Gender-biased sex selection has emerged since the early 1990s as a widespread practice in parts of the Eastern Europe and Central Asia (EECA) region and now constitutes a significant challenge to the countries affected. The preference of many parents for sons, combined with the use of modern technologies and declining fertility, has skewed the normal ratio between male and female births in several countries, mostly in the South Caucasus and parts of South-East Europe. As a result, an estimated 171,000 girls are already ‘missing’ in the region, and there has been a growing surplus of men.

Research conducted in the region suggests that gender-biased sex selection occurs in a diverse range of countries that have three elements in common: a strong preference for male offspring, declining fertility rates, and access to modern ultrasound technologies. The practice has far-reaching negative consequences, as it endangers the health and rights of women and girls, perpetuates a culture of gender inequality, and jeopardises sustainable social development and stability. A number of policy options are available for governments to prevent and combat gender-biased sex selection.

The emergence of a skewed sex ratio at birth in the region

Since the 1980s, available statistics indicate that the sex ratio at birth (SRB, the number of male births per 100 female births) has been increasing in a number of countries above its standard biological level of 105.1 This phenomenon was first observed in Asian countries such as China, India, South Korea, and Vietnam, with SRB levels exceeding 110. Within the last five years, however, evidence pointing to abnormally high sex ratios at birth has also emerged in several countries of South-East Europe and the South Caucasus,2 as shown in Table 1 and Figure 1.

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In the South Caucasus, the sex ratio at birth was close to normal levels during the socialist period; it was only after the dissolution of the Soviet Union in 1991 that birth masculinity started to increase. The rise in Armenia, Azerbaijan, and Georgia occurred almost simultaneously and ran parallel for several years, with the SRB reaching 115 in less than a decade in Armenia and Azerbaijan, though plateauing at a slightly lower level in Georgia. The sex ratio at birth in Armenia and Azerbaijan peaked at record levels of 116-118 around the year 2000 and has since plateaued or recorded a slight downward trend. The western Balkans constitutes a second SRB hot spot, with Albania, the Former Yugoslav Republic of Macedonia, and Montenegro, as well as Kosovo (UNSCR 1244). In contrast, the rise in birth masculinity in South-East Europe occurred later in

**Table 1: Sex ratio at birth in selected countries**

<table>
<thead>
<tr>
<th>Country/territory</th>
<th>Sex ratio at birth</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>117.6</td>
<td>2013</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>116.5</td>
<td>2008-12</td>
</tr>
<tr>
<td>Armenia</td>
<td>114.8</td>
<td>2008-12</td>
</tr>
<tr>
<td>Vietnam</td>
<td>113.8</td>
<td>2012</td>
</tr>
<tr>
<td>Georgia</td>
<td>111.8</td>
<td>2008-12</td>
</tr>
<tr>
<td>Albania</td>
<td>110.9</td>
<td>2008-12</td>
</tr>
<tr>
<td>Montenegro</td>
<td>110.2</td>
<td>2005-12</td>
</tr>
<tr>
<td>India</td>
<td>110.1</td>
<td>2010-12</td>
</tr>
<tr>
<td>The Former Yugoslav Republic of Macedonia (Northwest)</td>
<td>110.1</td>
<td>2005-13</td>
</tr>
<tr>
<td>Kosovo (UNSCR 1244)</td>
<td>109.6</td>
<td>2008-12</td>
</tr>
<tr>
<td>South Korea</td>
<td>105.3</td>
<td>2013</td>
</tr>
</tbody>
</table>

Sex ratio at birth = male births per 100 female births. Based on birth registration data (estimates for China, India, and Vietnam).

**Figure 1: Sex ratio at birth, selected countries and territories, 1985-2013**

Smoothed annual data from the civil registration system.
the 1990s and never reached high levels above 115, though it remains skewed today at a level close to 110. There is currently no research or statistical evidence of a similar phenomenon in other countries of East and Central Europe.\(^3\)

**VOICES FROM ALBANIA\(^4\)**

‘There is a big desire for having sons, more than for girls. There is joy when sons are born. Sons are always beautiful […] When sons are born, even the house pillars are happy; when daughters are born, the pillars cry.’ – Participant, focus group discussion

‘Before 1990, I had two 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 advance]. In 1993, when ultrasound was available in Tirana, I started a pregnancy and I was expecting a girl, so I had an abortion when I was three and a half months pregnant.’ – Rural woman

In addition to statistical evidence, field studies have also provided qualitative evidence of the intensity of sex bias in the region and described a complex picture of the root causes behind the rise in birth masculinity. Though family traditions favouring sons over daughters and the emergence of healthcare services offering modern ultrasound technologies are shared factors, SRB levels appear skewed only in two geographical clusters, made up of countries with little in common in terms of economic and geographical environment, political change, ethnic composition, or religious traditions. Female infanticide or distinct excess female mortality are also absent.

The situation in EECA countries corresponds to the larger framework also observed in Asia, with three distinct factors emerging as the key contributors to a rise in SRB levels:

1) The existence of entrenched social and family norms favouring male children;

2) The emergence of modern reproductive technologies; and

3) The effect of low fertility on reproductive strategies among couples.\(^5\)

Gender bias in the region has led to a rise in the proportion of male births, especially among higher-order births. While there are distinguishable variations across countries, socioeconomic quintiles, and ethnic groups, society as a whole has proved vulnerable to prenatal sex selection.

Recent estimates put the number of ‘missing’ girls at 171,000 in the EECA region, but this number is likely to grow quickly in the future.\(^6\) There is at present no sign of a sustained decline in affected countries and a rise elsewhere in the region cannot be ruled out, as fertility rates are on the decline in a number of other countries with patriarchal societies. New reproductive technologies may soon allow for earlier or easier prenatal discrimination in the region. These factors demand rapid action before sex selection becomes any more common and its demographic impact unmanageable.

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\(^6\) Ibid.
Effects of sex selection and barriers to addressing the problem

Sex selection has negative implications for women’s lives and health, and for society as a whole. Women face intense pressure from family members and entrenched social norms to deliver male children, often becoming subject to gender-based violence, specifically psychological violence, if they do not. Women pregnant with girls may be forced to undergo repeated consecutive abortions, with debilitating effects on their mental and physical health. The prevalence of sex selection practices within a society creates an environment in which gender bias directly influences reproductive decisions and outcomes, reinforcing a culture of low value placed on girls, in which female births are actively avoided. Sex imbalances at birth will also translate two decades on into a surplus of men, a demographic imbalance likely to affect their marriage prospects and one with the potential to increase human trafficking, crime, gender-based violence, and political unrest in severely affected regions.7

The EECA region appears especially vulnerable to such outcomes for several reasons. Traditionally patrilineal families have proved to be one of society’s most solid institutions during a period characterised by rapid state withdrawal and rising inequalities in income, health, and living standards. This has led to what has been described as a revival of patriarchy.8 Despite advances dating from the socialist period, women in the EECA region are still far from achieving equal economic and political participation. The social and economic situation is further compounded by a demographic context characterised by low fertility and international outmigration. Abortion, which has long served as a standard family planning method, is now also used as a way to avoid female births.9 More recently, the emergence and misuse in the region of medical abortion pills and of assisted reproduction technologies may offer new ways for couples to practice sex selection, further fuelling discriminatory behaviour.

An additional challenge relates to the long delay in identifying and acknowledging the rise in birth masculinity in the EECA region, a delay attributable to the lack of adequate statistics due to social and political disturbances, and of in-depth field studies on gender bias. In countries of Central Asia where some signs of son preference are detectable,10 no comprehensive research attempt has been made thus far to assess the issue of gender-biased sex selection. The focus of population policies tends to be placed instead on the issue of population decline, with prenatal sex selection seen as a minor problem reflecting private family decisions rather than wider social objectives. Even when aware of the extent of prenatal gender bias, governments have often been hesitant to devise specific interventions. In addition, policy experience in Asian countries such as China and India shows that there is no ‘silver bullet’ to reduce elevated SRB levels and redress gender discrimination.

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Signs of positive change

There are reasons for optimism, however, including the recent gains in awareness and progress in mobilising around the issue of gender-biased sex selection. Sex imbalances at birth in the EECA region have received increased attention following a 2011 resolution on the issue adopted by the Parliamentary Assembly of the Council of Europe,11 along with efforts by UNFPA and other international agencies to assist in data analysis and policy dialogue, creating new opportunities for in-depth studies, knowledge-sharing, evidence-based interventions, and technical assistance.12 13

These developments have in turn resulted in rapidly improving knowledge about the issue in the EECA region and the initiation of a broader policy dialogue, with media, policy-makers, religious institutions, and NGOs all engaging in public debate on gender preference and prenatal sex selection. In partnership or supported by UNFPA, the governments of Albania, Armenia, Azerbaijan, and Georgia have already supported primary research on the issue, and advocacy activities and further policy initiatives have followed. The policy experiences from Asian countries provide important lessons that, if heeded, will allow national governments in EECA to develop innovative approaches better suited to their specific social and demographic situation, perhaps even incorporating the fight against gender bias into a larger population policy aimed at supporting non-discriminatory reproductive freedom.

EECA countries are already part of an international mobilisation to protect women’s rights. The ICPD Programme of Action adopted by 179 countries in 1994 aims in particular at ‘[eliminating] all forms of discrimination against the girl child and the root causes of son preference, which results in harmful and unethical practices regarding female infanticide and prenatal sex selection’.14 In addition, several European countries signed the 1997 Oviedo Convention prohibiting sex selection except for medical reasons.15

Policy options for addressing the issue

Promoting gender equality
Countries and territories in the EECA region have implemented national policies, programmes, and strategies to improve gender equality and empower women following the adoption of the ICPD Programme of Action and the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW). Where equal rights have not translated into equal opportunities for women, existing gender-equity laws must be revised and effectively implemented to bridge the gap between law and practice. Governments lead by example when they show senior-level commitment to gender equality and promote women’s access to leadership positions. Equal wages and access to inheritance of family property, improved pension and social security schemes will meanwhile strengthen women’s financial independence and social status.

Legal measures
Legal bans on sex-selective abortions, sex determination and its advertisement are obvious policy options for targeting prenatal discriminatory behaviour and several countries have already introduced such prohibitions.

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Bans also send a clear signal of governments’ official position towards sex selection and provide a basis for inter-ministry cooperation around issues of gender discrimination. However, the experience of Asian countries shows that such bans are difficult to implement, fraught as they are by high administrative expenses, deficient targeting, and the risk of infringing on reproductive rights. In addition, further technological advances, such as foetal blood testing for the identification of an embryo’s sex or assisted reproductive technology, may render such measures obsolete in the near future.

Monitoring trends in sex selection
Since the adoption of the Council of Europe resolution in 2011, governments also have a clear mandate to monitor closely the trends in prenatal sex selection, most notably with support from statistical bureaux, professional associations, and civil society organisations.

Advocacy actions
Awareness-raising campaigns and communication aimed at behavioural change are crucial instruments for addressing sex selection and altering traditional mind-sets. They should be led by high-level government representatives and elected members of national assemblies. Campaigns may also target specific groups such as youth, newly married couples, community leaders, and, most importantly, the medical community. Organising human capacity programmes with medical professionals and adapting medical curricula play a critical role in promoting the ethical use of reproductive technologies. Such activities, however, should be reinforced by parallel efforts to change the legal and political climate to demonstrate concrete efforts in all sectors of society to bridge the gender gap.

Welfare programmes
According to a recent study, improved welfare programmes targeting the girl child have been introduced in Albania, Armenia, Azerbaijan, Georgia, Kazakhstan, Moldova, Romania, Russia, Serbia, Tajikistan, and Turkmenistan, as well as Kosovo (UNSCR 1244). Such programmes may help reduce the intensity of gender bias by providing financial assistance to families with girls to counterweigh their perceived economic burden through direct subsidies or financial incentives. Although such conditional programmes are expensive and can be difficult to implement, they often have positive long-term multiplier effects in terms of schooling and health.

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Policy recommendations

Addressing prenatal gender discrimination always requires coordinated efforts by multiple governmental and nongovernmental stakeholders, but the regional character of recent sex imbalances additionally calls for an increased international policy dialogue around gender-biased sex selection. The following recommendations can be given:

• **Conduct further research on the underlying causes of gender bias** and on the potential consequences of current sex imbalances in the EECA region, accompanied by more systematic monitoring of SRB trends in all countries of Eastern Europe and Central Asia through national statistical offices.

• **Work with healthcare providers to develop new guidelines on the ethical use of relevant technologies** to suppress deliberate gender discrimination, and to revise or strengthen the existing legal frameworks on the misuse of reproductive technologies.

• **Review gender equity laws to prevent direct or indirect discrimination** against daughters, married wives, divorcees, and widows in property rights, access to education and employment, health and social insurance, pension benefits, and inheritance.

• **Engage in targeted advocacy, sensitisation, and awareness-raising campaigns** led by national figures and implemented through ministries to change social norms, promote gender equity in families and society, and raise the status of women and girls.

• **Consider introducing programmes that provide financial assistance**, either through direct subsidies or other incentives such as tax reductions, early retirement, additional social benefits, or scholarships for girls’ education, to families with girls to counterweigh their perceived economic burden.
Regional Issue Briefs

1. Adolescent Pregnancy in Eastern Europe and Central Asia (Issue Brief 1, 2013)
2. Investing in Young People in Eastern Europe and Central Asia (Issue Brief 2, 2014)