



SEX

IMBALANCES AT BIRTH IN ALBANIA

World Vision®



Tiranë 2012



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This research report on sex imbalances at birth in Albania is the product of close cooperation of several institutions and actors. This research was carried out based on the need to understand WHAT the situation is regarding sex imbalances at birth in Albania, HOW this sex selection is achieved under the conditions of Albania and WHY this sex imbalance at birth is taking place in Albania today.

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0 Executive summary

This report initiates from an initiative of the UNFPA a year ago in December 2011, when for the first time, in a conference in Albania, the issue of sex imbalances and sex selection at birth was discussed in the context of Albanian populations. Academics, national and international, policy makers, experts from the international community as well as civil society discussed the relevance and the issues related to the sex imbalance amongst Albanians at the start of the 21st century. One of the overwhelming conclusions of this conference was how little we know regarding this issue in Albania in particular and in the Balkans in general, at a time when the demography of the country and the region has been detailed for a very long time. It was recommended that more research needed to be done in this area focusing on three important aspects of the sex imbalance at birth and sex selection.

First, there is a need for understanding WHAT the situation is regarding sex imbalances at birth in Albania. A large number of data from various sources were recommended to analyze the patterns and trends of sex imbalances at birth. Data from vital registration, censuses and surveys were in particular, needed for this research. Another important question to be addressed was HOW this sex selection is achieved under the conditions of Albania. Is there any mechanism in place? In this respect qualitative analysis was seen as more appropriate and a special study was commissioned in this regard. However, in order to recommend possible policies and other instruments to change the situation, there is a need to understand WHY this sex imbalance at birth is taking place in Albania today. This final question needs to be addressed using both approaches, the demographic and statistical analysis and the more anthropological qualitative research. This report presents the results of this research which was commissioned by UNFPA in cooperation with World Vision at the start of 2012. We are happy to be able to have answered most of the questions designated at the start of this research.

The report is composed of different sections to reflect the type of research carried out and the way the research questions have been designed and answered. It starts with a brief summary of the issue of sex imbalances at birth across the world. This international perspective highlights how the situation of Southeast Europe is in many respects similar to that of countries in East and South Asia where prenatal sex selection has been observed since the mid-1980s. This first part of the report also provides a detailed analysis of the socio-economic situation in Albania and of the cultural context of gender and family relations, before moving to the demographic analysis of Albanian population. This section underlines in particular, the complex and rapid demographic transformations experienced by Albania over the last 25 years, characterized in particular by rapid fertility decline and intense international migration.

The main research questions and the various methods and sources used in the course of this study are presented in the second part of this report. Investigating prenatal sex selection requires both an in-depth statistical analysis, often based on indirect methods and field-based evidence gathered by qualitative and quantitative surveys.

The third part presents findings of the detailed statistical analysis of sex imbalances in Albania based on two sources of data, census 2001 and vital statistics from 1995-2010. The first objective is to

describe the intensity of son preference in Albanian society by using fertility behavior as an indicator of gender bias. A second objective is to date the initial rise in the sex ratio at birth in Albania during the 1990s and identify some of the main characteristics of the couples and families involved in sex selection, based on 2001 census records. The final objective of this demographic analysis of sex imbalances is to investigate the intensity and correlates of skewed sex ratios in Albania from 1995 to 2010 through the detailed analysis of civil registration records.

The fourth part of the report is devoted to the findings of a qualitative research analysis launched in three different research sites in the country. The field work aims precisely at documenting the presence and reasons of the preference for sons in Albanian families and the sex-selective behavior seen from discussions and interviews with couples and health practitioners. This survey provides an independent confirmation of the nature and factors of the sex imbalances at birth revealed by demographic analysis.

The fifth part of the report presents the findings of a demographic simulation exercise, based on population projections. It depicts the likely impact of the current skewed sex ratio at birth on the future age and sex structures of Albania's population and discusses some of its potential implications.

The report ends up with the conclusions and recommendations for changing the situation regarding the sex selection and sex imbalances in Albania.

Some of the main conclusions of this research are as follows:

Albania fits the profile of the countries where prenatal sex selection has spread rapidly once the level of fertility comes down. The country is characterized by a patriarchal family system, organized along male patriline. Sons are therefore absolutely needed to perpetuate the family. On the contrary, girls are seen as transient members of their native families since they will leave, after marriage. Sons are a source of protection and support, a need reinforced by the uncertainties in the economic and social environment since the exit from communism in the early 1990s. As a result of rapid fertility decline in the 1990s to present day, the probability to remain without a male child has greatly increased and parents are less ready than in the past to bear repeatedly unwanted girls for the sake of having a son. But most importantly, the modernization of the available reproductive equipment, the rapid development of the private healthcare system, and the liberalization of abortion has allowed parents to resort on modern methods of prenatal sex selection.

The demographic analysis of this research has confirmed that son preference is a distinctive feature of Albania's population regime. We can find traces of sex differentials in mortality among children in the past, and even the RHS survey of 2002 reported higher infant mortality among girls. But these mortality differentials seem modest. In comparison, fertility behaviors are clearly shaped by strong gender considerations. Both the qualitative and quantitative analyses explored the factors related to the preconditions for prenatal sex selection, starting with the preference for sons in the Albanian patriarchal society, the below-replacement fertility levels, and the supply of the sex determination technology. All these factors were found in spite of geographical and socio-economic variations in our study sites. The qualitative results reported that sex-selective abortion was reported to be performed in both private and public clinics, after the third month of pregnancy and mainly by women who have already two or three girls. No serious legal and procedural barriers were reported.

Based on the findings of this study, we offer a number of recommendations with regard to improving the situation of sex imbalances at birth and sex selection in Albanian society for the coming years. These recommendations stress in particular the need for a regional coordination, quality monitoring of trends and differentials in birth masculinity, and further analysis of the social and economic factors and conditions of sex-selective behavior. The time is ripe for launching a wider policy dialogue on birth imbalances in Albania by involving all stakeholders and considering the policy options for reducing prenatal gender discrimination.

1 Sex Selection and the Albanian context

1.1 Prenatal sex selection in the world: characteristics and trends

The existence of sex imbalances at birth emerged only during the 1990s when the combination of work by statisticians and field studies demonstrated that the sex ratio at birth was indeed higher than normal in many countries and that prenatal sex selection was the most probable explanation for this anomaly. Before this period, the interest in demographic discrimination had focused on excess female mortality, especially among children. The notion of “missing women”, popularized in 1990 by Nobel Prize winner Amartya Sen, drew attention to the apparent deficit of women in many countries of the world, but this demographic gap was firstly caused by excess female mortality. The rise in the proportion of male births that followed was an entirely new phenomenon, so unexpected that it took years to detect and confirm. In many countries, including Albania, it is still a disputed issue due to the lack of reliable data and of in-depth analysis. In countries adjacent to Albania where sex selection is also present, the issue is in fact still completely ignored.¹

One reason for this difficulty in identifying the presence of sex imbalances is the large number of distinct factors likely to affect sex ratios from conception to adulthood. Two main types of factors emerge. The first type refers to factors that are mostly biological or linked to the general social and economic environment. This is the case for instance of racial differentials in the sex ratio at birth or the varying impact of prenatal and postnatal mortality. But the second type of factors is directly related to sex discriminatory behaviors: It includes notably prenatal sex selection, selective infanticide or excess female mortality (Chahnazarian 1988; Waldron 1998; United Nations 2011).

Some of these factors are therefore unconnected to gender discrimination, but do affect the distribution of births by sex. For instance, the probability of conceiving a male embryo is more likely than conceiving a female embryo, in the human species. As a result, the sex ratio at birth among populations with no sex preference is usually close to 105 male births per 100 female births, with variations ranging from 104 to 106 across countries.² There may not be perfectly reliable measurements of the sex ratio at birth in every country, but all available data suggest that the range of variations across countries or ethnic groups remains quite narrow. Similarly, in the absence of discrimination, the impact of mortality is always unfavorable to boys. As a consequence, their initial higher proportion in the population decreases regularly with age since they tend to die earlier than females. The sex ratio declines therefore with age, starting from 105 at the time of birth down to values closer to 100 during adulthood and even lower among the elderly. In the absence of sex-selective migration or under-enumeration, mortality is the main cause of this continuous decline in sex ratios as the population ages.

¹ This section draws in particular on the recent study of sex selection in the world (UNFPA 2012). See also Attané and Guilmoto (2007).

² The sex ratio in this report is always computed as the number of men per 100 women. The sex ratio at birth is in particular computed as the number of male births per 100 female births.

The biological female advantage in mortality should result in a global predominance of women as long as no discriminatory mechanism disturbs this equilibrium. This is indeed what we observe in most developed countries. But there are several other factors that may in specific contexts cause unexpected demographic imbalances favoring the male population. In the past, women's life was shorter than men's in many countries, especially when life expectancies started increasing and men were the first to take advantage of the new health resources. This may for instance have been the case in Albania whose population has long been in the past dominated by men. Excess mortality was in particular visible among children, including in Southeast Europe, when differential treatment – mostly related to health and nutrition behaviour – favored boys and resulted in unexpectedly high infant and child mortality rates among girls. But discriminatory systems have evolved rapidly over the last three decades, fueled to a large extent by advances in prenatal sex determination. Several methods to discriminate among unborn girls co-exist today.

The most recent methods are based on pre-conception selection and require access to the elaborate equipment necessary to perform sperm sorting, pre-implantation genetic diagnosis (PGD) or in-vitro fertilization (IVF). Cost and accessibility factors, however, restrict these technologies to developed countries and to the most affluent populations. On the contrary, sex selective abortions offer a far easier and more accessible route to avoid female births. The gradual introduction of prenatal diagnosis technologies such as ultrasound during the 1970s, combined with abortion, has allowed millions of couples to eliminate unwanted female fetuses. This phenomenon is at the core of the disequilibrium in birth masculinity that has been observed since the 1990s.

1.1.1 Skewed sex ratios at birth (SRB) observed from Asia to America

We will briefly present data from different countries in Table 1. All except South Korea today, display significantly skewed SRB levels. As the data suggest, the issue of adverse SRB levels is not limited to China and India. Prenatal sex selection is a more global phenomenon than usually acknowledged, with traces observed in several continents.

China remains today the major contributor to the growing sex imbalances at birth. The SRB started probably to increase in China in the late 1980s from 105 to a level close to 120 in 2000-2005. The SRB may be today close to 118, one of the highest levels in the world, pointing to a proportion of deficit female births close to 12 per cent of all female births. The peak in birth imbalances seems to have been reached in 2005, at 120, and available annual estimates for China indicate a slight decrease over the last five years. One thing that needs to be stressed is the high level of regional heterogeneity, with many Chinese provinces reaching levels above 130 in 2005. In South Asia, the most affected country is India, where prenatal sex selection was first reported in the 1980s. The overall level of birth masculinity at 109 remains moderate in comparison with China, but it also conceals wide regional variations. SRB levels around 120 are common in Northwest India, while many other regions have simply recorded no sex imbalances at birth. Vietnam offers the case of a country where the rise in SRB has been both unexpectedly recent – occurring only after 2003 – and rapid since it has already reached 112. The situation in many countries such as Pakistan or Nepal is not well documented, but South Korea stands apart: this is the only country where the SRB rose up to 113 in the early 1990s and declined afterwards, reaching now normal levels close to 106.

Of special interest to us is the case of countries from “Eastern Europe”, taken here as a vast area encompassing a large part of the former socialist regimes of East Europe and of the former Soviet

Union. Two specific clusters of high SRB emerge from data shown in Table 1: Southeast Europe and South Caucasus. Levels above 110 are observed in Albania and Montenegro, as well as in Azerbaijan, Armenia, and Georgia.³ While statistics are often imperfect in these countries, sex imbalances have been confirmed by census figures and other sample survey estimates.

Table 1: Sex ratio at birth in various countries, 2007-2011

Country / regions	SRB	Period	Data source
<i>East Asia</i>			
China	117.8	2011	Annual estimate
South Korea	106.7	2010	Birth registration
Vietnam	111.2	2010	Annual demographic survey
<i>South Asia</i>			
India	110.5	2008-10	Sample registration
Pakistan	109.9	2007	Population and demographic survey
<i>South Caucasus</i>			
Azerbaijan	116.8	2009-11	Birth registration
Armenia	114.8	2008-10	Birth registration
Georgia	113.6	2009-11	Birth registration
<i>Southeast Europe</i>			
Albania	111.7	2008-10	Birth registration
Kosovo	109.7	2009-11	Birth registration
Northwest Macedonia	110.9	2009-11	Birth registration
Montenegro	109.8	2009-11	Birth registration

In the South Caucasus, birth masculinity levels briefly reached levels as high as 118 during the previous decade. This is the case in Azerbaijan and Armenia, whose statistical offices provide ample evidence of high SRB levels. Statistical evidence is more fragmentary for Georgia, but the proportion of male births and children remains undoubtedly excessive.

Albania, where birth masculinity is distinctly higher than the biological level, seems to be part of a large regional cluster of high SRB that includes also Montenegro, Kosova and parts of Macedonia (the so-called Polog region that includes Tetovo and Gostivar). This corresponds to a large extent to the area of Albanian ethnicity, with the exception of Montenegro of Slavic composition. Needless to say, the documentation on skewed sex ratios is sketchy in Eastern Europe, with little by way of in-depth qualitative or statistical analyses. The new round of censuses across Eastern Europe will, however, provide potential confirmation of our recent SRB estimates.

In addition to the countries briefly reviewed here, high SRB values have also been observed in industrialized countries with significant diasporas from Asia or Southeast Europe. Among these sub-populations made up of recent migrants, studies have demonstrated the existence of skewed levels

³ See Meslé, Vallin, and Badurashvili (2007), and Brainerd (2010). The Council of Europe has offered a recent review of data from Eastern Europe (CoE 2011). The first description of skewed birth masculinity in Southeast Europe can be found in Guilmoto (2010).

of sex ratio at birth. There is for instance, evidence of such biased SRB levels in the United States, Canada, the United Kingdom, or Italy. This includes in particular the Albanian migrant communities in Italy and Greece, among which birth masculinity has been shown to be significantly higher than among natives. Sex selection among migrants is especially revealing, since it shows that discrimination may not be as much due to local circumstances (conflict, birth control, economic crises, social customs etc.) as to ingrained cultural attitudes that migrants carry with them in their country of residence. This suggests that the bias against girls is not a superficial behavior that could be easily changed by acting on local factors.

High sex ratios at birth often combine with higher mortality among girls in Asia, but in Europe, such mortality differentials have mostly disappeared. For that reason, we will not explore at length this aspect of the gender discrimination regime in the course of this study.

1.1.2 Variations in sex ratio at birth across social groups

A trait of the current distortions in birth masculinity crucial to understand its mechanisms relates to the extent of variations observed across households, regions, ethnic groups, or even during the life of the mothers. It shows in particular that no biological mechanism is at work, otherwise social variables would have no impact on birth masculinity. It also emphasizes that sex selection is part of the family-building processes and can be understood only in relation to fertility choices.

The best-known variation in SRB levels pertains to birth order (parity). While parents are often indifferent to gender of their first child, the gender imperative emerges more clearly during the next pregnancy; especially in the absence of a male child, active preference for girls has never been described. This is most notably the case for the last child, expected to set right the sex composition of the family. In the past, parents were ready to repeat births indefinitely in their quest for a boy, but access to contraception and rapid fertility decline have entirely changed their strategies. They can avoid pregnancies once the proper composition is attained and they may also want to reduce the size of their family by limiting the number of unnecessary female children.

In most cases, the sex ratio at birth increases with birth parity. The sex of the previous births, when available, is an even stronger predictor of the sex ratio at birth of the next birth. In South Korea ten years ago and in today's Armenia, it is only after the first two births that the SRB shoots up. The increase is especially impressive in Armenia where the SRB reaches 170 for female births at parity three or higher. But in China, the impact of the fertility restrictions is already reflected after the first birth. In several Chinese provinces, the sex ratio of the second-order births even exceeds 160. Of late, the SRB among first births has also increased in some countries such as Viet Nam or China. Prenatal sex selection affecting first-order births has potentially large consequences, since first births account for more than half of all births when fertility is below replacement level.

We have already hinted at the extent of regional differences in China and India. This is also true in Vietnam and this appears mostly related to the speed of fertility decline and to regional differences in kinship systems and gender attitudes. But disaggregated data have also highlighted other determinants of variations in the sex ratio at birth, such as ethnic, religious, or rural-urban differentials. Of great relevance is also the extent of variations by socio-economic status. In India and in Vietnam, the link is for instance clearly positive, with birth masculinity close to a normal level of 105 among the poorest households and higher levels observed among richest households. Higher

education and better standard of living are almost inevitably linked to higher SRB, a phenomenon at odds with the beneficial effects usually attributed to social and economic development. Poverty seems to curb the spread of sex selection through higher fertility and poor access to modern technology

1.2 Why prenatal sex selection?

We have briefly described some of the demographic aspects of sex imbalances, leaving unanswered the question of its origin and underlying causes. Local studies point to the large array of potential drivers and determinants of the gender bias. But on the whole, what they suggest is that sex selection is firstly an adaptive behavior for avoiding births of the unwanted sex. It represents a rational strategy coming as a response to inherited cultural constraints and modern opportunities. In no way should it be construed as an archaic behavior fueled by superstitions. The fact that the more educated strata of society have been at the forefront of sex selection is indeed a clear indicator of its "modernist" contents.

Sex selection is often interpreted in narrow contexts and national or regional studies are usually dominated by "local narratives", in which cultural, economic or political circumstances are given precedence. Explanations such as the dowry inflation in India, the family planning regulations in China, war and economic crisis in the South Caucasus, or Confucian patriarchal norms in East Asia are usually put forward. Yet, they fail to account for the near simultaneous emergence of sex selection in countries scattered around the world. On the contrary, there are obvious social and demographic commonalities from Korea to Albania susceptible to account for the recent rise in the proportion of male births. The three specific preconditions for sex selection have already been identified:

1. Sex selection should be *feasible*. Parents require access to acceptable and efficient methods to alter the random, biological distribution of children by sex.
2. Sex selection should be *advantageous*. Parents will resort to sex selection only when they perceive clear benefits in having boys rather than girls.
3. Sex selection should be *necessary*. Small-family norm represents a necessary precondition for sex selection, otherwise parents would simply have other births in order to achieve their gender objectives.

These conditions can be translated into a simple framework: parents have to be *able* (first condition), *ready* (second condition) and *compelled* (third condition) to resort to sex selection. The first precondition corresponds to a rather straightforward supply factor: availability of enabling technology is an indispensable ingredient for adequate sex selection. This entails many independent conditions, such as the effectiveness of available methods, their cost and accessibility, as well as the legal environment. Methods also need to be socially acceptable, as specific techniques such as infanticide or abortion may be considered objectionable for ethical reasons. Sex preference is nothing new, and all societies have devised ways to preselect the sex of pregnancies, ranging from prenatal folk techniques based on calendar or diets and on ritual and religious formulas, to cruder forms of postnatal infanticide or abandonment. There was, however, a revolution in discriminatory techniques, heralded by contraception that allowed parents to stop childbearing once the desired

sex composition was reached (the so-called "stopping rules"), but brought to its climax by prenatal sex selection and access to abortion. The introduction of new reproductive technologies from the 1980s, the spread of effective contraception, and the liberalization of abortion where it was previously illegal, represent therefore key milestones in this evolution. Sex selection technologies are still continuously improving, with new methods available to influence the sex before conception or to diagnose the sex of the fetus earlier during pregnancies.

The second precondition corresponds to the demand factor and to the various facets of son preference. Sex selection and the birth of male children should carry distinct social, cultural or economic benefits. There may be a long catalogue of criteria that make male births necessary or simply preferable across the world. Some relate to very prosaic considerations: sons require less care from their parents and may offer protection to them later, be it physical protection or economic support. In fact, sons may live with their parents, or close to them, even after marriage and provide all kinds of support, when daughters are to be married off to other families. Men may work on the family land or in the family business, they may earn more through migration or local employment than women may, they may even support economically their parents until their death in an environment characterized by the absence of social security and pensions. In addition to worldly benefits, many traditional settings insist on the role of sons for the after-life of their parents, be it in terms of spiritual salvation or family honor. Daughters appear to have none of these capacities. But son preference, even when it seems to be culturally endogenous, is exposed to social transformations and to changing gender relations and therefore, far from fixed.

The last precondition corresponds to the exacerbating effect of fertility decline on gender preference: people will opt for sex selection, because they want to avoid additional, unnecessary births of girls. If they followed a more flexible fertility system, they would simply wait until they get a son, but low fertility acts today as a "squeeze factor", forcing parents to make serious choices when they decide about a subsequent pregnancy. By increasing the marginal cost of additional children, the small-family norm compels parents to limit the maximum size of their family. Birth control regulations in countries like China have added an additional constraint to the childbearing strategies of parents. But left to biological chance, an increasing proportion of couples would risk remaining sonless without active prenatal sex selection. On average, about one out of four couples will have no son when the fertility level is of two children per woman. In the past, the percentage of women without male progeny was negligible, especially when they were ready to have additional births to get a boy.⁴

These three conditions are indispensable for prenatal sex selection. They operate like "intermediate variables" through which any social factors influencing prenatal sex selection must operate. Each of them may be in turn influenced by other factors such as kinship systems, education, ethnicity or economic development. It is important for analytical purposes to conceive each factor as independent of the other, even when they are frequently associated. In spite of the stress sometimes put on new technologies or birth control, often blamed for prenatal discrimination, the intensity of gender preferences biased towards male progeny is the central factor. This can be seen for instance in most of Europe where low fertility and large access to modern reproductive technologies has not

⁴ It takes on average two pregnancies to ensure the birth of one boy. This also applies to families who have had two daughters in a row and who still want to have a son.

led to sex ratio distortions simply because there is no strong gender preference. This also suggests that this is one of the most effective ways in which sex selection is going to vanish in the future.

1.3 The socio-economic development in Albania

One cannot analyze the socio-economic context of Albania today, without the perspective of Communism-inheritance. Any knowledge of the communist past will help us understand the present and project the future of the country. In this respect we focus on the socio-economic development of Albania in two periods: the period under communism, 1950-1990 and the period of socio-economic transition, 1990 present.

1.3.1 Socio-economic development under communism

In many ways Albania from 1950 to 1990 represents an extreme version of the Communist mode of development. Economic growth was limited in comparison with the market economies of Europe, but significant advances were made on the social agendas of health care, education and social security. However, even compared with the rest of Communist Eastern Europe, Albania stands out as having a unique developmental history. Economic policy was more thoroughly Stalinist in its orientation than that of the Soviet Union itself. In particular, the collectivization of the economy was pursued more completely in Albania than anywhere else. In effect, private property was all but abolished (Sjoberg, 1989).

Moreover, collectivization was just one part of a wider process whereby the state took control of all aspects of life; education, health and social security, as well as food supply, became prerogatives of the state. Albania also manifested a particularly thorough version of Marxism in its policy on income distribution. Throughout most of the Communist period the highest income allowed was only 2.5 times the lowest, and in the 1970s this differential was reduced to less than two (Bollano 1984). The economic power of the state was matched by its total control of political life.

The changes in the agricultural sector were of particular significance in Albania, as the country remained predominantly rural and agrarian throughout the Communist era. In 1989 census, for example, 64 percent of the population was still classified as rural, with agriculture the overwhelmingly dominant economic activity. As late as 1989, over half the labor force was still in agriculture, in spite of the fact that investment had greatly favored heavy industry throughout the Communist period (Hall 1994, Schnytzer 1982). The industrialization in itself was slow, limited and focused on producing low-quality import-substituting items. Thus, even at the end of the era of Communist rule, Albania remained a poor and mostly rural country.

Estimates of Albania's GNP per head made in the period immediately following the collapse of Communism varied, with conventional GNP sometimes put as low as \$380 per head, and PPP estimates as high as \$3,500. The most authoritative source on internationally comparable long-run estimates (Maddison, 1995) puts Albania's GDP per head in 1950 at \$1,007, while the 1990 figure is \$2,500. These must be viewed as very approximate, but some idea of the low level of development they imply is indicated by the fact that the 1950 figure is lower than most western European countries had attained in 1820, when Maddison's survey begins, while the 1990 figure is comparable to values for other southern European countries in the 1910s and 1920s.

In sum, whilst it is impossible to give a precise specification of the level of economic development achieved under Communism, it is certain that Albania remained by some way the poorest and least-developed economy in Europe throughout the communist regime. However, while the economic record of the Communist government was unquestionably poor, and the political repression immense, the improvements brought about in the social agenda of development were considerable, especially in the areas of health and education.

Health Care

In common with other Communist countries, Albanian government gave high priority to improving health. In doing so they started from an extremely low base of development, as health and other social conditions, both before and immediately after World War II, were dire. Infectious diseases, especially tuberculosis and gastro-enteric conditions were widespread and malaria was endemic. In the 1930s up to 58 percent of children in Albanian cities were diagnosed as being infected with the malaria parasite. In 1938, the last pre-Communist year for which relevant statistics exist, only 102 Albanians were qualified as medical doctors and the number of physicians (including dentists) stood at 1.1 per 10,000 of population. At the same time there was less than one hospital bed per 1,000 people and health expenditure amounted to only one percent of the government budget. A wide-ranging social insurance and medical scheme was introduced in 1947 under which most medical treatment was free, although some medicines were still charged for. Legislation was also introduced in the late 1940s to help improve maternal and child health as well as to improve sanitary conditions and the treatment of infectious diseases.

In spite of the weaknesses that the new health system had, the initial success of the system was dramatic, with a marked reduction in mortality during the 1950s and 1960s. By 1980, although still consuming about five percent of the state budget, the number of physicians per head had grown to 16.8 per 10,000, and hospital beds had increased to 6.5 per 1,000. A policy of directing resources to many of the more remote areas of the country was also followed, so that by 1971 every village was said to have a health-centre and more than 80 percent of medical institutions were located in the villages. This was essential in order to have a marked impact on a population that was still overwhelmingly rural.

Within the general efforts to improve health care, as mandated by the constitution, special importance was given to maternal and infant and child health. Since the infant mortality rate in 1950 was 143 per 1000, such a focus was clearly required. Maternal and child health-centres were established in both urban and rural areas and ante-natal care made widely available for the first time. The proportion of deliveries in hospital rose from 0.4 percent of births in 1938 (when there was only one maternity hospital in the country) to 36 percent in 1960, 76 percent in 1976 and over 99 percent in 1982. Vaccination rates also reached high levels; in 1990 the proportion of children immunized with the polio, measles and DTP vaccines was over 90 percent. Relatively generous maternity leave arrangements, along with subsidized child care and kindergarten facilities, completed the picture. The result of these changes was a rapid fall in mortality. Between 1950 and 1990 life expectancy at birth rose from barely above 50 to over 70, while infant mortality fell from 143 per 1000 to 45 per 1000 over the same period (Gjonça 2001).

While the health services clearly expanded substantially, the quality of service is another matter. Albania's record on maternal and infant mortality in many respects lagged behind success at other

ages, so that the quality of service in these specifically targeted groups cannot have reached expectations. Nevertheless, the achievements in primary health care were undoubtedly considerable and sufficient to regard Albania as an example of the “good health at low cost” that is often advocated as a target for poor developing countries and forms a significant backdrop to mortality change (Gjonça et al. 1997).

Education

Given the significance attached to education in most studies of the determinants of demographic transition, it is clearly important to examine Albania's record in this respect. Immediately upon the seizure of power in 1945, the Communist regime gave high priority to opening schools and re-organizing the whole education system along ideologically-determined lines. As with health, the prevailing educational situation was one of almost medieval conditions. In 1938 there were only 20 secondary schools in the country, with a total enrolment of 5,700 students. At the end of World War II, it is estimated that more than 80 percent of adults were illiterate, 95 percent in some rural areas. Female illiteracy was almost universal in rural areas, and the norm even in the cities. The first priority of the new educational system, therefore, was to eliminate illiteracy as far as possible. The ‘struggle’ against illiteracy was based on the Educational Reform Law of 1946. This introduced the first national system of education, with pre-school up to age five, a seven-year primary school curriculum, and secondary schooling for four years. Primary school attendance was made compulsory. (Keefe et al. 1971).

Further expansion of the school system began in 1950 with an increase in secondary schooling, again along Soviet lines. By 1956 illiteracy was deemed to have been eliminated, and a steady expansion of secondary and tertiary facilities took place through the 1960s and 1970s. However, the country's success in increasing enrolments was not matched by the quality of its education. As was the case with the health care system, the quality of service provision clearly left much to be desired. In addition to the large element of compulsory ideological study, little more than brain-washing, schools suffered from overcrowding and a severe lack of materials and book, whilst extremely strict censorship and the lack of personal freedom only exacerbated the situation. Nevertheless, even the most severe critics of the Communist regime, acknowledged that “Albania's single most impressive post-war achievement was the expansion of its educational facilities” (Logoreci, 1977). Moreover, in a traditionally patriarchal and strongly male-dominated society, the provision of equal educational access to boys and girls must have been a revolutionary change. The potential impact of changing gender roles is clearly also a matter of wide significance, and is examined in detail in section 1.4.

1.3.2 Socio-economic development during the transition

In the past two decades, Albania has pursued an aggressive reform agenda towards a market economy. After the changes in economic and social-political system, following a period of growth in the early 1990s, interrupted by a series of political and economic crises, Albanian annual GDP growth rate has been one of the highest in Europe varying from 4.7 to 8 percent (World Bank 2007). Since 1997 annual real GDP growth rate started to increase. From 2003 to 2006 the annual average real GDP growth rate has been 5.5 per cent (World Bank 2007). However, the recent years have shown a slow-down of the GDP growth to 3.0percent in 2009, and less than 3percent in 2010 and 2011. Despite these achievements, living standards remain among the lowest in Europe. The transition from a planned economy to a market economy has been characterized by a re-allocation of

resources with a minor role of public sector. The private sector has only partially compensated for the loss of jobs in the public sector. This means that unemployment has been high from start during the whole period, reaching figures of 40 to 50 percent in specific years. The recent figures show an unemployment rate of about 14 percent (2008-2009). Females comprised 45 percent of them. Unemployment in particular was high in the immediate years after the collapse of communism which was associated with a total collapse of the industry. Redundancies were made across all sectors of economy, with females affected much more than males. Once unemployed or being made redundant, women found it hard to come back in the labour-market, in particular in a traditional society like Albania wherein most cases they decided to remain at home.

At the end of the 1990s, Albania was among the poorest countries in Europe. The share of the population living below the national poverty line, based on 2002 LSMS data, was estimated at 25.4 per cent. Poverty was found to be significantly higher in rural areas, with a poverty headcount 66 per cent higher than in Tirana and 50 per cent higher than in other urban areas. The distribution of poverty is also disproportionately rural, as 68 per cent of the poor were in rural areas, against 32 per cent in urban areas (as compared to a total urban population of 42 per cent). The number of poor is, as expected, disproportionately concentrated in the mountainous North-Eastern part of the country (21 per cent of the poor, 12 per cent of the population) (INSTAT, 2004b).

This widespread poverty across Albanian households has acted as a push factor for domestic and international migration during this period. Reduction of poverty has therefore become of significant importance for Albania, and some progress was recorded during 2000s. The fraction of the population below the poverty line fell from 25.4 to 18.5 percent between 2002 and 2005 due to strong economic growth and large inflows of remittances. However, inequalities increased during this period. As a result the gap in poverty rates between urban and rural areas widened in absolute and relative terms (World Bank, 2007).

Education

While Albania's economy continued growing, its total government expenditure on social services is the lowest in southeastern Europe with only 3.5 percent of its budget allocated to education and about 3.0 percent to health in 2010. The country has seen some improvements in access to essential services, mainly education and health, but quality problems persist.

Some progress has been recorded in achieving universal primary school enrolment. The net primary school enrolment ratio is 94 percent (UNICEF, 2007), which is above average for the region. Worryingly, this figure has been on the decline in the recent years. While enrolment rates are high for primary education, the secondary enrolment rates are among the lowest in the region, with a secondary school rate of 74 percent.

One of the significant successes during this period in the education system is the realization of equity among men and women. The country has achieved gender parity in primary education, with a Gender Parity Index (GPI) of 1.0. Girls' participation in education remains high throughout upper secondary education (0.98), but more importantly 50 percent more girls enroll in university than boys. The bigger gaps in educational opportunity are based on geographic location and economic status. The rates are lower in rural areas, in the poorest north east and among the poorest

households. These disparities resemble the economic development and health inequalities in the society.

Health care

While the health of the nation has been identified as a priority sector by most governments during the transition, the health care system in Albania today, as well as the country as a whole, is in a state of continuous "reform", at a time when it still feels weak and exhausted by the previous regime and the lack of investment. The many problems faced by the health care have resulted in declining quality of care. Historically, Albania's health care system has been based on the principles of free access, wide coverage of the population, and financing via general taxation. Budgetary spending on health was 3.1 percent in 2001, and has not changed much to the present day. This represents one of the lowest in the region. Because of a lack of funds to obtain services, the health care sector does not have a full coverage of the population and it also uses informal payments, which is wide spread in the country.

The aim of the health reform continues to be the decentralization of the health care, based on strengthening the role of local government. Despite these efforts, this reform has not yet had a significant impact on the health care system - due both to the lack of local professional capacity and inadequate resource allocation. The delivery of the health care is still a mixture, with local government in charge to deliver the primary health care and public health services. In rural areas, most services are delivered by the local health-centre or ambulatory centre. In urban areas, large polyclinics provide outpatient specialized care and also are the first point of contact with medical care. General hospitals at the district level remain publicly owned, consequently poorly financed. Tertiary care remains very limited and is located mainly in the capital, Tirana. There is a boom of the private sector, in the past five years, but the costs are not competitive and only a small fraction of the population can afford it.

This situation has increased dramatically the inequality in health with the poor, rural and northeast populations reporting worst health compared to the far richer Tirana, South East and urban populations. While the general public still en large uses the public system (more than three quarters in 2002, about half of the population report that they find it difficult to cope with formal and informal payments for health care (INSTAT, 2004b).

On one hand, the total number of staff employed in Albanian health services as a whole is comparable with that of wealthier Western European countries. The ratio for the population as a whole is 1:119. The distribution of professionals is adequate, with the exception of the visible imbalance of specialized doctors compared to GPs. The distribution pattern of staff among regions creates a significant inequity in the current provision of services, with staff-to-population ratios varying by plus or minus 50 percent between districts.

Saying that, Albanians continued to improve their health during the transitional period with life expectancy at birth for males, increasing to 73 years and females 79.8 years by 2005. More importantly infant and child mortality rates have come down to levels of 18 and 4 deaths per thousand respectively (ARHS 2010). There are signs of increased diseases of affluence, such as diabetes and hypertension, in particular at young adult ages (ARHS 2010). Abortion continues to be very high with official statistics showing values between 250 and 290 per thousand live births. More

importantly the figures vary from one source to the other and a large part of abortion might not be reported. To sum up Albanians are continuing to have a "Good Health", but most likely in the future this will come to a "very high cost", at macro and micro level.

1.4 The gender and family context in Albania

Of all the changes brought about by Communist rule in Albania, arguably the most dramatic and significant for demographic behaviour is the revolution that took place in gender roles. As Senturia (1996) puts it, with more than a hint of understatement, "Women in Albania appear to have undergone a significant status transformation in the last 50 years." In fact, the scale of this transformation can scarcely be exaggerated. As with all other demographic behaviour, the Albanian tendency to obscure the recognized patterns appears in the family and gender roles, as with mortality and fertility patterns (Gjonça, 2001, Gjonça et al, 2008). As early as 1918, the first partial census conducted from the Austro-Hungarian empire in the north east of the Country, the data suggest that while patriarchal structures in the family existed, they were not as uniform as one would have expected (Gruber and Pichler, 2002). In terms of family composition the 1918 census revealed that while the patrilocal and patrilineal patterns of household and family organizations existed in the northern part of Albania, nuclear and extended family were the norm in other parts of the country.

Albania at the time of the Communist take-over was a patrilineal and patriarchal society governed by feudal laws and traditions, with male superiority manifest in every aspect of life. All property and civic rights were vested in men. The majority of marriages were arranged, and women lacked the right of divorce whereas a husband could easily divorce his wife. One acceptable ground for divorce, for example, was the failure of the wife to bear a male child. In short, women and girls in traditional Albania lacked almost all basic human rights. In the words of Swire (1937), 'They were betrothed by their fathers in infancy and sometimes before birth ... their price was a heavy one for they were the drudges, the breeding stock, the beasts of burden.'

The superiority of men over women was reflected in a strong preference for male children, with a traditional saying that "even the beams of the house shed tears when a girl is born" (Prifti 1978). This preference was rooted in the patrilineal nature of familial relations. Male offspring remained in their parents' household long after childhood and often cohabited after their own marriage in an extended household arrangement. A daughter, however, left her natal home at marriage, becoming part of her husband's family. The contribution of a daughter to her family of origin, therefore, was short lived. Women's status was especially low in Northern Albania where the entire social and economic structure was governed by the Kanun of Lek Dukagjini, a set of traditionally unwritten laws, based on patriarchy and handed down from the Middle Ages. This set of laws gave males unquestioned authority over females, with greatest authority, literally of life and death, vested in the male head of each family. 'The husband is entitled to beat his wife and to tie her up in chains when she defies his word and orders ... The father is entitled to beat, tie in chains, imprison or kill his son or daughter ... The wife is obliged to kneel in obeisance to her husband.' Quoted in Ash (1974). While the Kanun was especially enforced in the mountains of Northern Albania, patriarchy was buttressed elsewhere by traditional religious practice (Prifti 1978).

The quantifiable consequences of these sexist practices were marked. In 1945, 95 percent of women were illiterate, and they played almost no role in public life or employment outside the home. As late as 1950, female life expectancy at birth (51.3) was lower than that for males (51.9). Even infant mortality showed a slight female disadvantage (144 versus 142), a very unusual situation in the demographic record of any society, as male disadvantage in the first year of life is virtually universal. In short, there are few, if any, documented cases of lower female status in Europe than that seen in traditional Albania.

From the very beginning of Communist rule, the party leadership recognized the importance of changing women's status. In November 1944, even before the end of World War II, the party issued a declaration guaranteeing women equal rights with men. Once having secured power, the Communists began to dismantle the planks of patriarchy in order to remove any alternative sources of authority or legitimacy to the party. Their achievements to this end were considerable. The legal basis for equality was established with a new constitution, and the new educational and health systems created by the Communists were established on as egalitarian a basis as was possible in so male-dominated an environment. Primary school enrolments show almost equal sex ratios from early in the Communist period, though it took longer to come close to equality in secondary and tertiary education. Possibly even more of a challenge to tradition was the expansion of female employment outside the home, which rose from the minimal levels in the 1930s to a situation in 1970 in which women made up 45 percent of the labour force.

In so far as sex-specific mortality patterns can reveal the impact of these moves towards equality, then they can be judged a success. From being slightly worse than male values in 1950, both life expectancy and infant mortality for females improved faster than for males. By 1990 female life expectancy (73.9) was six years longer than for males (67.9), while female infant mortality was 43 per 1000 compared with the male rate of 47.

However, while Communist success on "The road of the emancipation of the Albanian woman" was significant in terms of educational and labour force participation, in private Albanian domestic life remained patriarchal to a large degree. Furthermore, in spite of general equality in economic activity, women mostly remained in subordinate roles and made up a disproportionate share of workers in low paid and low status occupations such as agriculture, trade and the social sectors of education and health. Women also remained under-represented in the machinery of power; in 1967 they made up just 12 percent of party members. In sum, while we must be careful not to exaggerate the extent of the improved status of women and girls in Albania, it appears reasonable to judge that Communist rule transformed their position in ways that are often seen as being highly influential on fertility.

The collapse of communism brought back certain society changes and transformation which would affect the women's role not only in society but also in the family. While the move towards market economy is associated with the emancipation of the society in general and women in particular, it has to be said that the initial changes were negative towards this equal society in Albania. First and foremost, the collapse of communism brought about two significant changes: a) in the economy, the collapse of industry brought back large unemployment. Women were the first to be affected by being made redundant and the female excess in unemployment is present even today. Thus, on average the unemployment of women is 50 percent higher than that of males, and has been constant since 1998 to the present day (SRC INSTAT, 2007). Overall this reduces the decision making power of

females in the household, as the society was moving back towards its past, with “man being the breadwinner in the household”. b) Most importantly the collapse of communism was associated with a “return” of the traditional norms and values.

The unspoken laws of the Kanun of Lek Dukagjini were reinforced not just in the north but in other parts of the country. This was mainly due to the dysfunction of the state institutions and the unstable political and economic situation in the country. This had significant consequences for the society as a whole, but women were affected more than men. Women in the early stages of this transition were facing hardship in the family due to the lack of economic power, as well as the enforcement of patriarchal values. The reported violence has increased dramatically (SRC, INSTAT 2006) and the divorce rate increased too, during the transition. Poverty was affecting more women than men as the 2002 LSMS data demonstrated (INSTAT, 2004a, 2004b.). Closely related to the sudden increase in domestic and international migrations and the collapse of government structures, the dramatic development of human trafficking in Albania was another distinct manifestation of the increased vulnerability of women during the transition period.

However, the recent years as a result of the economic and political stabilization show some positive signs. First the reinforcement of rule of law has dramatically affected the application of Kanun. We see an increase in the number of girls in the school system and in both secondary and tertiary education, girls surpass boys. It remains to be seen if this equality will be reflected in the labour market in this generation. However, sex imbalances have now become a new indicator of gender inequity, an issue on which this report intends to shed some light.

1.5 Demographic situation in Albania

When communists took over the governing of Albania at the aftermath of the 2nd World War, the country had a population of just over 1.1 million people. When communism collapsed in 1990 the population had tripled in a period of less than 45 years to 3.3 million. This is an unprecedented growth in European terms. Albania had one of the fastest demographic transitions in developed and developing countries. With a TFR of 6 children per woman in 1950, the communists found already a pro-natalist environment. Albania was a patriarchal and traditional society. From 1945 till 1990, Albania remained under an orthodox communist government. The population growth in Albania as in some other communist countries that applied Marxist ideology was seen as positively correlated with economic growth. As Misja and Vesju (1985) put it,

“The essence of the socialist law of population is the full employment and rational utilisation of all sources of labour, the ceaseless growth of the population, the ceaseless raising of the material and cultural well-being of the people.”

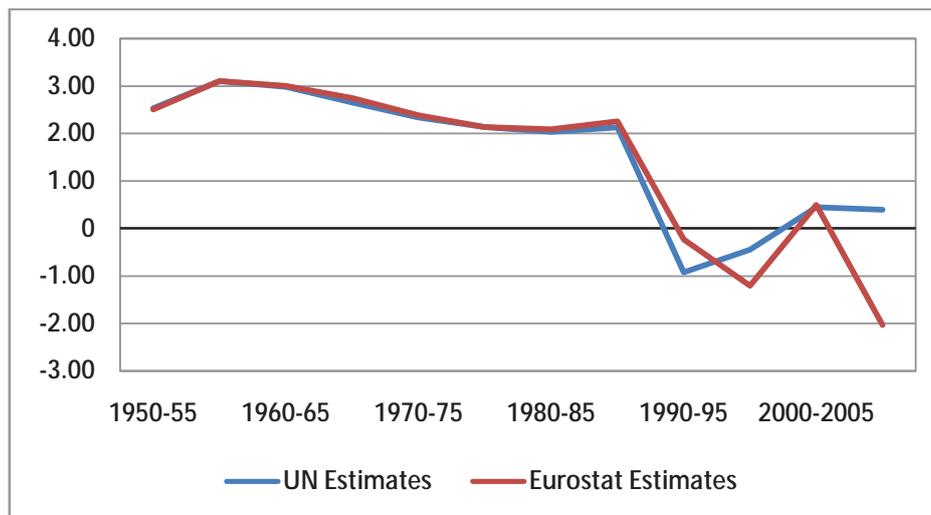
Fertility, from a high value of 7 children per woman in 1960 came down to 3 children per women in 1990 and 1.6 children per woman in 2010. Mortality improvements were similarly dramatic in pace and pattern. Life expectancy at birth improved from 51.6 years in 1950 to 70.6 years in 1990 for both sexes combined continuing to improve even during the transitional period to 76.3 years in 2005.

1.5.1 Population growth, fertility decline and abortion

The dramatic reductions in both fertility and mortality, while the country was virtually closed to migration due to the self-isolating approach of the former communist government determined a very fast population growth, as shown in Figure 1.

The growth rate reached 3.1percent during the end of the 1950s as a result of the high fertility and improved mortality, with the 1950s being important in bringing mortality down. This very high growth continued well into the 1960s with a rate of 2.9percent, falling to 2.1percent in the 1980s. With the collapse of communism the demographic situation of the country changed as well as other parts of the socio-economic aspects of development. Massive emigration at an unprecedented rate caused a reduction of the population of more than 700,000 people, about 24percent of the 1989 population in a short period of 12 years. This unprecedented emigration is the main cause of a continued negative growth in Albania during the period 1989-2001, with a negative annual growth rate of -0.32 percent. The negative population growth has continued even during the second decade, 2001-2011 (an annual growth rate of -0.9percent), causing the population to reduce from 3 million to 2.8 million (the latest census data for 2011).

Figure 1: Annual Population Growth rate in Albania, 1950-2010

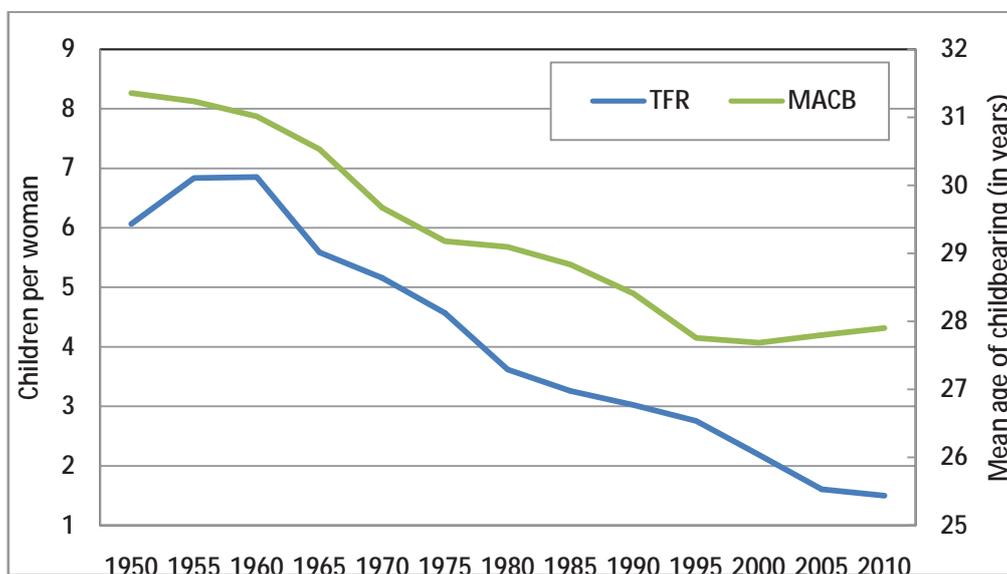


While both fertility and mortality continue to decline even in the 2010s, there is no sign that emigration has stopped. This will continue to lead to a negative population growth of the country for a third decade in a row. The following sections analyze the fertility, mortality and migration change in Albania and their relevance to the sex imbalance at birth.

The initial data on fertility level in the aftermath of World War II show that Albania had the highest fertility in Europe with an average of about six children per woman in 1950. This is no surprise as high fertility was reinforced by traditional patriarchal norms and values, which were prevalent in the Albanian society at the time. The level of fertility did not come down immediately. On the contrary it increased to an unprecedented level of 7 children per woman in 1960. This rise in fertility during the 1950s and early 1960s mirrors the experience of many European countries during the same period, with the baby boom in the mid 1960s. However, the Albanian experience was unique as in no other European country was the post-war baby boom of such a high value. An alternative interpretation of

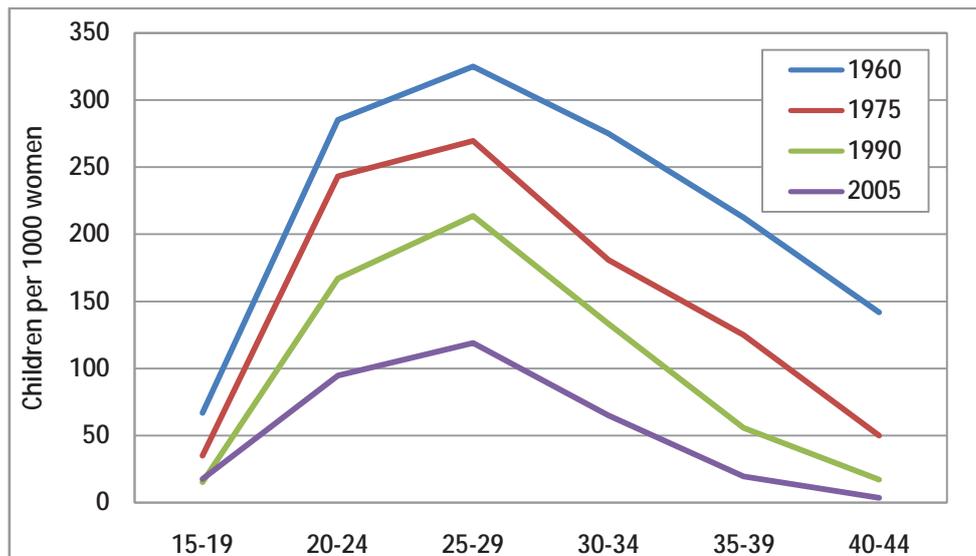
this trend is that it represents a pre-decline rise in fertility which is a widespread characteristic of fertility transition (Dyson and Murphy, 1985). The 1970s saw a steady decline in fertility, reaching just over three children per woman in 1990 (see Error! Not a valid bookmark self-reference.). During the transition period in the 1990s, fertility continued to decline and both vital statistics and survey data confirming a fertility rate at about the replacement level of 2.2 children per woman in 2000 and 1.56 in 2010 (Gjonça et al. 2008 and ADHS Report 2010). It is also important to mention here that infant mortality started declining rapidly in the 1950s. By mid 1970s it was almost half of the very high value of 143 deaths per thousands of the 1950. There is a well-established relationship between the reduction of Infant mortality and its effect in the reduction of fertility. In the Albanian case the improvement of survival in infancy was by far the most important factor explaining the decline, together with female education (Gjonça, A. et al, 2010)

Figure 2:Fertility rates (TFR) and Mean age at child-bearing (MACB) in Albania, 1950-2010



Previous research has shown that the rise in fertility in the 1950s came about from a rise in age-specific fertility rates at all ages and the increase was most marked amongst young women under the age of 30 (see Figure 3). Once fertility began to decline, the process was irreversible and over the period 1960-1990 the fertility rates fell by approximately 1.28 children per decade. While not as rapid as some of the most famous fertility declines of that era, nevertheless, the fall in fertility was substantial, especially when compared with most other countries at similar levels of economic development.

Figure 3: Age specific fertility rates in Albania, selected years, 1950-2010



Fertility trends point to a fall in completed family size from between 5-6 to around 3 children per woman. The mean age of childbearing does not fall either, a pattern similar to other countries where fertility came down dramatically. We distinguish two periods here, the period up to 1990 with the mean age at child-bearing dropping as fertility was decreasing. This was due to the fact that the change in fertility came from all ages at the same time. It is also perceived that Albania being a former communist country resembles the model of Eastern Europe where first birth is universal and at an early stage, thus keeping the mean age of childbearing relatively young. In the second period, after 1990, we see the mean age of childbearing starting to increase as fertility comes down. During this period Albania behaves more like a southern European country, similar to Italy and Spain where, while fertility comes down dramatically, we also see a postponement of first birth. The deterministic pattern to explain this change is different from the previous period as shown by previous research.

When Albania was opened in the 1990s, it came as a surprise to learn that in the intervening period, fertility had fallen to around three children per woman, despite a pro-natalist Marxist regime and in the virtual absence of contraception and abortion. Abortion in Albania was illegal until 1991 and was allowed only on medical grounds. There were some financial incentives for mothers to have children but they were not significant. However, it has to be pointed out that the cost of childbearing was very low in Albania during the communist period and this may have helped to keep the level of fertility high.

Other population policies such as the reduction of infant and maternal mortality policies had an indirect effect on fertility reduction in Albania. Despite this, the level of fertility at the end of the Communist regime was still high in comparison to the level obtained in other neighboring countries. The existence of a pro-natalist environment and the absence of the means of birth control kept the level relatively high by the end of 1980s.

Different from most other Communist states of Eastern and Central Europe that produced considerable pro-natalist propaganda and policies, population issues were given little attention in Albania. One of the few explicit statements concerning population is to be found in Albania's Communist constitution, which stated that "The State gives special protection to the interests of mother and child". In order to improve maternal and child health, medical care and prescriptions for

infants (0 - 12 months old) were free. Pregnancy leave was extended from six weeks to six months, with the woman's right to return to her job protected by law (Berxholi and Qiriazhi, 1986). The positive influences of such measures on fertility are reflected in the fact that over twenty thousand more births were recorded for the four-year period after this measure was enacted than in the previous four years (Hall, 1994). These measures, applied in a traditional society like Albania where children were already seen as beneficial, only served to reinforce the psychological base for a large number of children (Falkingham and Gjonça, 2001).

However, there were other state policies, in particular the ones that improved the social agenda in a country that had a much more significant and implicit effect on fertility in Albania. To start with, the investment in education, with particular focus on the improvement of female education was unprecedented in Albania. Female illiteracy improved from 92 percent in 1945 to less than 8 percent in 1989, and by 2002 it was less than 5 percent, similar to most developed European societies. It is well known that the improvement in female education has a significant effect directly and indirectly to the level of fertility. While interested in a full female employment, the government invested in the pre-school education system, creating a system of day-care nursing and kindergartens throughout the country. This had a double effect. On the one hand, it increased the female employment as it released them from childcare, while on the other in conjunction with other measurements it created a significant externality favouring large families. What is surprising at this stage is the fact that female education is linked with the reduction of fertility, and in particular with the reduction of female disadvantage in terms of health and mortality (detailed in session 1.5.2). But it did not affect the son preference and imbalanced sex ratios at birth. On the contrary, one could argue that it reinforced them as will be seen further on in this report.

Family Planning and abortion

Despite the value placed on mothers and children by the communist government there was however no provision for family planning. The most significant pro-natalist policy was the restriction of access to the means of fertility control. There was no contraception widely available and different from many European Communist states, abortion was prohibited by law. It was only permitted on very narrow medical grounds, making Albania's abortion law by far the most consistently restrictive in Eastern Europe (David 1970). There were also no incentives to provide any education or information with regards to the use of contraception, and in a patriarchal society, even if contraception is available, the lack of knowledge about it will on the whole restrict its use. Contraception was never prohibited, but neither was it promoted. Under Communism, Albanian women were given little choice but to procreate (Hall 1994).

More importantly there was no individual data to analyze both; the existence of knowledge and the use of family planning. Two reproductive health surveys are conducted in Albania in the post-communist period, in 2002 and 2008. Both surveys show an increase in the knowledge of modern methods of contraception, where 95 percent of women had heard of at least one modern method of contraception (ADHS Report 2010). The knowledge was higher among the married women and those who were sexually active. The difference in knowledge among men and women was not significant; however, it is worth mentioning that men were slightly more knowledgeable than women with regards to modern contraception. While the knowledge for modern use of contraception exists, it comes as a surprise that the traditional methods, such as withdrawal, were the most highly used, at

58 percent of currently married women. The percentage of women not using contraception is very high at about 31 percent. The modern methods are only used by 11 percent of married women. This is an interesting finding that shows that while the knowledge is there, the use is not widespread. As Coale (1973) explains one does not need the knowledge and the availability of the contraception, but also the acceptance of it. Most likely the instruments in place to explain the existence of universal marriage (Gjonça, 2010) can explain this as well, with patriarchal society still having an effect on the method used.

While there is no information about abortion prior to the collapse of the communist regime, with illegal abortion thought to be high, the data during the transition are not reliable. The data on induced abortion differ from one source to the other. Thus in both surveys the level of induced abortion was at 73 per 1000 live births in ARHS 2002, and in ADHS 2008 was at about 90 abortions per 1000 live births. It is believed that this is very low compared to the official figures of 200 per 1000 live births in 2002 and 272 in 2007. This is due to the under reporting in Albania as a result of resistance coming from the existence of a patriarchal society. There are several reasons that might explain this difference. One reason might be the under reporting of unwanted pregnancies that end in abortion. Another might be the under reporting of illegal abortion outside the medical system or in the private clinics, and another might be the tendency to classify induced abortion as a spontaneous one or as a miscarriage. It is difficult to figure out a trend in the abortion rate where there is such an inconsistency in the data. However, what surprises us is the fact that while fertility has come down and the knowledge of contraception has increased the rate of abortion has risen based on the survey data. This might be helpful in explaining the sex selection at birth in the transitional period.

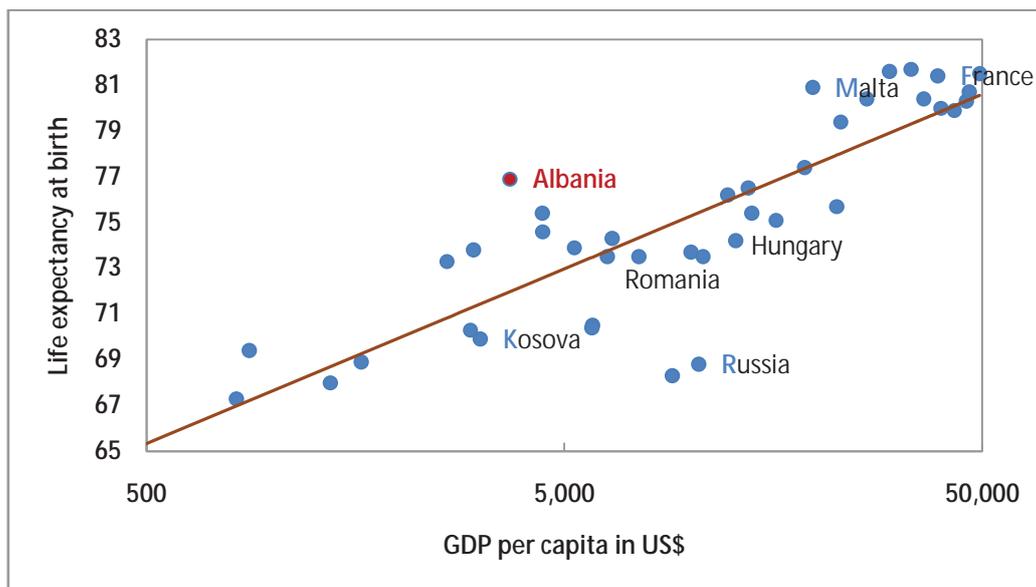
The period after the collapse of communism was characterized by the introduction of many new laws and policies in order to regulate the transition to a more market orientated and modern society. In this context population policies were not to escape. One of the first changes in legislation that Albanian Government introduced in 1991 was the legalization of abortion, which created the conditions for an upsurge in the number of abortion from close to zero to about 200 per thousand live birth in 2002. The law has gone through a number of changes and in 1995 became a comprehensive legislation (MoH, 1995). Under the law, abortion can be performed through the twelve weeks of pregnancy and is granted on different grounds be they medical, psychological or socio-economic. Abortion can be granted to save the life of a woman, to preserve physical and mental health, rape or incest, foetal impairment, and economic and social reasons. Contraception became widely available but the level of information and education for its use are still very low.

During the 1990s it is clear that we have a new setting in Albania with regards to fertility change; the existence of means of birth control which were not present before 1990. The contrast between the traditional values of a patriarchal society on one side, and the more modern values implied by the family planning policies that have just started, are reflected in the use of the means of birth control. While abortion has increased rapidly, the use of modern contraception is still very low in the country, due to lack of knowledge about it. The sex education is just introduced in the secondary system, but it is represented by only a one-off lecture, and applied only in the secondary school system in the main cities. In a society where abortion rate is very high, and in a traditional setting in terms of values and norms, one expects an imbalanced sex ratio at birth as a result of selective abortion. It is not by chance that the SRB values have reached figures of 114 during the period after the communism collapsed, and higher levels in some prefectures.

1.5.2 Mortality changes and the gender bias

When Albania was first open to the West and data were made available in the 1990s, it was quite a surprise to find out that Albanians had a long life expectancy at birth in the conditions of the poorest country in Europe (Gjonça, et al. 1997). Research showed that Albanians lived longer for their standard of living and from what their country's economic performance would predict. Albania was described as achieving "good health at a very low cost", an experience which was seen in other countries, such as Sri Lanka, China, Indian State of Kerala, Cuba and Costa Rica in the 1980s (Caldwell, 1986). This was called the first Albanian mortality paradox (Gjonça and Bobak, 1997) and it was explained with a deterministic pattern that included a wide range of variables. What is interesting is that this mortality paradox continues to the present day with Albania overachieving in terms of life expectancy for their income per capita performance (Figure 4). Even by 2005 Albania has a much higher life expectancy at birth than that which its GDP per capita would predict. Albania has a higher life expectancy compared to its neighboring countries of Bosnia-Herzegovina, Serbia, Kosovo and Macedonia, or far richer nations than her, such as other Eastern European countries of Hungary, Bulgaria, Czech Republic and many more.

Figure 4: Relationship between economic performance and mortality in selected countries, 2005



Different explanations were put forward in explaining this achievement. On one side the investment of communist regime in health in the 1950s brought down infant mortality dramatically in a very short period of time (see Figure 6). The 1950s were very important as the main killers of that time such as malaria and tuberculosis came down to insignificant prevalence in the 1960s. This investment in primary health care with particular focus on infant and child mortality improved life expectancy at birth in Albania by almost 10 years from 1950-1990.

Another important factor that helped Albanians achieve good health at low cost was the investment in social agenda, with particular focus female education. As we know from the literature, female education is important not just for the health of the woman herself, but also for the health of her

children and overall of her whole family. The literacy rate improved dramatically in a short period of time and the compulsory primary education became the norm. By 1980s Albania had similar indicators on education to most of the eastern and western countries with much better economic development. It was not just female education that helped, but also the full female employment that gave women some autonomy in the decision making in their households. A health system which was free for all and universally accessed by all played its role in the improvements of Albanians during the communist regime.

Another very important factor which is the one that puts Albania in a different place to other former communist countries is its Mediterranean cultural and life style that is a major determinant of very low adult mortality which we find in Albania from very early on in the 1960s. While Albania has progressed significantly in the past 70 years it has to be emphasized that it still has a relatively high infant and child mortality compared to its low overall and adult mortality. This, which was called the second Albanian paradox in the literature (Gjonça, 2001), is an indicator that while Albania achieved a good health at low cost, the conditions of poverty and low income are still prevalent in its mortality pattern, with relatively high infant and child mortality and high incidence of diseases of poverty such as respiratory diseases.

Figure 5: Changes in life expectancy at birth, Albania 1950-2005

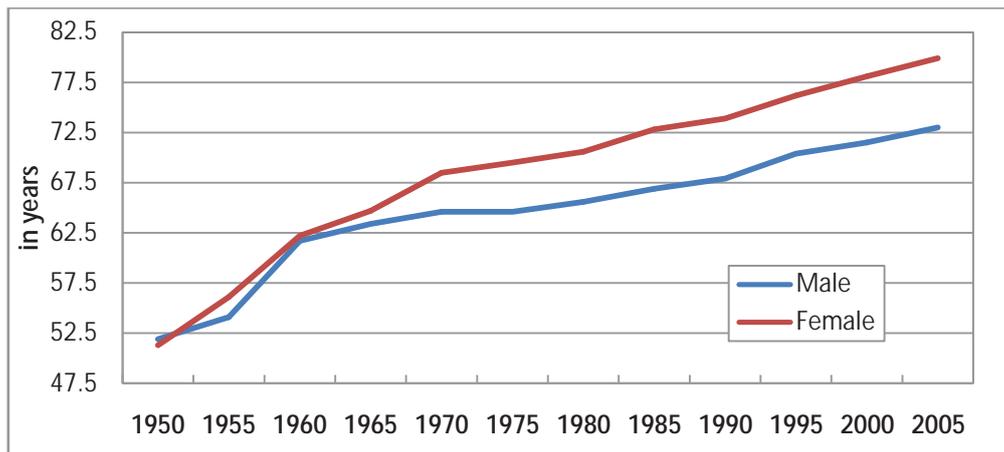
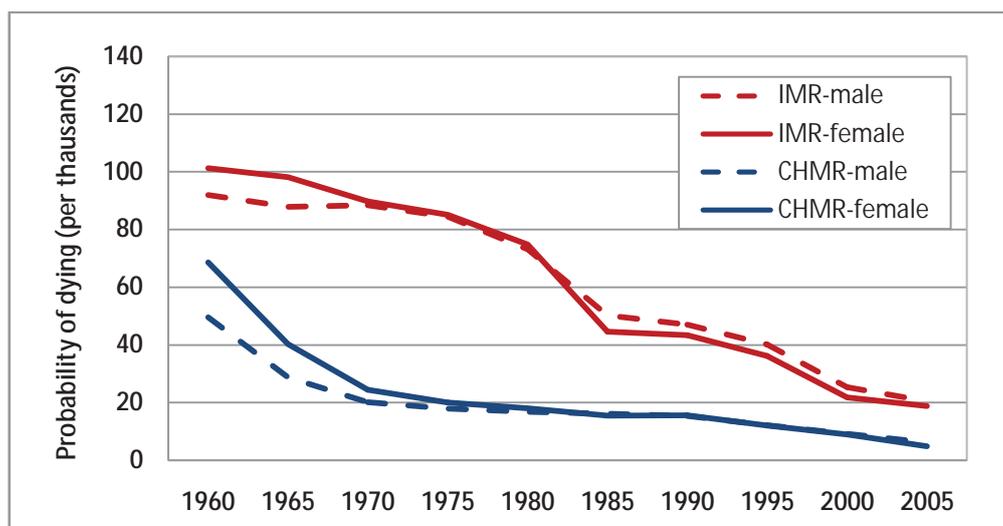


Figure 6: Changes in Infant and child mortality, 1960-2005

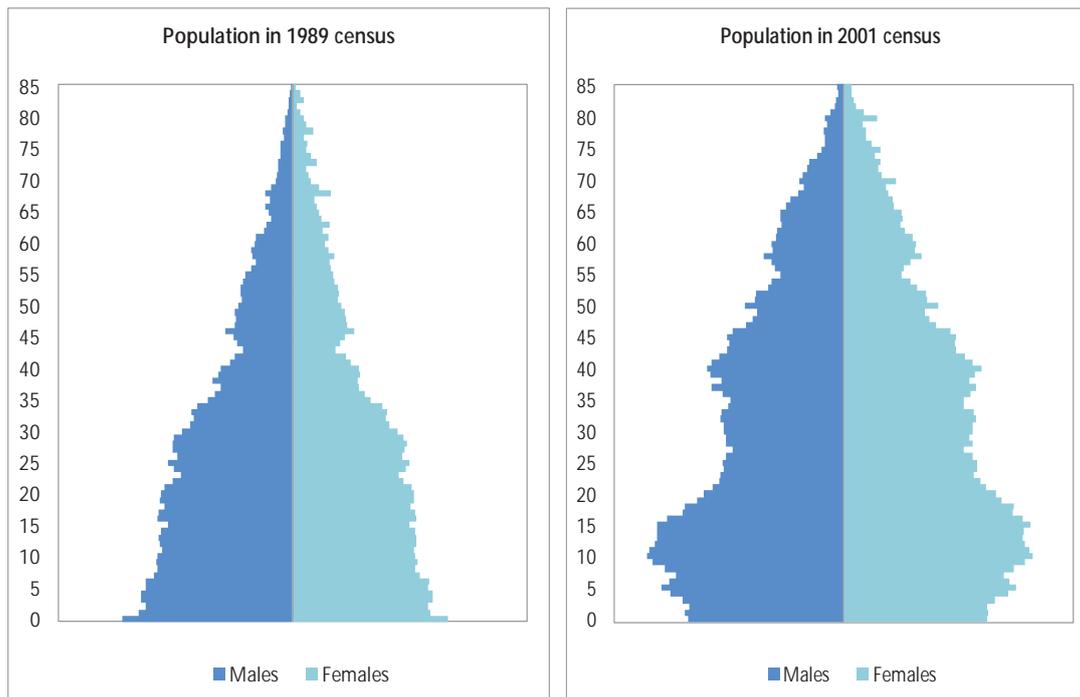


Another very important aspect of Albanian mortality pattern, relevant to gender biases in demographic behavior, is its unusual gender differences in mortality, disfavoring females compared to males. Similar to fertility pattern in terms of mortality the patriarchal society, favoring males in terms of care and nutrition determines the excess female mortality which as the data show was prevalent until the 1970s in Albania (see Figure 5 and Figure 6). It is usually a difference of five years of life expectancy at birth between males and females in developed countries. This difference is not present in Albanian mortality pattern until 1970s. Life expectancy at birth in 1950 for males was even higher than that of females. This was mainly determined by the very high infant and child mortality values for females compared to males. When one looks at the infant and child mortality differences, it is not until the 1970s that the trend changed direction with mortality of males at those age groups being higher than that of females. This is expected in a traditional society, where the same development ideas shaped both the changes in fertility as those to mortality by changing the values of the society from a patriarchal to a more modern and developed society. This gender mortality bias is found in other countries that have had sex ratio imbalances a few decades before those ratios have been evidenced. India and a few other Asian countries had similar experiences.

1.5.3 International and internal migration

The Albanian population has undergone profound transformation during the past 20 years since communism collapsed. As previously mentioned the main determinant of population change during this period has been migration of the population, at both country level (emigration) and local level (internal migration). During the 12 year period from 1989 to 2001 about one quarter of Albanian population has emigrated abroad (24 percent). This emigration is by far the most dramatic Europe has known in its modern history. This process took place during a period of economic and political unrest for Albania in the 1990s, with many young Albanians leaving their country. Its impact is clearly visible in the changing shapes of Albania's age pyramids from 1989 to 2001 (Figure 7).

Figure 7: Population age structure of Albania based on 1989 and 2001 censuses



This phenomenon has continued to the present day with the new census data showing a continuous shrink of the Albanian population from 3.3 million in 1989 to 3 million in 2001 and 2.8 million in 2011 (INSTAT, 2002, 2011), believed to have been a consequence of the continued emigration flows. Unfortunately the data of 2011 census have not been available to analyze the second period of emigration in details and this report makes use only of the data from the previous census in 2001.

It is obvious that this flow of out-migrants, taking place in a very short period of time, has had an effect on the absolute numbers of children born. However, it is difficult to judge if this large emigration has had an effect on the level of fertility. Previous research has shown that the reduction in fertility has been a result of people's decision to reduce fertility and not just an artifact of the increased emigration. However, aggregate data sources give some indication as to what might have happened. In the early years, migration was initially male dominated and thereby reduced the potential for childbearing due to the lack of matching partners. This might have affected the level of fertility initially, at least in the early years of the 1990s. Later, however, the gender difference became much more balanced, and it is believed that by the late 1990s this effect became somehow negligible. Another issue to consider here is that migration is usually selective in terms of the individual education, place of residence, and work history. However, the census data showed that in Albania emigration has affected all areas of the country, people with different levels of education, and people from different social groups (INSTAT 2004c).

Another very significant issue of migration is its effect on the matching patterns for marriage and fertility during the reproductive years. In a country where sex ratio at births have been skewed for a long period of time with a male advantage the population ends up with a distorted sex imbalance in the reproductive ages, with more males than females, as the cases of South Korea, China and India reveal. One would believe that this has been the case in Albania if the sex ratios at birth have been imbalanced for a while and the level of fertility has been low. During the 1990s and 2000s, fertility

has been low and the imbalances have started to show clearly. However, it seems as migration has worked in the opposite direction by reducing the number of males in the reproductive age groups. This will further be analyzed later in this report when the projections of Albanian populations will be considered for the coming years and the different effects of sex ratios at birth would be taken into account.

While emigration changed the demographic balance of the population for the whole country the massive internal migration became the main determinant of the population change at the local level. Given the collapse of Albanian industry in the early 1990s and the privatization and fragmentation of agriculture, the country experienced massive flows of movements from one region to the other and from one district to the other. The main directions of internal movements were towards the main economic centres such as Tirana and Durrës which absorbed 72 percent of the migrants in the country. Tirana was doubled in size in a twelve year time-span. The 2001 census showed that by 2001, 8 percent of the population has changed prefectures, 900,000 people moved from rural to urban areas, which accounts for 30 percent of the whole population of the country; 91 percent of these people were directed towards the more developed central and coastal areas of the country (INSTAT 2004c). The direction of the movements was unidirectional –‘one-way’ traffic.

The directions of the movements were towards Tiranë and Durrës, the main cities but also towards the coastal areas of Vlorë, Fier and Lezhë. The areas that lost most of the people were the north east, which lost about 34 percent of the population. The cities which lost most in the country in terms of internal migrants were Dibër (34 percent of the households) and Kukës (40 percent of the households). The trend in the 1990s was that people who moved from the north and north-east tended to migrate within the more developed centre and coastal areas, while those that moved from the south tended to go abroad (INSTAT 2004c). Another very important feature of this internal migration is that while men outnumbered females as to emigrating abroad, females outnumbered males when it came to internal migration. There are two possible explanations for this. First, young women were encouraged to emigrate out of rural areas as they have no inheritance family farms and other business. So, they were trying to seek employment outside the family business. The other explanation could be an artifact of the data, with males initially migrating within the country and then abroad. In this case it would be difficult for census to capture this phenomenon.

2 Main research questions and methodology

We present in this part of the report the main research questions arising from the presence of distinct sex imbalances at birth in the countries over the last two decades. The following sections describe the data available for the demographic analysis of sex imbalances and the methodology used for the qualitative survey of the causes and attitudes related to sex selection.

2.1 Research questions

The first research issue is the existence of a distorted sex ratio at birth in Albania. As we will see, this is not a simple question, in view of the available demographic sources. Albania is indeed among the European countries where the demographic information system has undergone deep changes after the fall of the communist regime. The previous statistical apparatus has given way to a more flexible and transparent system since the early 1990s. Yet, the quality of the registration and data compilation might have severely suffered from the transformations in the statistical organizations of the country, from local registration offices to the central statistical office. This period of relative statistical uncertainty coincides with the period during which the sex ratio at birth has increased. As a result, we have almost no straightforward and reliable indicator to document the annual change in birth masculinity in Albania and our first efforts to document the presence of an elevated sex ratio at birth in Albania and its magnitude will mostly rely on indirect estimation techniques. Once the presence of sex imbalances at birth in Albania has been established by demographic analysis, we will need an indirect confirmation of these practices by a qualitative survey of the population through group discussions and in-depth interviews.

The second research question follows from the first one. After confirming the presence of an excess number of male births, we need to understand when and where this trend was first detected in Albania and how it evolved over the year. Going beyond this mere description of trends and regional variations, we would also like to identify all potential correlates of higher SRB levels in the country: birth parity and sex composition of the family, age of the parents, socio-economic status, ethnicity, etc. Data permitting, this will help us identify the characteristics of the "sex selectors" and better understand the main features of prenatal sex discrimination in Albania.

A third research question relates to the overall context of sex selection and son preference in the country. Some of the contextual elements, such as rapid demographic change and fertility decline, are well-documented, but other factors are less known. This is in particular the case for the change in the medical technology available in Albania as well as the broader question of the importance of sons in Albanian families. In addition, since there is no way to measure sex-selective abortions for a large array of reasons,⁵ qualitative research provide the only vindication of the mechanisms behind the sex imbalances at birth measured by the sex ratio at birth. We will rely here firstly on the findings of the qualitative survey and its description of the main motivations behind son preference and active sex

⁵Abortions are rarely correctly reported in the world and this is the case for Albania where no reliable statistics for abortions exist. Even a detailed review of abortion as made possible by the 2002 RHS survey yields disappointing results with an under-reporting rate that might have been as high as 77% during the survey. In addition, we have no statistics of the sex of aborted fetuses. Moreover, the reason for abortion is almost never correctly recorded.

selection. Additional materials drawn from the literature on family and gender systems may also help to understand the gender situation. Statistical evidence may in some cases allow us to confirm some of the findings from the qualitative and documentary analysis.

The final research corresponds to the consequences of prenatal sex selection, in terms of both gender equity and future demographic imbalances. We will draw in particular on the results of a projection analysis to forecast the future impact on the adult population of current sex imbalances at birth.

2.2 Demographic sources

2.2.1 2001 census

Albania conducted successfully two censuses in 2001 and 2011, since the collapse of communism. Each of them collected the standard individual and household data used to describe the socio-demographic situation of the country as well as many socio-economic characteristics. These two censuses provide important sources to study sex imbalances. They provide in particular the exhaustive age and sex distribution of the population, including at sub regional level. The age-specific sex ratio is an important indicator of sex imbalances, for even if it is disturbed by the later impact of mortality differentials (higher male mortality), it reflects closely the intensity of prenatal sex selection for few years prior to the census.

What is more important is the access to raw census data to perform analysis that are not covered by standard tabulations.⁶ Unfortunately, detailed 2011 census data were not available to us in due time. Regarding the 2001 census, we were able to access the original dataset, which allowed us to conduct an in-depth analysis of fertility behaviour and sex distributions during the 1990s. In the course of our work, we created a new indicator of socio-economic status from the original household file, by using all variables related to household goods (from car to TV) and housing amenities (from construction materials to heating system). We conducted a factor analysis based on this set of 14 household-level variables.⁷ The SES index constructed by this factor analysis can be used to rank households by socio-economic level and to derive the socio-economic quintiles used in our analysis.

In addition to this analysis of socio-economic status, we have also used individual data on age and position in the household to reconstruct household structures. Individual census data can indeed be used in an innovative fashion to examine gender-related behavior. For this report, the 2001 data were processed in order to identify two distinct indicators of gender bias: Parity progression ratios (PPR) according to the sex composition of the family and sex ratios at birth. The first indicator captures the probability to have an additional birth at various stages of the family building process. It will help capture the intensity of son preference, according to the presence or absence of a previous

⁶ It may be noticed that the otherwise rich monograph on gender published after the 2001 census (INSTAT 2004) completely failed to identify the emergence of sex selection, this in spite of easy access to raw data by the team members.

⁷ The method used was the multi-correspondence analysis in order to be able to use categorical variables. We use the first factor that accounts for 80% of the variance of the original 14 household-level variables.

male birth in the family. The second indicator simply corresponds to the sex ratio at birth of children by birth rank and will be derived both from civil registration and census data.

The methodology to compute such indicators is based on family reconstruction. In each household, we can identify mothers and their children. When the mother is head of household or his wife, the situation is easy as children are simply classified as “children of the household head”. In other cases, especially when children are classified as grandchildren, care should be taken to identify the mother and siblings (and not confuse cousins with brothers and sisters). When mothers are more distant relatives, it is usually not possible to identify their children in a non-ambiguous way. Once siblings are identified, they can be listed by decreasing age and then ranked. It is also possible to create variables reflecting the previous sex composition (presence of an elder brother) and the presence of a younger sibling to compute PPRs.

This rank is almost equivalent to the birth parity (birth order), usually used for SRB computations. The main difference of the census-based child rank with birth parity is that it doesn't take into account deceased siblings, but only live children. In a way, it is even better than birth order since child rank based on the effective family composition reflects better fertility strategy than the exhaustive birth history that includes dead children.

The main difficulty relates to the necessarily truncated information derived from the census: older siblings may for instance have left the family, resulting in a systematic under-estimation of the actual child rank. As a result, these data will be used only for children born during the last ten years preceding the census in order to minimize the risk linked to siblings missing due to marriage or migration. Another limitation is that the census conducted in a given year does not provide the exact probability of having a younger sibling later, but only a truncated version at time of the census. Our truncated PPRs are therefore lower than actual PPRs –except for mothers aged 45+ who are unlikely to have additional pregnancies– as this measure is in part affected by the average intergenetic interval. Yet, since higher PPRs correspond to shorter intergenetic intervals, we believe that this shortcoming does not introduce any bias in the estimation of the *relative* value of the PPRs.

Both PPR and SRBs can be computed for different child ranks and family compositions, regions and year of birth. They can also be fruitfully related also to other characteristics of the child, the mother (her age etc.), the household head (sex, age, education, etc.) or the entire household (household structure, socio-economic status, etc.). These two indicators will be used for the analysis of son preference and birth masculinity in this report for the period before 2001. But the same analysis could be easily replicated once the 2011 data are available.

2.2.2 Birth registration data

The first effort to create a system of vital registration was initiated in 1922, when a compulsory system to record vital events (including marriage and divorce) was introduced. These regulations request vital events to be reported within ten days of occurrence to the “kryeplak” - the tribal chief of the area, who should report the events to the local authorities – “The prefecture”. Because no certificate was used to record the vital events, the information on them was inadequate and

sometimes inaccurate. A large number of events were not reported, especially births, since a tax had to be paid for each birth (Selenica, 1928). In spite of its inaccuracy, this information is the first that sheds light on the changes in vital events and population growth of the Albanian population before World War II. Creating a picture of the sex ratio at birth during this period is problematic. However, even these incomplete data (see **Error! Not a valid bookmark self-reference.**) show an imbalanced sex ratio at birth in Albania since the early 20th century. Such imbalances are most probably due to sex differentials in under-registration, when parents fail to register female births deemed less important.

Table 2: Sex ratios at birth in Albania in the 1920s

Sex Ratio at birth	1922	1923	1924	1925	1926
	1.15	1.37	1.29	1.30	1.24

Source: Selenica, 1928

The first well-organized vital registration system was introduced in 1936, with the creation of the Civil Registration Office within the government. At that time the death, birth and marriage certificates were introduced, thus initiating the creation of a regular vital registration system. In January 1945 the communist government created the Statistical Directory within the Council of Ministers, which was responsible for the collection of all statistical information. With the creation of this Directory a number of regular censuses started to be conducted and a new system of vital registration was applied. New certificates of vital events were introduced and improved with time. On becoming a member of the United Nations, Albania started applying international standards to the collection of statistical information. Thus, the death certificate collected information not just on sex, age, marital status, profession, location and nationality, but also on causes of death. Similar details were asked in the birth and marriage certificates.

Another very important aspect regarding data from vital registration and censuses during the communist period was the quality of this information. Gjonça, (2001) conducted extensive work in order to find out the quality of both censuses and vital statistics in Albania. His main conclusion was that the census enumeration was very high for the last three censuses with the enumeration at about 99percent in the 1989 census compared to 1979. Moreover, the death registration completeness increased with time from a 78 percent to 97.5 percent complete in the 1980s. This figure is quite high and there is no reason to believe that the birth registration should have a different completeness. Based on this finding we will consider birth registration statistics during the communist period as accurate in particular in the past two decades of communist rule, 1970-1990. However, detailed analysis is not possible for this period and the only data we will use is the time series on sex ratios at birth. This is due to the fact that birth certificates were not digitalized until as late as 1987. No digitalized data for the period under communism, including the past three years from 1987-1990 were made available for this research.

As to the transitional period, the established tradition of data collection continued and it was improved in terms of the access to information created – birth certificate was revised and improved, as well as the transparency to this information. The system of reporting did not change much. However, what is important to say is that we notice two problems with the data coming from the vital statistics during 1990-2012. First, as a result of the socio-economic and political unrest in the country data from certain years are either missing or are not complete. Second and more important

for the existing years, we note that there is a large variation in the number of births from one year to the other. This variation is even more emphasized by prefectures and districts. This is an indicator of low quality of the reporting of the vital events. It has to be emphasized that the years that were made available to us from INSTAT were 1995, 1998, 1999, 2000, 2001, and 2004-2010. So the data on the main series were extracted from the existing publications. The more detailed analysis from INSTAT covers only these years. But as we will point out in our analysis, this 1995-2010 dataset remains extremely fragile. There are obvious deficiencies in the quality of the data provided to us. One of the most obvious flaws relates to the loss of hundreds of births in specific prefectures from 2005 onwards. This resulted for instance in an apparently dramatic fall in the number of births registered in the country from 36,251 in 2008 to 23,546 in 2010, which is unlikely to be related to actual fertility behavior.⁸The preliminary age distribution from the 2011 census suggests in fact that the size of birth cohorts after 2008 was 33,000. While still using this dataset for lack of any source of adequate size, we hope that these irregularities have not been sex selective.

The analysis based on this data, will cover two parts. The first one is the construction of time series for sex ratios at birth for as long a period as possible that the data allow. The disaggregation is minimal with only rural/urban data being described and analyzed. The second part of the analysis consists of a detailed analysis of the birth certificate information, where sex ratios at birth have been disaggregated by different variables such as parity of birth, mothers and father's education level, prefectures and other variables available in the birth certificate. A regression analysis was run in order to find out the deterministic pattern of the sex ratio at birth in Albania.

2.2.3 Other survey sources

Several demographic and socio-economic surveys have been conducted in Albania during the last 20 years. They often complement the imperfect knowledge that regular census and registration statistics provide on the rapid pace of social and demographic change in the countries. Prominent among these surveys are the World Bank's Living Standards Measurement Studies (1996, 2002, 2003-04, 2005, 2008), UNICEF's Multiple Indicator Cluster Surveys (MICS, 2000 and 2005), and Macro's Demographic and Health Surveys (2008-09) and the CDC's Albania Reproductive Health Survey (2002) that preceded it. In theory, they should be able to provide important information on fertility attitudes and behavior and ultimately on the presence of prenatal sex selection. We will in fact use some of their statistics to estimate specific aspects of the reproductive behavior in Albania such as the ideal number of children or recourse to prenatal ultrasonography. Yet, as we will see with the DHS survey, surveys are not exactly designed for this kind of investigation and provide only limited information.

The DHS is often taken as the primary source for analyzing reproductive behavior owing to its extremely rich questionnaire on fertility behavior and attitudes. In 2008-09, it covered no less than 8,000 households. Many demographic indicators for Albania are in fact available only from the DHS. We will use it for instance to examine DHS data on son preference in Albania. Another potential from

⁸ These discrepancies probably explain why Albania has not officially published the annual number in the country beyond 2008 on its website.

the DHS data that is more directly related to this study is its capacity to estimate the sex ratio at birth.

Table 3 displays the available information collected on births by sex during the 2009 DHS round. We may observe that the sex ratio at birth during the last 10 years was indeed seriously skewed, since it reached an average value of 111.9 in 2000-09, a level very close to the SRB independently estimated by the vital statistics. Yet, whatever the plausibility of this SRB estimate, the number of births used is limited to 3355 observations and the 5percent confidence interval for a 105 SRB computed on such a sample would be 96-115. In other words, the DHS estimate at 112 is not significantly different from 105. When examined in greater depth, the data reveal in fact some discrepancies such as the fluctuations observed during each five-year period. These figures are due to the small number of births used for their computations. It is therefore far safer to rely on census figures and vital statistics based on larger if not exhaustive samples.

Table 3: Births and sex ratios at birth from DHS data

Period	Live births	Sex ratio at birth
2005-2009	1,186	108.1
2000-2004	2,169	114.0
1995-1999	2,880	102.6
1990-1994	2,955	96.7
<1989	2,773	103.4
All	11,964	103.8

Each LSMS round have included about 3600 households, while the latest MICS round in 2005 covered 5091 households, with no more than 1093 children below 5 years. These samples are smaller than for the DHS and therefore unlikely to bring more robust information on sex selection behavior. Only in the RHS survey of 2002 was the sample size bigger with 10,316 households in the female household sample. But it included only 2551 births during the five years preceding the survey in its analysis.

2.3 Methodology of the qualitative study

The qualitative study followed a methodology consisting of in-depth interviews with women, focus groups discussions with parents and grandparents and key informant interviews. The data were collected with participants coming from rural and urban areas of Vlorë and Dibër and the suburban area of Bathore near Tiranë. These three areas were purposely selected given their geographical location in the southwest, northeast and centre of Albania. In addition, a series of key informant interviews were also conducted with doctors of a maternity hospital in Tirana who provide antenatal care services for people coming from all over Albania. Data collection was conducted during the months of June and July 2012 and the findings were transcribed, coded and analyzed within the month of August 2012.

2.3.1 Participants and survey instrument

Twenty-seven women (from 20 to 56 years old) participated in in-depth interviews. Among them, twenty-four were mothers and three were engaged or married women with no children. Most of the women came from urban areas of Vlorë and Dibër (12) and the suburban area of Bathore (9), while fewer participants were from the rural areas of Dibër and Vlorë (6). In addition, 36 women, 36 men and 33 grandmothers participated in 12 focus group discussions that were held in the three selected districts. In the end, 26 key informant interviews were conducted. The key informants included doctors, nurses, midwives and officials working in obstetric-gynaecologist's public and private health care services in Tiranë, Dibër, Vlorë and Bathore. All participants were selected following a convenient sampling technique.

Based on the international literature and the background information for Albania, three different instruments were designed. Two instruments were interview scripts for women and key informants, and the third was a script for focus group discussion with women, men and grandmothers. A peer checking method was used to finalize the instruments.

The script of the key informant interviews was comprised of a series of open questions, which focused on son preference factors, causes of sex-selective abortion, as well as the practices and procedures of sex-selective abortion. Other probes included questions on the scale and characteristics of the sex selection at birth phenomenon, the history of availability of the gender determination technology and the legal framework related to sex selection in Albania. At the end, key informants were asked to provide recommendations for actions that could help to reduce this phenomenon.

The scripts of in-depth interviews and focus groups discussions focused mostly on son preference factors and stories of sex-selective abortion cases as experienced by participants themselves or other people in their communities. The remaining questions focused on participants' opinion towards sex-selective abortion and ways of addressing this issue.

2.3.2 Procedure and analysis

In the first step of data collection, key informant interviews with doctors of the maternity hospital in Tirana were conducted. The valuable information they provided helped us later on to design the scripts of in-depth interviews and focus groups discussions.

In overall the key informant interviews, in-depth interviews with women and focus groups discussions went through similar procedures. After being invited to participate in the study, participants were informed regarding the scope and nature of the interview/ focus group discussion and ensured that their answers would remain confidential. Then, the interviews/focus group discussions began with questions about community's preference for the family composition and gender of the children. Further on, participants were required to express their opinions on the perceived value of having a son/daughter in the family, the methods and procedures of prenatal sex selection, and the reactions of family and health care staff in case of sex-selective abortion. Following these questions, the key informant interviews proceeded with questions on the medical technology and the legal framework that may facilitate sex selection at birth through abortion or in-vitro fertilization. In the end, all participants were invited to express their ideas on future interventions that could help improve the current situation of sex selection in Albania. In general all the in-depth

interviews with women, the key informant interviews and focus group discussion lasted about 20-60 minutes.

The interviews and focus groups were recorded either via audio registration or by hand notes depending on the participants' willingness. The records were later on transcribed and printed in order to facilitate coding and analysis processes. The main tools for qualitative data analysis were the theoretical sample, coding, theoretical saturation and the systematic comparison method. After coding the data manually, a series of codes were produced through constant comparison. In a second phase, we selected and grouped the most repeated codes in other new codes. The analysis proceeded then by combining sets of codes into categories and observing the relations between these categories. Each of the analysis steps was performed following a peer checking method.

3 Demographic analysis of prenatal sex selection

This part includes the major elements of our demographic analysis of the last twenty years. It will be on various statistics, but disaggregated 2001 census and birth registration data for the last decade will serve as the main sources for our analysis. We will focus on two specific dimensions of sex selection:

- Gender preference, which directly reflects the central “demand factor” behind sex discrimination
- Distribution of sex by birth, which is the most concrete outcome of prenatal gender bias

While apparently inter-related, we will examine these aspects separately, starting with a survey of specific demographic measurements of gender preference, using fertility behavior as indirect indicators of a potential preference towards sons in the country. The next section will focus on the sex ratio at birth during the 1990s in order to identify traces of the initial rise in birth masculinity in Albania. The last section is based on the original dataset of birth statistics collected by INSTAT, which provide recent data for an analysis of the salient features of sex imbalances at birth in the country.

3.1 Son preference and its correlates

Son preference is a major trait of many family systems across and manifests itself through a large number of attitudes and behaviors that are often difficult to synthesize. It is often related to manifestations of gender discrimination among children and adults, such as the obvious sex differentials in income and education, or in variations in political status or legal rights. We have also mentioned the presence of a slight gender bias in mortality, but what we examine here is circumscribed to fertility desire and behavior. We want to identify attitudes and stated preferences that (could) lead to the desire to avoid female children and therefore to prenatal sex selection. Sex selection itself will be the subject of a different section.

3.1.1 Opinions on the ideal family composition

Sex preferences have mostly been gauged based on opinion surveys. Standard questions used in surveys relate to the sex preference expressed in relation to the sex composition of the ideal family. This is the approach of the DHS surveys, which includes questions on the ideal sex composition of the family (Fuse 2010). This approach is only introductory because opinions given in the course of a survey are subjected to a strong normative pressure. This encourages people to profess legitimate, authorized opinions, which may not reflect their actual attitudes. In many cases, when fertility is low, people almost automatically opt for a balanced preference and declare that their ideal family composition is one boy and one girl.

According to the latest Albanian 2008-09 DHS survey, the ideal number of children is indeed two children for 48 percent of women, but the average ideal size is higher than 2 at 2.6 children.⁹ No data are published for the breakdown by boys and girls, but special tabulations from the original dataset indicate that only 18.5 percent of respondents declared an ideal number of sons greater than the ideal number of daughters; such as two sons and one daughter. This percentage varies from

⁹The question on the ideal family size in the 2002 DHS survey could not be used as it did not distinguish between sons and daughters.

14percent among the population below 20 to 21 percent among older women aged 40 and more. 67.2 percent opt for an equal number of boys and girls while 13.1percent prefer more girls. Based on such data, the difference between son preference and daughter preference would therefore appear almost marginal in Albania.

A more sensitive test in such circumstances would be to restrict the fertility preference to parents who have already had children. We notice thus that the same proportion of all women declares to desire another child (60percent) after the birth of a boy or of a girl. On the contrary, after two live births, only 8percent of women with at least one boy want to have another child, as against 26percent of women with two daughters. In other words, the desire for a third child is three times higher in the absence of a male birth than after a male birth. This gives a better idea of the direction and intensity of gender preference. Yet, such estimates provide no exact measurements of son preference, as the information given in surveys refer to opinions, not on the actual behavior of couples.

3.1.2 Son preference in fertility behavior

We use here the reconstructed child population from the 2001 census to assess the impact of the rank of the children and the absence of a son on the birth of a younger sibling on subsequent fertility behavior. Our research question can therefore be reframed thus: does the gender composition of the family influence the probability to bear additional children?

There are three common situations. The first situation is the most common across the world, in which parents are somewhat indifferent to the sex of their children. The gender composition has therefore no impact on subsequent fertility decisions. The second situation corresponds to the "family balancing" pattern, in which parents want children of different sexes. The third situation corresponds to a sustained gender preference, usually a preference for sons: parents will have as many births as it takes to get at least one child of the desired gender and will stop afterwards. This behavior is also described as "stopping rules", when parents stop child-bearing only after the birth of a son. Contrary to popular opinion, fertility behaviors based on stopping rules—such as repeated births in the absence of male child—have no impact at all on the overall sex ratio at birth. The SRB remains determined only by biological random factors. Sex imbalances at birth proceed only from active prenatal sex selection and this will be examined in a different section.

To measure the intensity of son preference, we first compute the probabilities to have another child at different parities. This corresponds to what demographers call the parity progression ratio (PPR). Then, we compare these PPRs for family with or without boys, in order to test if the absence of a male heightens the probability of a next pregnancy. We will therefore compute the ratio of the PPR without son to the PPR with at least a son. When parents are gender indifferent, this PPR ratio equals 100percent. When people have on the contrary a preference for sons, we expect this ratio to be higher: for instance, it may be 150percent as when women without a son are 50percent more likely to have an additional child than those with a previously born son. The measurement is often inconclusive at low parities, since most parents aspire to have additional births—irrespective of the sex composition of the family. Son preference in fertility behavior is likely to be almost undetectable in high fertility regimes. But when fertility comes down, the pressure to have boys intensifies. For instance, 24percent of couples will not have a son after two births.

The next paragraphs present the results of our PPR analysis based on the 2001 census and the reconstructed child population born during the preceding ten years. Table 4 provides the most important result for our understanding of fertility strategies and son preference in Albania. This table reports the probabilities to have an additional child (PPR) according to the size and gender composition of the family. Thus, among the 98,251 parents with one child (first line), we see that parents with one daughter will have a 66percent probability to have another child as against 62percent of parents of a son. The ratio of these two PPRs is of 110percent, suggesting that the progression from parity 1 to 2 is almost unaffected by the outcome of a first birth.

Table 4: Parity progression ratio by parity and presence of a son, 2001 child population

Parity	Parity progression ratio				Children
	Without a son	With a son	Total	Ratio	
1	66%	59%	62%	110%	98,251
2	47%	23%	29%	201%	47,679
3	44%	19%	23%	228%	16,644
4+	46%	23%	26%	198%	7,019
Total	57%	32%	39%	180%	169,593

This table reads as: 47% of families with no boy among their first two children will have an additional child as against only 23% of parents with at least one son. The corresponding PPR is 201% (47/23)

The result cannot be more different for parents of two children. Only 23percent of those with one or two sons will have an additional child. On the contrary, 47percent of parents with no son will have an additional child. Our PPR ratio points to a son preference level of 201percent. In fact, Table 4 shows that it is only after the second birth that fertility behavior in Albania becomes intimately related with the sex composition since the PPR of sonless families is systematically twice larger than that of families with son. PPR levels do not change much for larger family sizes and the absence of a son always results in a double probability to have another child compared to other family sizes. Sample sizes are obviously large enough for this kind of computation.

More than anything that we know on gender attitudes in Albania, this table not only demonstrates precisely of the presence of a strong son preference in the country, but it gives some notion of its actual intensity. We learn that Albanians during the 1990s insisted on bearing a child and we also observed that the need for a son resulted in fertility levels twice higher at parity 2 or higher.

In Table 5, we can further test whether families express differences according to the number (rather than the presence) of sons they have. We see for instance that among families with two children parents with one and two sons have almost the same probability to have a further child (respectively 24percent and 23percent). Computations on larger families show only limited variations in PPR ratios according to the number of sons previously born in the family.

These results are significant for two reasons. First, they show that one boy is not always sufficient to fulfill the fertility intentions of Albanian parents. For instance, parents with only one son at parity 3 had a higher probability to have another child (22percent) than parents with 2 or 3 sons (16percent and 19percent). The difference is modest, but it is also visible among parents with more than 3 children.

Table 5: Parity progression by parity and number of sons, 2001 child population

	Number of male children					Total
	0	1	2	3	4	
1	66%	59%	.	.	.	62%
2	47%	24%	23%	.	.	29%
3	44%	22%	16%	19%	.	23%
4	46%	25%	21%	23%	24%	26%
Total	57%	38%	20%	21%	24%	39%

This table reads as: 16% of families with exactly two boys among their three children will have another child

Another lesson is about the need for girls. Table 5 indicates that there is no increased fertility when parents have only sons and no girl. In other words, parents without a girl do not appear to have more children. There was no visible effort at family balancing or any specific desire for girls in Albania during the 1990s.

3.1.3 Social and regional variations in son preference

We can now examine in detail some socio-economic correlates of this intense gender preference. Table 6 highlights the difference between rural and urban areas of the country. Evidence is mixed on the presence of significant differences. On the one hand, PPR levels are significantly higher in rural areas, reflecting the higher fertility level observed in the countryside. But on the other hand, the absence of a son tends to affect the PPR in both rural and urban areas in almost equal measure, with an increase of about 80 percent compared to that the PPR observed among families with a son.

Table 6: Parity progression ratio by rural/urban and presence of a son, 2001 child population

Residence	Parity progression ratio				
	Without a son	With a son	Total	Ratio	Difference
Rural	62%	34%	42%	180%	27%
Urban	51%	28%	35%	185%	23%
Total	57%	32%	39%	180%	26%

A more detailed analysis by number of children (not shown here) indicates that the increase in PPR may be proportionally higher in urban areas, but not in absolute terms for different family sizes. We may conclude here that there was no difference perceptible during the 1990s in the level of gender preference among Albanians residing in towns and villages.

The same exercise can be repeated for prefectures (Table 7). There were comparatively larger differences in PPR levels (fertility) across prefectures during the 1990s than between rural and urban areas. Kukës and to a lesser extent Dibër stand out for instance with the lowest PPR values. In terms of son preference in fertility behavior, the prefectures with the highest PPR ratios tend to be to the South of the country. They constitute a block comprising Berat, Fier, Gjirokastrë, Korçë and Vlorë.

These variations probably come from the lower fertility levels in these prefectures during the 1990s: this suggests that recent fertility decline must have had a significant impact on fertility strategies in these provinces. While son preference is found everywhere, it was exacerbated by the pace of fertility decline during the troubled 1990s as is visible in the areas in the South where fertility decreased faster. In other words, families in these parts of Albania decided to reduce fertility only after having a son.

Table 7: Parity progression ratio by prefecture and presence of a son, 2001 child population

Prefectures	Parity progression ratio		
	Without a son	With a son	Ratio
Berat	55%	27%	203%
Dibër	67%	38%	176%
Durrës	57%	31%	185%
Elbasan	58%	32%	178%
Fier	57%	29%	199%
Gjirokastrë	51%	27%	191%
Korçë	52%	27%	193%
Kukës	69%	45%	153%
Lezhë	63%	35%	181%
Shkodër	62%	35%	177%
Tiranë	53%	30%	178%
Vlorë	55%	30%	185%
Total	57%	32%	180%

A similar picture emerges when considering the socio-economic status of the population (Table 8). We use here the division into socio-economic quintiles derived from our analysis of household data to identify variations in son preference. Higher quintiles appear to display slightly higher levels of son preference in fertility, with a computed ratio above 185percent. But this trend strongly coincides with the declining number of children among the higher economic quintile that the average PPR level faithfully demonstrates as it decreases regularly among the affluent. This again suggests that where fertility decline was faster (i.e. among the richest groups), it took place in priority among families that already had a son. This tends to exacerbate the level of son preference computed here.

Table 8: Parity progression ratio by quintile and presence of a son, 2001 child population

SES Quintiles	Parity progression ratio				
	Without a son	With a son	Total	Ratio	Difference
1	62%	36%	43%	171%	26%
2	60%	33%	41%	181%	27%
3	58%	31%	39%	188%	27%
4	54%	29%	37%	186%	25%
5	51%	27%	35%	186%	24%
Total	57%	32%	39%	180%	26%

Other individual indicators of socio-economic status measured at the household level confirm the same feature: better-off households have systematically lower fertility and higher levels of son preference. This is visible for instance in the case of possession of a computer or of a car (results not shown here).

An even more powerful indicator of social disparities is education. Here we use the highest degree held by adult members of the household as household-level indicator of education. This level ranges from 1 to 8, starting from no degree at all to postgraduate university education (Table 9). As expected, the average PPR level decreases regularly from 43percent to 32percent as education increases. But this decrease is not linear among families with no son and there are in fact clear signs of an increase in the proportion of sonless parents having additional child among the three first educational levels (viz. no diploma, primary and lower secondary). The PPR ratio by sex composition rises with the educational level, but seems to plateau or to decrease among the two highest educational groups (viz. university degrees).

Table 9: Parity progression ratio by education and presence of a son, 2001 child population

Education level	Parity progression ratio				
	Without a son	With a son	Total	Ratio	Difference
1	54%	38%	43%	143%	16%
2	57%	37%	42%	154%	20%
3	62%	35%	42%	178%	27%
4	57%	30%	38%	189%	27%
5	56%	30%	38%	186%	26%
6	56%	29%	37%	191%	27%
7	46%	26%	33%	176%	20%
8	45%	25%	32%	181%	20%
Total	57%	32%	39%	180%	26%

3.2 The onset of prenatal sex selection in Albania

The previous section focuses only on son preference expressed through fertility behavior. But during the same period, the proportion of male births started increasing in Albania under the influence of the spread of prenatal sex selection. In this section, we will examine in closer detail the emergence of these sex imbalances at birth.

The census provides data that largely complement vital registration for the period preceding 2001 on the distribution of births by sex. We will first examine the timing and the extent of the rise in SRB levels during the 1990s and investigate its major demographic and socio-economic correlates.

3.2.1 The rise in SRB levels during the 1990s

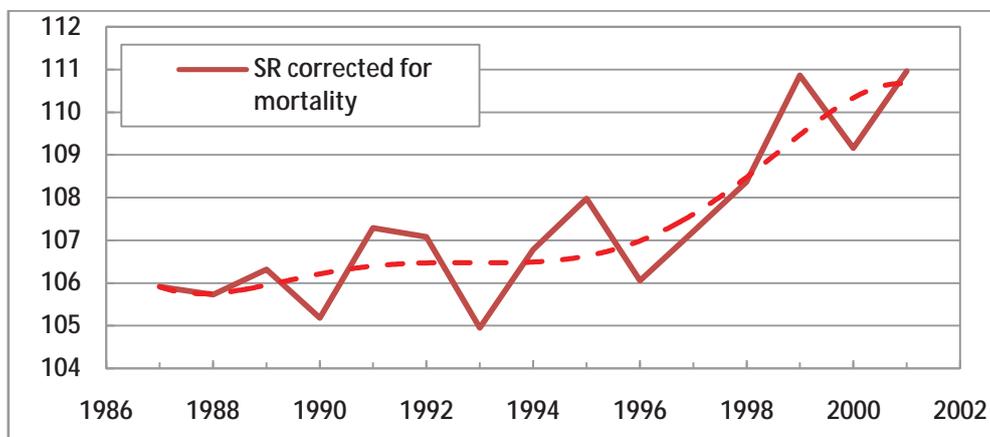
To start with, the age and sex distribution of the population provides a relatively reliable indicator of SRB levels during the years prior to the census. Beyond age 15, the sex ratio of the population is only affected by mortality differentials, with slightly higher infant and child mortality among boys that are likely to inflate the proportion of girls among children (the older the children, the higher male excess

mortality and the proportion of girls among children). The excess mortality among boys remains modest as the sex ratio of the survival rates is of 99.0 at age 1 and decreases slowly to 98.4 at age 15.¹⁰ The impact on the overall census sex ratio should therefore be limited to less than 1.5 per 100. Survival ratios have been incorporated in our computation to correct for the effect of mortality differentials.

Migration plays almost no significant role in the sex distribution of children. An unknown, but most probably negligible factor affecting the sex ratio may also be the presence of sex differentials in under-reporting. Beyond 15 years of age, sex-selective migration and under-enumeration become however significant factors that are likely to disturb any attempt at estimating the sex ratio of births in the past. Data are therefore not shown for people born before 1986.

Figure 8 displays the estimated SRB by year of birth, after correction for mortality differentials. A first examination of the series suggests the following: the sex ratio at birth fluctuated around 106 during the period 1986-1996, with local peaks such as 108 in 1995. From 1996 onwards, the SRB has increased rapidly from 106 to 108 in 1998 and reached 110 in 1999-2001. If we follow the trend depicted on the figure, these estimates suggest therefore that the SRB was almost normal prior to 1996, but that it recorded after this date a regular increase, reaching a plateau during the three years preceding the census. While the period preceding 2006 was probably characterized by a slightly excessive SRB level above 105, the major departure from the standard SRB level is obviously more recent.

Figure 8: Sex ratio of children by year of birth with trend, 2001 child population



This scenario of post-2006 SRB rise stands in relative contradiction with the trend derived from the birth registration data. The next chart (Figure 9) superimposes both series for the period 1986-2001. According to vital statistics, the SRB in Albania recorded a first jump after 1990. Before that period, it was already at a high level of 107-109, but it suddenly reached 111 in 1991 and stayed at this high level till 1995, after which it decreased below 109. During the last three years preceding the census, both series from the 2001 census and the vital statistics are almost parallel as should be expected.

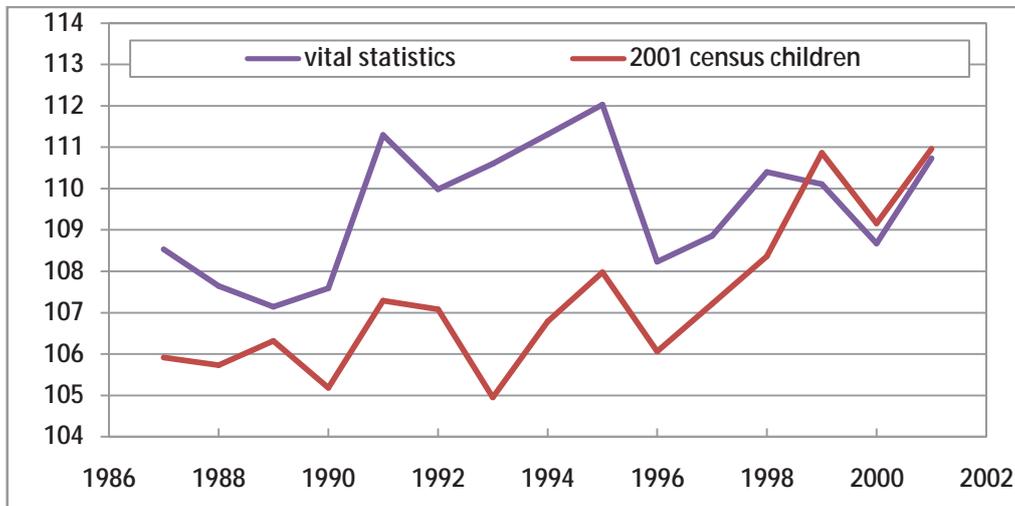
There are some parallels in both series: similarities in 1999-2001, comparable jumps during 1990-91, 1993-95 and from 1996 onwards. Yet, the levels are very different and periods of obvious elevated

¹⁰ Values derived from the WHO life tables for Albania in 1999.

SEX IMBALANCES AT BIRTH IN ALBANIA

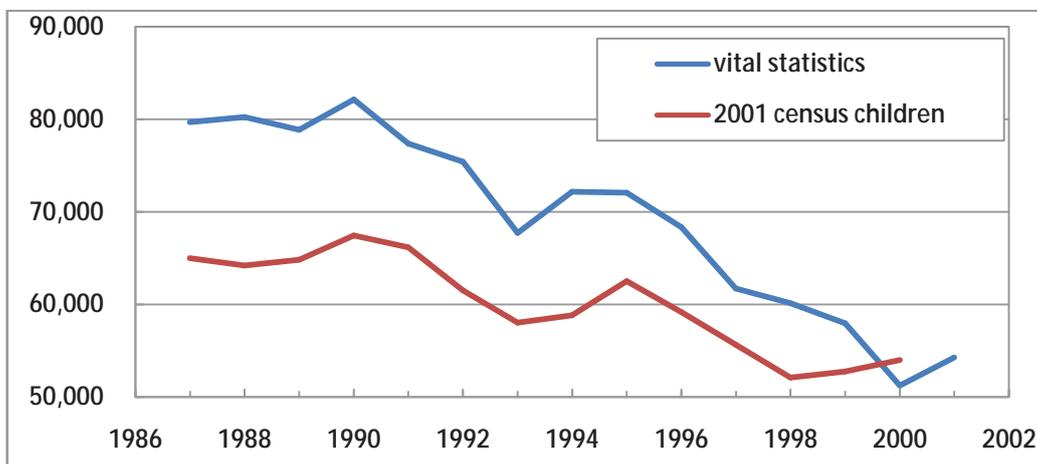
SRB levels before 1996 according to birth statistics do not tally with the census-based sex ratio estimates.

Figure 9: Sex ratio of children and births, 2001 child population and vital statistics



We do not have the space to conduct a detailed discussion of the comparative merits of both sources in order to explain the dramatic gap displayed by our two series, but a rapid examination tends to suggest that the number of births recorded during the 1990s and before is higher than the corresponding population recorded during the census by about 20 percent. These data are displayed in Figure 10. They highlight the significant gap existing between the sizes of birth cohorts according to these two different sources.

Figure 10: Size of birth cohorts, 2001 child population and vital statistics



Does this gap between the two series correspond to a systematic undercount (of children) during the census or to an unexpected exaggeration of birth figures before 2001? There is no easy explanation. On the one hand, these age young groups are usually immune to severe underestimation during surveys. Moreover, international migration plays a limited role as migrants are often single with no children. On the other hand, the overcount of registered births appears also atypical unless numbers of vital events were purposefully exaggerated.

The provisional census data on the age and sex structures from the 2011 census provide another source of indirect SRB estimates. The population aged 10-14, born in 1996-2001 has a sex ratio of

106.7 as against 101.9 among the 15-19 born five years earlier in 1991-1996. While the sex composition of the latter group may be affected by international out-migrations, there remains a clear gap between the generations born before and after 1996 illustrated by the jump in sex ratio from 101.9 to 106.7. This suggests that prenatal sex selection may have emerged or at least increased in the mid-1990s. This remains however a rather indirect indication of the trends and still raises many questions on the quality of census data and vital statistics in Albania.

Another indirect method provides, however, a more eloquent proof of the recent character of the excess of male births. The idea of this method is to focus on the children most likely to be affected by sex selection, viz. children born after successive female births. As observed in other countries, the sex ratio at birth tends to increase with parity: parents try in fact to adjust the initial gender composition of their offspring by resorting to prenatal sex selection to avoid subsequent female births through selective abortions. But as much as the birth order, it is the sex composition of the family that may influence the fate of later pregnancies.

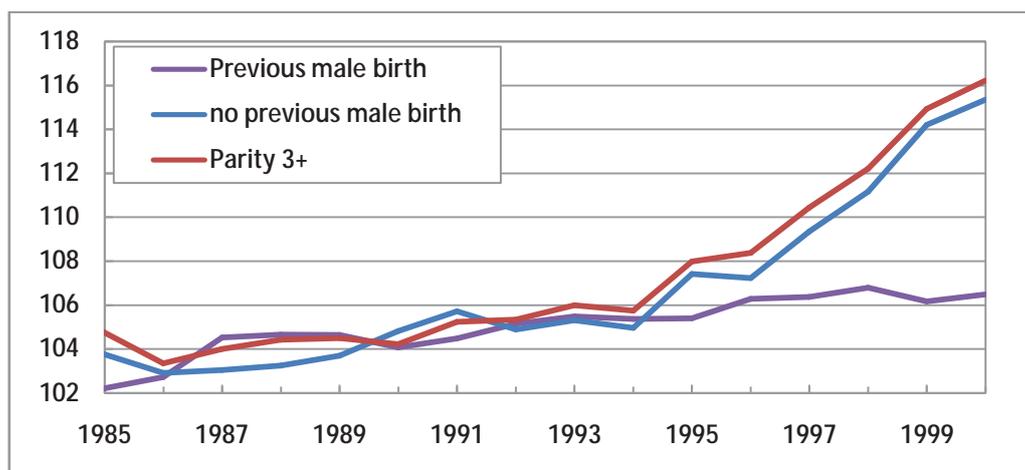
To examine these variations, we have divided our sample into three (partly overlapping) parts, after removing first births that are obviously not influenced by previous births. The first series is composed of children of rank (parity) 3+. These are to a large extent children above the two-child family norm and gender may be an important consideration to their parents. The second series is restricted to the population of children born to sonless women. They may be of rank 2, 3 or higher. Children born after one (or more) daughter correspond to a situation most conducive to sex selection. The corresponding probability to practice sex selection in the absence of a male child is expected to be far higher than among parents with at least a son since this is the typical family configuration in which son preference and low fertility conflict. The third series is composed of children born after the birth of an older brother. As data on son preference suggest, this population should be only marginally affected by prenatal sex selection.

Data shown in Figure 11 are based on three-year moving averages that are used to remove annual fluctuations caused by small samples. They show a rather temporal pattern in the sex ratio at birth, starting from a period before the mid-1990s during which birth masculinity is only increasing marginally from 104 to 105.¹¹ More importantly, the three series follow parallel trends, with no significant variations between them. In particular, we observe that the proportion of male births among late births or births among sonless families is not at all higher than among other births till 1994. In 1995, the situation changes entirely as the proportion of male births in "vulnerable situations" (parity 3+ or absence of previous male births) start increasing from 105 to 115. As expected, the level in 2000 is well above the average SRB level deduced from the aggregate census series (11). The trends are almost identical in these two categories.

When we restrict in a different analysis our sample of children to the most vulnerable category, i.e. children born after at least two older sisters, the sex ratio at birth appears to increase first in 2001 to 108 (data not shown here). It then stays at this level till 1994 and increases afterwards even faster than for series shown in Figure 11, reaching 120 before 1998 and finally 134 in 2000. On the contrary, our figure shows that births that followed a previous male birth record only a slight modest increase to 106-107 after 1994.

¹¹ This marginal rise is partly due to the effect of mortality differentials among children as the data have been not corrected for excess male mortality.

Figure 11: Sex ratio of children by year of birth, gender composition and parity, 2001 child population



Since the increase in SRB is related to the absence of a previous male birth (as the tables below will demonstrate), the evolution depicted on our series in Figure 11 help to better date the rise in birth masculinity. The first signs of the emergence of prenatal sex selection are very modest among late births in 1991 and in the following years. It is only from 1995 onwards that this amplification becomes considerable when sex selection spread through a large proportion of the population. To some extent, this sequence coincides firstly with the fall of the regime in 1991 and the rapid dismantlement of the socialist system afterwards. It also corresponds to the waves of abortion reforms in the country in the first part of the 1990s.

The trends in sex ratio at birth during the 1990s can also be further disaggregated by social category (data not shown). There is for instance a detectable early rise in the sex ratio among the highest quintile. The sex ratio of children with only female siblings rose from 1990 onwards and reached 120 in 2000. On the contrary, the increase in child sex ratio took place only after 1996 among the group of lowest socio-economic status and peaked at 110 in 2000. This gap of more than 5 years in the onset of prenatal sex selection between income groups corresponds to a clear mechanism of top-down diffusion. An almost parallel scenario emerges when the conditional child sex ratio in the absence of an older brother is disaggregated by urban and rural areas: in cities and towns, the rise in sex ratio started also around 1990 and reached 122 in 2000. In the countryside, the increase took place later in 1996 and reached a lower level in 2000 at 110 male births per 100 female births. Education data also display the same patterns with an early onset of sex selection among the more educated parents.

3.2.2 Parity and birth masculinity

Census data allow for a disaggregated approach of skewed sex ratio at birth. But in view of the variations of sex ratio during the 1990s, we will limit the analysis to the end of the decade during which birth masculinity became significantly skewed. The analysis is therefore restricted to the 208,277 children born after 1997, the sex distribution of which is significantly biased. We start with the SRB analysis by parity, proxied here by the rank of the child in the family. As expected, the results shown in Table 10 indicate that the sex ratio rises with birth order, moving from a somewhat normal

level for the first birth order to 124 for children ranked 6+. The sex ratio among children of parities 1 and 2 is slightly above the 105 standard. The fact that the sex ratio remains normal for the first two births suggest that child-bearing was not affected (or only marginally) by gender considerations before the third birth. In lower-fertility regime, like in China, the sex ratio at birth jumps immediately after the first birth.

Table 10: Sex ratio at birth by parity, 2001 child population

	Sex ratio	Children
1	106.6	71903
2	105.6	75457
3	111.5	37889
4	113.6	13815
5	116.2	5278
6+	123.8	3935
Total	108.1	208277

Among third and later births, the sex ratio is obviously (and significantly) above the 105 level and above the national average. Yet, these SRB levels appear rather modest and reach 120 only for the sixth child. Compared to the SRB observed elsewhere—such as Armenia where the sex ratio at birth among parity 3+ is above 170—, sex ratios were still moderately skewed in Albania before 2001. The main reason is that a large number of women proceeded with additional births independently of their sex composition and had no interest for active prenatal sex selection.

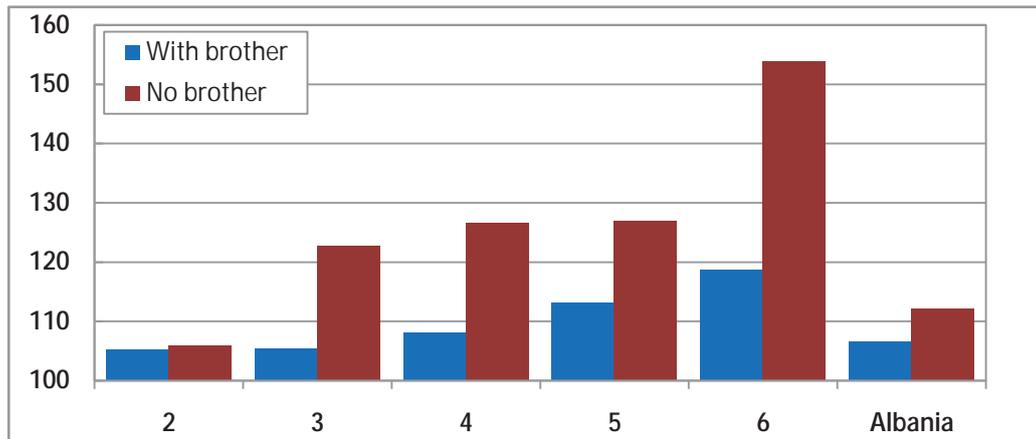
The next Table 11 derives from a more in-depth analysis of the sibling composition among children of birth rank 2 or higher (see also Figure 12). After removing first-order children with no older sibling, we can distinguish children with an older brother from those who had no male sibling at their birth. Among children born after a previous brother, the overall sex ratio remains almost normal at 106.5. There is however an increase that may be detectable among the children with an older brother of higher order, such as for parity 5+.

Table 11: Sex ratio at birth by parity and presence of an older brother, 2001 child population

	No older brother	With older brother
2	105.9	105.3
3	122.8	105.4
4	126.5	108.1
5	127.0	113.2
6+	153.9	118.7
Total	112.2	106.5

But the imbalance is more pronounced for children born with only female siblings as the average sex ratio is of 112, a level well above the average sex ratio of this child population (108). The gap between children with or without older brother remains invisible among second births, once again because the fertility norm remains flexible and encourages people to have at least two children. But for later births, the gap widens between the two series and the sex ratio jumps to 122 at parity 3 and to higher levels for the next parities.

Figure 12: Sex ratio of children by parity and gender composition and parity, 2001 child population



The examination of son preference through PPR ratios in the previous section had demonstrated the presence of well-entrenched son preference in the population and that third and higher-order births provide often the possibility for parents to correct the perceived gender gap (i.e. the absence of a son). But this fertility strategy now appears to have translated into active prenatal sex selection during the late 1990s. The sex imbalances at birth by parity illustrated by our data indicate that sex selection became at that time a common tool to “beat the biological odds”—by avoiding unwanted female births. This table also demonstrates the primary role of gender strategy in the sex ratio at birth: no biological or other exogenous factor can account for the observed gap by gender composition. In fact, the subgroup composed of children born without older male sibling constitutes a powerful marker of prenatal gender discrimination.

At the same time, the analysis by parity and sex composition may also lead to a more temperate appreciation of the true extent of sex discrimination. After all, we may also observe that boys do predominate, but that percentage of female births among all third births has only decreased from 48.7percent to 44.9percent. Even if its impact is statistically unmistakable, sex selection remains the behaviour of a minority and most couples in Albania do not resort to sex selective abortions, even in the absence of a male child.

We have also examined in greater detail the effect of the sex composition of the offspring on the sex of the younger child (data not shown here). This analysis indicates that the absence of a girl has no visible impact on the sex ratio of younger children. The sex ratio of a third child after two boys is of 104.1, a level statistically undistinguishable from the normal biological level. In other words, there is no tangible sex selection in order to have a girl. Whatever the stated preference for an equal number of boys and girls, the need for a girl is never strong enough to encourage prenatal sex selection. On the contrary, the desire for boys may persist after the birth of one. We notice that among parents who had one boy out of two first children, the sex ratio of the third child remains skewed towards boys (112), even if this is less obvious than among those with two girls (123). This suggests that there may be a small minority of parents in the population who still avoid female births even after giving birth to a boy.

3.2.3 SRB differentials

The overall sex ratio of the child ratio in 1997-2001 is higher in urban areas (112) than in rural areas (107). This difference swells when we restrict our sample to children born after girls (119 vs. 109), demonstrating that sex selection was more common in 2001 among parents from cities and towns than from the countryside. Among third births, the sex ratio in urban families without a son even increased to 145. This record value shows the urgency among the urban population to avoid an extra daughter. Compared to the variations in son preference between rural and urban areas identified in a previous section, it seems that urban parents have had recourse to sex selection more often while rural parents have preferred to have more births.

This urban-rural difference may sound counter-intuitive, given the sway in the countryside of traditional values biased towards sons as exemplified by *Kanun* regulations. But we need to take into account the other components of prenatal sex selection to better understand these differences. On the one hand, the access to new reproductive technologies was much easier in urban areas in the 1990s, for reasons related to both presence of medical infrastructures, access and transportation, and socio-economic capacities of urban households. Not only was the change in abortion policy recent and probably implemented faster in urban clinics, but cities and towns attracted most of the private facilities that had just appeared in the country at the end of the regulated health system. On the other hand, fertility was significantly lower in cities than in villages. It exerted therefore an additional pressure among parents who could not “afford” a third birth after two girls unless it was a boy. In the countryside, parents could still “try their luck” another time without prenatal manipulation as their fertility strategy was more flexible than in urban areas. Both supply and squeeze factors here are likely to have superseded the original demand factor.

The analysis of regional differences is limited here to prefectures, as districts tend to be too small for meaningful differences to appear. Table 12 pertains only to parity 2+ in order to distinguish births that followed a male birth from other births. Unsurprisingly, urbanized prefectures such as Durrës and Tiranë emerge with the highest sex ratio levels among sonless families. The capital prefecture records the highest level at 119 male births per 100 female births following the birth of only daughters.

The sex ratio is also quite high in the mostly rural and less developed prefecture of Kukës, a feature that can be understood only by reference to the influence of traditional patriarchal values in this part of Albania. In fact, an unexpected result is the high SRB of 112 male births per 100 female births recorded in Kukës among families who already had a son. This suggests that this region may be a place in the country where son preference is combined with a relative aversion for girls. On the contrary, several prefectures such as Berat, Gjirokastër, Korçë, or Shkodër record almost a normal sex distribution of children in sonless families. They will appear again in the vital registration data as prefectures with somewhat lower levels of birth masculinity.

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Table 12: Sex ratio at birth by prefecture and presence of an older brother, 2001 child population

Prefecture	Without brother	With brother
Berat	105.7	101.2
Dibër	109.0	107.6
Durrës	114.7	108.4
Elbasan	113.3	107.7
Fier	113.3	104.9
Gjirokastrë	105.2	105.6
Korçë	107.2	104.4
Kukës	117.5	112.1
Lezhë	111.9	108.6
Shkodër	105.1	105.7
Tiranë	118.8	104.8
Vlorë	114.0	109.1
Total	112.2	106.5

Birth masculinity can also be decomposed according to the socio-economic status of households using our quintile division (see Table 1.3). Among sonless families, the sex ratio at birth increases regularly along the socio-economic scale, moving from a somewhat moderate sex imbalance at birth among the poorest quintile (109) to a high sex ratio among the richest (117). While less pronounced than the rural-urban differences in birth masculinity, the variations by socioeconomic status also suggest the role of factors of Malthusian fertility strategies and of better access to private health infrastructures. In particular, the cost factor is directly relevant since health facilities with new imported equipment were probably out of reach to the less affluent sections of the population in the 1990s.

Table 13: Sex ratio at birth by quintile and presence of an older brother, 2001 child population

Quintile	Without brother	With brother
1	108.6	106.5
2	110.3	107.4
3	111.4	105.4
4	115.7	105.4
5	117.3	108.1
Total	112.2	106.5

We have also tested the child sex ratio against individual indicators of comfort and higher socio-economic status (household possessions, equipment, housing facilities etc.). They are systematically associated to a higher level of sex bias (data not shown). For instance, the sex ratio after the birth of girls was as high as 129 among the few households that already owned a computer in 2001.

Somewhat similar results are obtained when using data on education. The higher education reported by any adult household member is in particular closely linked to skewed sex ratios, ranging from

levels below 108 among households with no higher level than primary education to 120 among families with university degrees (data not shown). Sonless households that include any illiterate adult are on the contrary characterized by a low sex ratio of 103. We have tested the sex ratio against the presence of farm workers in the household, but the result (109) remains inconclusive.¹² Agriculture and land transmission cannot be therefore identified as an independent factor behind high birth masculinity.

We also examined the role played by migration by identifying households reporting a migrant residing away from the family (in Albania or abroad). These households are surprisingly few, accounting for only 2 percent of the child population. The sex ratio of children among sonless families at 102 is significantly lower than among other households, which is counterintuitive.¹³ There is also no significantly lower sex ratio among households headed by a woman.

3.2.4 A synthetic analysis of SRB determinants

A more global perspective is given by the results of a multinomial analysis that bring together all factors presented above. The model used is a multivariate logit analysis of the probability of having a son. The logit analysis is restricted to the child population aged 0-3 years and we have included most household, individual and geographical variables used in the previous analysis. Results are given here in odds ratio, with values greater than one when the effect of the corresponding variable is positive.¹⁴ Yet, the birth of a boy used as dependent variable in such models remains a chiefly random phenomenon determined by biological hazard. In other words, the sex of most births in our sample is unrelated to sex selection and to its social or economic correlates.

The first regression analysis is conducted on the entire child population born after 1996. Results are displayed in Table 14. Parity clearly stands out as the variables most associated to birth masculinity. However, first births (reference category) and second-order births have absolutely no association with male children: the positive relationship is limited to later births, with the highest odds ratio observed for the children of rank 4+. The minor link with the age in months points to presence of an upward trend in birth masculinity in Albania during the late 1990s.

Many social and family variables tested in our regression model are not significantly associated with birth masculinity. Yet, among socio-economic indicators, urban residence, possession of a computer and above all household education are showed to be positively linked to the presence of male children. Interestingly, the impact of these variables cancels entirely the role of socio-economic status measured by household quintiles. This suggests that education or presence of a computer—via access to information—and urban residence—via access to health facilities—may be more important determinant of recourse to sex selection than the income factor itself measured by the household standard of living.

¹² Occupation is probably not a very well-defined variable in a country where decades of socialist regime have blurred the definitions of class variations. Moreover, aggregating individual occupational information across a household may not result in robust indicators of occupational profiles.

¹³ This result is unexpected since households with (mostly) male migrants may have a stronger preference for male progeny. The low level of migration reported in 2001 –after a decade characterized by massive out-migration from Albania– tends however to suggest that the variables collected underestimate the true frequency of migration.

¹⁴ Results if not significant are omitted for some variables.

Table 14: Logistic regression of determinants of birth masculinity, 2001 child population below 4 years

	Odds Ratio	Significance	P>z
Age in months	0.9995	+	0.08
Child rank 2	0.9898		0.332
Child rank 3	1.0532	***	0
Child rank 4+	1.1057	***	0
Nuclear household	1.0031		0.753
Head is male	0.9905		0.672
Head is unmarried	0.9862		0.573
International migrant	0.9683		0.199
Urban	1.0298	**	0.008
Household education	1.0117	***	0
Quintile	1.0057		0.134
Computer	0.8703	**	0.003
<i>Elbasan</i>	1.0396	+	0.077
<i>Kukës</i>	1.0469	+	0.092

LR chi2(23) = 122.73 Prob > chi2 = 0

Log likelihood = -144148.44 Pseudo R2 = 0.0004

Number of observations = 208,277

Significance levels: +:10%; *:5%; **:1%; ***:0.1%.

Reference categories :

- Child rank : child rank 1
- Prefectures: Berat prefecture

Kukës and Elbasan are the only two prefectures with significantly higher sex ratios among young children. Interestingly, Tirana has disappeared from this regression as a significant variable once other socio-economic variables are introduced.

The next regression analysis conducted on the child population from the 2001 census is restricted to a smaller sample composed of children of rank 2 or higher. This allows us to introduce another variation, i.e. the absence of a previous brother. Results are displayed in Table 15. In spite of the smaller number of observations used in this analysis, the regression results tend to be far more significant. This is understandable as we are concentrating on a sub-population more vulnerable to the risk of prenatal sex selection.

The rank of children continues to be a major predictor of birth masculinity, especially as children of rank 2 (reference category) have a somewhat balanced sex ratio. Unsurprisingly, the absence of a previous brother becomes one of the most significant variables of this model. Several other socio-economic variables emerge, led once again by the household educational level which remains one of the best predictor of birth masculinity, along with urbanization and the presence of a computer in the household.

We also recognize the negative effect of an unmarried household head (usually a single or divorced mother) and of the absence of a migrant (often a man) on the probability to have a boy. More

surprising is the total absence of influence of the family structure, as we would expect complex and multi-generational households to be associated with more traditional attitudes towards children and therefore to exhibit a stronger preference for boys.

Table 15: Logistic regression of determinants of birth masculinity, 2001 child population below 4 years of parity greater than one

	Odds Ratio	Significance	P>z
Age in months	0.9993	+	0.058
No previous brother	1.0689	***	0
Child rank 3	1.0734	***	0
Child rank 4+	1.1357	***	0
Nuclear household	1.0109		0.377
Head is male	0.9690		0.264
Head is unmarried	0.9483	+	0.09
International migrant	0.9231	*	0.023
Urban	1.0423	**	0.002
Household education	1.0148	***	0
Quintile	1.0013		0.781
Computer in household	0.8360	**	0.003
<i>Durrës</i>	1.0604	+	0.051
<i>Elbasan</i>	1.0662	*	0.021
<i>Fier</i>	1.0540	+	0.061
<i>Kukës</i>	1.0829	*	0.016
<i>Tiranë</i>	1.0509	+	0.061
<i>Vlorë</i>	1.0620	+	0.065

LR chi2(23) = 161.46 Prob > chi2 = 0

Log likelihood = -94323.49 Pseudo R2 = 0.0009

Number of obs = 136374

Significance levels: +:10%; *:5%; **:1%; ***:0.1%.

Reference categories :

- Child rank : child rank 2
- Prefectures: Berat prefecture

In terms of regional differences, we distinguish a large group of prefectures with higher than expected sex ratio (Kukës, Elbasan, Fier, Durrës, Tiranë and Vlorë), with among them the main urban centers, but also a rural and undeveloped area like Kukës. Inversely, the sex ratio of children is especially low in the prefecture used as reference (Berat) in the southeast of the country.

The multivariate analysis shows that most variables individually associated to the deterioration of the child sex ratio after 1995 in Albania exert a significant and independent effect on birth masculinity. Parity and sex composition are the most decisive variables. The time trend—measured by the age of children in months—remains related to the sex ratio at birth as the period under study coincided with the gradual diffusion of the sex selection technology across the country. But once the trend factor and demographic variables are accounted for, socio-economic conditions of urban households

emerge also as a major source on influence on birth masculinity and higher education is in particular a very good predictor of male births. Socio-economic quintiles have no more, any visible impact on the birth masculinity of later births, once the average household education level and rural-urban differences are factored in.

There is only limited information available to assess the respective role of economic conditions, access to information, proximity of infrastructure, or low fertility in the increasing recourse to sex selection. Financial means per se may not have been the primary factor during this period. We do, however, have data from the 2002 RHS survey documenting the use of ultrasound.¹⁵ These data pertain to pregnancies during 1997-2002 and cover therefore almost exactly the period during which the sex ratio at birth in Albania appears to have increased. We discover first that no less than 76.5percent of women underwent an ultrasound exam during their pregnancy. This percentage illustrates the rapid diffusion across Albania of the new reproductive technologies in the 1990s.

The same RHS survey data describe in detail groups characterized by the highest frequency of ultrasound, i.e. women with post-secondary education (92percent), from the highest socio-economic strata (94percent) or from Tirana agglomeration (88percent). On the contrary, the lowest proportions of women undergoing a prenatal ultrasound are found in rural areas (69percent) and among the lowest economic strata (65percent). This closely matches our previous findings on the SRB differentials in the country as we identify a close correspondence between ultrasound users and families with skewed sex ratio at birth.

We also learnt that when classified by type of prenatal infrastructures used, the highest percentage of ultrasound during pregnancies is found among women visiting private health facilities, as 91percent of them reported an ultrasound. On the contrary, the lowest frequency of 54percent was recorded among women using local health dispensaries. Incidentally, the subsequent DHS survey taken only a few years later demonstrated the further spread of modern prenatal technology. 95percent of women reported in 2008-09 an ultrasound exam and the lowest frequency of 87percent were found among the poorest quintile. The diffusion cycle of this new reproductive technology is almost completed since prenatal testing has now spread across all sections of Albanian society, including in rural areas and among the poor.

These variations in prenatal behavior confirm to a large extent what the previous sex ratio analysis based on census data showed. But we learnt also from this survey that a large share of ultrasound (30percent) took place during the first 14 weeks of pregnancy, a proportion higher in groups reporting a higher frequency of prenatal testing. We also observed that ultrasound frequency tends to decline with birth order and tend also to be more frequent among women who undergo more than 3 prenatal visits. This shows that prenatal diagnosis has first spread among women from the middle classes who have fewer children and invest more in reproductive health. It also points to the fact that the main motivation for ultrasound is not sex selection, but antenatal care.

¹⁵ In spite of its detailed reporting of ultrasonography during antenatal care and on abortions, the RHS did not examine the sex ratio at birth, nor did it publish birth data by sex.

3.3 Analyzing birth masculinity based on birth registration

3.3.1 SRB trends in an historical perspective

As previously mentioned, the vital statistics data allow us the possibility to analyze the sex ratio at birth trends for the whole period under communism. The data presented here are twofold. For the purpose of analyzing the SRB trends data from 1950 onwards will be described in this section. These data were collected from the statistical publication of INSTAT and former Directory of Statistics for the period under communism. The quality of these data was discussed in the section of data sources, however where appropriate in terms of data analysis we will address it again. When SRB data were utilized it was found that certain years were missing, for the urban and rural populations, we have done our own estimations and where used we will address them. Another point about this data is the fact that only for a short period of time and selected years, individual data were made available and analyzed in detail. For the period under communism from 1950-1990 there is a lack of information on SRB by other important variables which we will be analyzing for the period after 1995.

When the Sex Ratio at Birth is analyzed based on vital events, the picture of the trend is a mixed one. From 1950 to 1980, we see a trend of SRB at just above 106 male births for 100 female ones. While we expect the sex ratios at birth to be in the region of 104 to 106 male births to 100 female one, this trend is not considered imbalanced. But the SRB level suddenly increases after 1980, with an earlier increase noticeable in urban areas during the 1970s.

Does it tell us that the society changed in the 1980s and Albanians wanted more male births than females? We believe this not to be the case. As previously mentioned, the period before 1980, is also a period of high fertility in the country with level of fertility of 6 to 7 children per woman in 1950 and 1960 and at about 4 children per woman in 1980. This appears to be a very high fertility level for sex selection to emerge.¹⁶ It was explained earlier that the sex imbalances become apparent when the level of fertility becomes lower. This is true worldwide and it certainly is in the case of Albania.

In the 1980s, we note an increase in the level of SRB, with two peaks at 110 in the 1980s and in 1990s. It is difficult to explain these peaks when detailed information on birth is missing. While they both coincide with the reduction of fertility in Albania during this period, it has to be emphasized that during the 1980s abortion was illegal and the sex selection technology had not yet reached the country in those years as the qualitative research suggests (see further below).

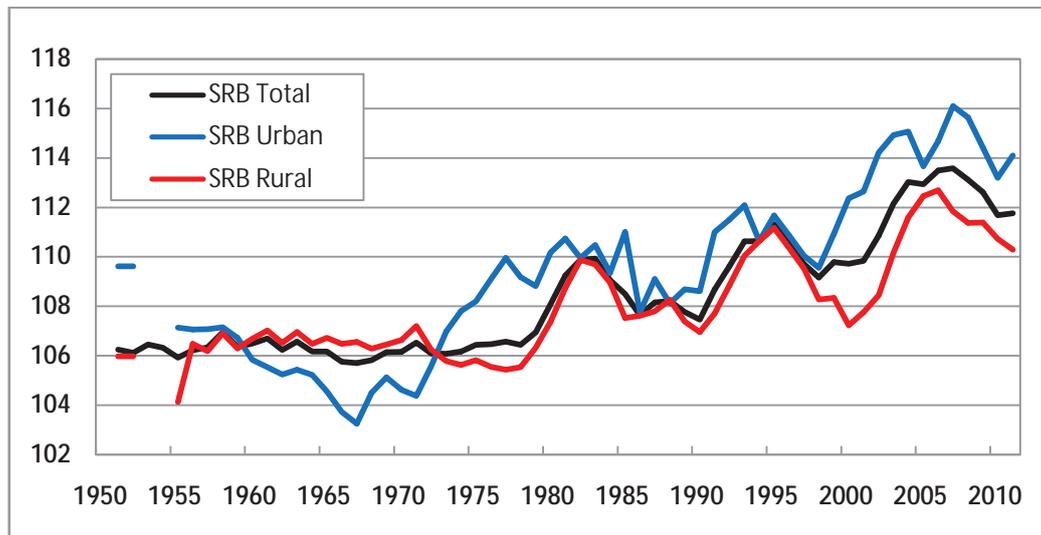
The situation is different during the 1990s and one can expect an increase in SRB levels for two reasons. First, fertility started to come down at below replacement levels and the demand for boys increases in such traditional societies. But more importantly, the technology for sex selection becomes widely available and abortion is simultaneously legalized. This issue has been discussed in

¹⁶ On average, less than 6% of parents of four children will end up without a son. Even if they were to resort to active sex selection, such a low percentage seems unlikely to create a real imbalance in the distribution of births by sex.

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detail later on in the section of qualitative analysis. While fertility decreases to levels of 2 and 1.6 children per women, SRBs respond with levels of 110 (1995-1996) and 113 (2006-2007) male births per 100 female births. If the trend will be left unchecked then it will not be a surprise to see levels of SRB reaching figures similar to those in China and some Indian states of 120 male births to 100 female. If one extrapolates from these trends, it is easy to expect these very high levels in the next 10-15 years.

Figure 13: Sex ratio at birth in rural and urban areas of Albania, 1950-2010



Note: The urban and rural sex ratios for years 1992, 1993, 1994, 1996, 1997 were estimated by the authors.

The differences between urban and rural populations (Figure 13) vary with time and a trend may be difficult to distinguish. While until 1970s, the SRB in urban areas is lower compared to rural areas the trend changes by 1973 and from then on the SRB in urban areas continue to be higher than in rural areas. This is counterintuitive if we portray the countryside as the hotbed of patriarchal traditions and of more prevalent son preference. But this in fact is not what the analysis of the fertility behavior in the 1990s suggests. The SRB analysis of 2011 census shows on the contrary that birth masculinity was higher during the late 1990s in towns and cities than in the rest of the country. Vital statistics show here a clear gap between urban and rural SRB levels since 1995. This trend can be related to lower fertility in urban areas. It might also be explained by the massive internal movements during the transitional period from 1991 to present day, with a substantial change in the composition of Albania's urban population. While in the 1989 census, we had 36 percent of the population living in urban areas, which changed in 2001 to 50 percent and more according to the 2011 census.

While the trend of SRB changes does not fully correspond with the series build by the census data, one thing can be concluded for certain that the trend in the period when fertility has come down from 2000 onwards shows a very significant increase in SRB in both urban and rural areas. This coincides also with the introduction and massive availability of the technology for sex selection at birth described earlier based on RHS and DHS data on use of ultrasound testing.

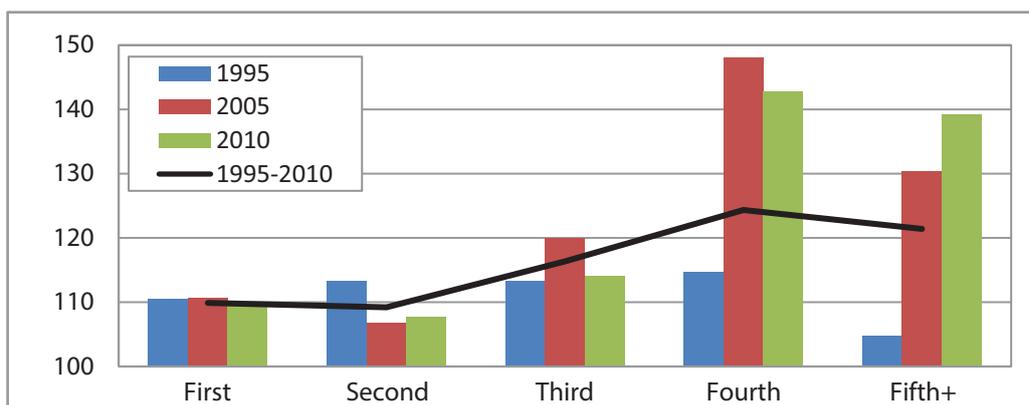
3.3.2 SRB differentials based on birth registration data

In this section we analyze the SRB by different variables available and significant to explaining SRB differentials. The type of analysis and the variables included is conditioned by two main factors. The first, is the availability of the variables which are in the birth certificate and available to us to analyze. As previously mentioned data before 1990 are not digitalized and unfortunately cannot be used for this type of analysis. Furthermore the data during the transition period do not cover the whole period from 1990 to present day. The second reason conditioning the type of analysis and variables used is the importance of these variables to the sex ratio at birth differentials, that we know from literature and other countries experiences. Unfortunately the individual data from vital registration was not fully available at the time of this analysis. We were made available from INSTAT only the data and analysis for the following years: 1995, 1998, 1999, 2000, 2001, and 2004-2010. In some prefectures, births are obviously missing from the dataset communicated to us by INSTAT and we have not been able to figure out the reasons for these discrepancies.¹⁷ This, however, has encouraged us to refrain from using year-wise data and we have found it safer to group data over five-year periods or the entire period as a whole.

Parity

The research to present day from other countries, but also the analysis based on the census of 2001 data on Albania, point out that one of the most significant variables affecting SRB is parity - the order of birth. The number of children that people already have plays a strong influence in the probability of having another child. In the case of analyzing sex ratio imbalances the fact that your previous birth is a boy or a girl is thought to be of high importance for the decision of having another child. Sex ratio at birth by parity for the period 1995-2010 is presented in Figure 14.

Figure 14: Sex ratio at birth by birth parity, 1995-2010



Similar to the analysis of census data, the vital statistics data show that parity is a significant variable that determines the higher sex ratio at birth. Figure 14 shows clearly an increase of sex ratio at birth for birth order 3 and more importantly for birth order 4 and 5+. The SRB from parity two to three goes from 110 to 115, and increases to 125 for parity four for the whole period 1995-2005. If the

¹⁷ For instance, the annual number of births in Vlorë falls for an average 1300 births in 2006-08 to 456 in 2009 and 168 in 2010 for no obvious reason. Similar irregularities—characterized by an unexpected drop in registered births over the last three years are found in several other prefectures.

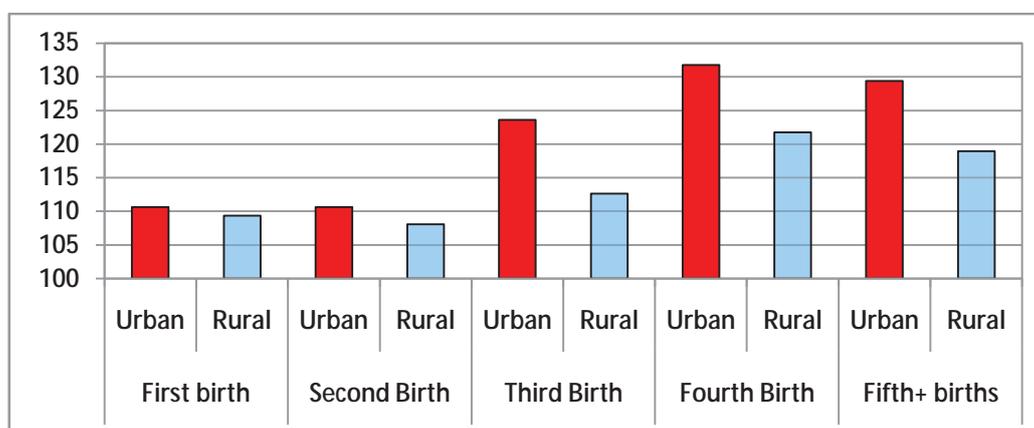
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data are analyzed for each individual year, it is apparent that for parity four we see SRB of over 140 male births per 100 female births for years 2005 and 2010.

This is a clear evidence of the existence of sex selection at birth during the transition period. What is also worrying is that these data suggest the presence of skewed sex ratios also among first birth, with birth masculinity levels close to 110 male births per 100 female births during the period under study. This is however at odds with the census estimates for the late 1990s, which suggested that first births were not affected by sex selection.

Figure 15 shows the parity by birth order for rural and urban resident populations for the period 1995-2010 as a whole. While in the case of Albania it is clear that the sex ratio at birth is higher even for the first parity (110), the SRB increases for the higher birth orders for both rural and urban populations. Similar to the trends seen earlier, the higher urban sex ratio at birth is present, at each parity.

Figure 15: Sex ratio at birth by birth parity and urban rural, 1995-2010

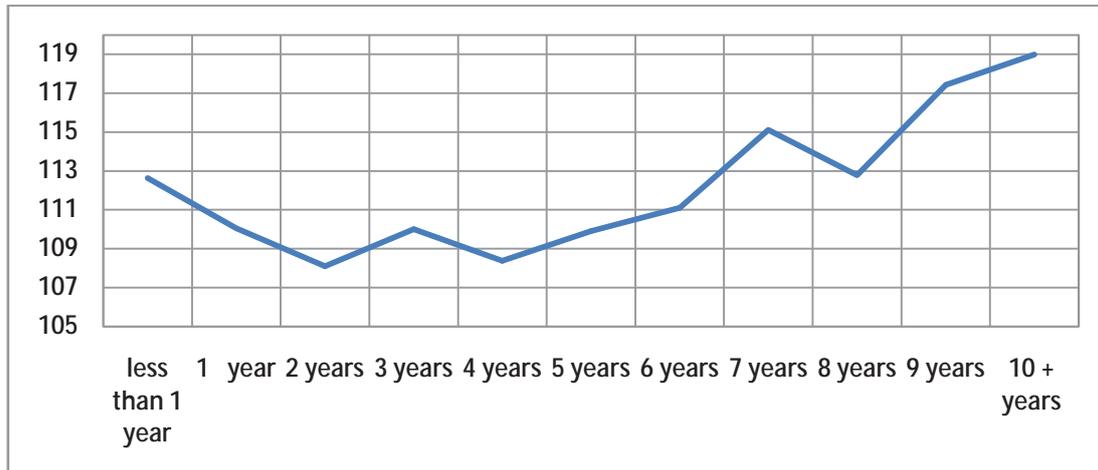


The difference for parity three and four is significant with SRB for urban areas being at 123 male births for 100 female births compared to 113 for rural areas. This difference is still significant even for higher parities with SRB as high as 132 and 127 for parity four and five in urban areas and 121 and 119 for rural areas. One explanation for this might be the high level of internal migration. People have been moving from rural to urban areas during this transition, thus changing the balance of rural-urban population quite dramatically. While this urbanization is natural and irreversible, people carry on their values and norms as it takes time, usually in the next generation for them to change. We believe this might have played a role in this respect and explain this unusual higher SRB in urban areas. However, another explanation could also be the availability of technology for sex selection in urban areas compared to rural ones even if the gap between rural and urban areas may have reduced during the last decade as indicated by the DHS data on prenatal testing. Both these factors might have played a role in explaining these differences.

Mothers' years in marriage

Another possibility that vital statistical data allow us is to analyze the sex ratio at birth imbalances by mothers' duration in marriage (years in marriage). It has to be noted that this variable is not linked with the end of marriage, but with the time still in marriage. From the data presented in Figure 16, it is clear that SRB increases with the increase of the number of years in marriage. Initially the SRB is higher for the first couple of years at 109-110, it firsts comes down and later on, after five years, it increases exponentially.

Figure 16: Sex ratio at birth by mother's years in marriage, 1995-2010



The explanation for this pattern could be three-fold. First, as the woman's time in marriage increases and the selection starts at third or fourth birth, you expect the increased SRB at later years of marriage as a result of the birth interval lengths. Another explanation can be found in the fact that while in the late 1990s first birth was universal in Albania, later on Albanians show signs of postponement of first birth. This means that the first birth might come after a certain number of years in marriage and not as it used to be in the first or second year of marriage. This shift in the fertility pattern from east to west European pattern could well be one of the explanations for this SRB pattern by years in marriage. This is also supported by the fact that SRB increases with age of the mother in the societies where the imbalances are present. As to the higher SRB level for shorter marriage durations, the causal factor may work in a reverse way: in a patriarchal society, it is also possible that the birth of a son by itself has resulted in a marriage rather than in a pregnancy termination.

3.3.3 The effect of socio-economic variables

Education

Literature and the experience of other countries tell us that sex selection at birth varies with different socio-economic situations. Different factors are accounted in this regard, from education of parents to socio-economic status, being that income based or social class based. In our dataset from birth registration, there are only two types of variables that can be used. First the parent's education is important and we are analyzing it below, but also the type of work the parents do. The latest reflects only the type of the sector that parents are employed, being it public, private or both sectors.

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In this case there is not much information that could shed some light regarding the variation of SRB in Albania. In fact the data on Albania show no trend or pattern in this regard.

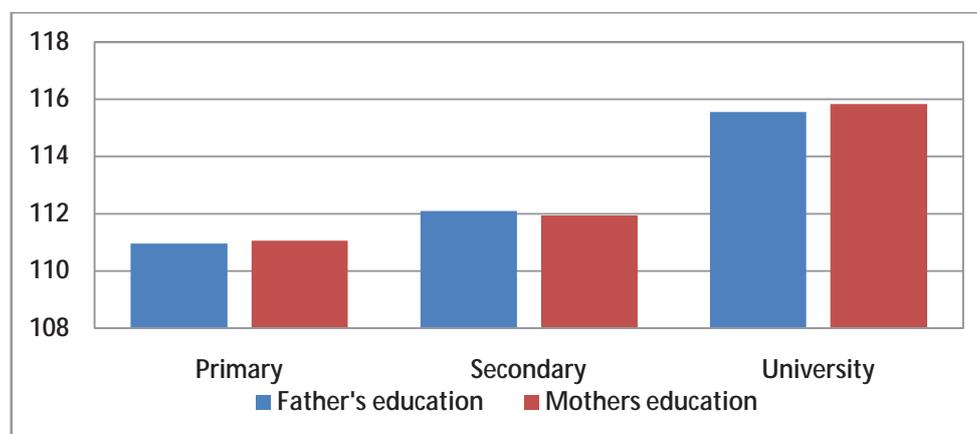
When education is considered (Table 16 and Figure 17) we clearly see a positive link with higher sex ratio at birth. Incidentally, this is a typical pattern also observed in countries such as India or Vietnam.

Table 16: Sex ratios at birth by parents' education level

	Father's education level			Mother's education level		
	Primary	Secondary	University	Primary	Secondary	University
1995-2010	111.0	112.1	115.6	111.1	111.9	115.8
1995	110.1	114.5	114.5	111.1	113.6	115.4
2000	109.6	106.5	117.7	109.2	106.2	120.1
2005	113.0	112.3	120.8	113.5	111.4	115.3
2010	108.3	114.0	117.2	108.1	115.2	112.8

The data on Albania for both males and females show a clear increase in the SRB with the level of education of the parents. Thus, the SRB increases from 111 to 112.1 and 115.6 for fathers with respectively primary, secondary and university level of education. The pattern is similar for mother's education with SRB changing from 111 to 112 and 115.8 for the same levels of education. This is true when the period is considered as a whole but also for most of the individual years.

Figure 17: Sex ratio at birth by parental education, 1995-2010



What does this pattern tell us in the case of Albania? We know that the rapid improvement in education in Albania, as detailed earlier in this report, was one of the significant responsible factors in bringing fertility down to below replacement level. Thus, as previous research has concluded the emancipation of the Albanian society with particular emphasis on female empowerment had a direct effect on fertility reduction as well as on the reduction of infant mortality.

The question raised by this finding on SRB is how can education and empowerment of women affect one demographic variable (such as fertility or infant and child mortality) but not the preference of boys compared to girls? This is a much wider discussion that this report aims at. However, the answer to this could be found in previous research (Gjonça et al., 2008) which found that while the investment in social agenda, particularly in education, brought fertility down in Albania, traditional

norms and values kept marriage patterns unchanged. The mean age at marriage remained unchanged for almost 40 years and marriage continues to be universal in Albania even in 2010s (98 percent of females enter marriage by age of 28). The same argument could be applied to the SRB. The traditional norms and family values coming from the traces of a patriarchal society are still significant in favoring boys compared to girls. In fact, in times of political and economic instability after 1991, the traditional family system emerged as one of the most stable institutions. The resurgence of patriarchal values (Kaser 2008) that the communist regime had failed to eliminate is an illustration of the strength of the traditional Albanian family. In other words, these age-old norms and values have a stronger effect than the education in the case of Albanian society.

SRBs by the time of birth registration

While analyzing the sex ratios at birth data, it was found that a large number of births over the years were not registered within the same year that the birth has occurred. It occurred to us to check first if this is something systematic over the period. Second, if proved systematic, we wanted to examine if late registration was in any way linked to the sex ratio at birth. At the outset, we need to mention that one cannot make a difference between the number of births registered from Albanians living in Albania and those of the emigrants. However, this is not expected to affect the results as research to date suggests that even in the countries where Albanians have emigrated in large numbers, Italy and Greece, the Diaspora population shows the same sex ratio at birth imbalances as the Albanian population.

Table 17: Sex ratios at birth time of registration

	SRB for births registered:		Later		On time	
	Later	On time	Male	Female	Male	Female
1995-2010	106.2	112.7	42643	40155	226049	200640
1995	103.8	113.0	2863	2758	30907	27352
1998	106.2	110.1	4845	4562	23337	21191
1999	105.2	112.5	5064	4814	21232	18869
2000	105.2	109.6	5220	4960	20840	19018
2001	107.2	112.0	6708	6258	20964	18713
2004	107.5	114.3	3080	2865	19779	17298
2005	108.2	113.8	3156	2918	17851	15687
2006	109.6	115.2	2992	2729	15258	13250
2007	109.8	114.3	2446	2228	15193	13296
2008	100.3	114.3	3428	3418	15685	13720
2009	109.2	113.1	1606	1471	13860	12252
2010	105.2	111.5	1235	1174	11143	9994

Table 18 shows the sex ratios at birth for two types of births, the one registered on the same year (on time) and the ones registered after the year the birth has taken place (later). The other columns show the absolute number of births for males and females for these two types of registration. The first thing to distinguish is the fact that the births show a reduction from one year to the other for both categories. This could hint to the fact that this reduction from one year to the other is a

reflection of fertility reduction in Albania during this period (supported from survey data, too). The second thing to note is that the difference between births registered on time and those later is very large, with births registered later on only a mere 16 percent of overall births.

Yet, if one looks at the different sex ratios at birth for both types of births, it is clear that the imbalances are more emphasized in the births registered on time. In fact, late registration corresponds in many years to births with an almost normal SRB level close to 105 and the average SRB level at 106 is not significantly skewed. This suggests that in a society where son preference is well-entrenched, one would expect that people would delay the registration of a birth if they were not happy with it—meaning here having a baby girl rather than a boy— and this is what this analysis indicates. Birth registration behavior as illustrated by these somewhat innocuous data on late registration seems to provide yet another illustration of the prevalence of gender bias in Albanian society.

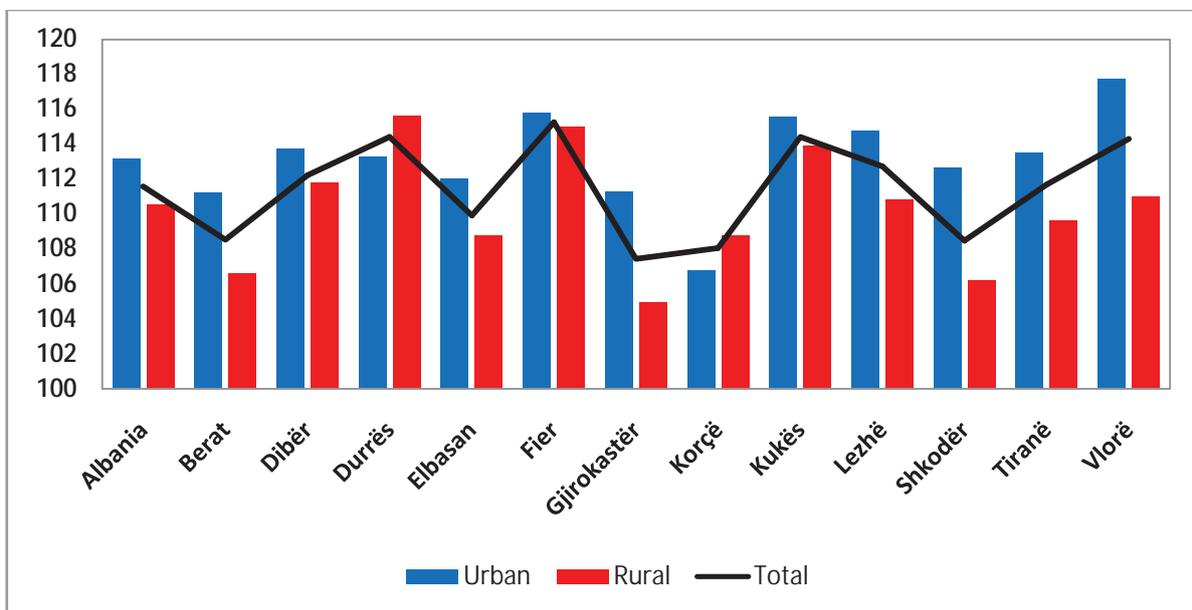
Birth masculinity by prefecture

Since one of the main determinants of the sex imbalances at birth is the existence of the patriarchy in the society which favours males versus females, it has always been expected that the norms and the values that discriminate women and girls would be found more in the northern part of the country where such values have been prevalent for a long period of time. In this respect, one would like to look again at the sex ratios at birth differentials by prefectures. Another reason to look at this regional division would be the fact that development in Communist Albania has been argued to also be regional with the north-east poorer and less developed than the southwest. Figure 18 shows the sex ratios at birth by prefectures for the whole period 1950-2010 and rural urban division. It has to be pointed out that the analysis of census 2001 data showed limited variations across prefectures (see

Table 12). As the data show there is a variation by both variables presented here, the prefectures and by urban rural division. The prefectures with the highest overall sex ratio at birth are Kukës, Vlorë, Fier and Durrës. These prefectures correspond almost exactly to the prefectures with the highest conditional sex ratios identified with census data (with exception that Tiranë is now replaced by Fier). Similarly, the southeast of the country (Berat, Gjirokastër and Korçë) along with Shkodër constitutes a distinct cluster with significant lower birth masculinity levels.

It is of interest to stress that a similar type of geography of sex discrimination in Albania emerges from census and vital registration analyses, opposing regions with almost normal sex ratio at birth to areas with levels close to 115 male births per 100 female births. For lack of additional data, the nature of factors behind these regional differentials is not easy to analyze, but they most probably result from a combination of cultural, economic and demographic effects. About cultural factors, the limited data available on ethnicity shows for instance that the sex ratio at birth among ethnic Greeks in Albania is in fact very low at 103 male births per 100 female births in 1995-2010, which is not entirely surprising as their kinship system is far rigidly patriarchal than the Albanian system. Greeks are more numerous in prefectures such as Gjirokastër and Vlorë and their overall historical similarities to Albanians are with population in the region of Southeast of the country where birth masculinity is lower. Similarly, the Catholic Church has a stronger influence in the North, especially in Shkodër, and this may be a reason why sex selection via abortion could be less frequent in this region. This issue will also be addressed later on when the logistic regression results will be analyzed in order to see a direct effect of each variable.

Figure 18: Sex ratio at birth by prefecture and rural urban variation, 1995-2010



As to the urban rural differences for each prefecture, the picture is still mixed. There are large differences in Vlorë, Shkodër, Tiranë and Gjirokastër between urban and rural population. Again it is difficult to judge of a significant pattern. One would only say that regions of Tiranë, Durrës and Vlorë are also the most populated (increased number as a result of internal migration), but also the ones which are more developed than the rest of the country.

3.3.4 Deterministic patterns of birth masculinity based on registration data

In order to understand the deterministic pattern of this well evidenced imbalanced sex ratio at birth in Albania, as well as determining individual effects of each variable, logistic regression models are run on the birth registration data. The modeling is very similar to the one run for the census data, where the probability of having a boy is seen as the dependent variable. Again here the results are shown in the form of odds ratios showing the likelihood of having a male birth from our sample data. A value of more than one shows a positive relationship with the probability of having a boy. It should be noted here that the effect on probability of having a boy are independent of each other. In order to increase the sample size we only run the regressions for the whole dataset including all the years. This was done in order to increase the sample and to increase the significance of results.

Various logistic regression models are applied by bringing the variables one by one in the model and looking at the effects. We are only presenting here two of the models chosen from ten models run for this analysis.¹⁸

The first model is given in Table 19. The results, as expected show a significant effect of the parity of birth in the probability of having a son. The results for all parities apart from order 2 are significant. Similar to the descriptive results of birth registration, as well as results from census 2001 analysis, the likelihood of having a boy increased with the increase of parity, with the fourth birth having a 13.7 percent higher chance to be a boy. This result supports the findings of analysis of the data from census 2001. While this result is expected from the descriptive analysis, the effect of being born in urban or rural areas is different from what was expected. The likelihood of having a boy is lower in urban areas compared to rural ones in this dataset. This is not systematic with the descriptive analysis and the results from the census data. This finding requires further investigation in the future, as it could have been affected by the different definition of urban and rural in the census and birth registration.

Table 19: Logistic regression of determinants of birth masculinity based on registration data 1995-2010, model 1

Masculinity	Odds Ratio	P> z	Significance
<i>Reference - First Birth</i>			
Second birth	0.993	0.317	
Third birth	1.061	0.000	***
Fourth birth	1.137	0.000	***
Fifth birth	1.113	0.000	***
Sixth + birth	1.109	0.023	*
Parity not stated	1.036	0.031	*
<i>Reference - Rural</i>			
Urban-rural	0.971	0.000	***

¹⁸The regression analysis has been conducted by INSTAT and we have not been able to check independently the robustness of the different models.

<i>Reference - Berat</i>			
Dibër	1.024	0.119	
Durrës	1.047	0.002	**
Elbasan	1.012	0.368	
Fier	1.064	0.000	***
Gjirokastrë	0.992	0.666	
Korçë	1.001	0.958	
Kukës	1.039	0.051	
Lezhë	1.026	0.105	
Shkodër	0.988	0.461	
Tiranë	1.022	0.107	
Vlorë	1.051	0.001	***

LR chi2(18) = 242.18 Prob > chi2 = 0.0000
 Log likelihood = - 352264.16 Pseudo R2 = 0.0003
 Number of observations = 509,487

The results by prefectures are not significant for all prefectures. While in the census analysis the findings were most significant for Kukës and Elbasan, in here we find significant positive relationship with birth masculinity in prefectures of Vlorë, Fier and Durrës. It is interesting to note that these prefectures showed high sex ratios at birth in the descriptive analysis, too. More importantly these prefectures, as previously mentioned, are located in the more developed area of coastal Albania where the effect of patriarchy is not as emphasized as in the north east of the country.

The second model presented in Table 20 shows results of the regression analysis including most of the variables derived from the birth certificate. This model is similar to the first one, but more complete when it comes to the variables affecting birth masculinity. Again in this model similar to all previous analysis, the effect of birth order on birth masculinity is the strongest, although a positive relationship exists with most orders of birth. Results by parity are significant for all parities apart from order 2. Similar to the previous model the result of urban residency is the same. In this model a variable on the 4 main region of the country has been included. The main regions are the mountain area of the country in the north, Central, Coastal and Tiranë. Similar to the analysis by prefectures, it is difficult to see any pattern here with the coastal pattern having relatively higher odds ratio compared to the rest of the country. This is similar to the results by prefectures, where the three prefectures with the highest odds ratios were those in the coastal area of the country.

Table 20: Logistic regression of determinants of birth masculinity based on registration data 1995-2010, model 2

Masculinity	Odds Ratio	P> z	Significance
<i>Reference - First Birth</i>			
Second birth	0.988	0.071	
Third birth	1.047	0.000	***
Fourth birth	1.119	0.000	***
Fifth birth	1.094	0.000	***
Sixth + birth	1.077	0.109	
Parity not stated	1.036	0.031	*

Reference – Rural

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Urban-rural	0.980	0.001	***
<i>Reference – Tirana</i>			
Coastal area	0.327	0.009	**
Central area	0.317	0.007	**
Mountain area	0.318	0.008	**
<i>Reference – Birth Registered later</i>			
Registration status	1.054	0.000	***
<i>Reference – Father with Primary Education</i>			
Secondary education	1.009	0.157	
Tertiary education	1.036	0.013	*
Education not stated	1.007	0.768	
<i>Reference - Age group 15-19</i>			
20-24	1.068	0.146	
25-29	1.052	0.255	
30-34	1.075	0.106	
35-39	1.092	0.051	
40-44	1.088	0.068	
45-49	1.126	0.018	*
50 yrs and over	1.033	0.574	
<i>Reference - Live births registered in 1995</i>			
Live births registered in 1998	0.981	0.101	
Live births registered in 1999	0.996	0.747	
Live births registered in 2000	0.977	0.056	
Live births registered in 2001	0.996	0.757	
Live births registered in 2004	1.014	0.272	
Live births registered in 2005	1.012	0.342	
Live births registered in 2006	1.026	0.057	
Live births registered in 2007	1.021	0.123	
Live births registered in 2008	1.003	0.806	
Live births registered in 2009	1.012	0.386	
Live births registered in 2010	0.996	0.772	
LR chi2(32) = 331.88 Prob > chi2 = 0.0000			
Log likelihood = - 352219.4 Pseudo R2 = 0.0005			
Number of observations = 509,487			

When the “education of the father” variable is included in the model, it is clear that having a higher education affects positively the probability of having a boy. This result was statistically significant. It also confirms the findings from the descriptive analysis. Similar result was also obtained when the “education of the mother” was included. When age of the father is included in the model higher odds ratios are obtained for higher age groups, in particular in the age-group 45-49 which has a 12.6 percent higher likelihood of having a boy. This result was also statistically significant. This is an expected result if one takes into account the other factors affecting birth. When the variable for the “year of birth registration” is included, the results are not significant, most likely due to the sample size. But the period 2004-2009 seems characterized by higher levels of birth masculinity.

Caution should be applied when interpreting the results of this regression analysis. The limitations of the data should first be mentioned here. Firstly, the variables included in these analyses are those

that can be found in birth certificate. This means that not all the determinants of birth masculinity can be included in this dataset. Secondly, in the case of Albania, we pooled together the births of a long period of 15 years in order to increase sample size. Fifteen years is a long period that might see some changes in the effect of these variables. These changes we cannot capture.

To finalize this section one can conclude that the analysis of birth registration data confirmed again not just the existence of the sex imbalances at birth in Albania during this period, but also confirm some of the main determinants affecting it, such as parity and education. On many other aspects, the analysis remains inconclusive.

4 Qualitative analysis of son preference and sex selection

The qualitative research study was designed to complement the findings of the demographic review of available data. This study consisted of in-depth interviews with women, focus groups discussions and key informant interviews. The data were collected with participants coming from three areas of Albania. Key informant interviews were also conducted with doctors. Its methodology in detail is described in the second part of the report. The qualitative approach aimed at exploring the factors that may contribute to the phenomenon and the practices related to it. It contributes also to the identification of recommendations on the appropriate and relevant steps to be taken in order to tackle the roots of this phenomenon. The research focused in particular on four main research questions:

- What are the factors that lead to son preference in Albania?
- How are decisions related to sex selection taken in Albania?
- What are the sex selection methods used and how?
- What can help alleviate the phenomenon?

4.1 Perceived value of sons

Overall, the findings show that sons and daughters are both perceived to be valuable in the family. Yet, their importance is linked to different gender-based attributes, roles and tasks. In almost all the interviews and focus group discussions, boys were described to have more social and economic advantages compared to girls.

"The wish is to have a son in any case, but we still love them (daughters and sons) the same...But if we don't have a daughter it is not a problem." - Focus group discussion with men, rural area in Dibër

"There is a big desire for having sons, more than for girls. There is joy when sons are born. Sons are always beautiful, even when they are naked. When sons are born, even the house pillars are happy, when daughters are born, the pillars cry." - Focus group discussion with grandmothers, urban area in Dibër

The findings showed that this advantageous position of boys is a result of various cultural and socio-economic factors, as well as community and family pressure. Some of these factors as the son's duty to transfer the family line, inherit the family property and provide financially for the family have been found to have a strong impact on the maintenance of son preference also in other countries.¹⁹ In addition, this research indicated the presence of some distinctive factors, such as protection that sons offer to the family regarding security threats and dishonor, which have not been found in other cultures. On the other hand, some other aspects characteristic for Asian countries, such as the value of sons for religious rituals, the high costs of the dowry for daughters, and the stereotypes towards mothers with daughters considering them as bad omen, were not found in this research.

¹⁹Our preliminary research was based on similar studies and surveys conducted in affected countries in Asia. See in particular UNFPA & CREHPA, Nepal (2007); OHCHR, UNFPA, UNICEF, UN Women & WHO (2011); UNFPA, Vietnam (2011).

4.1.1 Cultural aspects of son preference

Besides individual preferences, all the interviewees reported the existence of a cultural preference on sons, even when there are no strong or obvious economic or social reasons to have one in the family. This preference seems so deeply ingrained that many participants had even difficulties explaining the reasons behind it.

"It wouldn't change much, but I want a son, just to have one." - Mother, Bathore

"We, the highlanders, want only boys." - Focus group with grandmothers, Bathore

Based on the data gathered, we argue that the cultural factors influencing the necessity for sons are related to: a) the inheritance of the family line, and b) the protection of the family.

Family line

The value attached to the family line is grounded in the old patriarchal system of Albanian society, which may have a strong influence in defining family relationships even nowadays. Cornhiel and Wheeler (1998) have shown that the old traditional patriarchal norms in Albania defined the family blood relations vertically through male members and horizontally through brothers and their children. Sons were thus required to ensure the continuance and survival of the family line, meaning the family name and the family identity. In this study, it was revealed that the inheritance of the family line is still very important for Albanian families. While the daughters are expected to change their surname when they get married and therefore are not perceived to belong to the family of origin, sons are given the legacy to transfer the family name to the coming generations.

"The son is needed for the (family) roots, the family name, while the daughter is needed for "the world's house"(her husband's family). " - Focus group discussion with grandmothers, rural area in Vlorë

"The son is needed for the family name, for the successors. If you don't have a son, people say the family line is gone. " - Mother, Bathore

In addition, sons are also needed for the continuation of the family identity, which is defined, by the parents' and their ancestor's efforts and achievements. It is for these reasons that the participants in this study often referred to sons with expressions such as "the pillar of the household", "the roof of the household" or "the root of the household".

While in Vlorë, the inheritance of the family name has more of a symbolic value related to the continuance of the family genes and "blood", such tradition is in the North strongly related to the social norms shared in the community. In these areas, the inheritance of the family name means the legacy of the family land and other similar types of property. The land of an extended family is shared between the small families of brothers and male cousins from the father lineage. To follow up the tradition, parents wish to have sons so that the property of the family remains within the family. In case no sons are born, the parents feel obliged by the community norms to pass on their property to their nephews who have the same surname. Few of the interviewees mentioned that the family name inheritance continues to be important for parents regardless of the fact that nowadays, girls may also keep their name after marriage if they want to.

"Sons are needed for the inheritance of the family name. If you have a son, your name is not lost and your door is not closed when your daughters get married...If you don't have a son then you have to leave the house and the land to your nephew because he carries the family name." - Focus group discussion with men, rural area in Dibër

Family protection

The interviews revealed a pronounced gender difference in the descriptions given of sons and daughters. While sons were often referred to as strong and brave and as "a protection shield" for sisters and other family members, daughters were considered as fragile, weak and susceptible to bring dishonor the family. Although sons were not considered flawless, and in most of the interviews their upbringing was reported as being more challenging than that of the girls, sons' mistakes seemed to be easily forgiven and forgotten.

"You have to take care of girls because they have to be virgins when they go to their husbands, and they have to find a good luck (spouse). On the other hand, the son can meet several girls and can decide more freely than girls." - Mother, urban area in Dibër

"Girls are more difficult to be raised because of the prejudices. In villages, parents do not allow girls to go to school after the 7th grade because their body is developed. They are allowed to attend school only if they do well in school and can proceed further." - Focus group discussion with women, urban area in Dibër

Due to their perceived strength as illustrated in the above descriptions, sons are often given the role of protecting the family and the country in different situations.

First, especially for those participants who considered daughters to be vulnerable and a potential source of shame for their family, sons were needed to defend the sexual purity of their sisters. According to the Albanian traditional norms, if the daughter or the sister loses her virginity before getting married, this would cause a big damage to the social reputation and honor of the family in the eyes of the community. This view was widely found among participants from Dibër and Bathore, but not so much in Vlorë.

"Maybe one of the reasons why people continue to want to have a son at any cost is related to the fact that they are needed to protect the honor of their sisters and because the sister would feel stronger and secure with a brother." - Mother, Bathore

Second, sons are needed to protect the sisters from domestic violence by their husbands or others in the family. In Albania, domestic violence seems to be a continuous problem for women, which is still considered a private matter, and therefore it is solved within the family and not through the help of the police or other institutions (CEDAW & USAID, 2005)

"A sister without a brother is nothing. There is no protection without the brother. My brother is my protection. When I fight with my husband, I always think of going to my brother. " - Mother, Bathore

For some of the women, it is the submissive position of daughters in the family and community that leads to their desire not to have daughters, rather than the desire to have sons.

"I did not want a daughter because I did not want her to be dominated by others, but I will educate her to not take orders from anyone." - Mother, urban area, Dibër

Third, sons are needed to protect the family from security threats or other types of threats to the family honor and reputation. The role of sons in protecting the family has its origin in the traditional norms of Kanun, which represents a code of honor still powerful nowadays in the north of Albania. According to Kanun, only men have the right to restore the honor of the family when it is threatened. In some of the cases, this means that sons should be involved in blood feud and can lose their life. Therefore, the more sons a family has, the better it is (Halpern et al. 1996).

"A girl cannot take revenge when something happens. This Kanun does not leave us at peace." - Grandmother, Bathore

Finally, sons are needed to protect the country in periods of turmoil (Halpern, Kaser & Wagner, 1996). This concept was often found especially among interviewees in Dibër area.

"All the rituals, the songs about wars lead to the desire for sons. The son is for guns. This is an Albanian and highlanders' concept. These are wrong concepts. I have been abroad and found out that this is a patriarchal mentality since Ottoman time." - Doctor, Bathore,

4.1.2 Socio-economic aspects of son preference

Two socio-economic factors were found to have a strong influence on parents' wishes for a son or a daughter in the family: the support that children offer to the family, and the right of sons and daughter to inherit the family property.

Children's support to the family

Participants in this research very often mentioned the role of the children in providing two main types of services for their parents, namely the financial support and the emotional support. Even though both sons and daughters are expected to support the family, their support may be different. Sons are expected to live with parents and provide for them financially especially when they become old and incapable to work. Many participants argued that giving birth to sons is a future investment for the parents. Boys not only start working earlier or can emigrate, and are paid much more than girls (UNDP & SEDA, 2005) but they are as well expected to financially provide for their family all their life.

"Male children are thought to be a support for parents, a type of security for the future." - Doctor, Tirana

"The son is a working force. He provides for the family. When parents become old, he provides for them and the girl leaves." - Focus group discussion with men, town in Dibër

Some of the participants implied that this desire for sons is also a result of selfish needs of parents who want to live a good life without putting much effort themselves.

"The lazy men want sons, because sons are there to work and fight for them, and they can live peacefully." - Focus group discussion with men, rural area in Vlorë

While sons have the duty to provide financially for the family, daughters are given the responsibility to offer emotional assistance to parents. Almost all participants indicated that daughters have a unique value, which is mostly attributed to their caring and helping characteristics. For them, sons and daughters differ a lot in the ways they express emotions and take care of others. Sons are said to create distant and neglectful relationships with their parents and are described as emotionally cold and insensitive. On the contrary, daughters are considered in a much more positive light. They are described as kind, soft, respectful. Such descriptions are in line with the cultural stereotypes about differences between men and women in emotional expressivity and social relationships.

"Girls are for the mothers. I will talk about my problems only with her when she grows up. Girls are sweet, cuddly, caring and loving.." - Mother, Bathore

Girls are thus perceived as caring and thoughtful and who create a positive climate in the family. For some of the participants, they tend to cause less trouble for parents compared to boys and help parents (especially mothers) deal with emotional problems in stressful moments.

"Girls are extraordinary buffers, they soothe the situation at home, the situation between the couple (the parents) and the whole family." - Doctor, Tiranë

"Women want to have a daughter to talk to about problems. An imam from Laknas has told me, sons are for the name but daughters are for the heart." - Focus group discussion with grandmothers, Bathore

Another advantage of girls is their expected role in housekeeping. For these reasons, many participants suggest that having at least one daughter in the family is important.

"However, the preferences of parents have changed a lot now compared to before when they wanted only sons. Now they want daughters because daughters are for the household. So everyone loves girls, they just want also a son." - Focus group discussion with grandmothers, rural area in Vlorë

In addition, many participants stated that although girls are not expected to financially contribute to their family after they get married, they often continue to take care of their parents, especially when they get very old and need intensive health care. Moreover, girls continue to take care of their parents through housekeeping and care giving in situations when the sons have migrated and parents live alone.

"Girls are better because they take better care for parents". - Mother, urban area in Vlorë

"Guys now go abroad, emigrate. While girls continue to be dedicated to the household and the care giving, although they may have gone to their husband's house. - Engaged woman with no children, urban area in Vlorë

The inheritance of the family property

One of the most common answers regarding the value of sons was related to sons' legacy of the family property. As mentioned above, the inheritance of the family line is strongly related to the inheritance of the family properties. By giving birth to a son, the parents ensure that the property will remain in the family.

"You need the son for the inheritance, because the daughters belong to another house. In my neighborhood no one shares the property with the daughters." - Mother, urban area in Dibër

Such patriarchal tradition is reported to have been more active in the north of Albania, as property inheritance was strongly related to the social structure of the community. Villages in these areas were formed by large families (*fis*), which shared the same name. Hence, the family land and the house were not private property but property of the *fis*. The absence of sons resulted in the transfer of the property to the nephews of the head of the house since the daughters were deprived of property rights. Many interviews depicted a widespread view, according to which the girls are considered as belonging to "the world's household" and not to the family. The participants from Dibër reported that in their area, the rule of passing the land and house to sons is still valid.

"The son is needed for inheritance purposes, although recently property has started to be divided, still, land is given to sons. It belongs to the fis and you cannot give it to girls, they have another surname." - Focus group discussion with women, urban area in Dibër

Although in Dibër such law is still present, it is not anymore relevant in Bathore. Bathore is a poor suburban area of Tirana formed after the 1990s due to intensive internal migration waves. The majority of the population in Bathore comes from the northern and northeastern rural areas. Most of these migrant families settled in this area by building informal settlements, which with the passing of years were substituted by houses (Vullnetari, 2007). In this new context where the land was informally occupied or bought, the community was not anymore bound by the social expectations to pass on the property to the nephews or other male members of the family if not sons are born.

"We had a 'social' capital in our areas, which was passed on from brothers to kinship (fis) and to the village. The girls were outside of this, because they married outside the village. By moving down (to Bathore), we lost this." - Focus group discussion with men, Bathore

With the inheritance of the family property, sons are given also the responsibility to take care of the others members of the family such as provide for the parents financially and use the family resources to prepare the sister's weddings and help them out in life. If sons are missing, then the nephew who inherits the property receives these responsibilities. This tradition was again mostly shared among participants from Dibër area.

"I leave my wealth to whoever I want. I may leave to my daughters or my brother-in-law or their children. If I leave my property to the son of my brother-in-law, my daughters will have a place where to go, and he will be responsible even for the future weddings. The son keeps the door of the household open, so the girls have a place to come back if they have problems." Focus group discussion with grandmothers, urban area in Dibër

Even though such value of sons regarding property inheritance was found mostly among participants coming originally from the north of Albania, the inheritance issue has a different meaning for participants of Vlorë. In Vlorë, it is expected that the child who will live with the parents is the one who will benefit the family property. In most of the cases it is the son who is expected to live with the parents and not the daughter and her husband. Therefore, the parents' desire to have a son is not as much related to the property inheritance as to the need to have a son to live with them.

4.1.3 Community norms and family pressure

Community unwritten norms also influence the son or daughter preferences in Albanian families. Albania is a Mediterranean country, and as such characterized by a collectivistic and honor-oriented culture (Fischer et al. 1998). In such societies, group concerns and social reputation are very important to individuals. As a result, there is in these cultures a high sensitivity and compliance to the community beliefs and norms. Participants in this study often mentioned how the community attitudes about childbirth and family composition become a source for pressure coming both within and outside the family.

Ideal number of children and family composition

Due to big social and economic changes in Albania in the last 60 years, Albanian families nowadays have fewer children than before (Gjonça et al., 2008). The participants reported their desire to have between two and four children, which is a much lower number than the number of children in their families of origin. The reduced fertility rate combined with the culture-specific son preference lead parents to feel the pressure of having a son at any cost.

"Now there is this trend to have fewer children. Our mothers have had ten children, us three to four children and now the new generation wants only one or at the maximum, two children, and possibly a son and a daughter. The mentality here requires to definitely to have a son. - Mother, urban area in Dibër

As the previous quote depicts, parents reported their preferences also regarding the composition of their family. Having a son and a daughter was widely found to be the best combination. Almost all participants stated that girls are most needed for the mothers are sons are needed for the fathers. This division is related to the kind of support that girls and sons offer to mothers and fathers.

"If you ask men, they would love the chance to have only sons, because they want the sons to be like them and for them. Possibly to take sons with them for watching soccer matches or go for rides together. Fathers want sons, mothers want daughters. I want a daughter to have her at home and stay with me." - Mother, rural area in Vlorë

Many participants stated that the ideal combination of children in the family would be two daughters and two sons. This is also considered as positive because their grandsons and granddaughters would have at least one uncle and one aunt.

Pressure to have a son

Parents are not isolated individuals or couples with independent goals and wishes. They belong to a community, which has norms that besides other aspects also concern family relations and parenting. One of the main concerns for people in collectivistic cultures is saving the face, the social image. In such a culture, group norms are often so well internalized that they become part of the core identity of the individual. In this perspective, the community norms regarding the importance of sons and daughters are often at the core of the pressure exerted on parents with regard to family composition and the need to bear a son or a daughter. In this line, many interviewees mentioned that communities cultivate the concept that "real men" and "good wives" give birth to boys. Key informants confirmed that the extended family and especially the father's parents have a role in creating such an image for parents.

"The family of my husband was upset... I have felt inferior and withdrawn because I have given birth to daughters." - Mother, Bathore

As the quote above shows, the pressure often comes from within the family. For instance, some women reported that after giving birth to sons, they received more respect from their in-laws. It seems that in some of the cases, having sons is not only an issue of parents' pride, but also an issue of family's dignity and honor.

"Men want sons, while women do not have special preferences. In Vlorë it is the concept of "Ego", I am the father of the son and not of a daughter. Sometimes are grandmothers who are even more upset than fathers when the baby is a girl. Even the extended family influences the parent's desire for sons. " - Nurse, urban area in Vlorë

When they give birth to sons, people say 'she has given birth to guns', but when daughters are born they say that they are bad wives. - Mother, Bathore

Sometimes the pressure is emotional and is exercised from the husband to the mother of the child. In the past, some men used to marry a second wife after having only daughters with the first wife. Today, the pressure is firstly emotional as this testimony shows:

"When I was in the maternity hospital I met a woman who told me 'When I gave birth to the fourth daughter, no one came to see me, not even my husband. Only my family came.'" - Mother, urban area in Dibër

At the end, some participants reported that emigration and the exposure new couples have to the western cultural values are has lead to a decrease of son preference among them. These couples seem to care little for the communities' pressure for having sons.

4.2 Knowledge and practices of prenatal sex selection

4.2.1 Traditional practices and beliefs related to sex determination

Many traditional methods for prenatal sex determination existed in the past and are still reported now days. Most of the participants mentioned several methods that can influence the sex of the fetus before the pregnancy, or several beliefs that particular signs and symptoms experienced by pregnant women can successfully predict whether the fetus is male or female.

When asked about possible ways to achieve to have a son, most of the participants reported practices related to going to prayers or 'good people', the timing of intercourse (mainly related to the moon cycle, or menstrual cycle of the woman), signs that can be seen/recognized in the head of the previous child of the couple, and 'turning the uterus on the right'. Even though most of the participants reported their doubts on the effectiveness of such 'formulas', they were well-known and sometimes given also by health care providers.

"Some people look at the signs in the head of the previous baby and can tell you what will be your next child. I saw a dream before I got pregnant about the sex of my baby, and it came true" - Mother, Vlorë

"Many times they come to have advice even from us and we give some advice, even though we warn them that there is no guarantee of success. For example, one advice is related to the period of the menstrual cycle during which the baby should be conceived. Based on the literature, it is believed that if the baby is conceived during the first half of the menstrual cycle, there are higher possibilities to have a boy." - Gynecologist, Dibër

"Sometimes I laugh when women come and ask me 'How did you achieve to have sons?', as there is any special formula for that." - Key informant with 3 sons, Vlorë

The participants identified a number of traditional beliefs that particular signs and symptoms experienced by pregnant women can successfully predict whether the fetus is male or female. Participants reported that a male fetus will make the woman look more beautiful and charming than before; experience same signs and cravings as when the woman previously had a boy; and the belly is more rounded and the baby grows higher, etc.

"If the belly grows higher, for sure it is a boy. Girls provoke you signs in the skin. My skin was damaged from the time I was expecting my daughters." - Mother, Bathore

These signs and symptoms were believed to successfully predict the sex of the fetus in most of the cases, and they were reported to be the first indicators of the decision-making process of sex-selective abortion. In few cases, these signs were reported as leading to sex-selective termination of their pregnancies, even before 1990, when abortion was illegal and when there was no technology available.

"Before 1990s, when they had the same signs, they had abortions secretly to terminate the pregnancy." - Woman, Bathore

Availability and awareness of sex determination technology

The ultrasound technology is the only available scientific technique for sex determination in Albania. This technology was firstly introduced in University Maternity Hospital in Tirana in 1987, and after 1993 it was rapidly spread in all the maternity hospitals and private clinics in the country. The costs of the ultrasound scan range from 500 to 3500 ALL (4-13 Euros), based on the type of clinic and the quality of the device. When the ultrasound scan is recommended by the general practitioner, it can be performed free of charge at the regional maternity hospital of the residents' area. As health care professionals reported, even though the quality of the ultrasound devices varies, most of them can identify the sex of the fetus starting from the 12th or 13th week of pregnancy.

Nowadays in Albania, the sex determination technology is available and affordable and there is a high awareness of this technology in the population. All participants in the study knew about the existence of ultrasound technology and reported the use of this method as the most efficient way for sex determination after the first trimester of the pregnancy.

"Now the things have changed because of the ultrasound scans, but this is a good and bad thing, because sometimes it makes you happy, sometimes it makes you sad, and some people decide to undergo abortion as they don't want to have girls" - woman, Vlorë

Practices of prenatal sex determination

Based on the reports of participants, most of the pregnant women perform more than 1 or 2 ultrasound scans during the first weeks of the second trimester. As most of the doctors reported, pregnant women and their relatives perform in many cases ultrasound scan as they are more interested in determining the sex of the fetus than in checking other medical/developmental parameters of the fetus. According to Reproductive Health Protocol (MoH, 2003), the second recommended ultrasound scan to check the fetus development is free of charge, but it should be performed later—between the 19th and the 20th week of pregnancy—after a first test conducted in the first semester.

"There are cases that the parents come just to reconfirm the sex. ... You work hard for 20 minutes to see the baby in ultrasound scan and they ask you just for the sex." - Gynecologist, ultrasound specialist, Tiranë

Another gynecologist, when asked if there are cases when the parents come to perform ultrasound scan just for the sex determination, reported:

"Indeed, 40 to 50 percent (of cases of pregnancies) come just in the beginning of the second trimester. You try so hard with your diagnostic capacities, while they stand over my head, like a hammer, asking 'What is it? What is it? First the heart, second the sex, then I continue the examination, but they are not interested anymore. It doesn't mean that all of them will go for abortion, but they want so much to know it." - Gynaecologist, ultrasound's specialist, Tiranë

The participants reported that the pregnant women are accompanied in many cases by one or more relatives—usually their husbands, mothers or mothers in law. When asked about their reactions immediately after the sex determination procedure, the health professionals reported that most of them are disappointed when they learn that they are expecting a girl.

"A man, who came to the clinic with his wife some days ago, after hearing that they were expecting a girl...it was the 3rd pregnancy after 2 daughters...left the clinic very angry and left his wife here. There are some cases like this, but not too many... While in another case, the husband returned to the clinic just to ask again the doctor if she was sure that they were expecting a boy because he wanted to announce it to the relatives" - key informant, Vlorë

In few cases, when the possibility of sex selective abortion is suspected, health care professionals and other participants reported that some doctors refuse to say the sex of the fetus, or 'lie' about not being able to determine it, even though they are sure that the women will go to some other clinic or doctor to recheck it.

"I am the only gynaecologist there who refuses to tell the sex. I had a problematic situation once, when I refused to tell the sex of the baby to a couple as I was sure that they would ask for a sex-selective abortion, and I was criticized at the hospital." - Gynaecologist, Vlorë

4.2.2 Sex-selective abortions

Abortion is a widespread phenomenon in Albania, as shown by existing data (ADHS, 2010) and as reported by the participants in this study. Abortion can be performed in all the public clinics as well as in many certified private clinics, for pregnancies though the 12th week. According to our key informants, its cost ranges from 3,000 to 20,000 ALL (21-142 Euros).

Based on the Law no. 8045 "On the interruption of pregnancy", abortions are available throughout pregnancy when a fetal defect is present and when continuation of the pregnancy would endanger the life or health of the woman, as determined by a commission of three physicians. An abortion may be performed through the twenty-second week of pregnancy, if the pregnancy is the result of rape or a sex crime or there are "social reasons" for terminating the pregnancy, as determined by a three-member commission consisting of a physician, a social worker, and a lawyer. This legislation clearly does not endorse conducting abortion for sexselection. Also, sex selective abortion in assisted reproduction is specifically banned under the 2002 Law no.8876 'On reproductive health'(MoH, 2002).

Even though abortion was mentioned to be the most known method of family planning for most of the participants in the in-depth interviews and focus-groups, it was also mentioned as one of the methods used for sex selection reasons. Most of the key informants and other participants expressed their opinion that sex-selective abortion is 'common':

"Most of the women nowadays abort if they have 2 or 3 girls. No one would like to have 3 children of the same sex, but if they have 2 or 3 boys, they continue to give birth" - Focus group discussion with men, rural area, Dibër

"In the past, they (the women) continued to give birth to children until the son was born; nowadays, they see the sex of the baby through ultrasound scan, and undertake abortions" - Focus group discussion with women, rural area, Vlorë

Even though there are no available quantitative data on sex-selective abortion up to now in Albania, the participants reported that the frequency of sex-selective abortion was in its highest levels during 1995-2000. The perceived boom of this period is reported by participants to be related to the introduction and the increased availability of ultrasound technology. They report a decrease of the phenomenon in the last decade, a trend not corroborated by the demographic analysis presented before since SRB levels have remained very high during the last decade. The perception of participants may be influenced by a combination of factors, such as the increase of the number of private clinics (licensed and not) that perform abortions and with the implementation of stronger rules in maternity hospitals, as reported below:

"During 1996-97, this was a very frequent phenomenon. They stopped the pregnancies very freely, just because they were expecting a girl and they wanted a boy. They could receive a false medical report from the health professionals of their catchment area, and even though we were aware for the real reasons, as there were no other complications, still...There were at least two abortions per day. Nowadays, the sex-selective abortions are rarer, at least they are not performed any more at the maternity hospital" - Gynaecologist, ultrasound's specialist, Tiranë

There is an overall perception about the commonness of abortion for sex selection reasons, which seems to be based on direct exposure to this phenomenon, besides other sources. Most of participants reported personal cases or cases from their close environment, which have undergone such procedures.

"I have heard too many cases, and I have done it myself. I had 3 daughters, then I had 4 abortions as I wanted a boy, and then another girl. I would like to try it again, but now I am too old." - Woman, Bathore

"Before 1990, I had 2 daughters and I didn't want to have another child as I was afraid to have another girl. At that time, you did not have the possibility to know the sex of the baby. In 1993, when ultrasound were available in Tirana, I 'started' a pregnancy and I was expecting a girl, so I had an abortion when I was 3½ month pregnant" - Woman, rural area, Dibër

Practices of sex-selective abortions

One of the goals of the study was to explore and describe practices of sex-selective abortion as reported by the participants, in order to better understand where and when these abortions are performed; which are the main characteristics of the parents that choose to sex-selective abortion; as well as who is responsible for the decision-making process before such practices.

These abortions are performed in different settings. In Tirana, the abortions for sexselection are reported to be performed mainly in the private clinics, as in the two large maternity hospitals of the capital the procedures are more strict/rigid, while in the other cities most of the sex-selective abortions are performed inside the regional hospitals.

"All these abortions are performed at the regional hospital. None of the private clinics in Vlorë would agree to perform an abortion after the 12th week of pregnancy due to the complications that could occur. They need to be sure that if there will be any complication they will have all the necessary equipments for the reanimation. The private clinics will not risk their license for this reason." - Key informant, Vlorë

"The abortions are performed after the 4th month of pregnancy in different clinics in Tirana. Mainly at the private clinics, as the public ones do not allow these abortions" - Nurse, Bathore

These differences reported in various areas may be attributed to several factors, such as the availability of private clinics (e.g. there were no private clinics in Dibër); their infrastructure in order to perform abortion even after the 12th week of pregnancy or later; or the number of *gynaecologist* in each area. This last factor is important considering the fact that most of the *gynaecologist* work at the same time at the public clinic and at their private clinic.

"The money you have to pay is almost the same at both settings. So, even if you ask the gynaecologist at the private clinic for an abortion after the 3rd or 4th month of pregnancy, they will refer you at the public hospital, probably when they (the same doctor) will be at the afternoon or night shift." - Key informant, Vlorë

In most of the cases of sex-selective abortions the participants didn't report any legal or procedural barrier. Discussion participants reported only infrequent difficulties in performing sex-selective

abortions. Even in these cases, the 'solutions' were never reported to be difficult to find. Most of them, when refused by the hospital doctors to perform the abortion for sex selection reasons, went to a private clinic or to another city to perform it, or performed it at the hospital during the night shift, which offer higher secrecy for the staff.

"Here, all the women have their abortions at the regional hospital. I paid 2000 ALL (14 Euros) five years ago at the hospital to have my abortion (for sex selection). I didn't fill any documentation at all. I asked for abortion immediately after the ultrasound scan. They (health professionals) told me not to do it, but I did it. While a friend of mine that wanted to have a sex-selective abortion when she was 4½ month pregnant, couldn't do it here, as the doctors didn't accept to do it as it was very risky. She went to a private clinic in Tiranato have the abortion. She paid a lot of money" - Woman, rural area, Vlorë

"My sister-in-law had an abortion when she was at the 4th month of pregnancy. The doctor at the hospital refused to do it, so she paid one of the nurses. The nurse let her in the hospital during the night, wearing a white uniform, and performed the abortion herself" - Woman, Dibër

In other cases, the women could manage to provide a false medical report that certifies they have physical or mental problems that cannot allow the termination of the pregnancy.

"The fetal defects can be easily documented at the hospital, so the only way is for the mother to provide a certificate that she has heart or mental problems, and the medications can harm the baby... She can easily provide a certificate with three signatures from the specialist doctors of her catchment area, such as psychiatrist, neurologist, gynaecologist, etc." - Gynaecologist, Maternity Hospital, Tiranë

Most of the cases of sex-selective abortion reported from the participants were associated with women that have 2 or 3 daughters and are trying to have a son. "The sex-selective abortion is asked mainly in planned pregnancies, when they have more than 2 or 3 girls. But in some cases of unplanned pregnancies, even though the child is not welcome they decide to keep the baby for the only reason that it is a boy. They say: 'Ok. Because it is a boy we are keeping the baby'." reports a *gynaecologist* in Tirana.

"The sex-selective abortions are mainly performed by those women who already have 2 or 3 girls, coming from remote areas, but even from the city... there are not many differences" - Gynaecologist, Dibër

The women undergo such procedure usually during the 4th or 5th month of pregnancy, or sometimes even later. Some of the cases reported by the participants had undergone several abortions prior to achieving the birth of a son. In most of the cases of sex-selective abortions reported, the decision was made immediately after the ultrasound scan for sexdetermination.

"In most of the cases, sex-selective abortion is performed by those couples that started the pregnancy aiming to have a son. So, when they come to the maternity hospital after the 3rd or 4th month of pregnancy for the ultrasound scan, if they are expecting a girl, they immediately ask to abort" -Gynaecologist, Dibër.

As the same *gynaecologist* reported, the fact that the decision to abort the female fetus is made even before the sex determination procedure, make it impossible for the health professionals to convince them to reflect on or change their decision. As she reported "In most of the cases I try to convince them not to abort, but they have already taken their decision. I don't have plenty of time in order to discuss with them on this issue. But even in the cases that I thought that I convinced them not to do the abortion, the next morning I find them waiting for me at the entrance of the hospital, that is if they have already decided to do it".

In some of the cases reported, the decision for the sex-selective abortion was made by the women themselves. In other cases, the decision for the abortion was based on the pressure of their husbands or close relatives. These findings are in line with the pressure to bear a son that women can feel within the family or by the society, as reported in the previous section.

"I had an abortion when I was in the 3rd month of pregnancy, as I already had 2 girls and I didn't want to have another one. I had thought about it before, so one day, together with my sister in law, I went to the regional hospital to perform the ultrasound scan and when I learned about the girl, I immediately asked the doctor to have the abortion. I took the decision by myself, not because of my husband, he didn't want this. Perhaps because of the pressure from the community. It was not me to invent this, to do this, ... I am not the first or the last one." -Woman, rural area in Vlorë

"My sister-in-law had 2 girls and she had a third pregnancy, but she aborted at the 4th month as she was expecting a girl. She did that because of her husband's pressure, as he said to her: 'If you don't provide me a boy, you should go back to your parents'." - Woman, urban area in Dibër

4.2.3 Factors influencing attitudes towards sex selection and ideas about change

Perception on influencing factors

The participants identified several factors, which they saw as influencing the decision for sexselection. Among those, interviewees reported that while son preference is a factor which has been transmitted through time, new factors have contributed to the development of sex selection phenomenon in the 1990s, such as the reduced fertility rate, the legal changes and lack of legal consequences, and the development of ultrasound technology. The son preference factor was discussed in the first section of findings and discussion, while the other factors will be discussed below.

According to Guilamoto, C.Z. (2009), the reduction of fertility rate is one of the main contributing factors to the phenomenon of prenatal sex selection. With the decrease of number of children per family, the potential for sexselection increases, since the couple is more likely to abort any female fetus, until the conception of a son is achieved. During 1990-2010, the fertility rate in Albania has decreased to 1.5 children per woman (INSTAT, 2012). In consistence with these studies and data, all of the participants reported a difference between an ideal number of children per family and the real possibilities of a couple. While couples today prefer to have around two children, the ideal number of children is four. The participants listed several reasons for this, such as economic ones, the added burden on women and the changing needs of women. The most mentioned reasons were mainly economic.

"There are also those couples that have 12 children, but this happens very rarely, because nowadays it is very difficult to raise so many children. It is because of economic reasons that people have fewer children." - Focus group with grandmothers, Bathore

"Today the children's needs have changed a lot and you need to be financially well off to fulfill them." - Mother, rural area in Vlorë

An additional reason that has led to a decrease of the number of children per family is the burden of child-rearing for women, which increases with each new offspring, until the son is born. As a mother in a rural area of Dibër says, "When I learned that the fourth pregnancy was a girl, I was very sad. I wanted to abort and I told my husband 'I will do it, even if I die, it doesn't matter'. He said 'If you talk like this, you can go back to your father'. It was stupid, but I was concerned of how was I going to take care of so many children, and that we would go on like this, until we had a son." This burden can get heavier, especially for women of migrant husbands.

"Migration also may have influenced the decrease of number of children, because fathers are often migrating and it is not easy for a woman to raise children all by herself." - Mother, urban area in Dibër

As reported from the participants, the occurred changes in gender roles for women in the last twenty years might be another influencing factor in the reduced fertility rate. Therefore, a new reason seems to be the need of the women to have some space in their life, besides work and family caretaking.

"Today, the new families, because of economic and social factors - because the wife is not supposed anymore to only work and take care of children, she is more active now - choose to have 2 children on the average, and very rarely 3". - Doctor, Vlorë

The legal situation in relation to abortion seems to be another contributing factor to the phenomenon of sex selection. First, its legalization in 1991 made abortion available to all women. Secondly, despite the fact this law permits abortion only until the 12th week of pregnancy (besides special situations) and almost all health professionals were aware of it, there seem to be no legal consequences on doctors according to our respondents. This is considered by them as another important factor, which makes it easier for couples to decide on abortion and for the doctors to perform it.

"There is a law on abortion, but it doesn't get implemented." - Mother, rural area in Vlorë

It seems that this lack of legal consequences has made it possible to operate in informal grounds. This seems to create some space for the doctors to have financial gains for performing abortions, and to hide the phenomenon in maternity hospitals and especially in private clinics, as reported by the participants.

"We have to accept that it's also our fault, as doctors. These cases are all done in the maternity hospital, even though now we are a bit more resistant than before." - Doctor, urban area in Dibër

"Doctors look forward to abortions because of financial benefits." - Doctor, Bathore

"Anyway, there are problems of awareness among doctors...Later on, women go to private clinics. I don't know how these clinics report it. Maybe they write down that it is a 12 weeks pregnancy." - Doctor, Vlorë

One other important factor, which influences strongly the possibility to have a sex-selective abortion, was added with the entry of ultrasound services in Albania, and further on, with the increase of ultrasound services' availability and quality throughout Albania.

"The improvement of ultrasound quality made it possible to identify the sex of the baby earlier. Before it was done around the 20th week, now it can be done since the 12th week." - Doctor, Tiranë

Attitude towards sex-selective abortion

Most of the participants in the interviews value negatively the act of abortion in general, and that of sex-selective abortion. The main reasons behind this attitude seem to be the lack of respect for human life, or committing something amoral or sinful in religious terms, for some of them.

"I wouldn't do it myself, because the kids are equal. I am not against abortion in the first months, but I am against sexselection." - Mother, urban area in Vlorë

"A daughter is also human, and you kill her" - Focus group with men, Bathore

"Since God created her, I don't think it is the right thing to do." - Mother, Bathore

It is important to note that only a few participants speak of sex selection phenomenon in terms of women's rights and consequences from this point of view for the whole society.

"Why should you abort because she's a girl, she has a right to live." - Mother, Bathore

Even though most of health professionals reported a negative attitude towards sex-selective abortion, some of them expressed a dilemma or ambivalence in their attitude towards sex-selective abortion. On one hand they consider it as a negative phenomenon, as a doctor from a public service in Tirana says 'Well-prepared doctors are against sex selection and respect the law because that law is made to respect women's rights and everything outside the law hurts the women's rights'. On the other hand, the same doctor expresses the frustration on his relationship with the client 'Listen, I'm a doctor, I serve to people, we are all human.'

It seems that in some cases, health professionals have internalized the same values of their clients, being from the same culture. 'Well, this is a concept of the whole Albanian society, it could happen to you, or to your husband too, it is a feeling, we are not yet that developed in this direction", as the same doctor said.

Similarly, qualitative studies have shown that health professionals face complex ethical decisions in the area of pre- and post-conception sex selection (Ehrich, et. al. 2007; Puri & Nachtigall, 2010). According to Lamichhane et al, (2011), finding a balance between conformity with legal restrictions, respect for client autonomy, and professional ethics is challenging.

Prevention / how to reduce the phenomenon

One of the goals of this research study was to identify ways for the reduction of the phenomenon, as perceived by the participants. The findings show that the participants identified changes in the contributing factors, as the potential ways to the phenomenon reduction, such as: changing the attitude of people towards son preference, raising awareness on the issue through its inclusion in the public discourse, supported by media and non-governmental organizations, and law reinforcement measures.

Changing the attitude of people towards gender relations in general and son preference in particular, was the ultimate solution to the reduction of the phenomenon. At the same time, this goal was considered demanding and difficult, by both health workers and the other respondents. They viewed it as a long-term process, which will need time, and as a consequence, couldn't be the present solution to the situation. On the other hand, for them this did not imply that only 'external' measures should be taken. They considered 'talking about this issue' and raising awareness, in the whole population and also in the health sector, as the most important step.

"We, the older ones, need to talk with the younger women, in order that we can learn something, that we can develop, and our daughters in law, too." - Focus group with grandmothers, Bathore

"It's good to have conversations like this one that we had today." - Focus group with women, Bathore

"Women care more than men about the gender of the babies. Women control the world, they can be talked to. If they change, men will change too. It is helpful to communicate with women." - Nurse, urban area in Vlorë

Participants also suggested promotion of gender equality in general, and particularly with a focus toward the younger generation, in order not to transmit these stereotypical attitudes towards men and women.

"I think the way we raise children has to change. Mothers spoil boys, and fathers tell them 'you are the man of the house'." - Woman, urban area in Dibër

Many participants notice that this change may occur through exposure to various gender roles and relationships. They report that couples exposed to other models of living through migration, show a different attitude towards this issue.

"More should be done on promoting gender equality. I say this because I notice that couples that live abroad are less influenced by family members or by old gender values." Nurse, urban area, Vlorë

The participants expressed that the role of media and relevant non-governmental organizations is very necessary in order to raise awareness and make the issue of sex-selective abortion part of the public discourse. Many of them were aware of the first media reports on this issue issued in Albania a few months ago.

"Associations and newspapers should influence this. They have to be convincing. They have to talk about this issue." - Woman without children, Bathore

"I have learned by TV about this problem." - Mother, urban area in Vlorë

Legal restrictive measures, such as prohibiting doctors by law to tell parents the sex of the fetus, are reported by most of participants as a short-term measure that could reduce the phenomenon. Some doctors consider it as a breach of human rights/the right of the couple to know, while others don't. This seems to reflect an existing debate between health workers, as reported also below:

"The sex of the baby shouldn't be told. I am the only one who doesn't do it. Once I didn't tell a couple, which I knew would have sex-selective abortion, and for this reason I was criticized by my colleagues. I have talked even to my colleagues about the possible change in the law, in order not to tell the sex of the baby before birth, but we have had a lot of debate about this issue." - Doctor, Vlorë

"There has been a debate among doctors about telling the sex of the baby." - Doctor, Bathore

Other restrictive measures, such as concrete legal consequences for doctors who perform sex-selective abortion (even stronger sanctions), thus a more effective implementation of the law, is considered as helpful in the reduction of the phenomenon. In order to achieve this, participants suggest a closer monitoring of abortion units, especially of private clinics.

"Abortion should be punished." -Focus group with men, Bathore

"There should be penalties from the state for the doctors who do it, but it is difficult to be done. The "doctors with villas" cannot do that. The doctors themselves are the ones that should advocate against it. The state should control private clinics." - Doctor, Bathore

"Standard protocols are needed. The primary health care still functions by the law of 1973 and they are not effective. Pregnancies shouldn't be followed by family doctors, but at the women's centre in the maternity hospital, as in Tirana. A regionalization of antenatal care would give less opportunity for abuse by medico-legal commissions." -Doctor, Vlorë

4.3 Factors contributing to prenatal sex selection

The findings of this research shows the existence of several factors related to the preconditions for prenatal sex selection, such as: a) the preference for sons in the Albanian patriarchal society; b) the low fertility rate that reduces the probability to have a son in smaller families; c) the availability of sex determination technology; and d) the legal changes and lack of legal consequences in cases of sex-selective abortion. These preconditioning factors were found to be present despite the geographical location of the areas, or the socio-economic and educational level of the population studied.

The factors that were found to nurture the son preference phenomenon in the Albanian patriarchal and patrilineal society are grouped in three categories: the cultural factors, the socio-economic factors and the factors related to community norms and pressure.

The cultural factors - The research indicates that the need for sons derives by the importance of transmitting the family name and identity on to the successive generations and the duty of sons to protect the family from risks and defend the family honor.

The socio-economic factors - Sons are perceived to have larger economic advantages compared to girls as they can work and migrate in order to financially maintain the parents and the whole family. Moreover, the sons are traditionally the children who have the right to inherit the family land and property especially in small rural communities. To the contrary, the daughters traditionally have little say on the use and distribution of the family property. However, sons were found to contribute less positively than girls in the emotional climate of the family. Daughters are therefore perceived to be more emotionally intelligent and more prone to involve in intensive communication and emotional assistance with parents than sons.

The factors related to community norms and pressure - Community pressure regarding the number of children and the family composition has an indirect impact on the preference or necessity to have a son in the family. By idealizing the image of parents with sons, the community also exercises a pressure onto young families to bear sons.

The Albanian society still remains patriarchal, there is segregation of gender roles in the private and public life and gender discrimination, despite some new trends in terms of lifestyle and gender relations (also because of exposure to new models of living, such as reported by the participants). These social changes do not seem sufficient to change the son preference so far.

Practices related to prenatal sex selection

Sex determination Technology - The fact that many traditional methods for prenatal sex determination existed in the past and are still reported now days from the participants, emphasize the longtime desire of the Albanian families to have a son, and may be an indicator of prenatal sex selection practices even before 1990, when the abortion was illegal. The developments in sex determination technology that were introduced in Albania after the 1990s, as well as the availability and affordability of ultrasound technology, has identified it as the most well-known and used method of sex determination nowadays. As the findings show, most of the pregnant women perform one or two ultrasound scans in the beginning of the second semester, just for sex determination purposes.

Sex-selective abortion - Even though abortion was mentioned to be the most known method of family planning for most of the participants in this research, it was also mentioned as one of the methods used for sex selection reasons. Most of the key informants and other participants expressed their opinion that sex-selective abortion is a 'common' phenomenon and reported personal cases or cases from their close environment. Sex-selective abortion was reported to be performed in private and public clinics, after the third month of pregnancy, mainly by women who have 2 or 3 girls. Legal and procedural barriers were rarely reported to be an obstacle in performing sex-selective abortion in health centers.

5 Demographic projections

One of the most widely used tools in demography is the population projection. In the case of Albania projections are carried out by INSTAT after every census, when the baseline population data are available and more accurate. The existing projections on Albania are those carried out in 2005 as well as the demographic forecasts prepared by the United Nations in 2010. These population projections have one thing in common: they use specific SRB levels for Albania—either the biological value of 105 male births per 100 female births, or 107 male births to 100 female births in the case of UN population projections. None of these values represents the reality of the sex ratio at birth in Albania, which is now distinctly above 110. This issue has been recognized as recent as this year by UN and other projection authorities, but still not reflected in the actual projections.

Here we carry our own population projection aiming to project different scenarios of population change in the future based on different sex ratios at birth. This is performed in order to illustrate the potential implications of long-term imbalanced sex ratios at birth for the population in the future.

5.1 Future trends in SRB and sex imbalances

Population changes due to three main components, namely mortality, fertility and migration. Based on a baseline population by age and sex and assuming different changes in the three processes mentioned above, a set of population projections are conducted. There are different methods used by researchers and planners, but the most applied and accurate one is the cohort component method, which projects each process, fertility, mortality and migration separately and finally puts these assumptions together using a base population in order to get the final population output. Most international institutions use this method, and we are using the same method here. The main factors we have taken into account for our population projections are: the accuracy of the baseline population, the changes in fertility, mortality and migration, and most notably in our case the different sex ratios at birth.

5.2 Assumptions

The first stage of the projection is to get an accurate base population by age and sex. It would have been beneficial to have the latest census population by age and sex. However, this was not available to us at the time of the projections. Alternatively, we went for the best available option which is the UN population estimates for Albania in 2011 (United Nations Population Division, 2011). We did not literally use it as given by UN. Since we have the preliminary data for the census we have the overall population of Albania which shows a decline from the previous census. We apply this total to distribution of the UN population estimates, and correct for the recent migration from 2001-2011.

This would give us a better base year population by age, sex, and urban-rural division. We decided to make the projections separate by urban and rural populations due to two main factors. First, the past 20 years have seen a massive change due to the rapid pace of urbanization in Albania. The latest 2011 census show that the urban/rural ratio has changed to 54:36 in 2011 census, from 36:64 in the 1989, and 50:50 in 2001 with a continuous increase of the urban population due to large scale internal migration. Second, in view of the different attitudes towards sex selection in rural and urban areas, there may be variations within the country as a result of the persistent values of a traditional society. So the results will be given separated for urban and rural populations, too.

We carried out a number of projections from 2011 to 2061. After a period of 50 years, it is well known that the projections become inaccurate and we decided therefore not to go beyond the year 2061.

As to the projection of fertility, two important assumptions were taken into account. The first one was to maintain the same level of change in the overall level of fertility with the total fertility rate continuing declining and then stabilizing to a value of 1.4 children per woman. The second assumption was also important as for the first time we have assumed that the pattern of change in fertility would be such that Albanians will have a delayed childbearing similar to those seen in western countries, by increasing the age at first birth. We believe these two assumptions are the most likely trends for the future of fertility in Albania. In making these assumptions past trends were considered as well as similar experiences to Albania, such as those of countries in eastern and southern Europe, experiences of which Albanian fertility has been part of (Gjonça et al, 2010). Projections on different variants of fertility change were also carried out. However, we decided to only present here the projections with the main-principal variant of fertility change.

Mortality assumption was straightforward due to the gradual change of mortality over the years in Albania. The past trends were extrapolated in the future with three important assumptions: The first one is that life expectancy at birth will continue to improve with a similar pace as the past 30 years, with similar sex differences as those seen in developed countries of Southern Europe, which Albania resembles in terms of mortality experience. Second, continuous infant and child mortality improvements were foreseen for the coming years. Different data sources from past series confirm that infant and child mortality have been gradually improving in Albania. Another specific assumption of these projections has been a slowdown in the improvement of adult mortality. This was based on the recent findings of Albanian DHS in 2008, which showed increased rates of obesity and hypertension, expected to be converted into higher rates of diseases and death from cardio-vascular diseases and other affluent diseases.

As to migration, a clear decision of no net migration in the future was made. Migration is the most difficult to predict as there is very little data in the country of origin - Albania, but also in the main destination countries, such as Italy and Greece. We know from the past two censuses that Albanians have emigrated en masse. However, a few points needed consideration here. First, the two main receiving countries of Italy and Greece have been experiencing economic hardship and will continue to experience that for the near future. This might even trigger a reverse trend in emigration, with more Albanians returning than leaving the country. Second, it is important to recognize that it is almost impossible to predict events that might trigger migration in ten, twenty or fifty years. However, more important in our case, migration can work as a "regulator" in the marriage market in

cases where a sex imbalance at the reproductive ages exists. This has been the case in the past twenty years in Albania, where migration has confounded the “real” sex imbalance created by the skewed sex ratio at birth. So a decision was made to keep the net migration zero.

As to the sex ratios at birth assumptions, we decided to have three different scenarios. First, to have a population projection based on a “normal” sex ratio at birth of 105 male births per 100 female births. The second projection would be based on the “real” sex ratio at birth in Albania, which as it stands is at 112 male birth per 100 female births, and the last one was on an extreme sex ratio at birth of 120 male per 100 female births. The last scenario assumes what the sex ratio could be if left unchecked by the society. These values are familiar in countries and regions in Asia, such as China or different parts of India.

So finally we will present data on the projection of population of Albania by age and sex, urban and rural for the period 2011-2061 with one principal variant of mortality, fertility and migration as described above, but with three different scenarios of sex ratios at birth.

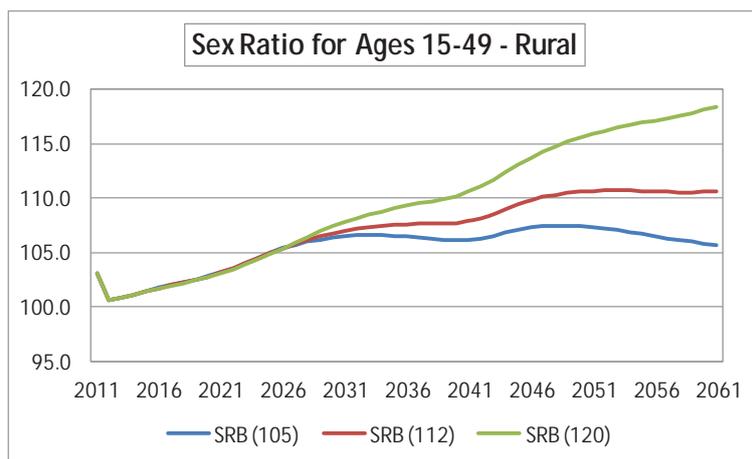
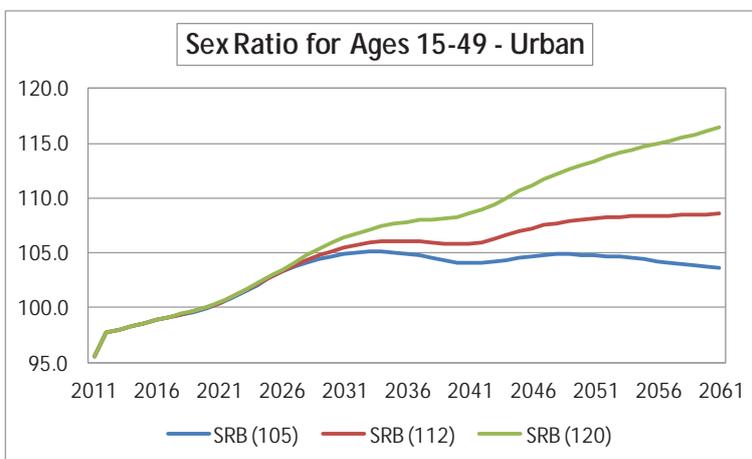
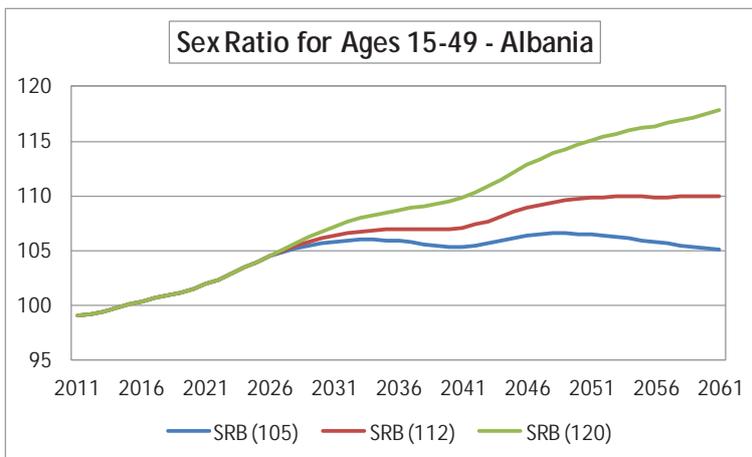
5.3 Results

The main results of the population projections are shown in Figure 19. The results are presented separated for the whole country and urban and rural populations. The results are presented only for the population in the reproductive ages, 15-49 years old. The graphs show the sex ratio at ages 15-49 based on three variant projections for three different sex ratios at birth, 105 (the normal rate), 112 (the actual one), and 120 (extreme). The data show clearly a strong effect of the sex ratio at birth to the excess females after 2030. This is understandable that people born in the early 2010s will be in their early age of reproductive life span in the 2030s. As time goes by, this effect becomes stronger with the male population overtaking the female population by a large number. The sex ratio of this age group increases up to 111 males for 100 females in this age group if the present sex ratio at birth is applied. This ratio increases up to 117 to 118 if Albania will increase the sex ratio to 120 male births per 100 female births by 2061. In short, this means that there will be an excess of 11 percent and 17 percent of males based on the assumption applied in the reproductive ages in Albania by 2061.

Taking into account that marriage continues to be universal, most females marry by age of 28 (about 98 percent of them Gjonça, et al. 2010), this implies that there will be a surplus of males in the marriage market in Albania, with about 44,632 more males or 76,424 more males by 2061 based on the two different assumptions applied. Another interesting finding is that rural and urban populations behave similarly when it comes to sex ratio at birth. The differences are almost negligible.

SEX IMBALANCES AT BIRTH IN ALBANIA

Figure 19: Sex ratio at ages 15-49 in rural and urban areas according to different scenarios, Albania, 2011-2061



5.4 Implications

One of the main implications of skewed sex ratios as shown by these projections relates to the forthcoming imbalances among adults and its potential impact on the marriage market. The current imbalance in the sex ratio at birth will translate into a surplus of men among adults and it may cause a serious marriage squeeze with a deficit of women. The situation might in fact be worse than the data suggest. This is due to the fact that marriage patterns are also sensitive to changes in demographic structures. If men fail to marry during one period, they will try to marry in the next period, thus creating a backlog of single men that will exacerbate the imbalances in the marriage market.

Another already recognized implication for the society is the reduced level of fertility in the coming years. Since there is no matching partners in the reproductive life span, fertility will by default come down in absolute terms. The best example of this effect is the recent fertility changes in Albania which are as much a consequence of the socio-economic changes in Albania during the past twenty years as well as a reduction due to unmet need for partners as a result of the large emigration which has affected mainly men.

Another effect this high demand for brides caused by the surplus of young men could possibly bring is the "re-introduction of early marriages". While this has been prevalent in Albania in its traditional past, we might see it in the form of a decrease in the age at marriage for girls. How far this decrease will depend on the implementation of the law in a relatively traditional society. As far as we know, this has never been an easy process in Albania, where sometimes the traditional values have won over the rule of law.

Another implication of this imbalance might be a change in the labor market. This sex ratio imbalance at reproductive ages might trigger emigration (not for the same reasons as the present emigration of males). Thus in a society that needs to make use of what the demographers call "the demographic dividend"²⁰, Albania could end up being deprived of a significant share of its male population of working age and the country would not be able to make full use of the demographic bonus resulting from its recent demographic transition. This phenomenon might also trigger further economic and social inequality in the society as the unmarried men might come from less affluent and rural undeveloped areas, thus, creating a social "underclass of unmarried men".

This situation might also have some positive implications for women. If the demand for women in the marriage market will increase as a result of their long-term shortages, this might give women more negotiating power in the family and household (UNFPA, 2012). This might have a direct effect in the empowerment of them in the decision making process as well as inheritance regulations. On the other hand, this might have an effect on the changes roles of care in a traditional society, with unmarried, men living with their old parents and caring for them. But there are also obviously

²⁰Demographic dividend is a situation that is created in the population of a country as a result of fertility reduction, which increases the working age population compared to the dependent population. This situation can be used by the markets for prospects of economic growth. Most known for making use of this window of opportunity created by demographic transition are countries such as Japan, Singapore, Hong Kong, Taiwan and many more.

negative implications for women as well. China's and India's experiences also suggest that the deficit of women may be accompanied by a rise in gender-based violence, trafficking and sex work.

6 Conclusion and recommendations

6.1.1 Conclusions

The realization of the sex ratio situation in Southeast Europe is very recent since the rise in the sex ratio at birth has long remained ignored by social scientists and decision-makers. A first turning point was probably the initial report prepared in 2011 by Ms Doris Stump for the Parliamentary Assembly of the Council of Europe (PACE). It was the first study that outlined all the forms of sex selection existing in Europe, from the immigrant populations in the United Kingdom to the populations of the South Caucasus region. Albania featured prominently in this report because of its adverse SRB level observed since the 1990s. The PACE resolution included a call to public authorities and international agencies to mobilize around the fight against prenatal sex discrimination. A few weeks later, the two writers of this report attended a seminar held in Paris where demographers, anthropologists and statisticians from Albanian and other European countries met to discuss the many challenges for the studies of sex imbalances in Europe. Since then, several studies have been launched on sex selection in Eastern Europe, including the present study focusing on Albania's situation.

Our study shows that Albania fits the typical profile of countries where prenatal sex selection has spread. To start with, the country is characterized by a patriarchal family system, organized along male patriline. Sons are therefore absolutely needed to perpetuate the family. On the contrary, girls are seen as transient members of their native families since they will leave it after marriage. Sons are a source of protection and support, a need reinforced by the uncertainties in the economic and social environment since the exit from communism in the early 1990s. In addition, rapid fertility decline has caused a significant reduction in average family size in the country, which is now significantly below replacement level. As a result, the probability to remain without a male child has greatly increased and parents are less ready than in the past to bear repeatedly unwanted girls for the sake of having a son. Third, the modernization of the available reproductive equipment, the rapid development of the private healthcare system, and the liberalization of abortion has allowed parents to resort to modern methods of prenatal sex selection. The three conditions necessary for sex selection are clearly fulfilled since the deep political and economic transformations of the 1990s.

The demographic analysis has confirmed that son preference is a distinctive feature of Albania's population regime. We can find traces of sex differentials in mortality among children in the past, and even the RHS survey of 2002 reported higher infant mortality among girls. But these mortality differentials seem modest. In comparison, fertility behaviors are clearly shaped by strong gender considerations. In the 1990s, we observe for instance that couples with no son had twice more chances to bear a third or a fourth child than had parents with already a son. More than opinions stated in surveys, this analysis illustrates the presence of a gender factor specific to fertility strategies and also estimates the exact intensity of the latent demand for male children among Albanian families. Further analysis of social and regional variations indicates that son preference appeared prevalent among all sections of society, with only moderate differences between regions or socioeconomic quintiles. The qualitative analysis, led in diverse locations of the country, will confirm the near ubiquity of son preference in today's Albania.

In view of such a manifest preference for sons, it is therefore not a surprise to realize that the sex ratio at birth has recorded a significant increase during the 1990s in Albania. The number of children per woman fell during this period at the pace of one child per decade, discouraging parents from bearing additional children to ensure male progeny. While there are doubts on the quality of civil registration data, age and sex structures estimated by the 2001 census clearly demonstrate the rise in birth masculinity in the mid-1990s, reaching 110 male births per 100 female births in 2000. The rise was more pronounced among families with no son or among third-order births, with SRB levels close to 115 at the end of the century. Parity-wise data on birth masculinity confirm that the proportion of male births increases regularly with birth order. Other differentials observed in the 1990s relate to the difference between urban and rural areas, as the SRB increased apparently sooner and faster in cities and towns. In 2000, Tirana emerges in fact as the prefecture where the sex ratio at birth is the highest in the absence of a son, a feature that can be linked both to the supply of modern technology in the capital region and to its faster fertility decline. Similarly, socio-economic status appears correlated to the early diffusion of sex selective fertility behavior.

The trend observed after the mid-1990s continued during the next decade. It led to a further increase in birth masculinity to levels close to 114 male births per 100 female births around 2005, followed by a slight decline to 112 during the recent years. The rise since the 1990s was especially felt among third and higher-order births. This suggests that sex selection represents, to some extent, a last resort strategy among parents after giving birth to several daughters in a row. Yet, recent data also point to a somewhat imbalanced sex ratio at birth among the first births in Albania.

Socio-economic differentials remain almost the same, with higher birth masculinity observed among the most educated parents and the higher socio-economic quintiles. The sex ratio at birth is still higher in urbanized prefectures, but Tirana has now lower SRB levels than coastal regions from Durrës to Vlorë. Rural areas, prefectures in the southeast of the country and the Greek minority display lower levels of birth masculinity. The leveling off of SRB levels in 2005 and the slight decline observed since then correspond most probably to stabilization in prenatal sex discrimination. While son preference is unlikely to intensify in the current social environment, the other two preconditions of skewed sex ratio at birth are also reaching a plateau: new reproductive technologies are now widespread and affordable across the country and fertility decline is probably nearing its bottom level at 1.5 children per woman.

The qualitative survey based on in-depth interviews with women, group discussions with parents and grandparents, and interviews with health professionals provide the necessary complements to the statistical study. In three research sites (Vlorë, Dibër and suburban Tiranë), we explored the factors related to the preconditions for prenatal sex selection, starting with the preference for sons in the Albanian patriarchal society, the below-replacement fertility levels, and the supply of the sex determination technology. All these factors were found in spite of geographical and socio-economic variations in our study sites. The need to perpetuate the family name through sons is often given as the first factor behind the preference for sons, but their economic role in the family is also stressed.

Key informants and other participants in this research expressed the opinion that prenatal sex selection is common and they knew of many such cases from their close environment. Sex-selective abortion was reported to be performed in both private and public clinics, after the third month of

pregnancy, and mainly by women who have already 2 or 3 girls. No serious legal and procedural barriers were reported.

The analysis includes also a demographic simulation exercise based on population projections according to different SRB scenarios. The sex ratio of the adult population mechanically increases because of sex imbalances at birth. High birth masculinity will therefore translate into increasing in twenty years from now and are likely to generate a marriage squeeze, with young men outnumbering women of marriageable age. It is difficult to foresee how family systems will adjust to this imbalance, but further male out-migration or pressure for earlier female marriage could be the two distinct consequences. It may also be mentioned that human trafficking as a consequence to a deficit of women is a risk in a country like Albania.

6.1.2 Recommendations

This section outlines several recommendations derived from this report. This initial study represents the first concerted effort to bring together demographic and qualitative evidence to document the presence, determinants and motivations behind the diffusion of prenatal sex selection in the country over the last 20 years. We see it as an important stage in a process of social and political mobilization around a crucial issue of gender equity: the existing prenatal discrimination against girls in Albanian society. Our findings shed light on several important aspects of the context and mechanisms of sex selection in the country that had not been explored in spite of the existing statistical evidence. Yet, our study has also demonstrated that many aspects of the birth masculinity nexus in Albania are poorly documented. Unsurprisingly, the level of public awareness on these issues is still very limited in the country. There have been only rare mentions in the press, no fully-fledged scientific study, no systematic statistical review, and limited political engagement in government departments and agencies with this issue.

This suggests that the lessons drawn from the experience of other countries have not percolated into Albania and that a lot needs to be done to raise awareness among scientists, health professionals, NGOs, decision-makers, and the general public. For this not be repeated at the regional level, we would like to stress as an initial recommendation the need to coordinate within Southeast Europe to share as early as possible methods, results, materials, and lessons.

- Involve neighboring countries that are also affected by adverse sex ratio at birth in research, advocacy and policy designs developed for Albania.

The research for this report has otherwise identified three key areas in which immediate action is needed for a better monitoring and understanding of the SRB deterioration in Albania and for developing an adequate policy response to the challenges sex selection poses to society.

Monitoring sex imbalances in Albania

This report has illustrated the relative dearth of data to examine the intensity and the distribution of sex selection behavior across the country. The most useful source of data on sex-wise distribution of births was in particular the annual data from the civil registration system. When ready, the 2011

census records will also provide for an in-depth recent analysis of the characteristic of sex imbalances at birth.

- Redouble efforts to improve the quality of vital registration.
- Ensure the regular publication of birth registration data, including births by sex, parity and region.
- Encourage the in-depth statistical analysis of existing sources, including registered births and census records on the lines of the present demographic analysis
- Support capacity building activities to strengthen national competences in data analysis and interpretation in the country.

Understanding the causes and mechanisms of sex selection

The practice of sex selection across Albania is still poorly documented and understood. While studies exist on abortion and other aspects of reproductive health, there is a relative lack of research on the demand and supply aspects of prenatal sex selection. There is for instance no sustained involvement by civil society and academic organizations into these issues.

- Support broader qualitative and anthropological surveys of the dimensions of gender inequity related to prenatal discrimination in Albania such as; the patrilineal family patterns, the marriage system, and gender inequities in inheritance practices, the spread of masculinity values and the migration factor.
- Conduct targeted studies on the supply of reproductive technology, including private healthcare facilities, late abortions and the use of abortifacient drugs.
- Support initiatives by NGOs and other institutions to document sex selection practices and motivations.

Disseminating knowledge and engaging public authorities

Information and dissemination are crucial extensions of the previous activities. They will form the basis for launching a political dialogue on sex selection in Albania with all stakeholders: the public, civil society organizations, the medical community, and public authorities. Sex selection is a typical action that people see as beneficial to their immediate interests, but it is in fact a potential violation of human rights and it can also have serious long-term consequences at the societal level. Before the introduction of any regulation, there is a need for a widespread dissemination to the public of all information about the extent of discriminatory behaviors and their future consequences on the demographic fabric of society and introduce advocacy campaigns towards greater gender equity. Such awareness and advocacy campaigns will be needed to break the cycle of discrimination based on son preference and selective abortions.

- Develop targeted campaigns in order to raise the public awareness on prenatal sex selection and its long-term effects with; young couples, parents, women, social and religious leaders, and officials as priority targets.
- Develop models based on advocacy, communication and community-level approaches for influencing gender norms within families and society.

- Promote positive discrimination models and increase government intervention to extend support to girls.
- Educate and train health professionals about their responsibilities in the growing sex imbalances at birth.
- Raise awareness about the Law on the termination of pregnancy and monitor the mis-use of second-trimester abortions for sex selection purposes.
- Improve the monitoring system of clinics and envisage further regulation on prenatal sex determination as temporary measure

References

- ADHS Report 2010 Demographic and health Study in Albania, 2008-2009 – Final report, Tirana Albania
- Ash, W., 1974 Pickaxe and rifle. Howard Barker, Wimbledon
- Attané I., and C.Z. Guilmoto, eds. 2007. *Watering the Neighbour's Garden. The Growing Demographic Female Deficit in Asia*. Paris: The Committee for International Cooperation in National Research in Demography.
- Bollano, P. 1984 'The limitation of wage differentials', Albanian Life, No. 29.
- Brainerd, Elizabeth 2010. *The demographic transformation of post-socialist countries causes, consequences, and questions*. Working Paper No. 2010/15. Wider, Helsinki.
- Caldwell, J. 1986. 'Routes to low mortality in poor countries', *Population and Development Review*, 12, No.2, p. 171-220
- CEDAW & USAID, 2005. CEDAW ASSESSMENT REPORT Albania – "Women's legal rights initiative"
- Chahnazarian, A. 1988 'Determinants of the sex ratio at birth: review of recent literature'. *Social Biol.*, 35, 214–235
- Coale, A.J. 1973 'Demographic Transition'. In: International Union for the Scientific Study of Population. International Population Conference, Liege, 1973. Vol 1. Liege, Belgium, IUSSP, 1973. :53-72.
- CoE 2011 Prenatal sex selection – Report, Committee on Equal Opportunities for Women and Men Rapporteur: Ms Doris STUMP, Switzerland, Socialist Group
- David, H.P. 1970. *Family Planning and Abortion in the Socialist Countries of Central and Eastern Europe*. New York: Population Council.
- Dyson, Tim and Mike Murphy. 1985. "The onset of fertility transition," *Population and Development Review* 11, 399-440
- Ehrich, K., Williams, C., Farsides, B., Sandall, J and Scott, R. 2007 Choosing embryos: Ethical complexity and relational autonomy in staff accounts of PGD, *Sociology of Health & Illness* 29:7: 1091-1106
- Falkingham, J., Gjonça, A. 2001. 'Fertility Transition in Albania, 1950-1990' *Population Studies*. Vol. 55, No.3, pp. 309-319
- Fischer, A. H., Manstead, A. S. R., & Rodriguez Mosquera, P. M. 1999. The role of honor-related versus individualistic values in conceptualizing pride, shame and anger: Spanish and Dutch cultural prototypes. *Cognition and Emotion*, 13, 149-179
- Fuse, Kana 2010. Variations in attitudinal gender preferences for children across 50 less-developed countries. *Demographic Research*, vol.23, Article 36, pp. 1031-1048.
- Gjonça A. and Bobak M. 1997. 'Albanian paradox, another example of protective effect of Mediterranean lifestyle?' *The Lancet*. Vol. 350, p.1815-1817.
- Gjonça A., Aassve, A, Mencarini, L. 2008. 'Trends and patterns, proximate determinants and policies of fertility change: Albania,' *Demographic Research*, Vol 19: Art. 11, pp. 261-292.
- Gjonça A., Aassve, A, Mencarini, L. 2010. "The highest fertility in Europe – for how long? Determinants of fertility change in Albania.", *DEMOGRAPHIA*. Vol. 53 Eng. Edt

- Gjonça, A. 2001 *Communism, Health and Lifestyle: The Paradox of Mortality Transition in Albania, 1950-1990*. Greenwood Press. Westport, US
- Gjonça, A., Wilson, C., and Falkingham J. C. 1997 'Paradoxes of Health Transition in Europe's Poorest Country: Albania 1950-1990'. *Population and Development Review*, Vol. 23, No.3, September, pp. 585-609
- Gruber and Pichler 2008 "Urban Household and family in twentieth Century east and south-east Europe." *The History of the Family*, Vol. 13, Issue 2, pp. 138-151
- Guilmoto, C. Z., 2009 "Sex Ratio Transition in Asia", *Population and Development Review*, Volume 35, Issue 3, pages 519–549, September.
- Guilmoto, C.Z., 2010. High sex ratio at birth in Southeast Europe, Research Note, CEPED, Paris.
- Hall, D. 1994. *Albania and the Albanians*, Pinter, London and New York.
- Halpern J.M. Kaser, K. and Wagner. 1996. *Patriarchy in the Balkans: Temporal and Cross Cultural Approaches. The history of the Family. The History of the Family. An International Quarterly. INSTAT 2006 Women and Men in Albania*
- INSTAT 2002 *Population and Housing Census 2001 – Preliminary Results*, Tirana, Albania
- INSTAT 2004a. *Gender Perspectives in Albania, Population and Housing Census*. Tirana, Albania: INSTAT.
- INSTAT 2004b. *Living Conditions and Inequality in Albania. 2001 Population and Housing Census*. Tirana: INSTAT Albania.
- INSTAT 2004c. *Migration. 2001 Population and Housing Census*. Tirana: INSTAT Albania.
- INSTAT 2011. *Preliminary Findings of the Census of Population and Housing 2011 in Albania*. Tirana: INSTAT.
- Kaser, Karl 2008. *Patriarchy after Patriarchy. Gender Relations in Turkey and in the Balkans 1500 - 2000*, Vienna: LIT Verlag.
- Keefe et al., 1971. *Area Handbook for Albania*, US Government Printing Office, Washington DC.
- Lamichhane, P., Harken, T., Puri, M., Darney, P.D., Blum, M., Harper, C.C., & Henderson, J.T. 2011. Sex-Selective Abortion in Nepal: A Qualitative Study of Health Workers' Perspectives. *Women's Health Issues* 21, 37–S41
- Lastarria-Cornhiel, S., & Wheeler, R. 1998. *Gender, Ethnicity, and Landed Property in Albania*. Working paper No 18, Albanian Series, Land Tenure Center, University of Wisconsin–Madison
- Logoreci, A. 1977. *The Albanians: Europe's forgotten survivors*. Victor Gollancz; Boulder, CO: Westview Press. London
- Maddison, Angus. 1995. *Monitoring the World Economy*. Paris: OECD UNICEF, 1994. *Crises in mortality, health and nutrition*. Florence, Italy: UNICEF International Child Development Center
- Meslé France, Vallin Jacques, Badurashvili Irina, 2007. A sharp increase in sex ratio at birth in the Caucasus. Why? How?, in : Isabelle Attané and Christophe Guilmoto éd., *Watering the neighbour's garden: the growing demographic female deficit in Asia*, p. 73-88. – Paris, CICRED Brainerd
- Ministry of Health (1995). *Law on Interruption of Pregnancy*. Tirana, Albania: Ministry of Health.
- Ministry of Health (2002). *Law on Reproductive Health*. Tirana, Albania: Ministry of Health.
- Ministry of Health (2003). *Reproductive Health Protocol*. Tirana, Albania: Ministry of Health.