perspective. A better operationalisation in a survey context should be needed too (Macunovich 1998). In using this concept for forecasting fertility levels, as also shown by Lutz *et al.* (2005), it is necessary to include in the model cultural factors such as the rank of childbearing in the preference consumption scale, and the social acceptability of childlessness.

Appendix

The Consumer Confidence Index published by the European Commission (2007) is the average of the balances of the answers at the following questions:

1) How do you expect the financial position of your household to change over the next 12 months?

2) How do you expect the general economic situation in this country to develop over the next 12 months?

3) How do you expect the number of people unemployed in this country to change over the next 12 months?

4) Over the next 12 months, how likely is it that you save any money?

The balance is the difference, in percentage point, between the positive and negative answer; neutral answers are not considered. The sum of positive, negative and neutral answers is 100.

The typical answer scale is this:

+ +   get a lot better

+   get a little better

=   stay the same

−   get a little worse

− −   get a lot worse

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Tables

Tab. 1. "In your opinion, what would be the very lowest net monthly income that your household would need to have in order to make ends meet, given the present circumstances and composition of your household? Net income is after tax and social security contribution have been deducted." Question QB2 in Eurobarometer 67.1 – residents aged 15 or more (2007)

	Less than 1.000 euros	From 1.000 to 1.499 euros	From 1.500 to 1.999 euros	From 2.000 to 2.499 euros	From 2.500 to 2.999 euros	3.000 euros and more	Refusal	DK	1 Less than 1.000 euros	Mean	N
Luxembourg	0,8%	4,0%	10,2%	18,4%	12,2%	30,6%	7,2%	16,6%	100,0%	2658	500
Italy	1,1%	10,5%	12,8%	18,9%	10,7%	33,4%	2,5%	10,1%	100,0%	2539	1000
Ireland	11,4%	9,3%	8,3%	13,3%	5,2%	15,1%	7,8%	29,7%	100,0%	2089	1000
France	5,5%	18,9%	25,1%	16,0%	6,6%	18,3%	1,3%	8,2%	100,0%	2084	1031
Cyprus (Republic)	9,6%	17,4%	26,7%	7,6%	15,4%	18,2%	-	5,2%	100,0%	2079	500
Belgium	2,9%	19,8%	24,7%	21,0%	13,3%	10,9%	0,9%	6,5%	100,0%	2064	1040
Netherlands	3,5%	15,7%	22,2%	18,5%	9,2%	10,7%	1,6%	18,6%	100,0%	2061	1000
Denmark	14,2%	16,9%	9,9%	13,4%	11,7%	15,7%	2,8%	15,5%	100,0%	2024	1008
Greece	10,5%	21,3%	22,4%	19,1%	8,2%	17,3%	0,4%	0,8%	100,0%	2009	1000
Finland	10,8%	19,9%	19,0%	17,8%	8,8%	14,5%	-	9,1%	100,0%	1986	1041
Sweden	8,4%	17,0%	24,7%	18,8%	9,5%	11,0%	1,0%	9,6%	100,0%	1979	1011
Germany	7,8%	23,9%	23,9%	18,3%	8,0%	10,8%	1,0%	6,4%	100,0%	1919	1534
Austria	10,0%	20,8%	19,6%	10,8%	6,6%	7,8%	8,1%	16,3%	100,0%	1817	1011
UK	14,4%	26,3%	6,6%	11,2%	10,2%	6,3%	6,9%	18,0%	100,0%	1743	1310
Spain	11,3%	31,4%	23,8%	13,3%	3,7%	7,7%	3,3%	5,6%	100,0%	1711	1006
Slovenia	28,7%	27,5%	13,9%	12,1%	4,5%	6,5%	2,4%	4,4%	100,0%	1537	1015
Portugal	31,6%	23,6%	15,0%	9,4%	3,0%	4,1%	2,0%	11,4%	100,0%	1432	1013
Croatia	49,8%	33,3%	3,6%	8,3%	2,9%	1,0%	0,1%	1,0%	100,0%	1192	1000
Romania	55,1%	22,2%	6,5%	4,0%	1,0%	1,9%	0,5%	9,0%	100,0%	1116	1037
Latvia	63,9%	24,7%	1,3%	3,1%	3,1%	2,2%	0,4%	1,4%	100,0%	1090	1006
Hungary	64,2%	17,6%	11,9%	1,2%	0,3%	0,6%	0,6%	3,6%	100,0%	1041	1000
Malta	56,6%	20,2%	5,4%	1,0%	0,2%	0,2%	2,0%	14,4%	100,0%	996	500
Estonia	76,8%	12,8%	5,4%	0,6%	1,0%	1,9%	0,1%	1,4%	100,0%	990	1001
Czech republic	61,8%	21,2%	3,9%	0,8%	0,2%	0,7%	1,9%	9,5%	100,0%	987	1060
Slovakia	73,0%	15,7%	1,9%	0,2%	0,5%	-	3,9%	4,8%	100,0%	911	1094
Lithuania	82,1%	12,2%	1,1%	0,8%	0,9%	0,5%	-	2,5%	100,0%	910	1029
Poland	77,4%	12,6%	1,6%	0,2%	0,4%	0,6%	-	7,2%	100,0%	904	1000
Bulgaria	85,7%	6,4%	1,5%	0,2%	0,2%	0,1%	1,1%	4,8%	100,0%	855	1009

The original answers were open ended. The working database contain coded answers. The average has been computed on the recoded answers, apart from the refusals and the DK.

Tab. 2. "In your opinion, what would be the very lowest net monthly income that your household would need to have in order to make ends meet, given the present circumstances and composition of your household? Net income is after tax and social security contribution have been deducted." "Is the total net monthly income of your household higher, lower or more or less the same as this figure?" Question QB3 in Eurobarometer 67.1 - residents aged 15 or more (2007)

	Much higher	Higher	More or less the same	Lower	Much lower	DK	Total	Relative Affluence	N
Sweden	19,0%	39,6%	21,2%	8,0%	2,3%	10,0%	100,0%	48,2	1011
Luxembourg	15,2%	39,6%	13,0%	5,2%	2,4%	24,6%	100,0%	46,9	500
Denmark	10,5%	41,7%	23,6%	6,9%	1,1%	16,2%	100,0%	44,0	1008
Netherlands	11,6%	38,7%	17,7%	9,5%	3,3%	19,3%	100,0%	37,6	1000
Finland	6,0%	42,1%	25,9%	14,0%	4,2%	7,8%	100,0%	29,7	1041
Germany	6,0%	43,1%	23,0%	15,5%	4,6%	8,0%	100,0%	29,0	1534
UK	9,0%	27,7%	22,8%	15,3%	5,0%	20,2%	100,0%	16,4	1310
Belgium	6,3%	35,2%	23,2%	22,3%	4,4%	8,6%	100,0%	14,9	1040
Malta	1,4%	31,2%	28,2%	18,6%	1,8%	18,8%	100,0%	12,4	500
Austria	3,3%	30,2%	26,6%	17,5%	4,0%	18,5%	100,0%	12,0	1011
Ireland	4,5%	23,8%	22,5%	15,3%	4,5%	29,4%	100,0%	8,6	1000
France	3,8%	28,9%	23,3%	25,9%	8,0%	10,2%	100,0%	-1,2	1031
Czech republic	2,9%	26,7%	24,9%	23,2%	13,4%	8,9%	100,0%	-6,9	1060
Spain	2,2%	16,9%	31,7%	30,1%	7,1%	12,0%	100,0%	-18,1	1006
Estonia	2,9%	21,0%	23,5%	32,8%	18,1%	1,8%	100,0%	-27,0	1001
Slovenia	3,6%	16,4%	25,2%	37,7%	10,4%	6,6%	100,0%	-28,2	1015
Cyprus (Republic)	1,6%	12,4%	31,5%	34,7%	12,0%	7,8%	100,0%	-32,9	500
Portugal	1,3%	12,2%	27,0%	33,6%	13,3%	12,5%	100,0%	-33,4	1013
Lithuania	1,7%	17,7%	21,8%	31,0%	26,2%	1,6%	100,0%	-37,8	1029
Italy	1,3%	9,7%	28,3%	37,2%	14,1%	9,4%	100,0%	-40,2	1000
Greece	0,8%	10,8%	30,8%	34,6%	20,6%	2,4%	100,0%	-43,6	1000
Poland	1,9%	10,8%	18,2%	37,9%	24,8%	6,3%	100,0%	-50,0	1000
Slovakia	0,8%	11,5%	19,3%	35,2%	27,5%	5,7%	100,0%	-50,3	1094
Croatia	1,0%	7,3%	15,8%	41,7%	32,9%	1,3%	100,0%	-66,3	1000
Latvia	0,4%	7,2%	12,0%	45,4%	32,7%	2,3%	100,0%	-70,6	1006
Bulgaria	0,6%	4,0%	10,8%	37,1%	43,1%	4,5%	100,0%	-75,6	1009
Romania	0,5%	2,4%	7,3%	26,3%	55,5%	7,9%	100,0%	-79,0	1037
Hungary	0,6%	1,9%	9,7%	38,8%	45,5%	3,5%	100,0%	-81,9	1000

The measure of relative affluence has been computed as the difference, in percentage points, between who say "much higher" or "higher" and who say "lower" or "much lower".

Table 3. Total Fertility Rate, Relative Affluence , per capita Gross National Product at purchasing power parity, growth in volume of Gross National Product, unemployment, and Consumer Confidence. 27 European countries 2006

	TFR	Relative Affluence from Eurobarometer	Per capita GDP in Euro purchasing power parity	% growth of GDP in volume	Total unemployment	Female unemployment	<25 year-old unemployment	Consumer Confidence Index
year	2006	2007	2006	2006	2006	2006	2006	2006
France	1.98	-1.0	25,900	2.2	9.2	10.1	22.1	-11.5
Ireland	1.90	9.4	34,800	5.7	4.5	4.2	8.6	-0.2
Sweden	1.85	51.1	28,700	4.2	7.0	7.2	21.5	13.8
Finland	1.84	28.1	27,100	4.9	7.7	8.1	18.7	16.1
United Kingdom	1.84	16.3	28,400	2.8	5.4	4.9	14.0	-4.6
Denmark	1.83	45.1	29,100	3.3	3.9	4.5	7.7	16.9
Netherlands	1.70	37.3	30,900	3.4	3.9	4.4	6.6	12.1
Luxembourg	1.65	48.2	63,100	6.4	4.6	6.0	15.8	-0.4
Estonia	1.55	-33.4	15,400	10.4	5.9	5.6	12.0	9.1
Cyprus	1.47	-35.2	21,300	4.1	4.6	5.4	10.5	-34.6
Malta	1.41	11.8	18,200	3.2	7.1	8.7	16.5	-29.6
Austria	1.40	12.1	29,400	3.4	4.8	5.2	9.1	5.2
Greece	1.39	-44.9	22,200	4.5	8.9	13.6	25.2	-32.8
Croatia	1.38	-67.5	12,200	4.8	11.2	12.8	28.9	
Spain	1.38	-20.9	24,600	3.9	8.5	11.6	17.9	-11.9
Bulgaria	1.37	-76.0	8,600	6.3	9.0	9.3	19.5	-30.5
Portugal	1.35	-34.3	18,000	1.4	7.8	9.1	16.3	-34.2
Latvia	1.35	-72.7	12,400	12.2	6.8	6.2	12.2	-5.3
Hungary	1.34	-82.9	15,000	4.1	7.5	7.8	19.1	-34.7
Czech Republic	1.33	-7.9	18,300	6.8	7.2	8.9	17.5	1.5
Germany	1.32	29.1	27,400	3	9.9	9.5	12.6	-5.9
Italy	1.32	-41.3	24,500	1.8	6.8	8.8	21.6	-15.8
Romania	1.31	-79.2	9,100	7.9	7.3	6.1	21.4	-22.0
Slovenia	1.31	-28.9	20,700	5.9	6	7.2	13.9	-13.7
Lithuania	1.31	-39.0	13,100	7.8	5.6	5.4	9.8	0.6
Poland	1.27	-52.6	12,400	6.2	13.9	14.9	29.8	-12.7
Slovakia	1.24	-53.5	15,000	8.5	13.4	14.7	26.6	-9.1

Notes

Italian TFR refers to 2005.

Relative Affluence is the variable described in the text.

Consumer Confidence is a survey index produced by the European Commission (2007). It is used to monitor the economic confidence of citizens. See the Appendix for the explanation of how it is measured.

Sources: Relative Affluence: our elaborations on Eurobarometer data, as explained in the text; others: Eurostat.