Comparative policy perspectives of happiness and parenthood

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Abstract

This paper discusses the links between parenthood, happiness and policies, taking a comparative perspective. Its motivation derives from recent analysis suggesting a positive relationship between happiness and fertility. Taking a multilevel approach, we find that parental happiness, and thus wellbeing associated with childbearing, depends on a series of country characteristics – ranging from economic prosperity, trust, social capital and gender equality. We reflect on its policy implications and highlight the fact that direct measures of child friendliness, such as the supply of public childcare – though important – appear to matter less than for instance gender equality.

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1. Introduction

Comparative analysis of European fertility levels reveals astounding differences, ranging from a total fertility rate (TFR) of 1.9 in Norway and close to 1.2 in Bulgaria. For policy makers a key concern is that the TFR is well below the replacement rate in a number of European countries. There are many explanations on offer for the observed fertility differentials, ranging from individuals gaining new value orientations where childbearing is no longer the essential utility parameter it used to be - to deficiencies in welfare provision that makes childbearing and rearing arduous. An interesting addition to the literature concerns the relationship between happiness and childbearing (Kohler et al 2005; Aassve et al 2011, Margolis and Myrskylä 2011, 2012; Billari and Kohler 2009; Aassve, Goisis, Sironi 2012). Large-scale comparative data source, such as the European Social Survey, shows that the correlation between average levels of happiness and TFR is strong and positive. Thus, in countries where overall fertility is high individuals are also on average happier. It is also the case that in "happy countries" public welfare is also more generous. The latter would suggest that high fertility in the Nordic countries is driven by welfare provision that favours and enhances the wellbeing of parents with young children (McDonald 2000). This argument builds on the idea that policies must matter and that in those countries where policies are geared towards childbearing - fertility is also higher - presumably because potential parents in those countries predict happiness associated with childbearing to be higher – all else equal. This is however, a hotly contested issue in the demography literature. More often than not, it is argued that there is little evidence to suggest that policies have any significant impact on demographic behaviour - and certainly not on fertility. Based on existing studies, Gauthier (2007) argues that the policy impact on fertility is small. The assessment of McDonald (2002), however, suggests that the effect may not be so small after all. The role of policies on demographic behaviour remains an unsettled issue.

Our paper follows up on this debate by taking a broader perspective on policy, acknowledging that couples' childbearing decisions depend on a range of factors, the most important being their own personal circumstances, but also on the characteristics of the setting where they reside. We provide a country comparison of happiness and parenthood, which we hold against characteristics of the societies in which individuals and couples reside and make an assessment of how these relate to European fertility levels. These characteristics include not only the usual suspects discussed as policy measures for fertility. The key is that childbearing decisions are irreversible, long lasting and life changing, and as such, very different from most other consumption choices individuals deal with. Thus, couples' childbearing decisions will depend on other factors than the mere financial benefits generated through policies. As highlighted by Gauthier (2007), childbearing decisions are influenced by individuals' characteristics, by social norms and

culture at different contextual levels. Hence, the entire political and cultural system of a country might matter for whether a country becomes more "children prone" and family-friendly. Thus, a tapered discussion of cash benefits for children, is not very fruitful if the aim is to understand why countries differ so substantially in terms of fertility. Rather, ones fertility decisions may more generally depend on individuals' subjective assessment of the environment and society in which they will have to raise their children. For instance, parenthood, and the satisfaction associated with it, may, in addition to general economic prosperity, also depend on social capital, trust and state governance and its predictability for the future. Without making any causality statements, our aim is to bring to light those aspects that are not often considered important for individuals' childbearing decisions and hence overall fertility. We discuss the possible mechanisms for why these factors may matter for individuals' childbearing decisions.

We support our arguments by conducting a comparative analysis based on the European Social Survey (ESS). Differently from other studies, we consider the policy perspective of parenthood by holding childbearing experiences against individuals' reported happiness (as opposed to economic wellbeing). We use a simple multilevel model where the dependent variable is respondents' level of happiness, and the key explanatory variable is parenthood interacted with key country level characteristics. In general we observe that fertility is higher in those countries where the average happiness is higher, but there is a critical gender difference. That is, in high fertility countries we find that mothers are always happier than non-mothers, meaning that in low fertility countries, mothers are always less happy than non-mothers. Fathers in contrast, are always happier than non-fathers – no matter the circumstances of the country where they reside. Importantly, the interaction between happiness and parenthood (i.e. childbearing) is consistent with patterns of fertility differentials across Europe. Moreover, factors such as gender equality, trust, social capital appear to distinguish mothers' happiness better than the supply of childcare facilities for instance.

2. Theoretical background

The recent fertility decline in Western countries is well documented (Billari et al, 2007; Billari, Kohler, Ortega, 2002; Goldstein et al., 2009). Italy, Spain, Portugal and Greece, often referred to as the lowest-low fertility countries, have experienced a sharp decline in childbearing with the TFR dropping to 1.3 at the end of the 20th century. They have been followed by former communist countries of Central Europe – with an average TFR of 1.28, and more recently by Germany and Austria with TFR levels of 1.35 and 1.40 respectively. In contrast, Anglo-Saxon and the Nordic countries (UK, Norway, Finland, Sweden, Denmark and Iceland) have maintained higher fertility rates – though also here fertility levels declined when compared to the 60s and the 70s. In reaction to these patterns of low fertility, rich theoretical perspectives have been developed.

The basic line of explanation is that industrialization and urbanization led to a decline in mortality, followed by a decline in fertility (Notestein, 1953). However, the emergence of lowestlow fertility cannot be easily explained by the mechanism underlying the demographic transition. As highlighted by Myrskale et al (2009), among developed countries, fertility now appears to be rebounding in those countries where development is very high, indicating that there is no simple linear relationship underlying fertility trends (Thevenon, 2011). Complementary to the more traditional explanations of fertility decline, we find the ideas of the second demographic transition (Lesthaeghe and Van de Kaa 1986). The SDT theory stresses how self-fulfilment, self-realization and happiness lie in the autonomy of the individual from constraining institutions, family included, and who set his or her own well-being as prior to the one of his or her children (Billari, Philipov, Baizan, 2001). Interpreting the SDT thesis literally one would conclude that its emergence should lead to lower fertility, in part because postponement of parenthood reduces the chances of completing ones desired fertility and it will necessarily have an impact on observed fertility rate. However, recent fertility trends show the opposite. Those countries that appear to have progressed farthest on the path of the second demographic transition, also appears to have higher fertility (Sobotka 2008; Aassve et al 2012). Any satisfactory explanation of fertility differentials clearly needs to go beyond the standard SDT arguments.

The underlying assumption in our analysis presented here is that childbearing indeed make a couple happier or more satisfied, and therefore act as the key motivator behind having children in the first place. There is now a burgeoning literature considering the links between happiness and childbearing (Myrskale and Margolis 2011, 2012; Kohler et al 2011; Billari and Kohler 2009;), whereas the literature concerning childbearing and economic wellbeing is more extensive (see

Aassve et al 2006). A useful approach to analyse happiness and childbearing is to start from prospect theory (Kahnemann and Tversky, 1979; Billari and Kohler 2009). Couples predict their level of happiness associated with childbearing and act accordingly. In other words, if individuals predict their level of happiness to increase from having children, they will also go on and have children, whereas those who have a negative valued prediction will not - or at least be less likely to do so. Thus, children should be positively associated with happiness. Naturally, individuals and couples differ in their precision of such predictions. Moreover, heterogeneity in these predictions might be dependent upon observed individual characteristics and social networks (and their experiences of childbearing). More relevant in the comparative perspective is that the characteristics of the societies where couples reside may have an impact on their assessment of wellbeing associated with childbearing and therefore influence their childbearing decisions. This line of arguments is consistent with the idea of Billari and Kohler (2009) who argue that subjective wellbeing and fertility depends both on micro and macro level factors. The main idea is that the quest for happiness, and the compatibility between happiness and childbearing, is the "commonality" that may clarify why fertility levels are so heterogeneous across developed countries. The perception of an enhancement in happiness from having a child is a key factor driving the decision to become a parent, as well as expectations of drops in one's own satisfaction can dissuade people from having a child. People can gather information through social networks on the effects that childbearing might have on parents' happiness and form their own opinion, or they have already experienced parenthood in the past.

In terms of understanding the broader policy perspective of happiness and parenthood, we start first by considering the more standard policies issues that relates to benefits related to childbearing, and more generally welfare provision to parents with young children. We then move on to discuss the role of gender equity and equality, then to discuss trust, social capital and functioning of institutions, all of which have been considered more esoteric in the fertility discussions, but in our mind equally important for understanding satisfaction associated with childbearing, and therefore fertility differentials.

2.1 Welfare policies and state support

Governments' policies and welfare generosity are often claimed as key driving forces behind higher levels of fertility in Nordic relative to Southern European countries (Neyer and Andersson 2008). The underlying assumption is that individuals and couples have more children because the state provides generous support, which implicitly assumes that subjective well-being associated with childbearing is higher if more support is provided. However, Kalwij (2010) using information across countries over time finds that direct benefits geared towards children has only a modest effect on overall fertility levels. More important is the support package. For instance, cash and in-kind benefits, needs to be held together with family allowances, maternity and parental leaves benefits and child-care facilities. Moreover, it is argued that labor market policies aimed at creating opportunities for women to combine family and employment are critical for maintaining higher fertility (Chesnais 1996; Neyer 2006). The empirical evidence is however somewhat mixed, in part driven by the inherent difficulties in measuring the composite nature of such policies. Some studies show small positive effects, while others find no statistically significant effect. Yet others suggest that policies tend to have impact only on the timing of childbearing and not on the completed cohort fertility (Gauthier 2007; Neyer and Andersson 2008).

2.2 Gender equity and equality

Welfare benefits and support refers in part to income effects, in the sense that generous welfare helps the economic situation of parents with young children. But it is widely argued that welfare systems interacts importantly with gender equality - and as such may matter more for fertility (McDonald, 2002). For instance, the vast majority of family policies in Scandinavian countries have been geared towards improving gender equality and never had the aim of increasing fertility (Duvander, Lappegard, Anderson, 2010)). In other words, high fertility appears to be a by-product of increased gender equality.

In order to understand the importance of gender equality one needs to start by one of the most important structural changes that has taken place in recent decades – namely expansion in education – and in particular the increase in women's education. Currently women attend higher education in equal number as young men, and if anything, recent trends would suggest that the enrolment rate among women in tertiary education is even higher than that of men (World Bank, 2012). When thinking of women's education, or using Esping-Andersen's terminology (Esping-Andersen 2009) - women's revolution, it is important to bear in mind that not so many decades ago, the male breadwinner model was dominant also in Scandinavian countries. The move towards a gender egalitarian society where men and women gain higher education in equal manner has certainly changed gender equity and the dynamics of couple-relations. The key lies in the compatibility between women's aspirations and opportunity structure. In the new egalitarian societies, gender equality becomes a precursor for mothers' subjective wellbeing. That is, where women aspire both to parenthood and a pursuit of a successful working career, policies geared towards gender equality would increase women's satisfaction – simply because aspirations are fulfilled and should lead to greater happiness. A similar argument holds for the male breadwinner

model. Here women would not attend higher education and work much less. However, since aspirations are consistent with social norms and the actual opportunity structure, happiness from parenthood would be high. These arguments would suggest that happiness associated with parenthood would be high in the pure male breadwinner model as well as in the new emerging egalitarian societies. These arguments are perfectly consistent with the ideas of McDonald (2000). Gender equity and equality are compatible both in the traditional male breadwinner model as well as in the new egalitarian society, giving rise to high satisfaction and high fertility simply because aspirations are in line with opportunity structures. The kind of society where the happiness associated with childbearing would be lower is when there is a mismatch between women's aspirations and their opportunities. For instance, whereas women's expansion in education improves gender equity, a mismatch will occur if gender equality does not follow through. In particular, if there is little change in "family-oriented institutions", despite changes in gender equity, the burden of housework and care remain mainly on women's shoulders, generating a "dual-burden" which most likely affect negatively on women's subjective assessment of wellbeing from childbearing (McDonald 2000; Mencarini and Sironi, 2012).

2.3 Governance, trust and social capital

Childbearing is a life defining and irreversible decision, and as such is very different from other more mundane consumption decisions. Thus, it may not only be the content of a policy that matters, but also whether it is stable and predictable, lessening uncertainty about the future and thereby making long term planning easier (Morgan, 2003; Billari, 2009). If a society has a history of interchanging and unpredictable policies, then any new policies may not be given much credit. In such circumstances a newly introduced policy, despite substantially improving the economic situation of families with young children, may have little effect if individuals do not trust the policy will be sustained. Policies will be more efficient in those societies where trust is strong, as trust is closely linked to social influence (Uslaner 2002). On the contrary, individuals may be less likely to adopt policy advice if they do not trust the one proposing it – even if the policy itself by objective measures is a good one and would enhance the wellbeing of those exposed to it. These arguments alludes to the idea that good governance and the presence of trustable institutions are important for individuals' long term planning, and becomes particularly important for childbearing decisions given its life-long consequence. These arguments also relate to the literature arguing that uncertainty matters for fertility. A central explanation for the very sharp decline in fertility levels among the former communist countries of East Europe is exactly that the fall of the iron curtain brought on tremendous uncertainty about the future. Individuals and couples suddenly had to adjust to dramatic societal upheavals - not being sure about what the future would bring (Philipov, 2002). It is also clear that in the East European countries, the trust to institutions is particularly low (Aassve et al 2012).

Importantly, trust has a strong positive correlation with fertility levels. It is high in Scandinavian countries and also in Anglo-Saxon countries, but much lower in Mediterranean and East European countries. Trust has different meaning and its impact on fertility is important. On one hand trust to institutions correlate with general governance and well functioning institutions. Thus, trust to a country's institutions reflect benevolent circumstances. Another dimension of trust refers to generalized trust. This kind of trust refers to the extent in which people trust other people outside their own family sphere. Whereas trust to institutions varies considerably over time, general trust is a much more stable country characteristic, and is consequently considered as a cultural trait (Mishler and Rose, 2001). Generalized trust correlates strongly with social capital, where the latter refers to the network one has outside one's own family. Thus, the greater the network of non-family relatives, the higher one tends to trust other individuals generally. Paradoxically, this kind of trust may also be critically important for fertility, because in those societies where generalized trust is high, outsourcing of traditional family activities become easier - or at least more accepted. To see how this works, it is important to consider the way women's role has changed in Western societies over the last decades. After an enormous expansion of education among women, in many countries, as many women as men are now enrolled in tertiary education. Together with increasing participation in the labour market, this is having dramatic impact on women's autonomy, economic independence, attitudes and preferences. An important implication is that also women pursue ambitious working careers. The key however lies in the fact women's revolution require broad outsourcing of traditional family activities. The argument behind generalized trust is that outsourcing may come about in an easier way in so far individuals tend to trust other people to take care of those tasks which traditionally were limited to the family. From a dynamic perspective, such outsourcing will be slower if trust to other individuals is low.

3 The relationship between happiness and parenthood across Europe

3.1 Data

Assessing the arguments put forward in section 2 requires information on individuals' subjective well-being and their parenthood status together with information concerning childcare support, gender equality and equity and measures of social capital, generalized trust and state governance.

We take this information from the European Social Survey (ESS). The ESS is representative of the European population aged 15 and over, resident within private households in each participating country. In our analysis, we use the fourth round that has been released on 24 March 2010 and includes 28 countries. The main aim of the ESS is that of outlining the attitudes of the different European regions towards religion, politics, and moral issues, while also depicting their social habits and how they are changing over time. We focus the analysis on people between 20 and 50 years of age, in order to have a more homogeneous sample on important life aspects, such as subjective well-being and fertility choices. Our sample counts 26,576 individuals, of which 53% are females. As we can observe in Table 1, countries belonging to the sample are very diverse. Happiness is measured through the question "Taking all things together, how happy would you say you are?" and the answer is given on an ordinal scale, ranging from 0 (extremely unhappy) to 10 (extremely happy). People in the sample, on average, report fairly high levels of happiness (see Table 1.A in the Appendix for further details).

Table 1 shows the key contextual variables all measured at the country level. Childcare availability is measured by the number of children aged 0-3 years, enrolled in child-care centres per 100 children and the availability of places in child-care centres (ratio of the number of places available for children aged 0-3 years in child-care centres per 100 children). Gender equity is measured by the Global Gender Gap of 2008² and the percentage of women members of the national parliament. The measures of social capital and trust are constructed by aggregating individual level variables concerning trust and social capital. Trust is constructed through a factor analysis based on a battery of six questions: "most people can be trusted or you can't be too careful", "trust in country's parliament", "trust in the legal system", "trust in the police", "trust in politicians", and "trust in political parties" (see Appendix for more details). The same procedure has been followed to build an indicator of *social capital*, using three variables: "How often socially meet with friends, relatives or colleagues", "Take part in social activities compared to others of same age" and "Anyone to discuss intimate and personal matters with" (see appendix for details related to the factor analysis). Finally, socio-economic development is covered by three different indicators: per-capita GDP in 2007 (in US \$ purchasing power parity), the Human Development Index in 2007 that considers life expectancy and level of education other than per-capita GDP, and

 $^{^{2}}$ It ranks economies according to their gender gaps and their scores can be interpreted as the percentage of the gap between women and men that has been closed. Gaps are measured based on economic participation and opportunity, educational attainment, health and survival sub index and political empowerment.

the Corruption Perception Index of 2008, which reflects the degree to which corruption is perceived to exist among public officials and politicians³.

³ This Index has been published since 1995 by Transparency International and corruption is defined as "the abuse of entrusted power for private gain".

	GDP pc - ppp US\$ (2007)	HDI (2007)	Corruption Perception Index (2008)	Global Gender Gap (2008)	Women in Nat. Parliam. (2008)	Enrolment Rate of children < 3 year (2007-2008)	Place availability for children 0-3, per 100 children	
Country	Value	Value	Score	Value	%	%	(2007-2008)	
Belgium	34,935	0.95	7.30	0.716	35.30	32.0	30.00 *2003	
Bulgaria	11,222	0.84	3.60	0.708	21.70	13.0	11.00 2006-2007	
Switzerland	40,658	0.96	9.00	0.736	28.50		-	
Cyprus	24,789	0.91	6.40	0.669	14.30	21.0	-	
Czech Republlic	24,144	0.90	5.20	0.677	15.50	6.0	-	
Germany	34,401	0.95	7.90	0.739	31.60	18.0	8.50 2002-2003	
Denmark	36,130	0.96	9.30	0.754	38.00	66.0	58.00 *2003	
Estonia	20,361	0.88	6.60	0.708	20.80	34.0	31.00 2006-2007	
Spain	31,560	0.96	6.50	0.728	36.30	50.0	5.00 *2003	
Finland	34,526	0.96	9.00	0.820	41.50	14.0	23.00 *2003	
France	33,674	0.96	6.90	0.734	18.20	28.0 * Oecd 02	44.00 2005-2006	
UK	35,130	0.95	7.70	0.737	19.50	27.0 * 2006-2007	2.00 *2003	
Greece	28,517	0.94	4.70	0.673	14.70	5.0	-	
Croatia	16,027	0.87	4.40	0.697	20.90	16.0	-	
Hungary	18,755	0.88	5.10	0.687	11.10	5.0	6.00 2005-2006	
Israel	26,315	0.94	6.00	0.690	14.20	30.0	-	
Latvia	16,377	0.87	5.00	0.740	20.00	16.0	-	
Netherlands	38,694	0.96	8.90	0.740	39.30	51.0 * 2006-2007	16.00 2004-2005	
Norway	53,433	0.97	7.90	0.824	36.10	48.0	41.90 2005-2006	
Poland	15,987	0.88	4.60	0.695	20.20	2.0	2.40 2005-2006	
Portugal	22,765	0.91	6.10	0.705	28.30	23.0 * Oecd 04	12.00 *2003	
Romania	12,369	0.84	3.80	0.676	9.40	3.0	2.10 2005-2006	
Russian Fed.	14,690	0.82	2.10	0.699	14.00	18.0	-	
Sweden	36,712	0.96	9.30	0.814	47.00	49.0	37.00 *2003	
Slovenia	26,753	0.93	6.70	0.694	12.20	44.0	-	
Slovakia	20,076	0.88	5.00	0.682	19.30	17.0 * Oecd 03	12.00 1990	
Turkey	12,955	0.81	4.60	0.585	9.10	-	-	
Ukraine	6,914	0.80	2.50	0.686	8.20	15.0	-	
Source	UN Stats Division: data.un.org	UN Stats Division: data.un.org	transparency.org	GGG Report: www.weforum.org	UNECE Statistics: unece.org/stats	UNECE Statistics: + OECD Family Database	UNECE Statistics: unece.org/stats + Del Boca - Wetzel '07	

TABLE 1: Contextual Indicators

Simple eyeballing of Table 1 reveals systematic differences across countries. Starting with socioeconomic development, we find the Scandinavian countries, together with Netherlands, France and Switzerland at the top. Eastern European countries are lagging behind, with the remaining Continental European countries located in between. The level of gender equity is highest in Norway, followed by Finland and Sweden, while it is lowest in Greece, Cyprus and Turkey. Countries with the highest percentage of women working in the national parliament are again Nordic countries (Sweden, Finland, Denmark and Netherlands), as opposed to Eastern European ones (Hungary, Romania, Turkey and Ukraine). As for childcare provision, the picture is somewhat more mixed. Scandinavian countries are still in top positions, but there are some Eastern and Continental European countries, which seem to have good childcare provision (e.g. Estonia). We have to be careful when analyzing these data, first because information is missing for some of the countries in the sample and secondly because they have been taken from different sources.

3.2 Bivariate analysis

In line with arguments put forward in section 2, we investigate the effects and the role of country level characteristics in connection between happiness and parenthood. In order to do this, we first look at the bivariate relationship between average happiness in different countries and contextual variables, distinguishing parents and non-parents. We start by considering childcare institutions, meaning the enrolment rate in childcare centres of children between 0 and 3 years of age and place availability in these centres per 100 children (Figure 1). For each country, we compute the average happiness for parents (blue coloured dots) and for non-parents (red coloured dots). We then fit a regression line for each sets of dots. Figure 1 shows that in general, the happiness that people derive from parenthood is positively associated with availability of childcare, a feature that is reflected by the positive slope of the fitted lines. Any conjecture concerning overall fertility is totally qualitative, as this is based on the location of the countries in the graph – bearing in mind country specific fertility rates. For instance, in Figure 1 we tend to find high fertility countries in the upper right hand side corner where happiness associated with parenthood is large. In contrast, where happiness associated with parenthood is lower, located in the lower left hand corner, we tend to find countries where fertility is low, examples being those of East Europe and the Mediterranean. A key point we can discern from Figure 1 is that when childcare institutions are not diffused, mothers are *less* happy than non-mothers. When enrolment rate and place availability increase, the relationship change, and mothers become happier, on average, than non-mothers. Conversely, fathers are happier than non-fathers, no matter the extent of childcare provision. The positive slope and the fact that it crosses for mothers and non-mothers is an important feature, not least because the same pattern emerges when we consider the other aggregate measures.



FIGURE 1: Happiness, Childbearing and Childcare Institutions

Figure 2 plots trust against happiness for parents and non-parents, separately for men and women. The pattern is very similar to what we observed in Figure 1. When trust in people and institutions is high, average happiness of mothers is higher than that reported by non-mothers, while the opposite is true when trust is low. Fathers are always happier than non-fathers independent of the level of trust. That said, the positive gradient reflects that in countries where trust is high, men are on average happier – as are women. The difference between men and women is important, as the results would suggest that institutions and the general political and cultural climate have no influence on the relationship between happiness and childbearing for men, whereas it does matter for women. The picture is the same if we consider instead socio-economic development in place of trust or childcare provision. The relationship is plotted in the two lower panels in Figure 2.

We consider next the relationship between happiness and gender equity – holding them against parenthood. The Global Gender Gap (GGG) and the percentage of women in the national parliament, as depicted in Figure 3, have the same impact on the relationship between happiness and parenthood as the other country level factors. When considering the GGG it is clear that the observations do not form a strong linear relationship and the fitted line is strongly influenced by Turkey, which we find in the lower left corner. At the other end, we find three Scandinavian countries where both happiness and GGG are high. The fitted lines for mothers and non-mother do again cross, meaning that mothers are happier than non-mothers when GGG is high, but again is driven in large part by the inclusion of Turkey. In other words, the relationship is less clear when considering the GGG also because fertility is higher in Turkey than in the other countries included. When instead considering the number of women in parliaments we find a stronger linear relationship with happiness and parenthood. Again the fitted line for women crosses, meaning that in countries where a larger number of women take part in the parliament, mothers tend to be happier than non-mothers, and the opposite being the case when participation of women in parliaments is low. In the top right corner we find the Scandinavian countries where fertility is high, whereas in the bottom left corner we find East-European and Mediterranean countries, where fertility is much lower. The outlier is again Turkey, which we again find in the bottom left corner, but where we know fertility is higher than any of the other countries.



FIGURE 2: Happiness, Childbearing, Trust in institutions and Human Development Index



FIGURE 3: Happiness, Childbearing and Gender Inequality

3.3 Multivariate analysis

The patterns presented in section 3.2 are intriguing, but are essentially bivariate descriptive analysis. Here we devise a statistical model to investigate if the relationships are also statistically significant. Of key importance is to test 1) whether the relationship between happiness and parenthood is increasing with the macro variables, and 2) to test if the fitted lines for mothers and non-mothers indeed cross. One benefit of the statistical model is that we can include a wide range of control variables. Moreover, we do not have to limit the analysis to assessing the difference between parents and non-parents. Instead, we include the number of children as a key explanatory variable. We implement a simple multi-level regression model with two levels, which is appropriate given the hierarchical structure of the data, where respondents are nested within countries. Individuals of the same country share both observed and unobserved macro-contexts. The multi-level statistical model facilitates such hierarchical structure through a decomposition of the error term, one being individual specific and the other being country specific (Goldstein 2003). Our model can be written as follows:

$Happines + / Child_{il} e / X_{ic} + / X_{ic} + / Child_{il} e / E_{c} + u_{c} + \varepsilon_{c}$

Where $Happiness_{ic}$ is measured on an ordinal scale ranging from 0 (extremely low level of happiness) to 10 (extremely high level of happiness) reported by individual *i* in country *c*. X_{ic} is a vector of individual characteristics including age, education, religiosity, employment and partnership status. Importantly it also includes the number of children. X_c represents the country level variables as outlined in the previous section. These macro variables are not included in the analysis all together, given the high correlation among them. To avoid collinearity problems, they are instead included in the regressions one by one. Their relative importance are assessed through the intra-class correlation presented below. u_c the country specific error term, while ε_{ic} is individual specific.

A great benefit of this multi-level set up is that we can estimate how much of the variation in happiness is attributable to country level factors and how much to individual level factors. In this way, the role of country characteristics in explaining the outcome is first observed through its direct effect measured by its coefficient, and then through its ability to reduce cross-

country variation. The latter effect is computed through the intra-class correlation coefficient ρ , defined as:

$$\rho = \frac{V d(n_{tc})}{V d(n_{tc}) + V d(\mathbf{E}_{tc})}$$

where $Var(u_c)$ is the variance across countries and $Va(\mathbf{E}_{ic})$ among individuals in country c. The regression results are reported in Tables 2.a and Table 2.b, for women and men respectively⁴.

⁴ Results showing the association of individual-level variables and happiness are reported in the Appendix (Table 4.A and 5.A, for women and men respectively). As previously mentioned, given that we have 28 countries, it is not possible to include all country level variables in the same regression, simply because the degrees of freedom become small, moreover many of the country levels are correlated, meaning that we cannot easily identify the country specific effects if included at the same time.

WOMEN (20-50)	Enrollment	Place Availability	Trust people & Institutions	HDI	Global Gender Gap	Women in Parliament
# Children	-0.029	-0.04	0.008	-0.667**	-0.607***	-0.080*
	(0.029)	(0.029)	(0.016)	(0.234)	(0.179)	(0.032)
Enrollment Rate Children < 3 years	0.022***					
	(0.006)					
Enrollment Rate * # Children	0.002*					
	(0.001)					
Place Availability Children < 3 (p. 100 children)		0.016*				
		(0.008)				
Place * # Children		0.004***				
		(0.001)				
Trust people & institutions (Country level)			0.887***			
			(0.151)			
Trust*# Children			0.068*			
			(0.028)			
HDI (2007) [*10]				1.026***		
				(0.125)		
HDI * # Children				0.074**		
				(0.026)		
Global Gender Gap (2008) [*10]					0.787***	
					(0.209)	
Global Gender Gap * # Children					0.087***	
					(0.025)	
% Women in National Parliament (2008)						0.040***
(2000)						(0.008)
% Women in Parliament * # Children						0.004***
						(0.001)
Constant	8.224***	8.630***	8.502***	-0.806	2.913	7.595***
	(0.336)	(0.405)	(0.296)	(1.169)	(1.521)	(0.354)
Country level Variance	0.226	0.269	0.176	0.109	0.274	0.221
Individual level Variance	3.203	3.065	3.374	3.374	3.374	3.374
ICC	0.066	0.081	0.050	0.031	0.075	0.062
N	12926	8429	14214	14214	14214	14214

TABLE 2.a: Results of two-level regressions with contextual variables, Women

Note: standard errors in parenthesis. P-values: $+p \le 0.10$: $+p \le 0.05$: $+p \le 0.01$ ***. Controls : age, age², years of education, living with a partner, working status, church attendance.

MEN (20-50)	Enrollment	Place Availability	Trust people & Institutions	HDI	Global Gender Gap	Women in Parliament
# Children	0.001	0.009	0.066***	-0.075	-0.250	0.004
	(0.031)	(0.032)	(0.018)	(0.241)	(0.173)	(0.034)
Enrollment Rate Children < 3 years	0.021***					
	(0.006)					
Enrollment Rate * # Children	0.003**					
	(0.001)					
Place Availability Children < 3 (p. 100 children)		0.016*				
		(0.009)				
Place * # Children		0.004***				
		(0.001)				
Trust people & institutions (Country level)			0.885***			
			(0.178)			
Trust*# Children			0.031			
			(0.029)			
HDI (2007) [*10]				1.151***		
				(0.13)		
HDI * # Children				0.016		
				(0.026)		
Global Gender Gap (2008) [*10]					0.845***	
					(0.224)	
Global Gender Gap * # Children					0.045	
0/ W/					(0.024)	
% women in National Parliament (2008)						0.039***
(2000)						(0.010)
% Women in Parliament * # Children						0.003*
						(0.001)
Constant	8.277***	8.402***	8.638***	-1.794	2.61	7.747***
	(0.343)	(0.412)	(0.307)	(1.21)	(1.629)	(0.381)
Country level Variance	0.244	0.333	0.253	0.118	0.320	0.299
Individual level Variance	2.974	2.824	3.158	3.158	3.158	3.158
ICC	0.076	0.105	0.074	0.036	0.092	0.087
Ν	11273	7594	12362	12362	12362	12362

TABLE 2.b: Results of two-level regressions with contextual variables, Men

Note: standard errors in parenthesis. P-values: $+p \le 0.10$: $+p \le 0.05$: $+p \le 0.01$ ***. Controls : age, age², years of education, living with a partner, working status, church attendance.

The findings of the multilevel regressions largely confirm the patterns observed in Figures 1 to 3 above. Starting with women, we see that the direct effect of children on happiness are either negative or insignificant. These are of course the average effect on happiness from any number and age of the children. In Figures 1 to 3 these coefficients reflect by the gap between the fitted lines at the lower left part of Figures 1 to 3. Moving on to the effects of the macro variables we see that they are all positive and statistically significant, which in Figures 1 to 3 is reflected by the positive slopes of the fitted lines. The key lies however in the estimated coefficient of the interaction terms. They are all positive, meaning that the happiness associated with children diverges. That is, as the variable measuring the country characteristics increase – the difference in happiness from having few or no children compared to those having many children also increases. When the direct effect of children on happiness is negative and significant, a low score on the country characteristic implies that those with fewer or no children are happier than those with many children, whereas the opposite is the case when country characteristic take a large positive value. This is exactly what we observe in Figure 2 for instance. For low values of trust, mothers are less happy than non-mothers, but the opposite is the case when trust is high.

For men (Table 2) the results are different in two important ways. First, the number of children never has a direct negative effect on happiness. More importantly however, the interaction terms are never statistically significant, meaning that the fitted lines for happiness never cross - exactly as we saw in Figures 1 to 3. In other words, fathers are happier than non-fathers in all countries.

The macro variables are measured at different scales, so the coefficients are not informative about their relative strength. However, we can discern to some extent their relative importance by looking to the country level variances. The lower they are, the higher is the explanatory power. Out of the macro variables, we see that HDI has the strongest power in explaining happiness, followed by trust, and then childcare enrollment and number of women in parliament. One should note that the effects of these macro variables are generally large. In all the tables reported above, we included the variance of country and individual's error term together with the intraclass correlation coefficient (ICC). Comparing results from regressions where only individual characteristics are included (see Appendix) with all the other regressions' results where a macro variable has been included, we see that the ICC declines substantially, meaning that these contextual indicators are able to explain an important fraction of well-being variability across countries. For instance, the variance of the error term at country level when we just include individual level variables for women is 0.45 (while the variance of ξ_{t} is 3.456), so that the ICC is equal to 0.115. When we include the Human Development Index, and its interaction with number of children, the variance of unobserved heterogeneity across countries drops to 0.109 and the ICC to 0.031. This means that, taking into account HDI, the variance in women's well-being across countries is just 3.1% (as opposed to 11.5%) and that we are able to explain 73% of the country level variability in happiness among women.

4 Discussion

A good starting point of our discussion is to begin from the analysis by Myrskyla at al. (2009), where they argue for a non-linear relationship between the level of development and fertility. In other words, with economic development, we first see a decline in fertility, but for very highly developed countries, the trend appears to reverse – generating higher fertility. These arguments are supported by time series of development and fertility. The reversing trend is also evident from the observed fertility trends of those countries now at the forefront of development. An issue less emphasised in the analysis by Myrskyla et al. (2009), though key to our understanding of fertility dynamics, is that countries have witnessed very different fertility trends. Starting from the sixties and seventies, fertility declined in all Western countries, but the extent of the decline varies tremendously across countries. Whereas many countries fell below the lowest-low level of fertility – examples being Mediterranean and East European countries, others maintained levels not far below the replacement level. The current analysis adds important insights to our understanding of these trends by first taking onboard subjective wellbeing measured in terms of happiness that is associated with childbearing, and secondly, introducing a range of societal features other then economic development.

First, from the countries included, we know that fertility is high in those countries where the average happiness is high – the prime example being the Scandinavian ones. At the other end, we find East-European countries, where happiness is low but also fertility is low. This feature is crystallised when we differentiate parents against non-parents in our analysis, but in particular when we do so for mothers and non-mothers. In societies where development is highly advanced, individuals are not only happier – it turns out that mothers are significantly happier than non-mothers, whereas the opposite is the case in those countries where development is low. The fact that

fathers are always happier than non-father – independent of the level of development, suggests very clearly that the gender perspective matters in critical ways. In essence, it means that in highly developed countries happiness associated with childbearing is consistent across gender. In less developed countries, there is a clear mismatch across genders since fathers are happier whereas mothers are not. Our analysis gives therefore support to Macdonald's hypothesis that low level of fertility is in part generated by the mismatch between gender equity and gender equality (McDonald 2000). Whereas women are now gaining higher education in ever greater numbers, in many societies outnumbering that of men, and more generally are experiencing improvements in their life opportunities, gender equality do not necessarily follow suit in the family sphere. The obvious example concerns childcare supply. Without it, mothers are not able to outsource traditional family activities, and tend to end up with a double burden of housework and childrearing on one hand and the pursuit of a working career on the other. Combining the two is hard, and may lead to lower fertility (Mencarini and Tanturri, 2004).

Our results also relate to the idea of the "Incomplete Revolution" as postulated by Esping-Andersen (Esping-Andersen 2009). Here the suggestion is that societies are characterized by different equilibriums, which may or may not be stable. Equilibriums, in which individuals' aspirations and opportunity structures are matched, would be stable and associated with higher satisfaction. Examples of such stable equilibriums would be both the male breadwinner model that dominated Western societies in the sixties and the seventies, but also the current egalitarian model now emerging in the Scandinavian countries. The key is that from a gender perspective, both equilibriums provide a match between aspirations and opportunities – and hence high satisfaction. The two equilibriums are of course very different from a structural point of view. In the male breadwinner model, men earn wages in the market whereas women stay at home rearing children, but does provide a good match between women's aspirations and opportunity structure in so far women do not want to take higher education nor follow ambitious working careers. In the egalitarian model, women have gained full access to education, and hence improved their independence, but can now participate in the labour market due to the ability of outsourcing traditional family activities through various services, such as public childcare facilities. In the crosssectional analysis presented in this paper, the Scandinavian countries serve as examples of the egalitarian model, where satisfaction with motherhood is high, which then leads to higher fertility. The important point however, is that women's education has increased in dramatic ways among all European countries – not only the Scandinavian ones. Many countries find themselves somewhere between the male breadwinner model and the egalitarian one. In Esping-Andersen's framework, these are unstable equilibriums characterised by a strong mismatch between women's aspirations and opportunity structure. On one hand, their aspirations are shifting through their freedom in the educational sphere, but are being held back due to slow diffusion of institutions that create the opportunity structure. Our analysis suggest that in these societies, happiness associated with childbearing is lower, which most likely leads to lower fertility.

Will all countries eventually make a transition to an egalitarian society, and therefore generate a general rebound in fertility? According to the analysis of Myrskyl et al (2009) one would be tempted to say yes, since in their analysis fertility appears to increase as societies develop further. But this is not necessarily the case. At least there is substantial uncertainty about the timing for such convergence to take place. The reason for this is that the inverse u-shape may not be causally driven by economic development. As we see from the current analysis, the relationship between happiness and childbearing across countries might equally be driven by factors such as good governance (e.g. low corruption), the emergence of external childcare supply, a higher representation of women in parliaments, social capital, trust and possibly other characteristics that we have not included in our empirical analysis. Societies will experience further economic development in the years to come, but it is unclear if that will be followed by equal improvement in the other country characteristics highlighted here. It is important to bear in mind that these characteristics differ widely in terms of the way they have changed over recent years. If we consider the Scandinavian countries, we see of course important changes in key indicators such as economics development, expansion in childcare, and a steady increase of women in government. But other characteristics are remarkably stable across time. For instance, average generalized trust, social capital and governance are highly persistent across time, whereas they vary substantially across countries. Importantly, the level of trust in Scandinavian countries has historically been very high, and might have been a key ingredient in facilitating the diffusion of institutions needed for the outsourcing of traditional family activities (Aassve et al 2012) which now appears to be a key ingredient behind the high fertility in Scandinavian countries.

But trust may have another important effect that becomes important in the transition from a male breadwinner model to an egalitarian one. A key aspect of the egalitarian society is that its functioning relies on infrastructure that individuals can use to outsource traditional family activities.

The diffusion of such infrastructure is likely to depend on the extent in which individuals trust other individuals to undertake these activities. It is important to note that in a male breadwinner model, trust to other people would *not* be less critical for childbearing decisions, the simple reason being that in such societies child rearing is confined to the family sphere (Aassve et al 2012). In light of this, it is also important to bear in mind 40 to 50 years ago, the breadwinner model was also dominant in Scandinavian societies, but trust and social capital was likely to have been high. As women's revolution emerged through improvements in educational opportunities, trust might have been a critical ingredient for the diffusion of childcare supply and gender equality more generally.

The arguments concerning trust, suggest that it is not entirely clear to what extent, or at least when, the low fertility countries in Europe will catch up with those with high fertility. In many respects, the low fertility countries needs to be considerably more aggressive in their policy programs than what has been the case for the high fertility countries such as France and the Scandinavian one. The reason is that in the latter, over time, diffusion of outsourcing (i.e. the emergence of childcare supply) has been strongly demand driven – simply because couples have been keen to endorse outsourcing of traditional family activities. If the aim is to improve fertility levels in current low fertility counties, outsourcing probably have to become supply driven.

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APPENDIX

Country	Num Obs	Нар	opiness	Age	Female	# Ch	ildren	Years of Education	Working	Living with a partner	Church Attendance (at least once a month)
Code	#	Mean	St. Dev.	Mean	%	Mean	St. Dev	Mean	%	%	%
Belgium	873	7.7	1.5	36.0	49.0	1.1	1.2	13.8	76.1	66.3	8.4
Bulgaria	884	6.0	2.5	36.6	57.5	1.0	0.9	11.9	71.9	67.5	15.2
Switzerland	947	7.9	1.5	36.3	54.3	0.7	1.0	11.7	75.7	52.7	15.3
Cyprus	642	7.7	1.4	35.1	51.1	1.1	1.2	13.6	80.5	63.2	36.4
Czech Republic	958	7.0	1.8	35.7	47.6	0.9	1.0	12.9	79.3	62.1	6.7
Germany	1313	7.2	1.9	37.3	47.7	0.8	1.0	14.4	74.6	61.8	14.4
Denmark	720	8.3	1.3	37.1	51.0	1.1	1.1	14.1	83.5	73.6	6.8
Estonia	779	6.9	1.9	35.1	54.4	1.0	1.1	13.4	73.7	65.6	7.6
Spain	1347	7.8	1.5	35.0	52.6	0.8	1.0	12.9	75.7	61.0	14.6
Finland	1032	8.1	1.4	35.7	48.9	1.1	1.2	14.9	76.6	68.0	8.8
France	1004	7.2	1.8	36.1	54.7	1.1	1.2	14.1	77.5	66.3	6.9
UK	1179	7.3	1.9	36.4	56.0	1.0	1.1	14.5	72.4	56.0	15.9
Greece	1200	6.9	1.8	36.0	57.0	0.8	1.0	12.9	73.9	58.0	30.4
Croatia	722	7.1	1.9	34.6	58.7	1.0	1.2	12.9	60.0	55.7	43.9
Hungary	747	6.3	2.3	34.9	53.0	1.0	1.1	13.2	63.5	60.4	13.7
Israel	1166	7.9	1.9	34.0	54.4	1.7	1.9	13.6	67.3	65.4	31.2
Latvia	901	6.7	1.9	35.9	58.0	1.0	1.1	13.4	62.4	65.8	13.2
Netherlands	865	7.7	1.3	37.0	54.7	1.1	1.2	14.5	81.2	65.0	14.8
Norway	804	8.0	1.5	36.3	48.5	1.2	1.2	14.4	85.6	67.7	8.1
Poland	812	7.6	1.8	34.1	52.2	1.1	1.2	13.6	73.3	65.1	68.3
Portugal	898	7.0	1.8	35.9	58.1	0.8	1.0	10.5	74.4	61.4	33.0
Romania	1077	6.5	1.9	34.6	55.4	0.7	0.9	12.4	64.4	63.3	38.9
Russian Fed.	1165	6.4	2.1	34.6	56.0	0.7	0.8	13.4	78.5	58.2	15.5
Sweden	888	7.8	1.6	35.5	47.6	1.1	1.1	14.0	85.2	68.9	8.0
Slovenia	633	7.5	1.7	35.5	52.3	1.0	1.1	12.8	79.0	62.1	23.2
Slovakia	801	6.8	1.9	36.1	53.6	1.1	1.2	13.3	70.2	62.3	35.6
Turkey	1430	5.4	2.7	33.6	54.1	1.2	1.4	7.5	32.7	71.8	41.0
Ukraine	789	5.8	2.3	35.4	58.9	0.9	0.9	12.8	62.6	65.1	29.5

TABLE 1.A: descriptive statistics of the variables used in the analysis, by country

	Factor Loadings
Most people can be trusted or you can't be too careful	0.4738
Trust in country's parliament	0.8588
Trust in the legal system	0.8243
Trust in the police	0.7593
Trust in politicians	0.8824
Trust in political parties	0.8588
Cronbach Alpha	
Average interitem covariance:	3.55
Number of items in the scale:	6
Scale reliability coefficient:	0.8663

TABLE 2.A: Factor analysis for Trust in people and institutions

TABLE 3.A: Factor analysis for Social Capital							
	Factor Loadings						
How often socially meet with friends, relatives or colleagues	0.7686						
Anyone to discuss intimate and personal matters with	0.5807						
Take part in social activities compared to others of same age	0.7525						
Cronbach Alpha							
Average interitem covariance:	0.2385						
Number of items in the scale:	3						
Scale reliability coefficient:	0.4172						

WOMEN (20-50), N=14214	# Children	# Children + Partnership	Children- Partnership Interaction	Children- Employment Interaction	Parent vs Non parent	Parity
age	-0.071***	-0.120***	-0.112***	-0.116***	-0.120***	-0.124***
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
age ²	0.001*	0.001***	0.001***	0.001***	0.001***	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
# Children	0.091***	0.011	-0.123***	-0.027		
	(0.015)	(0.016)	(0.033)	(0.022)		
# Years Education	0.057***	0.059***	0.057***	0.058***	0.059***	0.059***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Employed	0.117**	0.117***	0.122***	0.041	0.116**	0.115**
	(0.036)	(0.036)	(0.036)	(0.047)	(0.035)	(0.036)
Living w/ a partner		0.655***	0.534***	0.655***	0.654***	0.647***
		(0.036)	(0.045)	(0.036)	(0.037)	(0.037)
Living w/ a partner*# of children			0.165***			
]	(0.036)			
Go to church (\geq once a month)	0.176***	0.163***	0.158***	0.162***	0.164***	0.166***
	(0.040)	(0.039)	(0.039)	(0.039)	(0.039)	(0.039)
Employed*# children				0.067* (0.027)		
At least one Child					0.027	
					(0.038)	
One Child						-0.031
						(0.043)
2 Children						0.106*
						(0.046)
3 Children						0.024
						(0.067)
4 Children						0.130
						(0.121)
5 or more Children						-0.300
						(0.159)
Constant	7.980***	8.525***	8.454***	8.518***	8.522***	8.589***
	(0.313)	(0.312)	(0.312)	(0.312)	(0.312)	(0.313)
Country level Variance	0.450	0.455	0.453	0.453	0.456	0.453
Individual level Variance	3.456	3.374	3.374	3.374	3.374	3.374
ICC	0.115	0.119	0.118	0.118	0.119	0.118

TABLE 4.A: Results of two-level regressions with individual characteristics, Women

Note: standard errors in parenthesis. P-values: +p<=0.10:*+p<=0.05:**+p<=0.01***.

MEN (20-50), N=12362	# Children	# Children + Partnership	Children- Partnership Interaction	Children- Employment Interaction	Parent vs Non parent	Parity
age	-0.106***	-0.157***	-0.157***	-0.154***	-0.159***	-0.160***
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
age ²	0.001***	0.002***	0.002***	0.002***	0.002***	0.002***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
# Children	0.194***	0.070***	-0.029	0.011		
	(0.016)	(0.018)	(0.072)	(0.031)		
# Years Education	0.062***	0.060***	0.060***	0.059***	0.060***	0.060***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Employed	0.733***	0.638***	0.639***	0.583***	0.631***	0.633***
	(0.043)	(0.043)	(0.043)	(0.049)	(0.043)	(0.043)
Living w/ a partner		0.642***	0.624***	0.641***	0.603***	0.602***
		(0.042)	(0.044)	(0.042)	(0.046)	(0.046)
Living w/ a partner*# of children			0.104			
			(0.073)			
Go to church (\geq once a month)	0.151***	0.158***	0.156***	0.158***	0.168***	0.165***
	(0.045)	(0.045)	(0.045)	(0.045)	(0.045)	(0.045)
Employed*# children				0.077*		
				(0.033)		
At least one Child					0.194***	
					(0.045)	
One Child						0.159**
						(0.053)
2 Children						0.223***
						(0.053)
3 Children						0.218**
						(0.077)
4 Children						0.140
						(0.137)
5 or more Children						0.350
						(0.179)
Constant	7.837***	8.640***	8.634***	8.629***	8.668***	8.683***
	(0.317)	(0.321)	(0.321)	(0.321)	(0.321)	(0.322)
Country level Variance	0.478	0.500	0.501	0.497	0.507	0.505
Individual level Variance	3.222	3.158	3.158	3.158	3.158	3.158
ICC	0.129	0.137	0.137	0.136	0.138	0.138
Note: standard erro	ors in	naranthasis	D volues:	n < -0.10	n < 0 05·** n	

TABLE 5.A: Results of two-level regressions with individual characteristics, Men

TABLE 6.A,	Other	Country-level	characteristics
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	WOMEN	N (20-50), N=	=14214	MEN ((20-50), N=12	=12362	
	Social Capital	GDP pc	CPI	Social Capital	GDP pc	CPI	
# Children	0.012	-0.100*	-0.130**	0.070***	0.031	-0.015	
	(0.016)	(0.039)	(0.05)	(0.018)	(0.041)	(0.053)	
Social Capital (Country level)	1.472***			1.584***			
	(0.39)			(0.412)			
Social Capital * # Children	0.125*			0.075			
	(0.052)			(0.052)			
GDP pc (PPP US \$), (2007) [/10,000]		0.456***			0.504***		
		(0.073)			(0.079)		
GDP*# Children		0.042**			0.014		
		(0.013)			(0.014)		
CPI (2008)			0.254***			0.266***	
			(0.038)			(0.043)	
CPI * # Children			0.023**			0.013	
			(0.007)			(0.008)	
Constant	8.525***	7.319***	6.935***	8.650***	7.337***	7.009***	
	(0.302)	(0.348)	(0.371)	(0.31)	(0.364)	(0.401)	
Country level Variance	0.280	0.160	0.143	0.316	0.189	0.194	
Individual level Variance	3.374	3.374	3.374	3.158	3.158	3.158	
ICC	0.077	0.045	0.041	0.091	0.056	0.058	