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Research Article

Patriarchy and fertility in Albania

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Table of Contents

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Mathias Lerch[1]

Abstract

BACKGROUND
Theories of fertility collapse in the post-socialist era imply a decline in the moral primacy of traditional social institutions. Yet gender inequality actually increased in many countries, and there is a scarcity of empirical evidence for the role played by traditional social institutions in reproductive decision-making.

OBJECTIVE
We investigate whether patriarchal institutions sustained the fertility levels in Albania. The geography of marriage and family enlargement is related to the importance of patriarchy in kinship organisation and in the public sphere. To account for this spatial relationship we test the evidence for different pathways in patriarchal influence on reproductive decision-making including social effects, socialisation in patriarchal ideals, and the promotion of male fertility.

METHOD
We reconstruct reproductive histories from the 2001 Census and use data on attitudes and fertility intentions from the Reproductive and Health Survey 2002. Multilevel logistic regressions on marriage and (the intention of) higher order births are used.

RESULTS
A majority of women endorsed patriarchal ideals and fertility transition was less advanced in more patriarchal municipalities. Patriarchal kinship organisation promoted early marriages and high fertility, which is shown to be achieved by social learning among peers and intergenerational social influences respectively, as well as by women's socialisation and a stopping behaviour in childbearing dominated by son-preference. Although gender inequality in the public sphere has also sustained the level of fertility and decreased the risk of marriage, it was not accounted for by these pathways of patriarchal influence.

CONCLUSION
Despite Albania's gradual opening to the world in a period of economic and political crisis, traditional social institutions remain important for family behaviours.

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1. Introduction

A sharp decline in fertility during the post-socialist transition has been documented in Europe and the former Soviet Union with an analytical focus on the effects of economic crisis along with restructuring and ideational change (Billingsley 2010; Philipov and Dorbritz 2003; Sobotka 2003). Fertility limitation was initiated by the adverse material and social consequences of the crisis, and the onset of childbearing was further postponed when the economic and political situation stabilized. However, fertility trends in countries which have experienced social upheaval or war have highlighted the importance of social and cultural context for the way in which family behaviours respond. Young and stable ages at marriage, as well as fluctuating or increasing fertility, have indeed been attributed to a return to traditional values (Clifford, Falkingham, and Hinde 2009; Dommaraju and Agadjanian 2008; Lerch 2013a).

This is congruent with the decline in gender equality observed in many countries (UNDP and LSE 2007). Women paid heavily for the costs of the transition as they were affected by lower social transfers and high levels of unemployment. In the Western Balkans, as elsewhere in the post-socialist era, women retreated en masse from the labour market and the political sphere (Brunnbauer 2004; UNIFEM 2006). But there is a scarcity of empirical evidence for the role played by traditional social institutions in reproductive decision-making. Most evidence is only indirect. In Moldova, a lack of female autonomy increased fertility intentions (Ryabov 2010) whereas in Bulgaria, crisis-driven constraints on the onset of childbearing were mediated by social capital and normative pressures to become a mother (Billari, Philipov, and Testa 2009; Philipov, Spéder, and Billari 2006). According to Bühler's (2008) analysis of Bulgarian fertility, culturally-specific perceptions of the structural value of children for parents sustain the level of childbearing because it "may change their social networks in an advantageous way" (Bühler 2008: 572). In Russia, family formation was considered to be a strategy to limit uncertainty during the crisis (Kohler and Kohler 2002). This article proposes a systematic investigation of the role played by traditional social institutions in marriage and fertility decision-making in post-communist Albania.

Social institutions can be defined as patterns of social and reproductive behaviour which may be innovated, generationally transmitted, and adapted to cope with contemporary challenges. Because they organize economic, political, and cultural contexts, institutions influence reproductive decision-making, thus stabilizing demographic regimes to ensure the stability of the larger social system (McNicoll 1980; Lesthaeghe 1980; Ryder 1983). They shape norms and economic incentives of reproduction and mediate the role of individual determinants in childbearing (Caldwell 1976). Social change is therefore a necessary condition for fertility change. Traditional institutions based on kinship systems are holistic in that they define access to resources

and distribute social roles. However, their moral primacy is challenged during the modernization process by the differentiation of social structures, which opens up new opportunities for the fulfilment of individual goals. The transition from high to low fertility indeed parallels a shift from socially-controlled reproduction to decision-making individualization in the context of competing incentives and normative references.

Theories of post-socialist fertility decline imply a significant role for traditional social institutions. Their moral primacy was expected to decline abruptly with the disappearance of totalitarian regimes and the establishment of a new politico-economic order. Two consequences of this transition were expected to sustain the postponement and fall of fertility. First, the period of institutional change was characterized by a high level of uncertainty related to a cultural and societal vacuum. The temporary absence of recognised rules or accepted behavioural norms – a state referred to as social anomie— increases a sense of disorientation in decisions about family formation, and was expected to motivate postponement (Philipov 2002). Second, the diffusion of new ideas and family values from western to eastern Europe was also expected to challenge traditional social institutions and open up avenues for a destandardization of family life-courses, leading to postponed and lower fertility (Lesthaeghe and Surkyn 2002).

Albania is an interesting case for an institutional analysis of fertility in the post-socialist era for at least two reasons. First, the country constituted the historical core region of patriarchy in the Balkans (Kaser 2008). In its strictest sense, patriarchy describes a system of kinship relations which is organized in terms of the rule of the father and endorses a set of social and economic values that promote young motherhood and large families. Secondly, the society experienced deep institutional change. It had lived in complete autarchy under a restrictive communist rule and opened up to the modern world during a difficult economic and political transition. Yet in 2009 Albania still ranked last among the former socialist countries in the OCDE's Social Institution and Gender Index[2] and maintained the highest level of fertility in Europe until 2001. We are interested in the relationship between these two phenomena and investigate whether and how patriarchal institutions have sustained the level of fertility.

In the next sections we further put Albania into context and formulate our hypotheses. Following the presentation of the data and research strategy, we investigate whether the spatial distribution of marriage and fertility (intentions) is related to the local importance of patriarchal institutions and test their pathways of influence on reproductive decision-making at different levels of social organisation. The results contradict the hypothesis of a decline in the moral primacy of patriarchy in Albania. On

[2] This OECD index focuses on the root causes behind gender inequalities and is based on 12 social institutional variables characterising the family code, women's physical integrity, preferences for a son, civil liberties, and ownership rights (see http://genderindex.org/methodology).

the contrary, they, in fact, underscore its importance in reproductive decision-making. The fertility transition was less advanced in more patriarchal municipalities. Patriarchal kinship organisation promoted early marriages and high fertility, which is shown to be achieved by social learning among peers and intergenerational social influences respectively, and by women's socialisation and a stopping behaviour in childbearing dominated by son-preference. Although gender inequality in the public sphere has also sustained the level of fertility and decreased the risk of marriage, it was not accounted for by these pathways of patriarchal influence. These results are discussed with reference to Albania's stage in the fertility transition, and to the role of patriarchal institutions during the post-communist crisis.

2. The Albanian context

Albania is a small mountainous country located in the Western Balkans on the Adriatic Sea. At the end of the Second World War, the level of socioeconomic and sanitary development was very low. Four fifths of the population lived in remote rural areas and the society was organized according to patriarchal kinship structures. Balkan patriarchy can be defined "as a complex of hierarchal values embedded in a social structural system defined by both gender and age [..] linked to a system of values orienting both family life and broader social units [which] not only divide and ascribe position by gender, but also allocate to males the predominant role in society. An obvious corollary [..] is the formal subordination of women within the context of an overtly "protective" family and household environment" (Halpern, Kaser, and Wagner 1996: 427). Historically, its core elements constituted a pastoral ideology, an agnatic lineage structure with high emphasis on masculine pride tied to lineage status, and the veneration of a lineage-specific patron saint. Besides their role as a cult-community, these traditional kinship structures exercised justice in relation to collective lineage honour and constituted corporate units of joint labour and shared economy. Marriage was universal, exogamous, and aimed at confirming or building alliances with other lineages (Doja 1999; Kaser 2008; Mitterauer 1996).

With the establishment of communist rule, these patriarchal institutions were challenged by the indirect effects of rapid industrialization and urbanization. Communist ideology and economic goals, as well as the need to undermine the competing power of traditional social institutions, motivated the regime's active promotion of gender equality. Legislation defined equal political rights for women and men and rendered economic activity compulsory for the working age population. However, this top-down imposition of women's status transposed private patriarchy to the collective level. Women's position was strengthened but remained subordinate to

men's and their primary role was still reproduction – now, however, not for the lineage but for the nation (Doja 2010; Kaser 2008). Kinship structures also remained important for accessing scarce resources and family reputation was used as a political instrument to distinguish communist friends from internal enemies who were disadvantaged or persecuted by the regime. Indeed pre-existing lineage solidarities were instrumental in enforcing the role of the so-called *biografi* in stratifying Albanian society. This was because of the collective character and the inheritability of the *biografi* (Rapper 2006) as well as its relevance in the processes of spousal selection (Young 2002).

Patriarchal institutions were thus not really disrupted during communism. Albania's demographic regime demonstrated their continuing importance. In 1989, two thirds of the 3.1 million inhabitants lived in remote rural areas. The population growth rate was the highest on the European continent in the post-war period (above 2%) because of the late onset of the fertility transition. The total fertility rate (TFR) declined from 6.8 in 1960 to 3.0 in 1990. Alongside the maintenance of traditional female roles in the family, the increasing participation of women in the public sphere multiplied their burdens and contributed to the trend in birth limitation, despite a pro-natalist environment. Female marriage, by contrast, remained universal and still occurred at a young age (i.e. 23 years on average; Falkingham and Gjonca 2001).

The fall of the regime opened up Albania to the modern world leading to a diversification and modernisation of society. However, the first decade of political and economic transition was accompanied by social upheavals. During the economic collapse and institutional change in 1991-92 and related to the civil wars in Croatia and Bosnia-Herzegovina, Albanians engaged in social riots against the government and public infrastructure. In 1996-98, a financial crisis further impoverished the society, leading to a second upheaval culminating in a state of emergency and an international military intervention to prevent a civil war. Uncertainty was exacerbated by the Kosovo war on the Northern border in 1998-99, inter-ethnic tensions in Macedonia on the North-Eastern border in 2000-01, and the rise in criminal networks (Bideleux and Jeffries 2007). As a result, large numbers of Albanians emigrated to neighbouring Italy and Greece to secure a living for their families left behind. These strong transnational ties have contributed to the rapid modernisation of society and the diffusion of modern life styles, particularly in the second transition decade, which was characterized by political stability and a high rate of economic growth.

Despite the crisis and opening up of Albanian society, traditional social institutions do not appear to have been seriously challenged. If a patriarchal social system is composed of different social structures in which gender inequality is determined (such as the household economy, the labour market, the political and private sphere and the cultural domain; see Walby 1989), Albania clearly displays persistent features of patriarchy. Despite a legal base for the per-capita privatisation of agricultural land in

1992, perceptions of land tenure and inheritance have remained biased towards the patriarch and, more generally, the males of the family (Wheeler 1998). Women have been generally relegated to the domestic sphere: they withdrew massively from the labour market during the crisis, especially in the primary childbearing ages, and have had very low representation in parliament after the loss of the socialist era quota (INSTAT 2004, 2007). Furthermore, men play a significant role in sexual and reproductive health because withdrawal is the main method of contraception (INSTAT, PHI, and ICF Macro 2010; Morris et al. 2005).

Although birth limitation methods were more widely diffused during the 1990s, women continued to marry at young ages, and in 2000-01 the national level of fertility was still the highest observed in Europe (i.e. 2.3 children per women; Gjonca, Aassve, and Mencarini 2008; Lerch et al. 2010). The recent onset of marriage postponement has led to below-replacement fertility, but a significant minority of women still marry very young. Family enlargement is still compressed over a short age interval, and the two-child family model has remained dominant in rural areas (see Lerch 2013a). The aim of this analysis is to investigate whether patriarchal institutions contributed to the endurance of this traditional pattern of family formation in post-communist Albania.

3. Hypotheses

In relating demographic behaviour to the importance of patriarchal institutions we adopt a geographical perspective, which has proved an effective analytical approach (Dyson and Moore 1983; Malhotra, Vanneman, and Kishor 1995; Guilmoto 2012). Patriarchal institutions can be compared in space according to the extent to which three main principles of kinship organisation are respected: seniority of social power, patrilineal transmission of status and property, and unequal gender relations (Gruber and Szołtysek 2012). We expect the stage attained in local fertility transitions to be related to the local importance of patriarchal institutions since these patriarchal organising principles structure the reproductive decision-making process.

Patrilineal kinship organisation is institutionalized through exogamous and patrilocal marriage patterns. The out-marriage of young daughters relieves their birth household of an economic burden and reduces marriage costs which can increase with age. Brides are separated from their family of origin and move into their husbands' families where they become dependent on a new patriarch's authority and accumulated wealth for inheritance and old-age support. Early female marriage also ensures socialisation into the new family and maximises the period of potential fertility, thereby increasing the social status of the patriarch in the community (Dyson and Moore 1983; Davis and Blake 1956; Folbre 1983; Kaser 2008).

The principles of patriarchy also structure the fertility decision-making process. Given the emphasis on seniority of power and the lineage organisation of corporate groups, the extended family is favoured over the conjugal unit, which reduces the costs of childbearing to women (Mason 1995). This is potentially important in post-communist countries where there has been a sudden disengagement of the state from family support after the change in political regime. On the other hand, patriarchal gender systems increase fertility demand. Children constitute women's main avenue to raising their own social status and may represent a welcome addition to the work force to aid in undertaking women's household duties (Mason 2001; Folbre 1983; Kaser 2008). The first hypothesis therefore states that local patriarchal kinship organisation promotes early female marriage and high marital fertility. As gender inequality affects the society at large, the fact that there is a limited range of acceptable female roles in the public sphere as alternatives to motherhood should also promote early marriages and large families.

Although a spatial analysis can highlight institutional effects on women's decision-making environment, it provides little information on the pathways of influence on reproductive behaviour. Institutional determinants of fertility do indeed operate at the aggregate level, but the outcome occurs at the individual level. A multilevel analytical approach is required to test different influences operating at different levels of social organisation (Greenhalgh 1990; Mason 1995; Smith 1989). We anticipate that reproductive decision-making will be influenced by patriarchal institutions through social effects, socialisation and the promotion of male fertility.

Social effects are important for the diffusion of behavioural models in the course of women's social interaction. Social learning refers to the effect of informal conversations and sharing of information as well as to the exposure to specific behavioural patterns (i.e. demonstration effects; Bongaarts and Watkins 1996). The role of peers is particularly important in the evaluation of new behaviours when information is highly uncertain (Casterline 2001). Following Albania’s opening up to the modern world during political and economic crisis, the population was exposed to new family models. Consequently, the second hypothesis predicts earlier marriages and higher fertility where patriarchal institutions inhibit social learning of fertility postponement and the one-child family model, or, in other words, where there is a higher prevalence of traditional family behaviours among peers.

Social influence, by contrast, is the action of constraining, through positive or negative rewards, others' decisions to conform to a norm or desired goal (Montgomery and Casterline 1996). Given the seniority principle of patriarchy, the power of the elderly is important, as are the constraining forces of emotional bonds between parents and children. Intergenerational influences on reproduction have not only been documented across countries with different fertility levels (Axinn, Clarkberg, and

Thornton 1994; Randall, Mondain, and Diagne 2010; Thornton et al. 1986), but the strong emphasis placed on lineage honour in patriarchal societies also increases the need for close surveillance of in-married women's behaviour (Kaser 2008; Mason 2001). Thus, the third hypothesis predicts the social influences of older cohorts on younger women's reproductive decision-making. Intergenerational emulation of early marriage and high fertility patterns at the local level would be evidence of this. At the family level, women may be particularly subject to agnatic control when marrying at a young age and/or to an older man because of their lower bargaining power relative to the patriarch and/or to the spouse, respectively. Marital fertility should increase in these cases, as evidenced by Thornton et al. (1986) and Larsen et al. (1998). Alternatively, women conform to patriarchal norms because they have been socialised within them. According to the fourth hypothesis, a higher endorsement of patriarchal values is expected to increase the intention to enlarge one's family.

Patrilinearity promotes male fertility because men ensure the continuity of genealogical lines. Boys are important for increasing the status and power base of the patriarch in the kinship group and consequently the mother's status in the patrilocal household. Unlike women, men are also expected to provide old age support to parents. This represents an insurance for mothers who risk losing economic support from their marital lineage following widowhood (Cain, Rokeya Khanam, and Nahar 1979). Son preference is thus an important intervening mechanism of patriarchy affecting individual fertility intentions (see Guilmoto 2012; Morgan and Niraula 1995; Murphy, Tao, and Lu 2011). Stopping behaviour, conditioned by a previous birth of at least one son, tends to increase with parity and with progress achieved in the fertility transition and consequently slows down the fertility decline (Filmer, Friedman, and Schady 2008; Larsen, Chung, and Das Gupta 1998; Mutharayappa et al. 1997). Given that Albania had almost completed its fertility transition at the time of observation, the last hypothesis predicts a strong negative correlation between the number of existing sons and subsequent fertility.

4. Data and methods

We use a cross-sectional and multilevel perspective to examine whether spatial variation in the timing of marriage and the extent of family enlargement is related to the local importance of patriarchal institutions. We then test the role of social effects, socialisation in patriarchal values, and son-preference in the reproductive decision-making process to account for this spatial relationship. We rely on reconstructed information on marriage and fertility of the total female population at the Census in

2001 along with data on attitudes and fertility intentions from the Reproductive and Health Survey 2002.

Differentials in the likelihood of marriage are investigated for the 12 months preceding enumeration on first April 2001 (2000–01). Since rank of marriage is unknown, the analysis is restricted to women aged 15 to 34 years to limit potential bias due to remarriage. 246,623 women were either single at enumeration or married during the reference period. Assuming only one marital event per woman, they constitute the population exposed to the risk of a first marriage in 2000–01. 8% of these women married (see Appendix Table A.1).

The transition to the first birth is of little interest here because it is universal and closely follows marriage in Albania. For the analysis of family enlargement, the occurrence of higher order births in 2000–01 is indirectly observed through linking records of infants to married mothers present in the same family. The population at risk consists of 173,059 married mothers aged 15 to 34 at the start of the reference period for whom prior fertility history and husband's characteristics are known. 14% had a higher order birth in 2000-01 (more information on data, linkages and variables can be found in the Appendix).

Two-level-random-intercept logistic regression models of marriage and higher order births are specified. The effects of patriarchal living context are measured at the aggregate level of the 374 official Albanian municipalities in which the observed women are nested. Logged-odds are estimated by the average odds all over Albania (β_0) and the additive effects of the individual and contextual explanatory variables (respectively x_{1ij} and W_{1j}, as defined below):

$$y_{ij} = \beta_0 + \beta_1 x_{1ij} + \alpha_1 W_{1j} + (u_{0j} + e_{0ij})$$

The logged-odds of marriage in 2000–01 are controlled for the confounding effect of age. Given that marriage was still universal at the time of observation, interaction effects of explanatory variables and women's age are introduced to indicate a role for marriage postponement. In the model of higher order births, the number of years elapsed since marriage and parity at the start of the reference period is controlled for. The variance of family behaviours is partitioned into a between-individual variation within municipalities (e_{0ij}) and a between-municipality variation in average odds (u_{0j}). This enables the adjustment of standard errors to account for the clustering of women at the municipality level at which institutional and social effects are estimated. The extent to which local patriarchal institutions and their pathways of influence account for the spatial variation in family behaviour can also be assessed. We compare non-standardized and progressively standardized average relative inter-municipality deviation of marriage and fertility rates which are predicted from the adjusted base-line

odds and the municipality-specific residuals of different models (see Blomgren and Valkonen 2007). The non-standardized estimate of inter-municipality deviation is based on a model controlling only for the effect of the socioeconomic structure (or composition) of municipality populations. The standardized estimates are based on models also adjusted for the effects of socio-economic and patriarchal context as well as for the pathways of patriarchal influence. The model is estimated through the Markov Chain Monte Carlo Sampling Method in MLwin 2.2 (Browne 2003; Rasbash et al. 2005).[3]

Contextual variables are derived from the Census. Following Gruber and Szoltysek (2012), the local importance of patriarchal kinship organisation is indicated by the extent to which its principles are respected in extended or complex households. The percentage of the population living in households which are headed by the eldest of at least two adult men measures the *seniority principle* of patriarchy. The *principle of patrilinearity* is indicated by the percentage of the population in extended households related through male kinship only. *Male dominance in kinship* is proxied by the percentage of population living in households (with at least one adult male member) which are male-headed. The higher a locality scores on these indicators, the more the kinship organisation is patriarchal. Whereas the principle of seniority is not systematically respected (by 90% of population in the average municipality), patrilinearity and male representation are the rule in Albania (see Appendix Table A.2). An exploratory principal component analysis of contextual variables shows that these principles are distinctly correlated with each other (not shown). Their geographic variation is therefore summarised in a single principal component score.

Gender inequality in the public sphere is measured using the indicators defined by Malhotra et al. (1995). *Female discrimination at birth and during childhood* is indicated by the survival of boys relative to girls using as proxy the sex ratio of children aged less than ten years. Girls are discriminated against on average, although the inter-municipality range is large (see Appendix Table A.2). Discrimination *in secondary school* and *in the labour market* is measured respectively by the male-female ratio in the average number of years of schooling at age 15 to 19 and the male share among young adults aged 15 to 34 in paid occupations. The higher a municipality scores on these indicators, the higher the female discrimination in the public sphere. Given the communist legacy of mass schooling in Albania, discrimination against girls at secondary level is limited (although increasing) in the average municipality. However, women are strongly underrepresented in the paid labour market (although the indicator's

[3] The relevance and statistical significance of contextual effects on marriage and fertility is assessed against the increase in the step-wise adjusted model's fit to the data as measured by the Bayesian Deviance Information Criterion (DIC). The decrease in inter-cluster variation of marriage and fertility, by contrast, informs on the relevance of explanatory factors for the explanation of the geography of Albanian marriage and fertility.

range is large). This variable correlates highly with *women's value for household economies* as indicated by the percentages of economically-active occupied women aged 15 to 34 who work in family agriculture or, less frequently, in another family business. This was the case for a fifth of women in the average municipality, with a very large range across Albania. We therefore maintain this second indicator in the final model.

Inter-generational social influences on marriages are indicated by the municipality-specific average age at marriage of women aged 45 to 59. For fertility, the average number of children ever born to marriage cohorts prior to 1971 is used. These older generations married at age 19.3 and had 5.4 children in the average municipality (see Appendix Table A.2). *Social learning* of marriage and fertility behaviours among peers is proxied respectively by the percentage of females ever married at age 15–19 and the average number of children ever born to the 1991–2000 marriage cohorts. About ten percent of these women were married at the time of the Census in the average municipality and the large range is proof of the recent differentiation in marriage timing. Recent marriage cohorts had 1.5 children on average. *Agnatic influences* are implied from the effect on fertility of women's marital characteristics such as age at marriage and the age-gap with the linked spouse (a third married before age 20 and/or were at least eight years younger than their husband; see Appendix Table A.3). *Individual son preference* is indicated by the effect on fertility of the number of linked boys born prior to the reference period.

Empirically, the social effects of patriarchy in the census analysis may result from both the local intensity of social effects and the spatial distribution of women according to unobserved socialisation in patriarchal values. We therefore use attitudinal data from the Reproductive and Health Survey (RHS) 2002 to replicate the analysis on fertility intentions and to control for the influence of individual socialisation.[4] The sample contains 3,373 married mothers with known fertility intentions. Those women who agreed to a larger extent with seven statements reflecting patriarchal norms are considered as being socialized to patriarchal values. The statements cover individual compliance with patriarchal marriage norms, gender roles, and general attitudes towards decision-making in family matters (see Table 3 in the section 5.3). Individual variability in endorsement of patriarchal values is summarised in a principal component score.

[4] The survey was implemented by the Albanian Institutes of Statistics and Public Health with technical support from the Centers for Disease Control and Prevention. The sample of women of childbearing ages (15-44 years) is representative at the national and urban/rural level. Respondents were selected within households sampled according to a classic stratified multistage design. The non-response rate was 6% (for more information, see Morris et al. 2005). Birth intentions were collected using the following questions: "Looking to the future, do you yourself intend to have (a/another) baby at some time?", "When do you, yourself, actually want to get pregnant (again)? Right away, within the next 12 months, within 1–2 years, after 2 years, after she marries, when god wants, don't know?".

Binary birth intentions for the two years following the survey date or "when God wants" are analysed using single-level logistic regression adjusted for the clustering of standard errors at the municipality level (see Allison 1995). 12% of the sample wanted another child. The same explanatory variables defined above are used, including the contextual variables which were linked to the survey data using the municipality identifier. Interaction effects between patriarchal value endorsement and the municipality-specific social effects test whether these determinants of birth intentions confound or mutually reinforce each other. Interaction effects of patriarchal value endorsement and gender inequality at school, by contrast, test the role of women's participation in the public sphere in mediating the effect of socialisation on wanting another birth. Survey weights are applied.

All models control for confounding effects of local living conditions and individual socioeconomic characteristics (see the Appendix for more information and descriptive statistics).

5. Results

5.1 Marriage

Results of the marriage model are presented in Table 1. Odds ratios (i.e. exponentials of logged odds) follow an inverted U-shaped function of age with a peak between the ages of 20 to 24. The likelihood of marriage was lower for higher-educated women and, particularly, non-migrants. Controlling for municipalities' urban status and socioeconomic context had a significant impact on the geography of marriage as shown by the decline in average relative deviation (ARD) of local marriage rates predicted from the model 1b when compared to those based on model 1a. Women married less in richer municipalities. The higher likelihood associated with urban compared to rural residence can be explained by better amenities and social services for family maintenance in cities.

Table 1: Individual and contextual determinants of first marriage, single women aged 15–34, Albania 2000–01

	Model 1a		Model 1b		Model 1c		Model 1d	
	OR	S	OR	S	OR	S	OR	S
Intercept	0.14	***	0.14	***	0.14	***	0.14	***
Age								
15–19	0.28	***	0.28	***	0.29	***	0.27	***
20–24	1		1		1		1	
25–29	0.95	**	0.95	**	0.89	***	0.89	***
30–34	0.55	***	0.55	***	0.45	***	0.45	***
Educational level								
At best compulsory	1		1		1		1	
Post-compulsory	0.96	**	0.97	ns	0.96	**	0.96	**
Immigrant status								
Non migrant	1		1		1		1	
Migrant	4.02	***	4.05	***	4.06	***	4.00	***
Place of residence								
Rural			1		1		1	
Urban			1.05	*	1.02	ns	1.04	*
Other contextual variables								
Living standards			0.87	***	0.88	***	0.85	***
Patriarchal organisation of kinship					0.97	ns	0.98	ns
Gender inequality in childhood					0.95	**	0.96	*
Gender inequality in secondary school					0.97	ns	0.96	*
Share of occupied women working in household agriculture/business					0.98	ns	0.96	***
Average age at marriage, women aged 45–59							1.02	Ns
Percentage ever married, women aged 15–19							1.07	***

Table 1: (Continued)

	Model 1a		Model 1b		Model 1c		Model 1d	
	OR	S	OR	S	OR	S	OR	S
Interactions: Age & ..								
Patriarchal organisation of kinship								
15–19					1.05	***	1.00	Ns
20–24					1		1	
25–29					0.88	***	0.90	***
30–34					0.75	***	0.77	***
Percentage ever married, women aged 15–19								
15–19							1.29	***
20–24							1	
25–29							0.93	**
30–34							0.87	**
Lev-2 Variance	0.10	***	0.09	***	0.08	***	0.07	***
ARD (in %)	104		88		86		78	
DIC	19753		19751		19637		19402	
Number of women	249623		249623		249623		249623	

Source: Census 2001. Note: OR = Odds ratio, S = statistical significance (*** = at 0.01 level, ** = at 0.05 level), ARD = Average relative deviation of predicted marriage rates at the municipality level, DIC = Bayesian Deviance Information Criterion.

Although controlling for patriarchal context improved the model's fit (as shown by the decline in DIC), it was not a strong determinant of the geography of marriage: the average relative inter-municipality deviation in rates only slightly declined (model 1c). The independent effect of patriarchal kinship organisation was not statistically significant, but its interaction effects with age confirmed a promotion of early marriages. Gender inequality in the public sphere, by contrast, had no significant independent or interaction effect – except female discrimination at birth and in childhood, which surprisingly decreased the likelihood of marriage (interaction effects with age were not statistically significant; not shown).

Controlling for social effects not only improved the model's fit but also mattered more for the spatial distribution of marriage (see model 1d). Whereas social influence of older cohorts was not statistically significant, traditional marriage patterns among peers had a strong positive impact on the likelihood to marry. The interaction effects of the women's age and the peers' marriage behaviour confirm a role for social learning of

early marriages: women under 20 years of age were significantly most affected by the behaviour of peers. As expected, the control for social effects in the model accounted for the promotion of early marriages in municipalities where the principles of patriarchal kinship organisation were respected to a larger extent: indeed the positive interaction effects on marriage for women aged 15 to 19 years living in these municipalities disappeared (compare model 1d with model 1c). The independent contextual effects of women's value for household economies and gender inequality in school also became statistically significant, but surprisingly depressed the likelihood of marriage (interaction effects with age were not statistically significant; not shown).

5.2 Family enlargement

Results from the model of higher order births are presented in Table 2. Fertility negatively correlated with parity and followed an inverted U-shaped function of duration since marriage. Mothers holding a post-compulsory school diploma had lower fertility as did those with a husband working for pay outside the household economy. Economic constraints depressed fertility as shown by the lowest likelihood of childbearing for women whose husbands were not actively employed. Immigrants had higher fertility. Urban status and local living conditions accounted for a significant share of average relative deviation in local fertility rates (compare model 2b to model 2a). Fertility was lower in richer municipalities but higher in urban when compared to rural areas which confirms the role of amenities.

Controlling for the geography of patriarchal kinship organisation and gender inequality in the public sphere explained much of the spatial variation in childbearing: municipality deviations in rates declined in the adjusted model 2c, although there was no substantial improvement in fit. As anticipated, fertility was higher where the patriarchal principles of kinship organisation were respected to a larger extent. The likelihood of another birth also significantly increased where women were subject to more discrimination in secondary school and where they contributed to household economies.

Controlling for social effects significantly improved the model's fit and also explained much of the spatial variation in demographic behaviour (model 2d). Fertility was significantly affected by intergenerational social influences rather than by social learning among peers. As expected, the fertility-effect of local patriarchal kinship organisation lost its statistical significance after these adjustments of the model (compare with model 2c). However, the positive impact of gender inequality in the public sphere increased.

Table 2: Individual and contextual determinants of higher order births, married mothers aged 15–34, Albania 2000–01

	Model 2a		Model 2b		Model 2c		Model 2d		Model 2e	
	OR	S	OR	S	OR	S	OR	S	OR	S
Intercept	0.15	***	0.15	***	0.15	***	0.15	***	0.24	***
Years since marriage										
less than 7 years	0.76	***	0.76	***	0.76	***	0.76	***	0.72	***
7 to 9 years	1		1		1		1		1	
10 years or more	0.63	***	0.63	***	0.63	***	0.63	***	0.66	***
Parity										
One child	3.83	***	3.84	***	3.85	***	3.85	***	3.19	***
Two children	1		1		1		1		1	
Three children or more	0.78	***	0.78	***	0.78	***	0.78	***	0.82	***
Educational level										
At best compulsory	1		1		1		1		1	
Post-compulsory	0.76	***	0.77	***	0.77	***	0.77	***	0.77	***
Husband's occupation										
In paid labour	0.93	***	0.94	***	0.94	***	0.94	***	0.94	***
In family business	1		1		1		1		1	
Non occupied	0.78	***	0.79	***	0.78	***	0.78	***	0.77	***
Immigrant status										
Non migrant	1		1		1		1		1	
Migrant	1.16	***	1.16	***	1.16	***	1.16	***	1.16	***
Age at marriage										
Before 20 years									1.02	ns
20–22 years									1	
23 years and more									0.95	***
Age gap husband-wife										
8 years and more									1.01	ns
4 to 7 years									1	
Less than 4 years									1.04	**
Number of boys born									0.59	***
Place of residence										
Rural			1		1		1		1	
Urban			1.15	***	1.17	***	1.15	***	1.16	***

Table 2: (Continued)

	Model 2a		Model 2b		Model 2c		Model 2d		Model 2e	
	OR	S	OR	S	OR	S	OR	S	OR	S
Other contextual variables										
Living standards			0.78	***	0.81	***	0.90	***	0.90	***
Patriarchal organisation of kinship					1.05	***	1.02	ns	1.01	ns
Gender inequality in childhood					1.02	ns	1.03	ns	1.05	**
Gender inequality in secondary school					1.08	***	1.09	***	1.09	***
Share of occupied women working in household agriculture/business					1.06	***	1.08	***	1.08	***
Average number of children ever born, women married for more than 29 years							1.20	***	1.21	***
Average number of children ever born, women married for less than 10 years							1.01	ns	1.00	ns
Lev-2 variance	0.13	***	0.10	***	0.09	***	0.07	***	0.08	***
ARD (in %)	96		79		75		58		53	
DIC	93624		93607		93605		93594		91646	
Number of women	178252		178252		178252		178252		178252	

Source: Census 2001. Note: OR = Odds ratio, S = Statistical Significance (*** at 0.01 level, ** at 0.05 level), ARD = Average relative deviation of predicted fertility rates at the municipality level, DIC = Bayesian Deviance Information Criterion.

The introduction of family– or individual-level indicators of patriarchal influence strongly improved the model's fit and marginally explained the geography of fertility (model 1e). Results confirmed intergenerational social effects. Individual age at marriage and the age-gap between husband and wife correlated negatively with fertility. Thus, marriage at a young age for both spouses leads to larger families which indicates a role for intergenerational agnatic control rather than for the woman's lower bargaining power within the couple. The analysis of attitudinal data will provide more information on whether the intergenerational effects on fertility at the local and family level result from social influence or from the transmission of reproductive behaviour (i.e. socialisation).

Stopping behaviour determined by son preference was also confirmed. The number of boys previously born is one of the most important determinants of marital fertility in Albania, ranking just after women's parity and duration of marriage (model 2e). Moreover, the introduction of this individual-level variable in the model unravelled a positive and statistically significant fertility effect of local gender inequality at birth and in childhood survival (compare with model 2d). Son preference therefore appears to be an individual attitude promoted by social effects. These results were consistent across parity cohorts (not shown).

5.3 Socialisation in patriarchal values and intentions to enlarge the family

Table 3, which refers to all women interviewed by the RHS in 2002, shows that individual endorsement of patriarchal values was strong in Albania. About three quarters of women agreed with the social importance of universal and virgin marriages, with women's main job being caring for the home and cooking, or with a subordinated female role with regards to economic activity outside the household. When it comes to family matters, patriarchal value endorsement is less clear-cut. A slight majority of women thought that husbands should not have the final say in all family matters (57%) but considered child care a woman's job (52%).

Table 3: Individual endorsement of patriarchal values, women aged 15-44, Albania 2002

General statement	% Agree	% Don't know
All people should get married	78	4
A woman should be a virgin when she marries	74	3
The main job for a woman is to take care of the home and cook for her family	86	1
A married woman needs her husband's permission to work outside the home	75	2
If a woman works, she should give her money to her husband	69	3
The men in the family should have the final say in all family matters	41	1
Child care is a woman's job	52	1

Source: RHS 2002 (weighted percentages, N=5'688).

The analysis of birth intentions confirmed most socioeconomic determinants of fertility (Table 4). The main differences from the census results are the non-significant effects of migrant status and of the husband's occupational status.[5] The model also confirmed a role for intergenerational agnatic control and individual son preference. Although the effects of local patriarchal kinship organisation, gender inequality in the

[5] This may be explained by the fact that migrant status refers here to moves between municipalities, as the survey did not gather information on the previous district of residence. Short-distance mobility may be less selective than long-distance migration. The non-significant effect of the husband's occupational status may also have resulted from limited information in the survey regarding economic activity: paid labour was not distinguished from household production. Given that the respective effects on family enlargement were in opposite directions, they may have compensated for each other in the model of birth intentions.

public sphere, and social effects were in the same direction as in the fertility model, they were not statistically significant – except women's value for local household economies. As the number of women interviewed by municipality is often very small (see Appendix Table A.2), statistical power may be too weak to obtain significant effects of contextual variables.

Table 4: Individual and contextual determinants of higher order birth intention, married mothers aged 15-44, Albania 2002

	OR	S
Intercept	0.23	***
Years since marriage		
less than 7 years	0.60	***
7 to 9 years	1	
10 years or more	0.36	***
Parity		
One child	5.40	***
Two children	1	
Three children or more	0.45	***
Educational level		
At best compulsory	1	
Post-compulsory	0.75	*
Husband's occupation		
In paid labour or family business	0.99	ns
Non occupied	1	
Immigrant status		
Non migrant	1	
Migrant	1.02	ns
Age at marriage		
Before 20 years	1.35	ns
20–22 years	1	
23 years and more	0.96	ns
Age gap husband-wife		
8 years and more	0.66	**
4 to 7 years	1	
Less than 4 years	1.15	ns
Number of boys born	0.60	***
Place of residence		
Rural	1	
Urban	1.34	ns

Table 4: (Continued)

	OR	S
Other contextual variables		
Living standards	0.90	ns
Patriarchal organisation of kinship	1.05	ns
Gender inequality in childhood	1.03	ns
Gender inequality in secondary school	1.06	ns
Share of occupied women working in household agriculture/business	1.30	**
Average number of children ever born, women married for more than 29 years	1.05	ns
Average number of children ever born, women married for less than 10 years	1.05	ns
Patriarchal value endorsement	1.56	***
Interaction with: Average number of children ever born, women married for more than 29y	1.12	**
Interaction with: Gender inequality in secondary school	1.26	*
Number of women	3373	

Source: RHS 2002. Note: OR = Odds ratio, S = Statistical Significance (*** at 0.01 level, ** at 0.05 level, * at 0.1 level).

Individual endorsement of patriarchal values had a strong positive impact on wanting another child. This control for socialisation did not substantially change intergenerational social effects (not shown) which indicates that both influences matter. They also sustained each other through their significant positive interaction effect on birth intentions. Discrimination against women in secondary education also significantly increased the fertility-enhancing effect associated with individual endorsement of patriarchal ideals.

6. Discussion and conclusion

Despite rapid institutional change in the post-socialist era, the role of traditional social institutions in the collapse of period fertility has attracted little research attention. Theories of ideational change and social anomie imply that fertility change was enabled by a decline in the moral primacy of traditional social institutions. Following three decades of isolation, Albania's patriarchal society opened up to the world in 1990 and experienced social upheavals in a regional context of civil wars. Yet this analysis has highlighted persistent traces of patriarchy in Albania. A majority of women endorsed patriarchal ideals in 2002 and fertility transition was less advanced in more patriarchal municipalities. Our geographic analysis of census and survey data indeed demonstrated how patriarchal institutions influenced reproductive decision-making through different pathways operating at different levels of social organisation.

Marital fertility was higher and marriage occurred at younger ages where patriarchal principles were respected to a greater extent in kinship organisation. The promotion of large families was achieved by community- and family-specific social influences from older cohorts, women's socialisation in patriarchal ideals, and a strong preference for male births. Early marriages, by contrast, were promoted by social learning from peers. Internal migrants also had a higher risk of marriage and, to a lesser extent, births. Since this pattern has been related to the resurgence of traditional marriage-migrations of young brides rejoining the patrilocal family (Lerch 2013b), it can be considered as an additional pathway of patriarchal influence on reproductive behaviour. Moreover, gender inequality in the public sphere sustained the level of fertility, but surprisingly decreased the risk of marriage.

The differences in the social effects on marriage and on fertility are congruent with current behavioural change in Albania. During the crises and the opening up of society, many parents withdrew their daughters from school for security reasons or to avoid potential love affairs while waiting for an early and arranged union (Pritchett-Post 1998). It is therefore not surprising that social interaction with peers, rather than intergenerational influences, plays a major role in diffusing the emergent marriage postponement, which indeed challenged historical patterns. Birth limitation, by contrast, was found to be widely diffused, and the associated risks and opportunities were already evaluated, meaning that social learning was irrelevant here. The importance of intergenerational influences confirms the historical path-dependency of institutional and fertility change.

However, unlike patriarchal kinship organisation, the effect on reproductive behaviour of gender inequality in the public sphere was not accounted for by the pathways of patriarchal influence tested in this study. This is in line with the dominance of intergenerational influences on fertility. Older cohorts indeed experienced more limited gender inequality in the public sphere because of the legal and economic promotion of the women's status during socialism. Yet in contemporary Albania, large families may not only represent a patriarchal kinship ideal but also married women's own strategy for acquiring social status where the range of female roles alternative to motherhood is constrained. At the same time, women's relegation to the household sphere may have reduced their dual burden and limited the opportunity costs of childbearing when compared to the communist period. Singles, by contrast, may have been reluctant to marry in these unequal gender contexts to avoid being confined to a subordinate role. A competing explanation of the lower risk of marriage in these municipalities could also be related to Albania's predominantly male bread-winner emigration which attributes new social roles to unmarried women. There is indeed a need to keep daughters in the family for care of the elderly left behind as well as to

compensate for lost labour in household undertakings. Future qualitative research would be welcomed to shed more light on this issue.

Hence, this analysis not only confirms a role for traditional social institutions in fertility in post-communist Albania but also indicates an expansion of their sphere of influence from kinship structures to the society at large. Historical anthropologists agree on the idea of a patriarchal backlash in the Balkans since the end of communism – at least in terms of its visibility in the public arena (Fisher 1999; Kaser 2008; Mitterauer 1996; and others). The importance of patriarchy in Albania may have been sustained during the crisis by the role traditional social institutions played in providing psychological and social support, as well as cultural identification, and by the comparative advantage of kinship structures in terms of coping with economic hardship. This may have reduced the social and psychological effects of uncertainty, and obstructed ideational change that would otherwise have driven Albanian fertility to even lower levels.

Beyond the negative consequences of patriarchy for women's participation in society, the results presented here suggest that progress in reproductive health was delayed as well. In a context of increasingly low fertility and technological modernization, the dominant stopping behaviour determined by son preference accounts for the rising sex ratio at birth in Albania, which is among the highest in the Balkans and worldwide (111.5 in 2008; Guilmoto 2010). Gender discrimination at birth implies specific health risks to women related to unsafe abortions. Therefore, the fertility effects of socialisation to patriarchy and of gender inequality in the public sphere are particularly relevant from a policy perspective, because both are susceptible to interventions from the state or other social institutions. The analysis confirmed the importance of equal opportunities in schooling for girls and boys in mediating the role of socialisation in fertility intentions, presumably because it implies more freedom in social interaction outside the family and helps to diffuse new value orientations. Political actions have recently aimed to redress the trend, such as the increase in the minimum age at marriage to 18 years and the right to privacy for married couples asserted in the new family code of 2003 (INSTAT 2005). A gender quota system in political representation was also reintroduced and a law on gender equality was adopted in 2008. This may undermine the role of patriarchy in the future course of Albanian fertility.

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Appendix: Linkages of Census data and descriptive statistics of covariates

The modelling of family enlargement in 2000–01 requires some preparation of the Census data which is documented in this Appendix. The occurrence of higher order births is indirectly observed through linking records of children aged less than one year at enumeration to the married mothers present in the same household and family nucleus and characterized by the corresponding relationship with the household head. Information on age and parity was also used to select a mother when more than one was found in the same nucleus: 96% of children can be linked to married mothers of childbearing age (see Table A.1). The mothers' parity at the start of the reference period (April 1st 2000) is then adjusted in subtracting the linked child from stated parity at enumeration. The universe of analysis is constituted by women aged 15 to 34 who were married and had at least one child at the start of the reference period. The dependent variable is the probability of having had a higher order birth in 2000–01 which survived until enumeration.

Table A.1: Female population (aged 15-34), family events and linkage statistics, Albanian Census 2001

	Yes		No		Total	
	N	%	N	%	N	%
Single women at 1.4.2000, aged 15 to 34:						
Marrying in 2000–1	8'437	8	96'607	92	105'044	100
Children aged less than 1 year:						
Linked to married mother (at 1.4.2001)	49'788	96	2'341	4	52'129	100
Married mothers at 1.4.2000, aged 15 to 34:						
Having a higher order birth in 2000-01	27'626	13	178'038	87	205'664	100
Linked with husband	184'748	90	20'916	10	205'664	100
Linked with fertility history up until 1.4.2000	197'118	96	8'546	4	205'664	100
Married mothers at 1.4.2000, aged 15 to 34, linked with husband and fertility history:						
Having a higher order birth in 2000–1	24'257	14	153'995	86	178'252	100

Source: Census 2001.

Information on mothers' marital characteristics and on the number of boys born up to the start of the reference period is also reconstructed. To obtain spousal age differences, as well as husband's occupational status, married mothers are linked with the men who resided in the same family nucleus and married in the same year. To

reconstruct fertility histories by sex, enumerated children aged 1 to 14 years are linked to the mothers in the family nucleus. Mothers older than 34 years were not considered in the analysis to limit potential biases due to the exclusion from our sample of women for whom no fertility history can be identified. Among this exposure population of 205,664 mothers, 90% and 96% can be matched to their husbands and to information on past fertility, respectively (see Table A.1). The final sample available for analysis is composed of 173,059 mothers for whom both pieces of information are available; 14% of them had a higher order birth in 2000–1. The comparison of the sample's descriptive statistics with those referring to all married mothers does not indicate a selection bias (see Table A.3).

The analyses of patriarchal influences on marriage and higher order births (intentions) are controlled for the confounding effects of local and individual socioeconomic characteristics. Local living standards are proxied by a principal component score which summarises geographic variations using the average number of years of schooling among the population aged 25 to 44, the percentage of households owning, respectively, a car, TV, refrigerator, or washing machine, as well as the percentage of households with running water and toilet facilities inside the dwelling. The municipality's urban status is a proxy for the presence of other amenities. At the individual level, the model controls for the effects of completed education (post-compulsory level is distinguished from a lower level). In the model of family enlargement, the couple's living standards are also measured by the occupational status of the husband (unemployed or inactive; working in family agricultural or business; working for pay outside of the household). Moreover, the effect of contextual variables has to be controlled for the fact that internal migrants were socialized elsewhere. Immigrant status is defined in the Census and the RHS by a change in the district and municipality of residence since 1989, respectively.

Although no systematic quality assessment of the Census data has been undertaken, the enumeration is generally considered to be fairly good. Under-enumeration of children aged less than one (i.e. the observed fertility outcome) should not significantly bias the results because it appears limited: the number was slightly higher than that of (under-)reported births by vital statistics for the 12 months preceding the Census. Age heaping is almost non-existent (Lerch and Wanner 2008). However, our analysis may be affected by the under-linkage of infants to mothers: when the mother resided in Albania but in a different household from her child, the event of interest could not be observed and she would be wrongly considered as non-fertile in our model. The impossibility of controlling for infant mortality at the individual level also introduces some bias: those women whose child died before the 1st birthday are wrongly considered non-fertile. Since under-matching of events is limited (4%) and the

infant mortality rate was about 2% percent at the time of the Census (Lerch et al. 2010), this should not significantly impact on the results.

Table A.2: Descriptive statistics of municipality-specific contextual variables and analytical samples, Albania 2001–02

	Unit	Minimum	Average	Maximum	Range
Principles of extended and complex household organisation					
Seniority of household representation	percent	74.0	90.6	98.2	24.2
Patrilinearity	percent	95.1	99.0	100.0	4.9
Male primacy of household representation	percent	95.9	98.8	99.8	3.8
Women's discrimination					
Sex selection and childhood survival	Ratio M/F	0.6	1.1	1.7	1.1
Mean years of schooling (at age 15–19)	Ratio M/F	0.8	1.0	1.2	0.3
Share of males among employed for pay (age 15–34)	percent	36.3	64.5	89.6	53.2
Occupied women working in household agriculture/business (age 15–34)	percent	0.0	21.6	78.2	78.2
Social effects					
Average age at marriage, women aged 45–59	average	17.0	19.3	22.0	5.0
Percentage ever married, women aged 15–19	percent	0.0	9.7	32.1	32.1
Average number of children ever born, women married for more than 29 years	average	1.0	5.4	7.2	6.2
Average number of children ever born, women married for less than 10 years	average	0.4	1.5	2.5	2.1
Analytical samples					
Population exposed to first marriage	number	25	687	30276	
Population exposed to a higher order birth	number	22	477	17903	
Sample of higher order birth intentions	number	1	24	955	

Source: Census 2001 and RHS 2002.

Table A.3: Univariate relative distributions according to explanatory variables of women exposed to marriage and higher order births as well as of the sample of birth intentions, Albania 2001 and 2002

		Marriage (Census 01)	**Higher order birth** (Census 01)		**Higher order birth Intentions** (RHS 02)
			Total sample of married mothers	Married mothers with information on marital characteristics and fertility history	
Independent variables					
Place of residence	Rural	58.5	59.8	59.1	54.0
	Urban	41.5	40.2	40.9	46.0
Education	At best compulsory	70.8	61.6	61.1	54.9
	Non compulsory	29.2	38.5	38.9	45.2
Immigrant status	Non migrant	86.3	76.0	75.9	54.4
	migrant	13.7	24.0	24.1	45.7
Age class	15–19	57.7			
	20–24	28.5			
	25–29	9.9			
	30–34	3.9			
Years since marriage	Less than 7 years		41.7	40.3	23.5
	7 to 9 years		24.5	25.6	30.2
	10 years and more		33.8	34.2	46.3
Age at marriage	Before 20		34.0	33.0	29.9
	20–22		39.4	40.4	39.1
	23 and more		26.6	26.6	31.0
Parity at march '00	One child		32.7	32.7	19.2
	Two children		44.4	44.4	41.4
	Three children and more		23.0	23.0	39.4
Age difference husband-wife	8 years and more			34.1	24.4
	4 to 7 years			36.6	39.3
	less than 4 years			29.3	36.3
Number of boys born by March '00	None			26.9	18.7
	One			51.5	47.5
	Two or more			21.6	33.7
Husband's activity status	Not occupied		12.5	12.0	30.6
	in paid labour		32.2	32.5	69.4
	in family business		55.3	55.5	
N		246623	205090	178252	3373

Source: Census 2001 and RHS 2002.