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GIRLS WANTED: The Influence of Public Policy on Sex Selection in South Korea, India and Vietnam

Laura Rahm

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180) Centre de Population et Développement CEPED (UMR 196 / INED / IRD)

Girls Wanted

*The Influence of Public Policy on Sex Selection
in South Korea, India and Vietnam*

Par Laura RAHM

Thèse de doctorat de Sociologie Politique et Démographie

Dirigée par Christophe Z. Guilmoto

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Devant un jury composé de : Andrea DEN BOER, Senior Lecturer, Université du Kent; Christophe Z. GUILMOTO, Directeur de Recherche, IRD [Directeur de thèse]; Jutta JOACHIM, Assistant Professor, Université Radboud; Ito PENG, Professor, Université de Toronto [Rapporteuse]; T.V. SEKHER, Professor, IIPS Mumbai [Rapporteuse]; Jacques VÉRON, Directeur de Recherche, INED.



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Für Inge und Doris

In memory of the women we miss.

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List of Abbreviations

AAs	Appropriate Authorities
ACs	Advisory Committees
AI	Artificial Insemination
BBBP	<i>Beti Bachao, Beti Padhao</i> (Save the Daughter, Educate the Daughter) Scheme
BCE	Before Common Era
BLS	Baseline Survey
CCTs	Conditional Cash Transfers
CE	Common Era
CEHAT	Centre for Enquiry into Health and Allied Themes
CRS	Civil Registration System
CSB	Central Supervisory Board
CSR	Child Sex Ratio
DC	Deputy Commissioner
DHS	Demographic and Health Surveys
ELS	Endline Survey
FASDSP	Forum Against Sex Determination and Sex Preselection
FGC	Female Genital Cutting
FGD	Focus Group Discussion
GBSS	Gender-Biased Sex Selection
ICDS	Integrated Child Development Services
IDI	In-depth Interviews
IEC	Information Education Communication
IOs	International Organizations
IVF	In-Vitro Fertilization
KAP	Knowledge, Attitudes and Practices
KIHASA	Korean Institute for Health and Social Affairs
MoHFW	Ministry of Health and Family Welfare
MoWCD	Ministry of Women and Child Development
MTP	Medical Termination of Pregnancy Act
NFHS	National Family Health Survey
NGOs	Non-Governmental Organizations
PC&PNDT	Pre-Conception and Pre-Natal Diagnostic Techniques Act
PGD	Preimplantation Genetic Diagnosis

PM	Prime Minister
PNDT	Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act
SAARC	South Asian Association for Regional Cooperation
SBS Nagar	Shaheed Bhagat Singh Nagar, formerly known as Nawanshahr district
SRB	Sex Ratio at Birth
SRS	Sample Registration System
TFR	Total Fertility Rate
UN	United Nations
UNFPA	United Nations Population Fund
UTs	Union Territories
WHO	World Health Organization

The qualitative interviews are classified by country:

IN	India Interviews
SK	South Korea Interviews
VN	Vietnam Interviews

Longer interview extracts use the abbreviations:

I	Interviewer
P	Participant

Introduction

This thesis investigates the influence of public policies on sex selection in South Korea, India, and Vietnam. The title “Girls Wanted” is a double entendre and refers to Asian governments finding themselves demographically wanting for girls and responding with policies to make girls wanted.

Sex selection – predominantly practiced in Asia, Caucasus and Eastern Europe due to entrenched son preference – has increasingly caused concern among government, non-government and international stakeholders because of the human rights, health, and demographic implications associated with the practice (WHO 2011). Gender-biased sex selection (hereafter GBSS) refers to various pre- and postnatal strategies to choose the sex of one’s offspring, usually male. The most common forms observed throughout Asia have been sex determination via ultrasound followed by selective abortions of unwanted female fetuses and higher mortality rates among very young girls linked to infanticide or neglect after birth. Nevertheless, preconception sex selection is on the rise.

Since the late 1980s, several Asian countries have introduced laws, policies and programs to fight this form of gender discrimination. Although public policy is often promoted as a solution to gender-biased sex selection (Kostenzer 2016), little is known about anti-sex selection policies and their efficacy. The reasons behind the scientific neglect of anti-sex selection policies are multiple and can be summarized by 1) the late recognition of the problem itself, 2) the political denial of sex selection in many countries and 3) a severe underestimation of the scale of the problem (Miller 2001).

Nobel laureate Sen (1990) alerted the world that over 100 million women were missing in 1990. Yet it took more than a decade of research to establish that it was increasingly prenatal gender discrimination instead of postnatal neglect or infanticide that was causing the growing numbers of women to vanish (Sen 2003). Since the mid-2000s important demographic works have emerged highlighting the sudden rise of sex ratios at birth (SRB) above the natural norm of 105 male per 100 female births, first in different Asian populations (Attané and Guilmoto 2007; Attané and Véron 2005) and then in Caucasus and Eastern Europe (Duthé et al. 2012; Guilmoto and Duthé 2013). Scholars have also pointed to the adverse consequences and economic impact of a male surplus and female scarcity (Hudson and Den Boer 2004; Woetzel et al. 2015).

Despite this growing body of evidence, political scientists have shown little interest in analyzing the policy response to this problem. Instead, demographers have raised ethical considerations about whether prenatal sex selection should be restricted in the first place (Goodkind 1999) and some economists even argued that policy interventions were unnecessary because the problem would fix itself due to simple supply and demand dynamics (Becker 2007).

In general, policy research on sex selection has been surprisingly scarce and recent. Li (2007), Zheng (2007) and Ebenstein (2007) discuss interventions to balance sex ratios at birth in China, while Joseph (2007) and Sekher (2012) reflect on Indian campaigns and incentives against sex selection. Only a few scholars provide cross-country comparisons of policy interventions (see e.g. Das Gupta et al. 2003; Guo et al. 2016; Den Boer and Hudson 2017).

Rigorous assessments of the effectiveness of policies in balancing skewed sex ratios at birth have been especially rare. Assumptions are often formed on loose interpretations of sex ratio data wherein improvements are interpreted as a sign of policy success and deterioration as policy failure. This approach assumes that demographic changes are direct results of policy intervention. Moreover, interventions themselves often lack a clear definition of policy inputs, outputs and outcomes along with proper documentation, monitoring and evaluation. Scholars have tried to bypass these shortcomings, but very few formal comparisons between treatment and control areas, pre- and post-interventions, and appropriate commensurability analyses exist (Sinha and Yoong 2009; Nandi and Deolalikar 2013; Subramanian and Selvaraj 2009).

This scarcity of policy research is surprising given the fact that a growing number of countries have introduced policies to correct the situation. Since the late 1980s and early 1990s, China, South Korea and India have introduced legislation against sex selection and other countries have followed suit, including Vietnam, Nepal and more recently Armenia. A variety of policy instruments have been put into place, including legal bans on sex selection and sex determination, conditional cash transfers for families with girls, awareness-raising campaigns, advocacy and broader legal changes to strengthen the role of women in society.

Despite growing international awareness and decades of policies (WHO 2011), governments and international organizations (IOs) are still uncertain of ‘what works and what doesn’t work’ to restore the natural balance of girls and boys. To date only South Korea and probably Georgia have seen their skewed sex ratios at birth return to normalcy. While South Korea introduced policies against sex selection, Georgia did not. Uncertain about policy efficacy, policy makers and the international community continue to face a “policy puzzle” (Singh 2015). UNICEF and

UNFPA (2014, 34) concluded in a joint publication that “rigorous impact evaluations of existing intervention programs to reduce sex selection are absent.”

This has not discouraged stakeholders from sharing their policy experiences. Silently, and in the shadow of scholarly attention, a growing trend of international cooperation has emerged, where ‘lessons learned’ and policy ‘prescriptions’ are transferred transnationally with the help of international agencies seeking to prevent sex selection (Kostenzer 2016). Policy response to sex selection is an especially rich terrain for policy transfer research. This thesis aims to contribute to the underdeveloped field of policy research on sex selection, and more broadly to the growing field of policy transfer and convergence studies in political science.

Aim and Approach of the Thesis

This dissertation provides an analysis of anti-sex selection policies and their effectiveness in curbing skewed sex ratios in three Asian countries. India, Vietnam and South Korea were chosen for a comparative policy analysis. This dissertation was guided by two hypotheses: (1) public policies may show unknown efficacy in restoring sex ratios at birth and (2) policy instruments and ‘best practices’ may be transferred from one country to another with the help of IOs and epistemic communities without strong evidence of their effectiveness. In order to test these hypotheses, the guiding research question is: What are the intentions, instruments and impacts of policies against sex selection employed in South Korea, India and Vietnam?

Several supplementary questions were raised in this research:

- Regarding policy *intentions*: What motivates governments to intervene? Who are the stakeholders involved in making sex selection a policy issue? What roles do epistemic communities and IOs play in agenda setting and policy design?
- Regarding policy *instruments*: Which public policies are implemented and prioritized at national levels? What are the similarities and differences between policy instruments carried out in different countries?
- Regarding policy *impacts*: What effects have public policies had on sex ratio at birth in selected parts of India, Vietnam and South Korea? Are SRB improvements a result of policy intervention? What are the available tools for assessing policy effectiveness?

To examine these questions, the study follows a mixed method approach. I use the *Most Different Systems Design* to compare countries that are very different, yet despite their

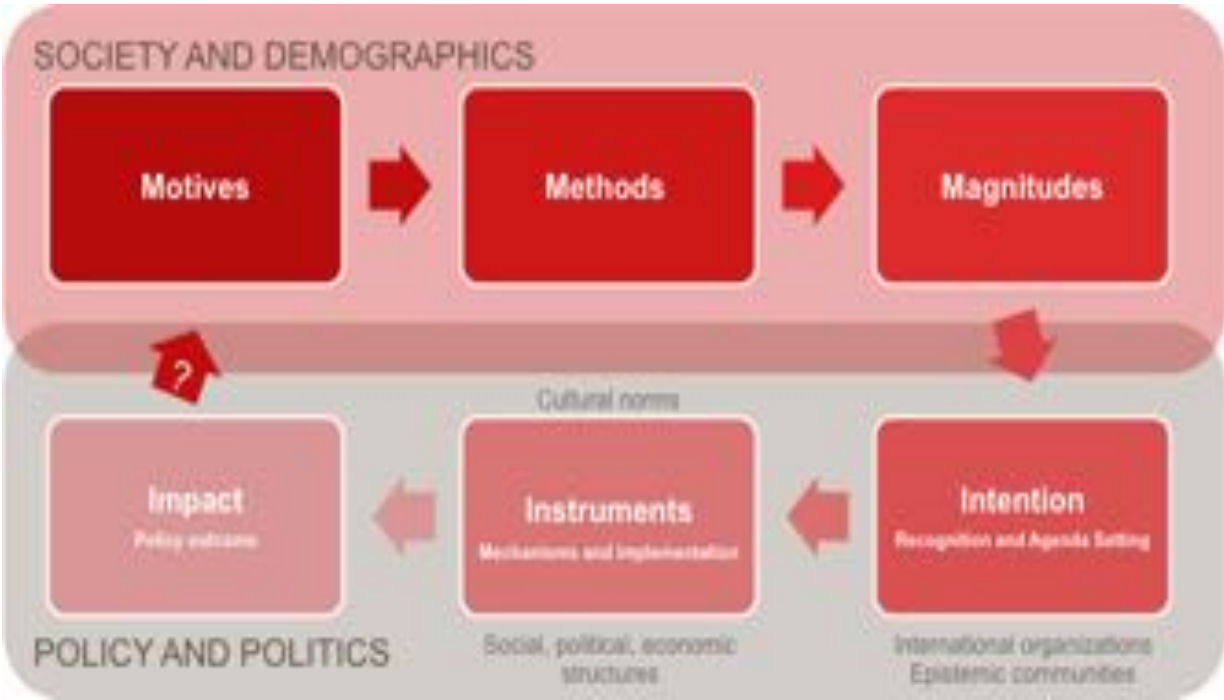
differences all have faced gender-biased sex selection and introduced similar policies to address the problem. Focus is placed on highly affected regions within these countries (Northwestern India, Northern Vietnam and Southeastern part of South Korea), where sex ratios at birth have improved.

Comparing similar policies in different countries and regions, where sex ratios at birth have improved, offers a natural experiment for assessing the impact of policies on prenatal sex selection. We present new empirical research, carried out in South Korea, India and Vietnam between 2014 and 2015, based on (a) qualitative expert interviews with governmental, non-governmental and medical personnel directly involved or affected by policy interventions, and (b) quantitative sex ratio at birth data comparing pre- and post-intervention areas.

Conceptual Framework

Figure 1 illustrates the framework that was developed to conceptualize the interaction between the socio-demographic phenomena of sex selection and policy response. It was inspired in particular by the work of, and personal exchange with, Ito Peng (Peng 2014).

Figure 1: Conceptualizing the Intersection of Socio-Demography and Public Policy



According to this conceptual framework, a socio-demographic phenomenon (like sex selection) appears in societies where people share common motives to influence their reproduction. They

also need to be given access to the methods that allow them to act according to their motives. If enough people follow the same path, their cumulative action manifests in socio-demographic outcomes (magnitudes). I call this the 3-M-Model, referring to the motives, methods and magnitudes of *why, how and to what extent people engage in a certain socio-demographic behavior*.

Once policy makers recognize a certain behavior (any of the 3-M's) as a problem, policies are often developed to counter the problem. In these cases IOs, NGOs and epistemic communities frequently facilitate problem recognition (Joachim 2007; Stone 2004). The policy intentions or reasons why governments introduce policies may well differ from one country to another according to their own unique and path dependent socio-cultural, political and economic factors.¹ These factors can also influence the policy instruments authorities chose to implement. To this regard, policies never exist in a vacuum, but are in constant interaction with cultural norms and socio-political and economic structures. The intended policy impact has to be tested against the actual changes in its socio-demographic outcomes. I call this the 3-I-Model referring to *why, how and to what extent policies affect a certain socio-demographic phenomenon*.

Figure 1 shows arrows going in one direction (e.g. from motives, to methods to magnitudes). However, there are multiple feedback loops and interdependencies, which are not shown in the figure for the sake of clarity. As such, methods can feedback into motives. The introduction of technology can create new, previously impossible, desires that then influence reproductive outcomes. For example, the introduction of modern contraceptives provided the methods for couples to effectively achieve their motives (e.g. have fewer children and space them as desired), which can be observed in the magnitude of declining fertility. There are also feedback loops and interdependencies within the political/policy sphere. Policy evaluations ideally inform policy makers about the impact of interventions on the socio-demographic sphere, allowing them to further tune policy instruments. In this regard, both spheres interact.

We may want to take high fertility as an example to illustrate the framework. For decades, the international community has encouraged countries in the Global South to lower their fertility levels. Many Asian countries have followed suit and recognized high fertility as an obstacle

¹ The concept of path dependency comes from the idea that “once a country or region has started down a track, the costs of reversal are very high” (Lewi 1997, 28). Likewise, formal institutions and public policies tend to be stable, and prior decisions inform future policy options (Pierson 2000; Kay 2015).

(e.g. for socio-economic growth or political stability). The policy intentions that motivate stakeholders to address high fertility can vary. For example, fertility policies can aim at:

- 1) Lowering the total fertility rate (magnitude);
- 2) Increasing contraceptive use (methods);
- 3) Promoting a small family norm (motives).

As we can see here, anti-natalist² population policies can aim at controlling the magnitude, methods or motives of reproductive behavior. Often governments implement policy combinations to address the socio-demographic phenomenon on different fronts. If we stick to our example, concrete policy instruments to lower fertility can focus on:

- 1) Government targets to reduce population growth or fertility (magnitude);
- 2) Free contraceptive services provided through public health facilities (methods);
- 3) Awareness-raising campaigns (motives).

In order to assess the impact of these policy instruments, their intentions need to be tested against the actual changes in the socio-demographic sphere while controlling for external factors of influence (which is one of the more challenging tasks in policy evaluation as we will see).

Despite its highly generalized structure, this framework usefully represents the fundamental dynamics between the social and political spheres and will serve as a roadmap that will guide the reader throughout the entire thesis. In each chapter an additional piece will be added to apply the framework to sex selection, anti-sex selection policies and policy experiences in South Korea, India and Vietnam. Only at the end, when all pieces are put together, will we return to this framework to show how the evolution of sex selection and policies has played out. Only then will we have a complete picture of policy influence on sex selection and hopefully come closer to solving the ‘policy puzzle.’

Structure of the Thesis

The thesis is organized into 8 chapters. Chapter 1 sets the scene by exploring the motives, methods and magnitudes of gender-biased sex selection drawing from socio-demographic and anthropological research. Chapter 2 explores the historical and theoretical foundations of public

² *Anti-natalism* refers to policies aiming at decreasing fertility (May 2012).

policies against sex selection and their intentions, instruments and impacts. Chapter 3 outlines the methodology that guides the empirical approach of this investigation. We then turn to the case studies of South Korea (Chapter 4), India (Chapter 5) and Vietnam (Chapter 6), which are the centerpiece of this dissertation.

The three case studies are structured in the same way: First, we highlight the unique country features and lay out the historical context of son preference, lowering fertility and access to reproductive technologies, which gave rise in sex imbalances in that country. Secondly, we present sex ratios at birth at national and regional levels. Thirdly, national laws against sex selection are presented in a chronological order and classified as policy instruments that address motives, methods or magnitudes. Fourthly, we analyze the impact of policies on sex selection by presenting both qualitative and quantitative data. Fifth, we turn to the regional case study to further explore the influence of policies in detail for regions with severely skewed sex ratios. Each country chapter ends with a discussion of the results and a conclusion. By presenting the three case studies one after the other and applying the same structure to all three countries, we hope to facilitate comparability, and yet give room for country specific nuances.

Chapter 7 offers a cross-country comparison with the main similarities and differences between the three countries of investigation and Chapter 8 gives a general conclusion in terms of the theoretical and applied contributions of the thesis.

1. Gender-Biased Sex Selection in Asia: Motives, Methods, Magnitudes

In order to assess policy options against sex selection, it is essential to have an in-depth understanding of the phenomenon itself. This chapter provides a detailed analysis of the state of the art knowledge on gender-biased sex selection in Asia. It starts out by discussing the motives (or reasons) behind GBSS, reviewing gender preferences, family structures, as well as fertility, economic, and political pressures to sex select. The focus then turns to the different methods used by parents to influence the sex composition of their families and the evolution of these methods (or practices) over time. Finally, this chapter highlights the magnitudes (or outcome) of sex selection by giving an overview of affected countries, the number of missing women as well as long-term consequences of sex imbalances at birth.

1.1. Motives of Gender-Biased Sex Selection

From a policy perspective it is important to understand the rationale behind gender-biased sex selection in order to formulate policy options accordingly. While policy response to sex selection has only emerged over the past 30 years, the motives behind this phenomenon are far from new. Couples have three core motivations to sex select according to WHO (2016):

1. Medical reasons to avoid the transmission of sex-linked genetic diseases.
2. Family balancing reasons when having one or several children of the opposite sex.
3. Gender preference reasons often in favor of sons due to cultural, social, and economic biases, or in the presence of restrictive birth policies.

Medical reasons are rare. Family balancing and gender preference reasons, which often go hand in hand, are much more frequent. This section focuses on gender preferences, their manifestations and origins. We discuss underlying kinship systems (in particular patrilocal and patrilineal family systems) as well as economic, political and exogenous factors that influence couples' behavior and attitudes towards their offspring. Why do many Asian couples prefer sons to daughters? What are the existing manifestations and measurement tools of son preference, and how can an emerging daughter preference in some East Asian countries be explained? Special attention will be given to flexibilities in family and kinship systems, which are relevant for the subsequent policy analysis.

1.1.1. Gender Preferences

Rarely do parents have to choose one child over the other. The novel Sophie's choice reflects this unusual dilemma in the most extreme way: arrested by the Nazis, a mother arrives in Auschwitz and is forced to decide whether her son or daughter will be gassed immediately, while the other is sent to a labor camp. Having to choose one child over the other would be unfathomably difficult for most of us. Yet, to a less radical extent, it is done in many cultures around the world. History is full of examples in which family norms have given preference to children of a certain sex. The English throne was historically given to the male descendant, while certain matrilineal societies have shown manifestations of daughter preference. From an evolutionary biology perspective, this comes as no surprise. Preferences are frequently seen in the animal kingdom. Several species favor male or female offspring in terms of food or attention allocated to them (Durante et al. 2015).

Gender preferences are based on individual experiences, family dynamics and social biases, or any combination of the three. In numerous Asian countries a strong son preference can be detected. The phenomenon has been widely studied in context of gender theory and has deep social, economic and cultural roots (Williamson 1978; Miller 1985; Croll 2000; Purewal 2010). Son preference can be defined "as an institution which is based on a set of values and norms that are produced and reproduced in a complex interaction between social, economic, political and cultural factors, and which does not [necessarily] remain at the attitudinal level but realizes itself through behaviour that favours boys and disfavors girls" (Eklund 2011, 30; brackets added). The brackets are added because couples do not always act according to their preferences. Eklund (2011) draws a distinction between latent and manifest son preference. The author reasons that "latent" son preference is largely at an attitudinal level (e.g. women stating that they prefer one gender over the other) and does not necessarily translate into "manifested" discrimination against daughters (e.g. in form of sex-selective abortions or female infanticide). Li et al. (2000) argue in a slightly different way, but reach a similar conclusion. They differ between sex selection pressure (the probability that a woman is exposed to social or family pressure to sex select); and son preference potency describing the probability that a woman will actually sex select (which is influenced by individual behavior and cultural factors). Thus, women or couples may be exposed to sex selection pressure, but they may not act on them.

They will act only when son preference potency is high enough.³ Gender preferences are articulated in multiple ways and have significant impact on the well-being of children. Following this argumentation, we separate between son preference attitudes and son preference behavior.

Son preference attitudes or latent son preference remain largely on an attitudinal level. Nevertheless, expressed attitudes can have harmful psychological effects on children. One powerful example is the practice of naming a girl Nakusa (unwanted) in some parts of Maharashtra (Shijith and Sekher 2017). In these cases, the girl's name itself has negative effects on her self-esteem and social interactions. Numerous studies exist on stated gender preferences expressed by parents as part of demographic surveys. Fuse (2008) provides a systematic analysis of cross-national attitudinal gender preferences, using data from 40 Demographic and Health Surveys (DHS) conducted between 2000 and 2006. Her findings show that women across the globe generally wish for a balanced family composition. Son preference is most common in North Africa, South Asia, some parts of Southeast Asia, and in about two thirds of sub-Saharan Africa, which is in line with earlier findings (Arnold 1997).

Quite intuitively, countries with the strongest son preferences (e.g. Bangladesh, India, Nepal, and Vietnam) also have the lowest percentage of women declaring daughter preference.⁴ Moreover, greater household wealth significantly decreases the odds of son preference in India and Nepal. Fuse (2008) argues that poorer households have more incentives to request a boy, since sons are expected to bring wealth to the family. On the contrary, it can be argued that richer families have more to lose when not bearing a son since inheritance is traditionally passed through the male line (see 1.1.2). Women in poorer families also play a greater role in terms of their labor contributions to family wealth than in the upper class. The relationship between family wealth and son preference is thus not clearly established.

Fuse (2008) also points out that better working conditions in India and Nepal and higher educational attainments in Vietnam significantly decrease women's odds of stating any gender preference, including son preference. Fuse argues that modernization (in form of urbanization, education, higher living standards and better labor perspectives) reduces gender biases and

³ In policy terms, it is important to study these coping mechanisms of couples that remain sonless, despite being exposed to sex selection pressure.

⁴ In Bangladesh, India, Nepal, and Vietnam, only 2.0%, 2.5%, 1.6%, and 3.4% of women report to have daughter preference, respectively (Fuse 2008, 13).

increases women's status. These findings seem to contradict the fact that sex selection in favor of sons is more common among the urban, wealthier and more educated social strata.

The main problem with collecting data on stated son preference is that it remains at a hypothetical level, precisely reflecting respondents' attitudes and not their actual behavior. People, however, do not always act according to their attitudes or beliefs for various reasons. Moreover, self-reporting involves multiple response biases⁵, which can have significant impact on the survey validity.

A more robust indicator for the extent of son preference is therefore the actual behavior. Son preference behavior, also known as "manifest" or "revealed" son preference, is expressed in modified behavior according to the existing sex composition of children in a family, as the following quote shows:

"whether and how women's gender preference is translated into behavior may vary by levels of fertility and by access to certain birth control methods and modern medicine. In the context of relatively low or declining fertility, gender preference is more likely to be manifested by aborting a fetus of the undesired sex or by stopping childbearing once the desired sex composition of children has been achieved. [...] In contrast, in the context of higher fertility and limited access to birth control methods and modern medicine, gender preference may be measured more validly through the assessment of one's post childbearing behavior. [...] Couples may be less conscious about limiting fertility, but their gender preference may bias the allocation of household resources (either consciously or unconsciously). This bias may result in sex differences in infant/child mortality, health, and treatment" (Fuse 2008, 1–2).

In low fertility settings people have fewer occasions (in terms of births) and often more means (in terms of access to technologies) to influence their reproductive outcomes prenatally. Meanwhile, in high fertility settings postnatal gender discrimination tends to be more prevalent (Chun and Das Gupta 2009). We will review the diverse methods of prenatal and postnatal gender discrimination shortly. For now it is important to stress that gender preference for children – expressed in differentiated attitudes and behavior – vary significantly in intensity throughout Asia. While some countries exhibit very strong son preference (e.g. Armenia,

⁵ Response biases can be caused by numerous factors ranging from the phrasing of survey questions to the desire to provide appropriate responses according to social norms or acceptability (Nederhof 1985; Zhou et al. 2012).

Azerbaijan, China, India, Pakistan, and Vietnam), others hardly demonstrate any consistent gender preference (e.g. Indonesia, the Philippines, and Thailand).

More careful examinations of ethnic and regional variations can, however, reveal more ‘hidden’ gender differentials, as shown in the case of Indonesia (Guilmoto 2015b). There can be significant regional differences within countries. Some regions may appear free of son preference, while other regions are severely affected. For example, Northwest India shows strong manifestations of son preference (e.g. Punjab and Haryana), while daughters are much more welcome in the South (e.g. Kerala). A comparable North-South division can also be detected in Vietnam. Northern Vietnam (e.g. Red River Delta) has stronger son preference than the South. These regional patterns in gender preferences can be explained through regional differences in family and kinship systems (Miller 1985, 198; Das Gupta et al. 2003).

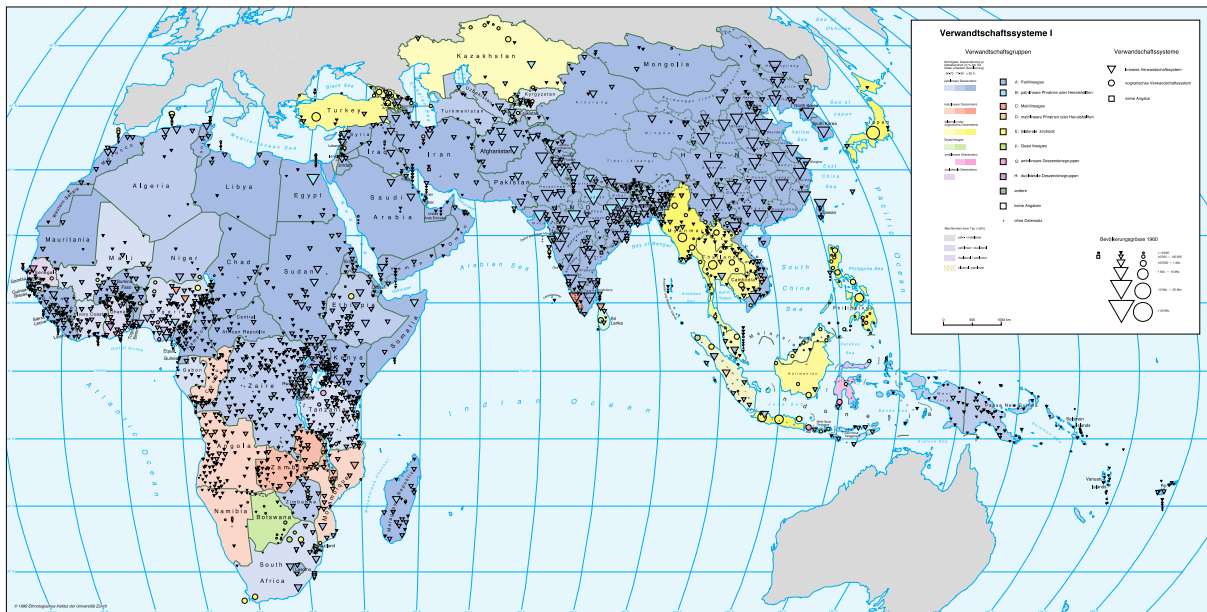
1.1.2. Patriarchal Kinship Systems

Traditionally, kinship systems construct social affiliations and define the rights and obligations of an individual within a society. Nowadays, governments and state laws regulate most aspects of social life. Yet, the influence of informal, family-based rules still play a significant role everywhere. The University of Zurich (2016) provides a basic overview of kinship systems in Asia and Africa (see Figure 2). The diversity and complexity of traditional family structures is reduced into three simplified categories:

1. In patrilineal systems (marked in blue), relations are traced through a person’s father.
2. In matrilineal systems (marked in red), relations are traced through a person’s mother.
3. In bilateral systems (marked in yellow), relations are traced through the father and mother.

As shown in Figure 2, most parts of Africa and Asia have long histories of patrilineality. Patrilineal kinship systems are most widespread in North Africa, Central Africa, Middle East, South Asia, Central Asia and East Asia. Matrilineal as well as bilateral systems are less frequent and only bound to certain regions. A closer look on the map provides insights about country specific variations and the heterogeneity of kinship systems in different localities: e.g. patrilineal systems are seen in major parts of India, Vietnam and China; yet matrilineal systems are found in the Indian state of Kerala or among national minorities in Vietnam and Laos; while bilateral systems exist mainly in Cambodia, Thailand and Myanmar.

Figure 2: Kinship Systems in Asia and Africa



Note: The family typology is based on the four variables: family organization, marital composition, transfer of residence at marriage, and marital residence with kin, which are based on the Ethnographic Atlas of Murdock. Source: University of Zurich (2016).

Patrilineal family systems are characterized by the need for male offspring. Sons continue the family name, inherit the family property and perform important family customs.⁶ Moreover, patrilineality goes hand in hand with patrilocality. Married sons are expected to reside with their parents, while daughters depart the family home after marriage. Family assets are passed through the male line, while women may be given some movable goods e.g. in form of dowry or inheritance. Patrilineality dominates much of Asia and Africa despite the fact that countries have increasingly introduced legislative changes granting equal inheritance rights to both men and women. In many cases women turn down their legal shares and are only able to sustain themselves whilst attached to men. Yet, as African and Asian differences demonstrate, not all patrilineal communities witness sex selection. The reason for that lies in the flexibility in kinship systems (Das Gupta et al. 2003).

⁶ According to Confucian belief, prevalent e.g. in China, South Korea and Vietnam, ancestor worship is traditionally conducted by males. The welfare and continuity of the family as a group is more important than the interests of any one individual. Also in Hindu tradition, special emphasis is placed on sons as they lite the funeral pyre of the deceased parents and sons continuing the family line.

Let us take Japan as an example. Sex imbalances never manifested in Japan, despite of historic traces of patriarchal kinship and succession, as well as the cultural proximity to sex-selecting countries (e.g. South Korea, China, Vietnam). The explanation for the absence of sex imbalances is at least threefold:⁷ Firstly, Japan is less patriarchal than other Asian countries, because it allows daughters to access to inheritance.⁸ In the absence of a son, a daughter and son-in-law could inherit the family property. The household could thus continue without a male heir. Secondly, the economic value of daughters was recognized early. At the end of the Tokugawa period in the 19th century, when Japan opened up its harbors to the world, the silk industry, and with it female labor force, became the backbone of Japan's economy. Thus, the value of girls increased. Women married later and resided longer in their maternal families, contributing to the family's wealth. After the Second World War, in the process of modernization, an opposing trend emerged where women were increasingly reduced to being housewives, especially among the middle class. However, this did not lead to discrimination against girls. Thirdly, fertility rates in Japan had already declined before couples gained access to modern reproductive technologies that would have allowed them to influence the fetal sex.

In sum, patriarchal kinship systems are common features of populations that express son preference. Whether that son preference is expressed in terms of sex selection is a result of the degree of patrilineality expressed and a complex interplay of further economic, political and cultural factors. For example, in the case of Turkey son preference exists, but prenatal sex selection does not take place, most likely due to religious and social barriers to abortion. Ultimately, the question is how well families cope with remaining sonless and what alternatives (in the form of incentives, disincentives) exist for them.

⁷ Based on personal conversation with Emiko Ochiai, EHESS, 23.02.2016.

⁸ Japan has historic traces of patrilineality and patrilocality, yet today it is classified as a bilateral kinship system. The country underwent historical shifts in kinship and succession between the eighth and seventeenth century. Prior, in ancient times, Japan and South Korea were both based on bilateral systems, where kingship stressed the importance of maternal and paternal bloodlines. Women could equally inherit or ascend the throne. This changed with the influence of the Chinese, which denied women such rights. Japan and South Korea later adopted patrilineal principles, which deviated significantly from each other and from the Chinese system. For more information on the history of kinship and succession in Japan, Korea and China see Rawski (2015).

1.1.3. Economic Factors

In patriarchal societies, families gain little from having daughters. Daughters are frequently seen as “a supplement, but rarely a substitute for sons” (Croll 2000, 132). They are often considered to be less “profitable” and provide a lower “return on investment” because – unlike sons – they leave the parental home after marriage and in some cases require high dowry expenses (e.g. India). Thus, spending a minor sum to abort an unwanted female fetus can be seen as more cost efficient than a major investment in raising a daughter, who leaves upon marriage and no longer contributes to the family wealth and well-being.

The economic pressures for son preference and sex selection are complex. At the macro level, it is economic growth that provides the technology and resources to sex select in the first place. Initially, only to the middle and upper classes can afford it. Early in large-scale economic transitions, these middle and upper-class families are still strongly influenced by traditional values that focus on family solidarity and financial support. In part, this is because their governments typically have not provided social support systems like health care and pensions, so the extended family has traditionally been financially responsible for its members. Thus, at first, traditional values, the lack of governmental support and the presence of affordable reproductive options lead to economic pressures to sex select.

Later in large-scale economic transitions governments often introduce public support systems or provide enough wealth building options that people no longer financially rely on a son for old-age support and thus are freer to make independent reproductive decisions. Also, later in economic transition household sizes typically reduce and the opinions of extended family members become less acute. So, although sex selection is typically strong early in these large-scale transitions, as economic growth continues the conditions change to make son preference less vital.

For those countries that are in the midst of modernization these factors are complexly interrelated. For example, when countries experience sudden economic downturns, political turmoil or their governments remove social support for some reason, there can be a spike in sex selection as people feel the need to revert to traditional son preferring values for financial security (Barbiéri and Bélanger 2009; Guilmoto et al. 2018).

In Asia there are many traditional economic reasons to prefer sons at the personal, micro level. These economic reasons change with economic growth and modernization (Chung and Das Gupta 2007), as women have increasingly better job opportunities and contribute financially to

their birth families. There are good reasons to believe that over the short term, sex selection is a suitable strategy to satisfy traditional son preference, but over the long-term, economic, social and cultural changes will make sex selection less economically necessary and ultimately, less desirable. During this process, however, sudden periods of instability can counteract this trajectory and cause families to go back to traditional son preferring ideals.

1.1.4. Political Factors

The motives behind GBSS have been frequently associated with rigid fertility regulations such as the recently abolished Chinese One-Child Policy, the Two-Child Policy in Vietnam, and the Two-Child Norm introduced in India (Ebenstein 2010). The idea is that government imposed fertility restrictions alter parents' pressure to have a desired son with fewer births, and thus make sex selection more appealing.

Let us take China and the One-Child Policy as an example. Jiang et al. (2013, 194) write that, "the strict population policy during [...] 30 years, and the low fertility level for the past 20 years, have had broad effects on the nation's economic and social development, as well producing such unforeseen side effects as the high male-biased sex ratio at birth (SRB) and rapid ageing." Sex imbalances are thus regarded as an unintended side effect of stringent policy efforts to lower fertility. It is important to note here that Chinese scholars often refer to the 1.5-Child Policy instead of the One-Child Policy, as couples in rural areas were given the opportunity to have a second child if the first was a girl. Such a policy provision is in itself biased towards sons, and researchers have shown that those areas in particular, where parents were given permission to have a second child when the first was female, reported the highest sex ratios at birth (Zhu et al. 2009).

Yet, there are also some skeptics that doubt the influence of fertility control policies on prenatal sex selection. Goodkind (2015) for example shows that the severely distorted sex ratios in the 1.5-child areas in rural China are mainly a result of excess underreporting of daughters and enforced sex-specific stopping behavior instead of sex-selective abortions. Johnson (2016) shows that many Chinese parents would have wanted to raise their daughters (despite cultural son preference), but fearing punishment for breaching the country's stringent birth-control policies, they were forced to abandon their girls or give them up for adoption. Furthermore, Almond et al. (2013) challenge the impact of the One-Child Policy showing that it was rather the post-Mao land reform and market liberalization which increased the number of missing girls in China by over 1.24 million between 1978 and 1984.

Despite these controversies, it is safe to argue that fertility control policies have put pressure on couples to achieve their desired family composition with fewer births. Nevertheless, in the absence of fertility regulations (in countries like Taiwan or Singapore), sex ratios have also become skewed towards males and a general trend towards lower fertility can be observed.

Besides population policies, many other political efforts have directly or indirectly affected people's motives behind sex selection. Some examples are awareness-raising campaigns, advocacy, legislative changes linked to land ownership, inheritance, job opportunities, social security, etc. In theory, these efforts contribute to more egalitarian gender relationships and thus reduce the pressure to sex select. In the case studies, we will get a better understanding how these policies influence sex selection (Chapters 4-6).

In this section we have reviewed to the kinship-based, economic and political motives behind sex selection in Asia. Whether or not couples actually act according to their gender preferences depends largely on their access to methods that allow them to shape their reproductive outcomes.

1.2. Methods of Gender-Biased Sex Selection

Families use different methods to influence their desired family composition. Rapid technological advancements (Sleeboom-Faulkner 2010) and the diffusion of innovations (Rogers 2003) over the last few decades have allowed couples to determine and select their offspring at ever-earlier stages.

1.2.1. Traditional Methods, Infanticide, Neglect and Abandonment

Throughout history, people have always been interested in knowing the sex of their offspring. One of the oldest records is an ancient Egyptian papyrus scroll dating back to 1400–1600 BCE, which contains a series of tests for fertility and sex determination (Carlson 2013).

The ancient Greek separated the world into pairs, e.g. male/female; right/left; light/darkness, using the Pythagorean Table of Opposites. Maleness was associated with the right side, light, excess heat, and the northern hemisphere, while the counterparts (left, darkness, coldness, south) symbolized femaleness. These attributes were often invoked for sex prediction. According to Aristotle (384–322 BCE) cold southern winds increased the likelihood of conceiving a girl, while facing north during sexual intercourse was said alter the chances for

conceiving a boy (Bennett 1983). Similar to the North/South division, different cultures believed that exposing pregnant women to cold water would produce daughters, while males were related to hotter climate as they were supposed to contain more of the primary force in nature, fire, and sweat more than females (Carlson 2013; Mittwoch 2013).

A very similar concept of the duality of complementary forces can also be found in ancient Asian beliefs. According to the Chinese concept of Yin and Yang, Yin symbolizes masculinity, light, heat, and activity, while Yang symbolizes femininity, darkness, cold and rest. Excess of either force can be detected in the pulse of pregnant women according to Chinese traditional medicine. Some have claimed this to be a highly accurate way to identifying the sex of a fetus (X. Peng and Huang 1999). An ancient Hindu belief proclaimed that women with heavy menstrual flows were more prone to conceiving daughters and by controlling their food intake, women could influence the sex composition of their children (Carlson 2013).

In Vietnam, for example, it is believed that eating salty and high-protein foods prior to conception and during pregnancy increases the likelihood of male births. Another strategy of couples is timing the birth and scheduling the moment of conception close to ovulation in their aspiration for a son. Some of these strategies continue to persist in Vietnam today (Becquet 2015, see also Box 1), despite their limited efficacy (Carlson 2013).

Box 1: Timing of Birth According to the Chinese Calendar

Several East and Southeast Asian cultures use the Chinese lunar calendar, which is composed of different animal signs that reoccur over a 12-year cycle. The time of birth, and the animal sign of the year in which a child is born, determine the child's fate. Some years are considered unlucky for girls (e.g. Horse, Tiger and Dragon). In order to avoid any stigma families have conceived or registered girls in the subsequent year. As a result, the SRB in South Korea have been particularly skewed towards males in the years of the Horse, Tiger and Dragon. A similar phenomenon was observed in Vietnam in 2012 (year of the Dragon) when SRB jumped to 114 followed by a drop by 2-3 points in the subsequent year (UNFPA Vietnam 2015). This superstition can result in "self-fulfilling" prophecies: girls born in inauspicious years encounter difficulties in finding a partner, while those born in auspicious years show "better health and education outcomes, because their parents have planned their births more carefully" (Chun and Das Gupta 2009, 94).

It is also common for Vietnamese women to combine traditional and modern methods by seeking spiritual advice, changing their diet, planning the time of the conception and praying at pagodas (along with medical methods) to conceive a son (UNFPA Vietnam 2011). Next to superstitious beliefs and practices, in some parts of Asia couples have turned to extreme measures to avoid the upbringing of a girl. Three forms of postnatal gender discrimination can be identified: female infanticide, postnatal neglect and abandonment.

Selective infanticide, or the intentional killing of female infants, has been reported throughout different parts of Asia (Gupta 2000), with historical records reaching from China over India to Northern Georgia (McLennan 1896). Better documentation has emerged in the 20th and 21st century and studies suggest that the phenomenon is still prevalent in parts of India, China, and Pakistan today, especially in areas of extreme poverty and overpopulation (Miller 1987; Caldwell and Caldwell 2005; Fuse and Crenshaw 2006). Yet, female infanticide has gradually declined due to greater awareness, legal restrictions, governmental and non-governmental interventions, and more modern forms of sex selection (Sen 2003; Goodkind 1996).

Selective neglect is another method of postnatal gender discrimination. Historically, boys have been given better care than their female siblings. While infanticide tends to occur right after birth, discriminatory practices towards daughters in terms of care, nutrition, vaccinations and medical examinations take place in early childhood. Demographic evidence in the form of a skewed child sex ratio and excess female child mortality indicates that postnatal neglect remains a problem into the 21st century (Bongaarts and Guilmoto 2015; Guo et al. 2016).

A third method of postnatal gender discrimination is the abandonment of children. Undesired female children are given to relatives, are abandoned, sold or fall victim to human trafficking (Guilmoto 2015a). Many Asian governments and NGOs seek to combat these discriminatory practices against girls by raising awareness and encouraging families to bring their children to shelters to be placed up for adoption, rather than killing or abandoning them (e.g. Indian baby cradle scheme). In China – in the absence of such schemes – girls are more frequently given up for adoption than boys (Johansson and Nygren 1991).

Apart from that, some rare cases of surgical sex changes among newborn girls have become known (e.g. in parts of Madhya Pradesh, India) or women give up their female identity to live as men in order to fulfill patriarchal norms (e.g. Albania's sworn virgins). Lastly, scholars have pointed to the underreporting of female births and the manipulation of statistical records to explain the increase in the reported sex ratios (Zeng et al. 1993; KIHASA and UNFPA 1996; Merli and Raftery 2000; Jha et al. 2006).

In summary, there are many traditional methods by which Asian cultures have sought to realize their son preference. Where superstitious traditions like waiting for auspicious years or changing diet or sexual positions are ineffective, other, more sinister, methods like infanticide and systemic neglect have highly negative outcomes and are still practiced. Unwilling to turn to these extreme forms of postnatal discrimination and lacking reliable methods to predict the sex of the child prenatally, many parents have simply continued childbearing to have a son.

1.2.2. Continued Childbearing and Stopping Rule

Since the 1970s governmental family planning efforts have led to wider access to modern contraceptives.⁹ Access to contraceptives allowed women to stop once the preferred number of sons and daughters was achieved (UNFPA 2012). This practice is known as differential stopping behavior or stopping rule (Arnold et al. 1998; Larsen et al. 1998). The stopping rule means that the sex composition of existing children affects the subsequent fertility behavior of a family. A number of scholars have identified fertility and reproductive preferences in selected Asian populations (Park 1983; Haughton and Haughton 1995; Clark 2000; Bongaarts 2001; Bhat and Zavier 2003; Pham et al. 2012). In some Asian countries sex ratio at last birth (SRLB) is particularly skewed towards males, indicating that couples apply the so-called stopping rule, once a son is born.¹⁰ This is particularly the case in Armenia, Azerbaijan, India, Pakistan, and Nepal, where SRLB ranges from 130 to 170 (Bongaarts 2013). The Indian case shows that there tends to be large regional differences. While the overall SRLB in India, was at 132 male per 100 female births in 2005 according to the National Health & Family Survey 2005-2006 (UNFPA 2012), SRLB in Punjab, Haryana, and Himachal Pradesh have exceeded 200 (Bongaarts 2013). Basu and Jong (2010) show that throughout South Asia, Southeast Asia and Northern Africa, girls have more siblings than boys (sibling effect) and are born at earlier parities within families (birth-order effect) as a result of son targeting fertility behavior. Simply put, “The desire for a son is the father of many daughters” (Seidl 1995, 185).

⁹ By 1976, broad parts of Asia with a few exceptions (Cambodia, Laos, Myanmar, Japan and North Korea) had introduced policies to lower fertility. Direct government support for family planning programs had spread through almost all parts of Asia reaching out to lower socioeconomic levels of population (UNDESA 2013).

¹⁰ According to Bongaarts (2013) SRLB is not a pure indicator of son preference because also access to contraception and overall fertility influence reproductive behavior.

We can conclude that couples relied on traditional methods, infanticide, postnatal neglect and continued childbearing before reliable scientific methods for sex determination became available. It was only with the arrival of modern reproductive technologies that prenatal sex selection became possible.

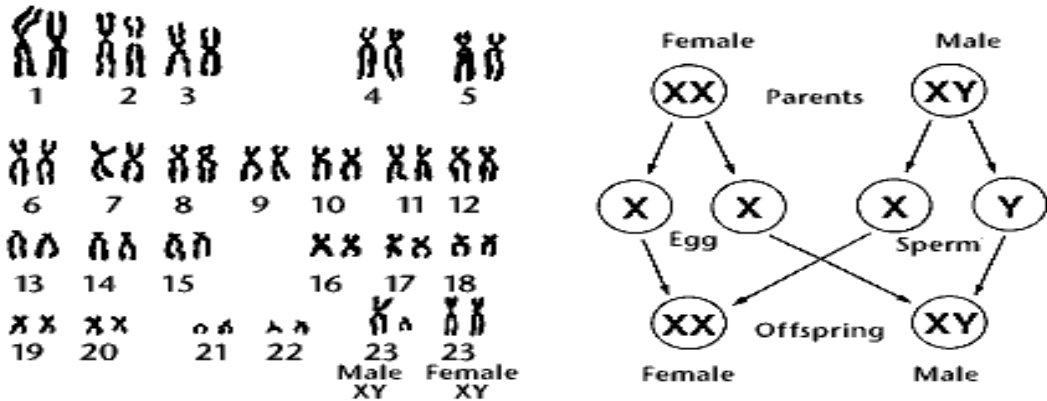
1.2.3. Prenatal Sex Selection

The shift from traditional to modern methods of sex selection was enabled through the rapid expansion of medical technology and services in the late twentieth century. Reproductive technologies significantly improved the health outcomes of women allowing them to exercise their reproductive rights (Gupta 2000). While this progress offered more choice to some, it translated into fewer choices for others. Frequently, women in Asia have been blamed or even punished for ‘not being able’ to conceive a son. In many cases it has been acceptable for men to remarry or have a concubine, if their wives ‘fail’ to produce a male offspring (Chun and Das Gupta 2009; UNFPA Vietnam 2011), despite the fact that the men’s sperm determines the fetal sex (see Box 2).

Box 2: Sex Determination in Humans and Mammals

The fetal sex is decided by the presence of XX chromosomes in females or XY chromosomes in males. Figure 3 illustrates the chromosome pairs that segregate during meiosis.

Figure 3: Chromosome Pairs and Sex Determination in Humans



Left: 23 chromosome pairs. Right: The offspring inherits the X chromosome from its mother and either the X or the Y chromosome from its father, which determines whether the child will be male (XY) or female (XX). Source: McGraw-Hill Education (2016).

At first invasive procedures for sex determination became available, in form of amniocentesis discovered in the late 1950s and chorionic villus sampling (CVS) developed in the 1970s. Amniocentesis allowed for sex determination after 14-16 weeks of gestation, and CVS after 10-12 weeks of gestation (Woo 2002). The procedures – originally developed to detect sex-linked hereditary diseases – quickly gained popularity throughout different parts of Asia (e.g. China, India, South Korea) for prenatal sex determination followed by selective abortions of female fetuses (KIHASA and UNFPA 1996). Due to the invasive nature of both procedures (e.g. collection of amniotic fluid vs. placental tissue through women’s abdomen or cervix), they involve a relative risk of an infection, amniotic fluid leakage and – to a minor degree – pregnancy loss (Mujezinovic and Alfirevic 2007).

Non-invasive procedures only became available in the 1980s with the spread of ultrasound technology, which quickly became a standard procedure in antenatal care worldwide. Ultrasound scans provide important information about the mother’s health, the timing of the pregnancy and the development of the embryo or fetus. The fetal sex can be diagnosed with 100% accuracy as early as 13 weeks of gestation, when interpreted by trained medical staff (Efrat, Akinfenwa, and Nicolaides 1999). Unlike invasive procedures, ultrasound produces immediate test results at low cost and relatively low risk. The medical community, however, does not recommend an excessive usage of ultrasound for non-medical purposes due to potential adverse effects on the fetal development (ISUOG 2011). Nevertheless, strong market commercialism has led to the overuse of ultrasound scans during pregnancy (Gammeltoft 2007; Gammeltoft and Nguyen 2007).

The availability of ultrasound has led to an increase in prenatal sex determination followed by sex-selective abortions in several Asian countries (Johansson and Nygren 1991; Park and Cho 1995; Attané and Guilmoto 2007). Ultrasound – being cheap and easily accessible – appears to be the “most frequently used” method for sex determination in Asia (KIHASA and UNFPA 1996). Sonogram providers have mushroomed in recent years offering latest 3D and 4D scans, even with portable devices. Since ultrasound is an important diagnostic tool during pregnancy and doctors can easily communicate the fetal sex – also indirectly (e.g. looks like the father) or nonverbally (e.g. using blue or red ink pens) – regulating the practice has become increasingly difficult (ToI 2012).

Since the late 1990s, cell-free fetal DNA screening has become available, which uses a small blood sample of the mother to produce reliable information about the fetal sex after 7 weeks of gestation (Wright and Burton 2008; De Jong et al. 2010). Early sex determination in the first

trimester enables women to avoid surgical abortions and undergo instead medical abortions (using a combination of mifepristone and misoprostol). The procedure is still expensive and not widely accessible. Few laboratories mostly in East Asia offer the service. Blood samples are often being sent to US laboratories for testing with costs ranging between US\$ 500-1000. However, it can be anticipated that as technology progresses, earlier stages of sex determination become available at more widely accessible rates. With easy, safe and early access to non-invasive prenatal diagnostic tests, selective abortions are likely to increase (De Jong et al. 2010; Hall et al. 2009).

The procedures stated above are all forms of prenatal sex diagnosis after conception. Couples aiming to sex select rely primarily on abortion. The earliest moment for an induced abortion varies regarding different sex determination methods from 8 weeks for blood testing, to 13 weeks for ultrasound and CSV, to 16 weeks for amniocentesis. The timing of abortion may make a moral difference to couples and has direct policy implications.¹¹ While sex determination via ultrasound followed by selective abortions of female fetuses, is the most common form of GBSS practiced in Asia today, earlier forms of sex selection are on the rise.

1.2.4. Preconception and Preimplantation Sex Selection

Recent advancements in reproductive technologies have become increasingly attractive as they enable couples to avoid an unwanted pregnancy in the first place. We differentiate between (a) preconception (or primary) sex selection, which takes place before fertilization using sperm sorting, artificial insemination (AI) or in-vitro fertilization (IVF), and (b) preimplantation (or secondary) sex selection done after fertilization using IVF in combination with preimplantation genetic diagnosis (PGD).

AI is used to insert the sperm directly into a woman's cervix. It is a common form of fertility treatment for humans. The pregnancy rate depends on multiple factors such as age and health of the recipient, sperm count, motility and volume, usage of fresh or frozen sperm, etc. (Besselink et al. 2008). Women under 35 have a 15% success rate, thus it takes several cycles to conceive (Human Fertilisation and Embryology Authority 2014). AI is a simple and inexpensive procedure with few side effects compared to IVF.

¹¹ E.g. the Indian and Vietnamese law allows induced abortions until 20 and 22 weeks of pregnancy respectively. Sex-selective abortions are, however, illegal in both countries.

IVF is an assisted reproduction technique developed in the late 1970s to help cases of infertility and genetic pathologies. Within a few decades IVF has become an integral part of Obstetrics and Gynecology training and reproductive medicine. Today IVF clinics throughout Asia, especially in big cities, routinely offer the latest services. Fertilization occurs outside the body in vitro (literally, in glass), as the sperm and the egg(s) are combined in a laboratory. One or several of the resulting embryos are then transferred into the woman's uterus where gestation takes place as usual. Eggs can also be placed into another woman's body, referred to as surrogate mothers. Different steps are necessary when undergoing IVF including superovulation, egg retrieval, fertilization, embryo culture, and embryo transfer. IVF can fail at any of these stages and success rates vary among clinics and patients between 15-20%. IVF is reported to be more effective than AI (Karabinus et al. 2014), but also costlier and more invasive (De Jong et al. 2010). Prices for IVF in India range between US\$ 1500-3000 per cycle, which is cheap by international standards, but expensive and rather inaccessible for the average customer (Gupta 2000).

PGD is frequently used in combination with IVF and refers to the genetic profiling of embryos prior to implantation. The procedure was developed in the 1990s to avoid the transmission of genetic diseases and has soon been expanded to include sex selection for non-medical reasons.

Table 1: Scenarios of Preconception Sex Selection for Non-medical Reasons

a.	Patient is undergoing IVF and PGD. Patient learns sex identification of embryos as <i>part of</i> , or as <i>a byproduct of</i> PGD done for other medical reasons.
b.	Patient is undergoing IVF and PGD. Patient requests that sex identification be <i>added to</i> PGD done for other medical reasons.
c.	Patient is undergoing IVF, but PGD is not necessary to treatment. Patient <i>requests PGD</i> solely for the purpose of sex identification.
d.	Patient is not undergoing either IVF or PGD for the treatment of infertility or any other medical reason. Patient <i>requests IVF and PGD</i> solely for the purpose of sex identification.

Source: Ethics Committee of the American Society of Reproductive Medicine (2004).

Table 1 gives an overview of the different PGD sex selection scenarios. It indicates that sex determination can be a byproduct of PGD done for medical reasons, e.g. fertility treatment

(scenario a.), or requested solely for the purpose of sex identification (scenario d.), with different nuances in between (scenarios b. and c.).

Due to legal restrictions in several countries, reliable statistics about the number of clinics offering PGD and IVF for non-medical sex selection are difficult to obtain. A 2006 survey by Genetics and Public Policy Center at Johns Hopkins University found that 42% of 137 PGD clinics in the US (where sex selection is legal in most states) offered this service (Baruch et al. 2008). The demand for such services certainly varies among different countries, ethnicities and socio-economic groups. Gleicher and Barad (2007) studied 92 couples that had undergone IVF in the US, showing that Chinese, Indians and Arab/Muslim couples primarily select in favor of male babies, while other ethnicities did not reveal strong gender preferences.

Over the past decade a lucrative sex selection industry has developed.¹² As services are unavailable or illegal in the home country, some couples seek treatment abroad, engaging in an emerging trend of “cross-border trade in assisted reproduction” (Whittaker 2011) or “sex-selection tourism” (George 2013). Several companies in the US and Thailand aim at attracting Asian clients. According to news reports, hundreds of couples from China, Hong Kong or Singapore visit Bangkok every year to undergo IVF treatment, asking primarily for boys (Kaye and Jittapong 2014). However, this number is too small to impact the national sex ratios at birth in their countries of origin.

Up to now sex-selective abortion remains the most common method of gender-biased sex selection practiced throughout Asia. However, the use of artificial reproductive technologies is likely to increase in the future. This is especially the case, since more couples are postponing marriage and child bearing and thus are experiencing more often fertility problems.

1.3. Magnitudes of Gender-Biased Sex Selection

We have reviewed the underlying motives and different methods contributing to sex selection. Knowing the scale and severity of this social phenomenon as well as future projections and trends is crucial to making informed policy decision. This section discusses the magnitudes of skewed sex ratios at birth and excess female child mortality. It provides an overview of the concerned countries and the long-term consequences of gender-biased sex selection.

¹² According to Reuters the business of sex selection is estimated to be worth US\$ 150 million in 2013, with a growing demand of about 20% per year (Kaye and Jittapong 2014).

1.3.1. Overview of Affected Countries

Since 1955 the world population has become increasingly masculinized (Guilmoto 2015a). At first the relative deficit of missing females was mainly linked to excess female mortality in Asia (Sen 1990). However, since the 1990s an abnormal rise of male births has been detected (Sen 2003). The affected regions include East Asia, Southeast Asia, South Asia, the Caucasus, and Eastern Europe. While some countries have severely skewed sex ratios (e.g. China and Azerbaijan), others show more mild forms of sex imbalances (e.g. Georgia or Taiwan). Affected countries vary significantly in terms of their population size (with over a billion in China and India vs. under a million in Montenegro) and in terms of their total fertility rate (with levels above vs. well below replacement level).

Table 2 gives an overview of the large geographical and demographic range of the concerned countries. In these diverse countries, sex imbalances emerged at different times and took different trajectories.¹³ The first set of countries that witnessed elevated levels of SRB was South Korea, China and India starting in the early 1980s with the introduction of ultrasound. While sex ratios at birth rose rapidly and in tandem in South Korea and China between 1980 and 1990, sex ratios in India increased at a much slower pace, which can be linked to greater regional diversity and a higher level of fertility (Jha et al. 2011).

Since the 1990s, the practice has emerged in Eastern Europe and the Caucasus. After the fall of the Soviet Union, couples in Armenia, Azerbaijan and Georgia started to sex select. The SRB levels rose quickly to levels of around 115 boys per 100 girls born. In fact, as of 2015 Armenia and Azerbaijan have the highest SRB worldwide after China (see Table 2). Neighboring Georgia, on the other hand, has witnessed a more moderate increase and already shows signs of improvement (in the absence of policy intervention). Since the collapse of Yugoslavia, the Western Balkan region (including Albania, Kosovo, Montenegro, and Northwest Macedonia) has become affected, where SRB levels tend to fluctuate around 110 (Guilmoto and Duthé 2013). Scholars have argued that political and economic instability can trigger revivals of patriarchal values that result in spikes in SRB (Mésle et al. 2007; Guilmoto et al. 2018).

¹³ We describe here only broad trends. Important variations as per region, parity, socio-economic status, urban/rural residence, religion and ethnicity will be ignored. The evolution of SRB in India, South Korea and Vietnam will be discussed in detail in the three case studies.

Table 2: Sex Ratio at Birth in Selected Countries

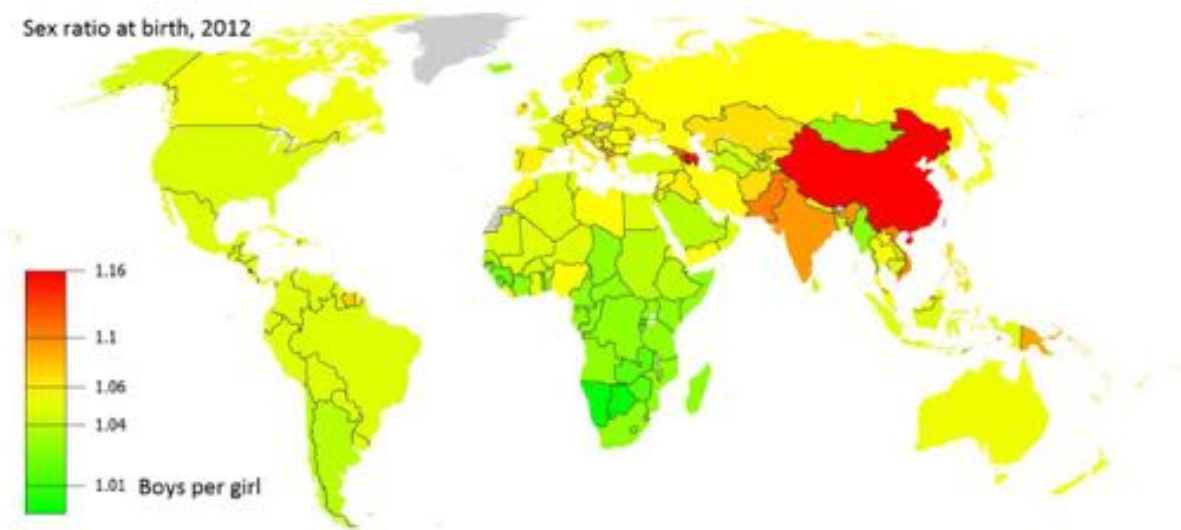
Country or region	SRB ^(a)	Period	Source	Population ^(b)	Fertility ^(c)
Asia					
China	115.9	2014	National Bureau of Statistics	1,401.6	1.7
South Korea	105.3	2013	Birth registration	49.7	1.3
Hong Kong ^(d)	109.3	2013	Birth registration	7.3	1.1
India	110.0	2011-2013	Sample registration System	1,282.4	2.5
	110.1	2012	Birth registration		
Singapore	107.0	2013	Birth registration	5.6	1.3
Taiwan	107.4	2012	Birth registration	23.4	1.2
Vietnam	112.2	2013-2014	Intercensal survey 2014	93.4	1.8
Southern Caucasus					
Azerbaijan	115.6	2013	Birth registration	9.6	1.9
Armenia	114.0	2012-2013	Birth registration	3.0	1.7
Georgia	108.0	2012-2015	Birth registration	4.3	1.8
Southeast Europe					
Albania	109.0	2012-2013	Birth registration	3.2	1.8
Kosovo	110.4	2011-2013	Birth registration	1.8	2.3
Macedonia (northwest) ^(e)	110.4	2009-2013	Birth registration	0.3	1.5
Montenegro	109.0	2009-2013	Birth registration	0.6	1.7

Source: Guilmoto (2015a). a) SRB, number of boys per 100 girls); b) Estimated total population in million, 2015; c) TFR in 2010-2015; d) Births among residents; e) Polog region.

At the turn of the century, a third set of countries including Vietnam and Nepal embarked on a trend of skewed sex ratios. The trajectory in Vietnam has been both recent and rapid. The Red River Delta in Northern Vietnam accounts for most of the sex imbalances with levels of over 120 male per 100 female births. Compared to Vietnam, data accessibility for Nepal is poor, but recent quantitative (Frost et al. 2013) and qualitative research (Puri and Tamang 2015) point to an increase of SRB after the legalization of abortion in 2002. More recently, other South Asian countries including Pakistan and Bangladesh may witness a rise in SRB, but reliable data is scarce and abortion services remain less acceptable and available (Hesketh and Xing 2006; Population Council and CREHPA 2015).

Figure 4 provides a geographic overview of the countries with skewed SRB (marked in orange and red). It is striking that other countries in the region – despite their proximity and shared patriarchal systems – have remained immune to the phenomenon, e.g. Turkey, Japan, Myanmar, or Iran. This can be explained by degrees of flexibility in kinship systems that we described earlier as well as the social and religious non-acceptance of abortion practices.

Figure 4: Sex Ratio at Birth, World Map, 2012



Source: Hunter (2014) based on World Bank Gender Statistics. Note that census data and actual birth records for each country may differ from the World Bank database.

Abnormal sex ratios have also been reported among migrant population in Europe, North America, Australia and the Middle East (see e.g. Almond et al. 2013; Dubuc and Coleman 2007). However, due to the small migrant population among the total number of births, the national sex ratios at birth have not been affected. The fact that migrants import cultural practices to their country of destination illustrates that the practice is not linked to restricted fertility control policies as enforced in China or to the dowry system as practiced in India, but more linked to cultural attitudes linked to son preference (Guilmoto and Duthé 2013). Similar dynamics can be observed with the continuation of other harmful practices such as female genital mutilation among African diaspora in Europe (Kostenzer 2013). The persistence of cultural practices away from home can be seen as a form of holding on to traditional family value systems. Yet, the tendency is likely to diminish among second and third-generation migrants, as the status of women improves and cultural bonds weaken.

1.3.2. Number of Missing Women

Sen (1990) coined the term “missing women” referring to females, who would be alive in the absence of sex discrimination. After Sen’s initial assessment, several studies have emerged on the global number of missing women (Coale 1991; Sen 1992; Klasen and Wink 2003; Bongaarts and Guilmoto 2015). Calculations have evolved over time as different methodological revisions were discussed and introduced. Subsequently computations improved leading to more precise estimations. Two types of assessments have been issued:

1. Estimated number of already missing women
2. Projected number of future missing women

Both assessments take the combination of prenatal sex selection and postnatal excess mortality into account. They are based on age-specific population sex ratios. Bongaarts and Guilmoto (2015) estimate that the number of missing females rose from 61 million in 1970 to 126 million in 2010. By far the biggest share of women went “missing” in China and India (62.3 and 43.3 million respectively in 2010) accounting for 84% of the world total, followed by Pakistan and Bangladesh (with 4.4 and 2.4 million respectively in 2010 (see Table 3).

Table 3: Estimates of Missing Females in Selected Populations, 1970-2010

	Number missing (in millions)					Percent missing	
	1970	1980	1990	2000	2010	1970	2010
World	61.0	72.2	87.6	105.9	125.6	3.3	3.7
China	27.2	31.8	39.2	49.5	62.3	6.9	9.5
India	21.8	27.1	33.2	38.9	43.3	8.2	7.4
Pakistan	3.5	3.7	4.0	4.4	4.4	12.5	5.2
Bangladesh	2.3	2.9	4.0	4.2	2.4	7.2	3.2
Nigeria	0.2	0.6	1.1	1.4	1.9	0.6	2.5
Indonesia	0.0	0.0	0.0	0.1	1.7	0.0	1.5
Rest of the world	6.1	6.1	6.2	7.4	9.6	0.5	0.5

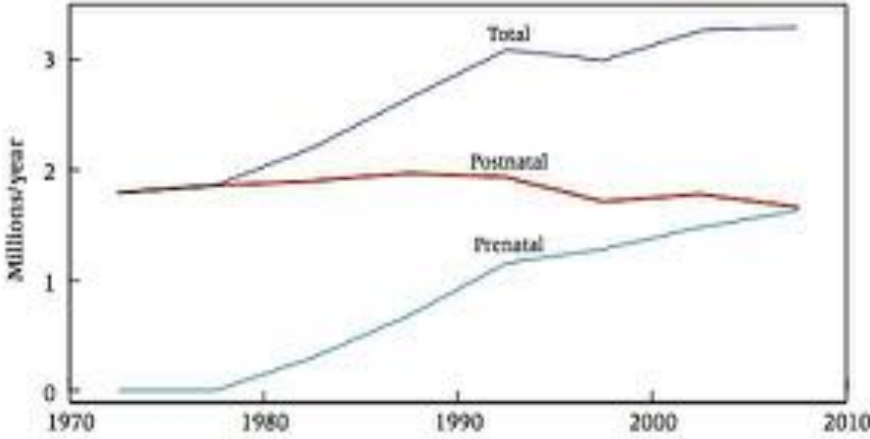
Source: Bongaarts and Guilmoto (2015, 247).

The proportion of missing females globally has increased slightly from 3.3% to 3.7% over the past 40 years. Due to the large population sizes and the severity of gender discrimination, 9.5% of the female population in China and 7.4% in India are missing as of 2010.

Bongaarts and Guilmoto (2015) also provide important insights regarding the distribution of pre- and postnatal discrimination. They estimate the annual number of newly missing females between 1970-75 and 2005-2010. This data set shows that since 1980 (with the introduction of

ultrasound) the relative amount of prenatal sex selection has been continuously rising, while the share of postnatal discrimination has slightly declined (see Figure 5).

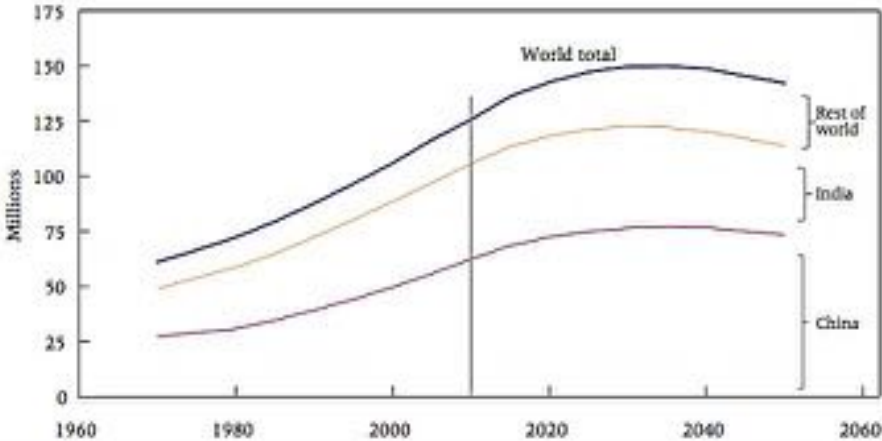
Figure 5: Annual Number of Newly Missing Females, 1970-75 to 2005-2010



Source: Bongaarts and Guilmoto (2015, 255).

Projections on the number of future missing women, on the other hand, are less accurate and more problematic. Like all projections they depend on available data and involve different levels of uncertainty, namely model and scenario uncertainty. The authors rely on the UN’s medium-variant population projections and estimate that the number of missing females will peak at 150 million in 2035 before declining to 142 million by 2050 (see Figure 6).

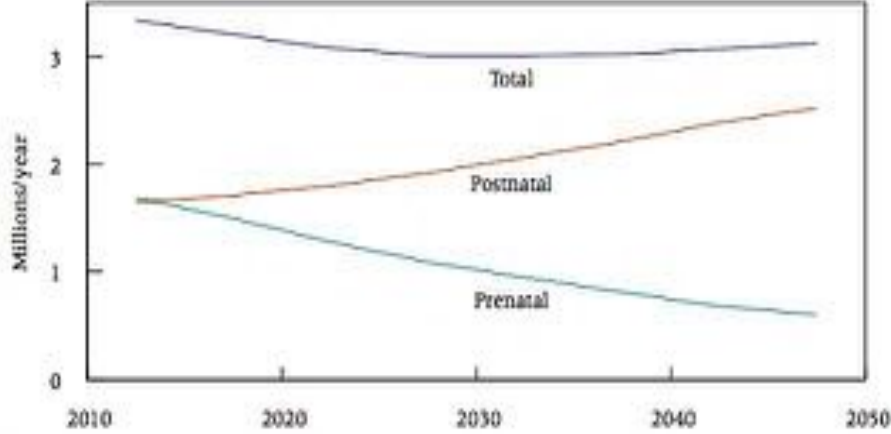
Figure 6: Estimated and Projected Number of Missing Females, 1970–2050



Source: Bongaarts and Guilmoto (2015, 259).

Most of the future missing women will be absent in China and India. According to these projections, prenatal sex selection will be declining in the 2010-15 to 2045-50 period, while postnatal excess mortality will be rising (see Figure 7).

Figure 7: Projected Annual Number of Newly Missing Females, 2010–15 to 2045–50



Bongaarts and Guilmoto (2015, 258).

These projections are counterintuitive and highly doubtful, especially taking into consideration the rapid technological advancements and their diffusion, as described in earlier sections and reflected in Figure 5. This illustrates the inherent limitations of future projections and provides a concrete example of model uncertainty. Even though projections can never be precise reflections of the future, they are nonetheless important to inform policy options. Projections can help policy-makers to design policy interventions, which in turn may affect future outcomes, and thus change the accuracy of the forecast (Walonick 1993).

This section has presented estimates and projections of the number of missing women, providing evidence that the phenomenon is both severe and widespread. Given the large number of missing women the problem has serious population and marriage implications.

1.3.3. Population and Marriage Implications

The long-term effects of sex imbalances will be especially severe in China and India, as they contribute to the largest share of missing women. Populations in both countries will remain predominantly male until the end of this century, resulting in a long-term male surplus of 15% in India and 20% in China, if SRB remains unchanged (Guilmoto 2015a). But even if SRB normalizes, the marriage market will remain disrupted due to belated marriages of previous cohorts. The scarcity of women and the surplus of males will lead to further imbalances in the

marriage market. This has been called the marriage squeeze, where a growing number of men are forced into bachelorhood or postpone marriage as they face difficulties in finding brides (Guilmoto 2012b; Cho 1994).

The marriage squeeze has fueled a trend of transnational and national marriage migration with globalization further accelerating this tendency (see e.g. Lee 2013). Diverse push and pull factors facilitate marriage migrations. In transnational marriage migration, the shortage of brides and bleak marriage prospects of men of lower socio-economic status in developed East Asian nations often generate greater need for female marriage immigrants. Migrant brides, on the other hand, are often attracted by higher earning potentials and aspirations for better living standards. Moving to wealthier countries allows them to send remittances to their country of origin and thus support their native families, which makes significant contributions to the local and national economy. Similar patterns also apply to national marriage migration. For example, in Northwest India, men are forced into bachelorhood because of a shortage in brides and decades of discrimination against women. Men from affluent, high sex ratio states like Punjab, Haryana and Uttar Pradesh have engaged in ‘purchasing brides,’ who often come from poorer states such as Bihar, Assam, or West Bengal.¹⁴ These women migrate from afar and cross borders of caste, culture, language, ethnicity, and even religion. Driven by skewed sex ratios, on the one hand, and poverty, on the other, cross-regional marriages ignore many of the principles ingrained in traditional marriages (e.g. endogamy) and have thus challenged the rigid marriage systems and the notion of caste in countries like India. Informal networks have established to facilitate the migration of brides nationally and transnationally.

In some cases women have also fallen victims of human trafficking (Le Bach et al. 2007). Yet, careful distinctions are necessary to not “collapse diverse forms [of marriage migration] such as trafficking, bride buying, bride price marriage, and cross-region marriage into one homogenous category” (Kaur 2012, 79).

Obviously, there are vast differences in changing marriage patterns across Asia and it is not feasible to cover here all the facets of this large and diverse continent. Nonetheless, there are at least three important communalities that can be detected: one is the dilemma of men who are willing but unable to marry in societies, where marriage has long been considered universal and

¹⁴ According to media sources prices for brides range between US\$ 88 to US\$ 660 (BBC 2006). Expert interviews conducted during field research in Delhi in 2014/2015 point to similar rates of US\$ 500 for a bride coming from East India being purchased to Delhi.

remaining unmarried is associated with significant social shame. Secondly, the tradition of patrilocality, according to which women are absorbed into the husband's family after marriage, still plays an important role in parts of South, Southeast and East Asia (Jones 2010).¹⁵ Thirdly, hypergamy (the desire for women to marry someone of a higher social standing than oneself) is a common feature in the concerned countries, causing additional squeeze because women are more highly educated, marry later or choose to not marry at all.¹⁶

As we can see, GBSS causes long-term population and marriage implications in terms of disruptions in the traditional marriage market. While careful distinctions need to be drawn between different cases of marriage migration, we can also identify similarities in national and transnational marriage migrations, where women from less affluent backgrounds are migrating to more economically developed states or countries.

1.3.4. Health, Gender and Political Concerns

A scarcity of women also generates significant health and gender-related problems for various parties, including women, children, men and the society at large. Women are often exposed to great pressure to conceive a son, which can have debilitating effects on their mental and physical health, especially in a context of declining fertility, restrictive reproduction policies and access to poorly regulated health services (WHO 2011). They may have to cope with the consequences of giving birth to undesired girls, which can lead to threats of violence, abandonment, divorce or even death (Li 2007). In some cases women have to continue childbearing until a boy child is born, or undergo one or several sex-selective abortions, putting their health and life at risk, especially when seeking illegal, clandestine and unsafe procedures. Women are also more likely to experience different forms of violence or fall victims to human trafficking. Hakim (2015) points out that male surplus increases men's sexual deficit leading to more sexual harassment, gender-based violence and rape. Tucker et al. (2005) document an increase in sex work, and the spread of HIV in China due to male surplus. Beyond implications

¹⁵ Bilateral kinship systems as seen in Southeast Asia allow greater flexibility and permit closer ties of the bride with her natal family. Often also neolocal arrangements (in form of independent households) are being established, especially in East Asia (see Chapter 4).

¹⁶ Kawaguchi and Lee (2012) find that college-educated women in East Asia are significantly more likely to remain single than their non-college-educated counterparts.

for health and reproductive decision-making, an overall environment of gender discriminatory behavior exposes women to more sexism and puts them in a position of lower social status.

The effects of gender preferences on children have been discussed in an earlier section.¹⁷ They typically involve biases in care, nutrition, and health, access to medical services and vaccination as well as differentials in infant and child mortality. Less studied is the harmful psychological and long-term effects on unwanted girls that are being born (Shijith and Sekher 2017). The psychological and health consequences for surplus men are also bleak. Besides forced bachelorhood, depression and the social stigmatization of remaining unmarried, they are exposed to several health-related risks. Studies have pointed to a growing marginalization and changes in risk taking and sexual behavior of single men in China and India (South and Trent 2010) and the increase in sexually transmitted disease including HIV/AIDS in regions, where men cannot find stable partners (Hesketh and Xing 2006). Bien et al. (2013) provide a systematic review and meta-analysis of prior research on sexual behavior and skewed SRB, concluding that high sex ratios are associated with increased individual sexual risk behavior among both men and women.

The diverse consequences of sex imbalances have heightened political concerns by threatening social, political and economic stability. Firstly, as mentioned, demographic masculinization poses a risk to social stability, as surplus males are more likely to engage in risk-taking and anti-social behavior (e.g. violence, crime, rape, sexual attacks). Secondly, excess male population threatens political stability and peace (Hudson and Den Boer 2002, 2004). Sexually frustrated “youth bulges” are associated with an increased risk of political violence and unrest (Urdal 2006). Hudson (2016) has used the recent influx of disproportionately young male refugees into Europe to illustrate how skewed adolescent sex ratios can potentially harm the stability of the country. Thirdly, sex imbalances generate economic costs in terms of direct health care expenses and secondary indirect costs due to long-term consequences. Recognizing the importance of female contributions to the local, national and global economy, a 2015 McKinsey study assesses the global loss in terms of GDP that countries lose by lacking or not making ‘full use’ of their female populations (Woetzel et al. 2015).

The consequences of demographic masculinization are still under-researched and poorly understood. Calculating the impact of direct and indirect current and future costs is indeed challenging. Studies would need to take into consideration the economic impact of individual

¹⁷ See 2.3.1, manifestations of son preference behavior.

suffering, family disruptions, and social unrest, among other factors. Methodological inspiration for such research can be found e.g. in costing of domestic violence. Lastly, also positive externalities (recognition of gay rights or increased savings of men) would have to be considered (Guilmoto 2013). While policy makers have frequently used projections of future missing women in government campaigning (e.g. Vietnam, India) to raise awareness and legitimize policy response to sex imbalances at birth, little attention has been placed on actually dealing with the consequences or adapting to them.

1.4. Conclusion

In this chapter we offered an in-depth perspective on the social phenomena of gender-biased sex selection. First, we discussed the motives behind GBSS, in particular the importance of son preference and kinship systems. Secondly, we highlighted the different methods by which couples influence the sex composition of their family and explained how these methods have changed over time. Lastly, we viewed the magnitudes and consequences of the phenomenon. These different dimensions of sex selection will guide us in the subsequent conceptualization of public policies aimed at countering sex selection.

2. History and Theory of Public Policies against Sex Selection

The motives, methods and magnitudes of sex selection are relevant at all stages of the policy cycle – from agenda setting to policy formulation, decision-making, implementation and evaluation. Sex selection needs to be severe enough to be recognized and articulated in the political arena before policy is considered. Knowing the 3-M’s also helps to formulate and implement target-group specific policies. Ultimately, a strong evidence base is crucial for the monitoring and evaluation of policies. All in all, this evidence base allows for the careful design, measurement and adjustment of policies based on trends and projections.

In this chapter we discuss public policies as they pertain to population policies in general, and sex selection in particular. We start out by highlighting the population goals that concern governments in general. One such goal is the balanced sex distribution of the population. Other topics linked to population quality or quantity may be of far greater importance for governments to achieve in their overall socio-economic development goals. We continue by reviewing the historical evolution of population policies concerning sex selection, stressing the population control movement of the 20th century, the emergence of prenatal sex selection in the 1980s, and its subsequent political denial. Since the 1990s, IOs and epistemic communities have brought sex selection into the political agenda urging governments to take action. After this brief historical review, we turn to theoretical considerations. We focus on three major theoretical axes: Why do governments intervene against sex selection (policy intentions)? How can governments intervene (policy instruments)? And what difference does it make (policy impact)?¹⁸ Box 3 defines the policy terms used in this chapter.

Box 3: Definition of Policy Terms

Public policy has been frequently defined as “whatever governments choose to do or not to do” (Dye 1992, 2).

Population policies are a type of public policies that can be defined as “actions taken explicitly or implicitly by public authorities in order to prevent, delay, or address imbalances

¹⁸ Note that this section offers a more theoretical than applied exploration of policies and their impact. Concrete examples will be given in the case studies (Chapter 4, 5, and 6).

between demographic changes, on the one hand, and social, economic and political goals, on the other” (May 2012, 42).

Anti-sex selection policies are any type of public policy that affects sex-selective behavior or sex imbalances at birth in an intended direction. Note that other policies (e.g. land reforms, social security schemes) may unintentionally affect sex-selective behavior and outcomes, but are excluded from this definition.

Policy instruments are “the set of techniques by which governmental authorities wield their power in attempting to ensure support and effect or prevent social change” (Vedung 1998, 21).

Policy effectiveness is here defined as “effects or results expected from interventions proposed” (May 2012, 208).

Policy evaluation is “fundamentally a testing of means” (Danielson 2007, 386). It can also be defined as a “careful assessment of the merit, worth, and value of organization, content, administration, output, and effects of ongoing or finished government interventions, which is intended to play a role in future, practical action situations” (Vedung 2015, 387).

2.1. Diverse Population Policy Objectives

Most governments have concrete plans for the development and growth of their nations. Population matters are typically of great importance. Influencing and anticipating demographic trends allows decision makers to allocate resources adequately and invest in the development of the country. Population policies often fall in line with national policy objectives and ideologies and thereby form integral parts of the government’s long-term goals (extending over decades and legislative periods). Traditionally, governments have been interested in policies influencing population size, growth and age structure, fertility, reproductive health and family planning, mortality, spatial distribution and migration (UNDESA 2013).

The world has undergone rapid demographic changes over the past fifty years with an overall lowering of fertility, better health outcomes, reduced mortality and increased longevity. Yet, these trends vary drastically between developed and developing countries, and between high and low fertility settings. Several countries, especially in less developed regions, are concerned about rapid population growth and have implemented policies to lower birth rates. In these cases, fertility reduction is seen as a necessary means to ensure food security, health, education, employment, and preserve national resources and the environment. Other countries – especially

in the developed world – have already managed to lower birth rates, but face the negative consequences of ultra-low fertility and a rapidly ageing society. They often opt for pro-natalist policies to boost fertility and prevent deflation of their population and economy.¹⁹

Different schools of population policy belief²⁰ have emerged over time informing population policies. Historically, the mantra has been to lower fertility in order to assure socio-economic growth and prosperity. Nowadays, overall population size or growth is still important, but governments have become more interested in factors like population age structure, ageing, migration or ethnic composition. Moreover, ‘new’ demographic challenges have emerged, such as skewed sex ratio at birth. Addressing sex selection and balancing sex ratios are thus just one among many concerns, nested in a government’s multilayered, interdependent, complex and frequently competing policy landscape.

Within this policy landscape there is both internal competition among population objectives and a growing number of stakeholders involved in population matters. While population policies are typically designed and shaped at the national level, they are increasingly influenced by top-down pressure to comply with international norms. At the macro level, IOs both fund family planning programs and inform policy options. The international community has given particular attention to population trends in Asia because of the sheer population size.²¹ At the national level, diverse state and non-state actors, market forces, and religious institutions are at work. They form coalitions to lobby for their respective policy objectives.

However, it is ultimately at the micro-level, where reproductive decisions are being made. Individuals and families determine the future demographic outcomes of their nations. Within their personal and legal boundaries, they decide on the number, timing, spacing of birth and increasingly also over the sex composition of the family. Their ability to make those decisions depends on knowledge of and access to services, and a variety of other factors, such as education, culture, religion, and socio-economic status, among others. People have diverse interests embedded in social norms, and it is the role of the government to balance individual

¹⁹ In 2013, 49% of developed nations had policies to raise population growth, while only 2% had policies to lower it. On the contrary, 49% of developing nations had policies to reduce population growth rate and 10% to raise it (UNDESA 2013, 48).

²⁰ Some schools do not believe in policy intervention. For Marxists, population is a response to economy, for Libertarians population will adjust itself, etc.

²¹ Asians make 60% of the world population in 2010. Asia has 10 of the 18 most populated countries in the world, with China and India hosting 37% of humanity (UNDESA 2013).

rights and obligations with societal interests. It is against this backdrop of competing population objectives and complex stakeholder interactions that policies concerning sex selection are being made. In the subsequent section we will explore these facets in its historic context.

2.2. Policy Evolution

Population policies are as old as governments,²² but it was not until after World War II that nation states began to seriously influence demographic variables. The end of World War II also marked the beginning of an international human rights agenda and a technological revolution (in form of digital record keeping and computational modeling). This provided enhanced frameworks and tools for governments to analyze and shape population outcomes. Traditionally, the intention of these population policies has been to control population growth through family planning (May 2012).

2.2.1. Population Control Movement in the 1960s-1970s

The population control movement originated from different ideological foundations. The first foundation was based on the idea of Thomas Malthus (1798) that population – if unchecked – will quickly outstrip food supply and lead to disease, war, famine, and death. Neo-Malthusians argued for the use of contraceptives not as an individual right, but as a means of lowering population growth rates. The second foundation was early feminism led by women like Margaret Sanger, Marie Stopes, and other pioneers in the early 20th century who advocated for the woman’s right to birth control in order to avoid unwanted pregnancies. Their overall aim was to reduce maternal and child mortality and free women from large families. These two ideologies mixed with the third ideology of eugenics, which was popular in the early 20th century. By promoting family planning among the poorer socio-economic strata, the ruling elite wanted to limit excess of births among those considered “unfit” or unable to afford children (Robinson and Ross 2007).

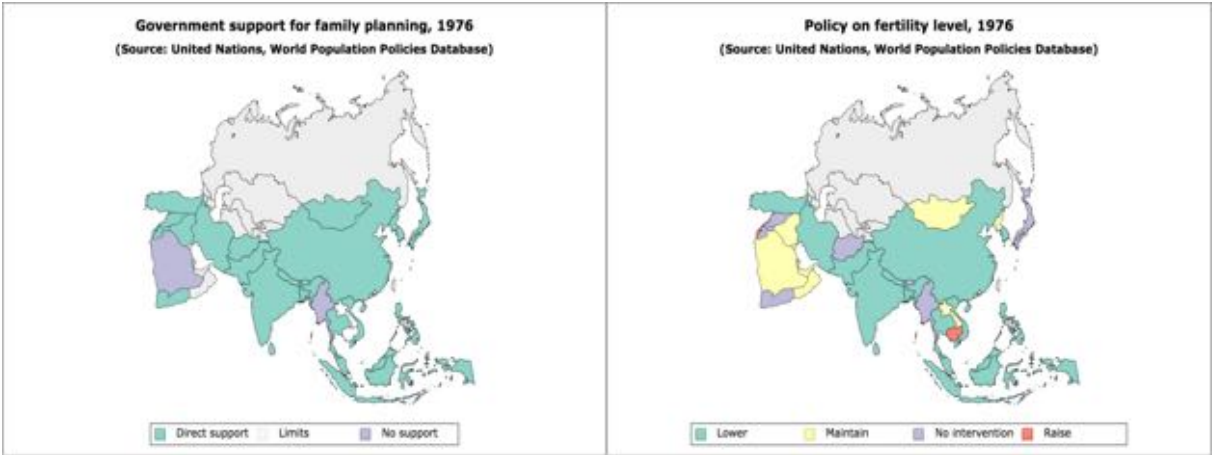
Between the 1950s and 1980s, concerns about global population growth and its effects on health, poverty, environmental degradation and political stability led to strong efforts to reduce population growth rates. Post-WWII marked the onset of the international family planning

²² E.g. Roman Emperor Augustus (63BCE-14 CE) tried to boost fertility among aristocrats.

movement, also known as the ‘Population Movement.’ India was the first country to launch a large-scale population stabilization program in 1951, through which the country avoided 168 million births by 1996 (Saxena 1996). Other Asian countries soon followed by introducing similar policies. In 1952, the International Planned Parenthood Federation and the Population Council were both founded. Each promoted reproductive health, access to contraceptives and abortions. Together with the US government, these international NGOs actively supported national efforts for fertility reduction. They all invested large sums intended to control what was then perceived as an emerging ‘population crisis.’

Books like the 1968 “Population Bomb” by Ehrlich portrayed apocalyptic scenarios. “The cancer of population growth [...] must be cut out,” if not humanity would face “a ‘death rate solution,’ in which ways to raise the death rate - war, famine, pestilence - find us” (Ehrlich 1975, 34). Over the coming years, broad parts of Asia with a few exceptions (Cambodia, Laos, Myanmar, Japan and North Korea) introduced policies to lower fertility. Direct government support for family planning programs quickly spread through almost all parts of Asia (see Figure 8). By the late 1970s, dozens of countries had introduced policies to facilitate abortion access, mainly to reduce overall fertility levels (Connelly 2008).

Figure 8: Policy on Fertility and Family Planning Support in Asia, 1976



Source: UNDESA (2013).

Certainly population control includes measures that improve the lives of people in general, and women in particular, by providing access to contraception and granting greater control over their reproduction. Some programs, however, have resorted to coercive measures. Mass abortions, sterilization camps and coercive family planning methods as practiced in China or India during the Emergency Period (1975-77) were widely criticized for undermining people’s reproductive rights and freedom (Connelly 2008). To give an example: between 1972-73, 3.1

million sterilizations were performed in India, two thirds of them at sterilization camps (Rao 2004, 40). At the same time abortion was legalized in India and was becoming more accessible over the coming years. In 1979, China introduced the One-Child Policy and averted millions of births over the coming decades. What was a drastic but necessary way to lower fertility for some, was for others a fundamental infringement of reproductive rights. These more coercive forms of family planning caused concern at international levels and ultimately led to a global shift in population policies away from population quantity (where people are seen in terms of numbers) towards population quality (where people's rights are being considered).²³

2.2.2. Emergence and Denial of Sex Imbalances in the 1980s

As fertility rates dropped and the international community took a clear stand to eliminate all forms of discrimination against women with the CEDAW in 1979²⁴, a 'new' form of gender discrimination emerged: prenatal sex selection. The preference for sons was indeed nothing new. Son preference had existed for centuries in some Asian countries and drove families to keep reproducing in their quest for a boy or turn to female infanticide, neglect after birth or unequal treatment in care and nutrition for girls (see Chapter 1). Two factors, however, were new: First, the drop in fertility increased the pressure on women to have a son. Second, ultrasound had become widely available since the 1980s, allowing families to determine the sex of their unborn child. This enabled parents to abort unwanted girls instead of carrying them to term.

The rise in male births first emerged in some parts of Asia, including China, Taiwan, South Korea and India. The problem became apparent in a variety of different data sources, including birth registration, hospital records, census data and demographic surveys. For example, the SRB in South Korea was 107.1 by 1981 and rose to 109.4 by 1985 (KOSIS 2015).²⁵ Similarly, the Chinese Statistical Yearbooks showed a steady increase in sex ratios in favor of males in the same period (Sen 1990). In India, sex imbalances became visible in the child sex ratio in urban

²³ More on the family planning movement in South Korea, India and Vietnam can be found in the country chapters.

²⁴ The 1979 UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) obliges UN member states to eliminate "prejudices and ... practices ... based on the idea of the inferiority or the superiority of either of the sexes" (Article 5.a).

²⁵ In fact, there is a discrepancy between data reported by the sources then and today (see Park and Cho 1995; Miller 2001).

areas as documented in the 1981 Census. Apart from early demographic evidence, field evidence pointed to son preference, daughter neglect and sex-selective abortions in Asia (Williamson 1978; Miller 1987).

Despite this emerging evidence, prenatal sex selection was largely ignored throughout most of the 1980s. Apart from some local activism²⁶ and isolated policy initiatives²⁷, political and scholarly denial was a common response (Miller 2001). As Bélanger et al. (2003, 243) point out, sex imbalances can cause significant political ramifications, both nationally and internationally, which may explain the resistance or caution of some policy makers to acknowledge this new form of gender discrimination.²⁸ It was not until the early 1990s that governments showed concern and started introducing corrective measures.

2.2.3. Recognition of Sex Selection and Agenda Setting in the 1990s

The first policy initiatives began in South Korea and India in the late 1980s, but sex imbalances were not really recognized as a problem until the early 1990s (Miller 2001). 1990 marked an important year: The UN Convention on the Rights of the Child (CRC) was enacted, a landmark treaty for the protection of children from any form of discrimination and maltreatment. In the same year Sen (1990) published his famous article of over 100 million “missing” women in Asia, which put the subject in the global spotlight. He ended his article with the following lines:

“If this situation [of missing women] is to be corrected by political action and public policy, the reasons why there are so many ‘missing’ women must first be better understood. We confront here what is clearly one of the more momentous, and neglected, problems facing the world today” (Sen 1990, last paragraph).

As the quote shows, there was great uncertainty about the reasons behind female scarcity. Since the issue was yet not fully recognized, scholars and policy makers alike were tapping in the

²⁶ Since the early 1980s local Indian NGOs lobbied for policy response to regulate diagnostic techniques, first in Maharashtra and later at national level (Forum Against Sex Determination and Sex Pre-Selection 1992). The Indian case is special because of its strong bottom-up women’s right movement.

²⁷ There were at least 4 outliers: In 1983, India had banned sex determination in government run hospitals. In 1987, South Korea outlawed prenatal sex determination. In 1988, Maharashtra State issued the Regulation of Pre-Natal Diagnostic Techniques Act, which banned sex selection and served as a model for Indian national legislation in 1994. In 1989, the Chinese Ministry of Health issued a notice on strictly forbidding prenatal sex diagnostic. The ban was not enforced until 1994.

²⁸ The authors do not further specify what type of political ramifications they refer to. Yet we can presume pressures to protect human rights and conform to the international development agenda.

dark for theories that could explain the growing demographic masculinization. Data flaws, female under-numeration, biological and ethnic reasons (among others) were discussed (Johansson and Nygren 1991; Zeng et al. 1993). Government officials were often reluctant to acknowledge that prenatal gender discrimination and selective abortions were actually driving the new trend.

In 1990, the Chinese Census was released pointing to an SRB of 111.3 boys per 100 girls. The results caused concern among national researchers and UNFPA. UNFPA China became the first agency to raise the issue of sex ratio imbalance in China, a topic that had previously been considered a “taboo.”²⁹ UNFPA collaborated with Chinese academics and funded the first research, before advocating for policy response among senior Government officials (ibid). In 1992, international scholars came together during the “International Seminar on China’s 1990 Population Census.” During this seminar it became evident that SRB imbalances were not just a matter of concern in China, but also in several other Asian countries.

One year after the Chinese Census was released a similar picture came to light in India. The 1991 Indian census showed a widespread decline in the child sex ratio (population of ages 0-6). National level estimations of the SRB were “as high as 112” (Westley 1995, 3). In contrast to China, political awareness in India was ignited by local NGOs. Grassroots activism and the media created political pressure first at state levels and later at the national level.³⁰

In 1994, India, China and South Korea introduced new policies to strengthen efforts against sex selection. The Indian Federal Government enacted the Pre-Natal Diagnostic Techniques (PNDT) Act banning sex selection thanks to the growing bottom-up pressure. In the same year the Chinese Law on Maternal and Infant Health Care came into effect, which also outlawed sex selection, but, in contrast to India, was influenced by top-down efforts by IOs (in particular UNFPA). Meanwhile, South Korea strengthened the Medical Code to include license removal, fines and imprisonment for doctors who disobey the law by providing illegal sex determination (Miller 2001; Park and Cho 1995).

²⁹ For a description how UNFPA China raised awareness on sex selection after the release of the Chinese Census in 1990 see (UNFPA China 2010). In fact, early UNFPA intervention was denied in Hvistendahl’s book *Unnatural Selection* (Hvistendahl 2011). UNFPA promptly responded to these assertions and the author later corrected her stands in public interviews and on her website.

³⁰ In Tamil Nadu, NGOs efforts led to Baby Cradle Scheme and several other state level programs (Srinivasan and Bedi 2011). In Maharashtra, activist pushed for state and later national legislation.

In the same year, the International Conference on Population and Development (ICPD) was held in Cairo. This conference was a milestone in the international population movement.³¹ It introduced a major shift from population control in terms of quantity to quality of population matters by stressing the importance of women's empowerment, maternal and child health, voluntary family planning, and the safeguarding of individual reproductive rights (also known as the Cairo Consensus). The ICPD Programme of Action (1994) was the first international document that openly referred to the "harmful and unethical practices regarding female infanticide and prenatal sex selection" (paragraph 4.16.) and urged over 180 UN member states to take preventive action (paragraph 4.23.). It also encouraged governments, "to measure, assess, monitor and evaluate progress towards meeting the goals of the [...] Programme of Action" (paragraph 13.6.) and to report regularly on their advancements ("ICPD Report" 1995). As a consequence, many other Asian countries were sensitized to the issue and translated these global commitments into national laws and policies.³²

The efforts of the ICPD Programme of Action were reemphasized in Beijing in 1995 during the 4th UN World Conference on Women. Although the Beijing Declaration and its Platform for Action affirmed "the right of all women to control all aspects of their health, in particular their own fertility" as a basic means for their empowerment (Paragraph 17), it also explicitly condemned prenatal sex selection.³³ Paragraph 124 (i) states that governments shall, "[e]nact and enforce legislation against the perpetrators of practices and acts of violence against women, such as [...] prenatal sex selection [...] and give vigorous support to the efforts of non-governmental and community organizations to eliminate such practices" (United Nations 1996).

³¹ Since the 1970s regular international population conferences were being held (Bucharest in 1974, Mexico City in 1984, Cairo in 1994, etc.), which have created a global consensus towards a development agenda in population policies.

³² Here are two examples: In Korea, policy makers set up a new Population Policy Deliberation Committee under the Minister of Health and Welfare after having joined the ICPD. They issued legislation to strengthen national efforts to address GBSS (Cho 1996). In Vietnam, authorities held a post-ICPD National Conference on Population and Development in 1998 informing population policies and leading up to changes enshrined in the 2003 Population Ordinance.

³³ We note the tension in the ICPD and Beijing agenda between individual rights and free reproductive choices on the one hand, and the prohibition of reproductive sex-selective choices on the other hand.

The ICPD and Beijing Declaration were important because they created awareness and generated political pressure. They do not form part of international law³⁴ and are therefore not legally binding for member states. As consensus documents they are expressions of political will and their success strongly relies on national implementation and enforcement efforts (Kostenzer 2016). Despite the lack of tools for policy enforcement, these measures were instrumental in building up top-down international consensus and pressure on the issue. Once sex imbalances at birth were recognized, resources could be allocated to the problem and different stakeholders could begin to conceptualize, analyze and address the phenomenon. Where the first policy interventions were mostly isolated local and national efforts, with the involvement of the international community, coordination became global.

2.2.4. Action Against Sex Selection in the 21st Century

The turn of the 21st century marked a shift from recognition to action. Various stakeholders stepped up their efforts to better understand and tackle the issue, including national governments, IOs, and research communities.

National governments in China, India and Vietnam rolled out new policies or strengthened existing ones.³⁵ Meanwhile, UNFPA national bureaus in China and India took notice of the scope of the problem and invested in research, policy response and multi-stakeholder cooperation. In 2007, UNFPA Asia-Pacific Regional Office issued a major study on *addressing gender-based violence in East and Southeast Asia*, which also covered policy response to sex selection in China and provided policy recommendations for governments and NGOs (UNFPA 2007). Around this time national efforts began to be increasingly discussed and showcased regionally and globally.

Increased attention and resources lead to more research. International scientific meetings on sex selection were held in Beijing, Singapore, Pondicherry, Xi'an, and Paris. Several publications also emerged in this period, making significant contributions to the deepening of our

³⁴ Legally binding international laws that oblige UN member states to respect, protect and fulfill the human rights of women and children include the ICCPR, ICESCR, CRC, and CEDAW (WHO 2011).

³⁵ For example in 2003, India amended the PC&PNDT Act due to national pressures and prior inaction of government, and Vietnam banned sex selection in the Population Ordinance.

demographic understanding of the problem. However, these still provided a limited understanding of policy implications (Attané and Véron 2005; Attané and Guilmo 2007).

Towards the end of the 2000s sex selection became an issue in Europe. The Swedish Court declared sex-selective abortions for non-medical reasons as legal, which caused policy concern within the region. For the first time high levels of SRB were observed in Southeast Europe and the Caucasus region. As a consequence, several European institutions have taken up the issue and issued legislation against sex selection.³⁶ The UNFPA country office in Armenia also became involved, followed by Azerbaijan and Georgia, producing research and informing policy makers. Local and national actions against sex selection were gradually followed by regional, and later global efforts.

Especially in recent years international interest and guidance regarding sex selection have increased. In 2011, several UN bodies (OHCHR, UNFPA, UNICEF, WHO and UNWOMEN) issued a joint interagency policy statement, the first of its kind, in which they condemn sex selection and offer guidelines and policy recommendations for its prevention (WHO 2011). In 2013, the conclusion of the 57th Session of the UN Commission on the Status of Women was the first international document that made reference to gender-related killing or ‘femicides,’ which led to Resolution 68/191 “Taking action against gender-related killing of women and girls.” This resolution was adopted by the General Assembly in the same year. In 2015, the Sustainable Development Goals (SDGs) were issued, reaffirming global efforts to combat gender discrimination and harmful practices against women, including GBSS.

International mobilization has been key in placing the sex selection on the political agenda and informing policy options. Political inertia is no longer an option when there is (top-down or bottom-up) pressure to conform to international norms. Kostenzer (2016, 2014) provides important insights on why and how IOs deal with sex selection and shed light on how global recommendations resemble national action plans. We can note that not only has the practice of

³⁶ The Swedish ruling motivated the Council of Europe under the auspices of the former Swiss parliamentarian Doris Stump to take up the issue (Stump 2011). The subsequent Resolution 1829 urges the partner countries of the Council of Europe (including Armenia, Georgia and Azerbaijan) to combat GBSS. Already in 1997, the Council of Europe had issued the Convention on Human Rights and Biomedicine, which prohibits pre-implementation sex selection for non-medical reasons (Article 14). In 2013, the European Parliament issued a resolution on *Gendercide: the missing women?* In 2015, the European Union financed the “Global Programme to Prevent Son Preference and Gender-biased Sex Selection: Improving the sex ratio at birth in select countries in Asia and the Caucasus” as part of their Global Public Goods and Challenges (GPGC) Programme (European Union 2015).

sex selection increased substantially over the past two decades, but so have the policies and programs against it. Many national policies have emerged and are being continuously adjusted and influenced by international advocacy.

2.2.5. The Growing Role of the United Nations Population Fund

The United Nations Population Fund (UNFPA) has played a key role in addressing gender-biased sex selection. As we have seen UNFPA has been at the forefront of making GBSS a policy issue since the early 1990s, first at national, and later at regional and global levels.³⁷ The Fund's mandate is to promote the right to health and equality by supporting population data collection in the form of censuses and demographic surveys, which are used to inform policies and programs. The overall goal of UNFPA is to “achieve universal access to sexual and reproductive health, realize reproductive rights, and reduce maternal mortality to accelerate progress on the ICPD agenda” (UNFPA 2013, 4). Regarding its women's rights commitment, UNFPA works to end gender-based violence (GBV), including harmful practices such as child marriage, female genital cutting and prenatal sex selection.

Sex selection is a fundamental concern of UNFPA because it directly relates to the three strategic pillars of the Fund, namely population data, sexual and reproductive health, and human rights and gender equality. Programmatic interventions tackling sex selection are based on the ICPD Programme of Action and UNFPA's strategic planning objectives (see Table 4).

One key objective of UNFPA is to “strengthen national policies and international development agendas through integration of evidence-based analysis on population dynamics,” namely by informing decision makers throughout the entire programming cycle “from data, to evidence, to policy and program design and implementation, to monitoring and evaluation and back to data” (UNFPA 2013, 9). Within this mandate special emphasis is placed on “advocacy and policy dialogue/advice, and knowledge management” as well as “capacity development” for staff of national statistical offices (ibid).

³⁷ For a timeline of how UNFPA has brought sex selection onto the political agenda see (UNFPA China 2010; European Union 2015).

Table 4: Three Strategic Intervention Areas of UNFPA Concerning Sex Selection

Population Data	UNFPA supports the collection, analysis, dissemination, utilization and harmonization of data on SRB and infant mortality, qualitative assessments of causes and consequences of sex selection to inform culturally sensitive approaches for community intervention.
Sexual and Reproductive Health	UNFPA informs legislation (which does not endanger otherwise legal abortion), service provision (for women and high-risk groups) and advocacy (for providers and community leaders) around GBSS.
Human Rights and Gender Equality	UNFPA promotes human rights and gender equality through revision of public policies that influences cultural norms and practices (e.g. unequal inheritance laws, documentation of ‘success stories’).

Source: based on UNFPA (2013).

In 1994, UNFPA hosted the first international policy dialogue on sex selection. Since then, UNFPA has financed and organized international, regional and national expert meetings on a regular basis that focus on bringing together leading experts, high-ranking government officials, UN staff and NGO representatives. The idea behind these expert meetings is to exchange experiences, knowledge and ‘best practices’ in order to inform policy options.

The first conference titled “International Symposium on Issues Related to Sex Preference for Children in the Rapidly Changing Demographic Dynamics in Asia” took place in November 1994 in Seoul and was jointly organized by UNFPA and the Korean Institute for Health and Social Affairs (KIHASA). The conference provided a platform for invited scholars and officials from different parts of Asia³⁸ to discuss policy options. This symposium was the onset of the international policy dialogue around sex selection. It was the first of many conferences that brought together a group of experts to analyze sex ratio data and produce policy recommendations.³⁹

Interestingly, policy recommendations regarding sex selection have broadly remained the same over the past 20 years. Participants of the 1994 Symposium recognized the limitations of

³⁸ The conference publication included South Korea, China, Taiwan, India, Sri Lanka, Pakistan, Bangladesh, Thailand, and Indonesia. Vietnam was added afterwards (Banister 1995; Westley 1995).

³⁹ Further UNFPA sponsored expert meetings on sex selection took place in Beijing in 2004, Bangkok and Hyderabad in 2007, Seoul in 2008, Hanoi in 2011, and Delhi in 2013.

regulating technology and pointed to potential infringement of abortion services. They spoke out for changes in the medical curricula to sensitize doctors. They also suggested legal revisions to strengthen gender equality and grant equal access to inheritance, property, education and economic opportunities for women. They further recommended IEC campaigns for the promotion of gender equality. Another outcome of this first policy dialogue was the desire to enhance data collection and the research base, along with increased regional cooperation on addressing the issue (Banister 1995; Westley 1995). These recommendations are in broad terms still promoted by IOs today (WHO 2011; Kostenzer 2016). Many of these same initial recommendations are still reproduced in policy briefs today (Gilles and Feldman-Jacobs 2012; UNFPA EECARO 2015).

Often policy-makers turn to IOs and epistemic communities for advice (see Box 4). As Bongaarts (2013, 185) notes: “policy-makers are hampered by an absence of methods for projecting trends in sex ratios at birth.” They are uncertain whether sex ratios will rise further without intervention, whether new regions with a tradition of son preference will become affected once technology spreads, and what preventive measures seem promising. IOs routinely recruit demographers and scholars to analyze demographic data, interpret past trends and anticipate future SRB trends. Increasingly these experts are also asked to provide policy advice, often in the form of country reports and policy briefs.⁴⁰ Members of epistemic communities are also hired to conduct international training and capacity-building workshops for IOs, government officials and NGOs.

Box 4: Definition of Epistemic Communities

Epistemic communities are global networks of experts that influence policy decisions. Experts may come from different backgrounds but share a common set of belief systems regarding means, ends, and standards of accruing and testing new knowledge (Haas 1992). These expert groups are often created or promoted by IOs. Together they operate as “shapers of interest and politics” (Powell and DiMaggio 1991, 28).

Unlike other gender related topics (e.g. female genital cutting, violence against women), sex selection attracts a rather small circle of experts that cooperate with IOs on this issue. On the

⁴⁰ Reports and policy briefs on GBSS and skewed SRB are available online through UNFPA country and regional offices (see e.g. UNFPA Albania 2012; UNFPA Armenia 2013; UNFPA Azerbaijan 2014; UNFPA EECARO 2015; UNFPA Georgia 2015; UNFPA 2012; UNFPA Vietnam 2014a).

one hand, epistemic communities produce important sources of information for policy makers to gain a clearer picture of GBSS in a given context allowing for more target-group specific approaches. On the other hand, in smaller communities, knowledge on policy intervention frequently gets reproduced and transferred from one context to another. It is therefore worthwhile to investigate the types of policy learning and transfer that take place in the context of sex selection.

2.2.6. International Policy Convergence and Policy Transfer

Since international agencies and experts provide evidence-based policy recommendations and inform policy options, it is not surprising that similar ideas circulate within the policy community concerned with sex selection. In this section we explore the notion of policy convergence and transfer linked to sex selection.

Policy convergence is essentially the “growing similarity of policies” across countries (Holzinger and Knill 2005, 776). Holzinger and Knill (2005) identified five mechanisms of policy convergence. A country adopts a policy from another country or organization due to 1) coercion or sanctions (*imposition*); 2) compliance with supranational law (*international harmonization*); 3) adjustments to growing competitive pressures (*regulatory competition*); 4) adjustments irrespective from each other (*independent problem-solving*); or due to 5) lessons drawing and the international promotion of policies often reinforced by IOs and epistemic communities (*transnational communication*).

The study of convergence is closely related to policy learning (Bennett and Howlett 1992), policy diffusion (Gray 1973; Karch 2007), policy transfer (Dolowitz and Marsh 2000; James and Lodge 2003; Schneider 2015) and policy translation (Stone 2012). Policy transfer refers to the process of using policy goals, institutions, regulatory/administrative tools, ideas or personnel from one political setting in another political setting (Dolowitz and Marsh 2000). It typically occurs within a spectrum ranging from instances of loose inspiration (lessons-drawing) to the exact copying of a specific policy (Cairney 2016). Policy translation refers to the process of “*selective borrowing*,” which leads to innovation, hybridization and mutation of policies during the transmission process (Stone 2012). The concepts described above are closely related, but they mean slightly different things. For example, policy convergence can occur without transfer, when countries employ similar means, yet independently or irrespective of each other. On the contrary, policy transfer usually involves convergence, in the sense that

transferred policies contribute to a “growing similarity of policies.” Policy transfer tends to place a focus on actors and inputs, while policy diffusion and convergence focus more on policy outcomes (Schneider and Janning 2006).

If we apply the convergence concept of Holzinger and Knill (2005) to the field of sex selection, we can summarize the evolution of anti-sex selection policies in the following stages. In the 1980s, countries engaged in *independent problem-solving* as anti-sex selection policies were novel and untested. By the 1990s, a platform for *transnational communication* was created by IOs and experts. This platform was guided by the global population and development agenda, which contributed to the *international harmonization* of policies against sex selection. As a consequence, new countries concerned with sex imbalances (like Vietnam) could draw lessons from abroad and engage in *transnational problem-solving*. The result of this international communication and harmonization has been the growing convergence of policy instruments against sex selection. One of the positive outcomes of convergence has been a reduced reaction time to sex selection onset, as sex selection newcomers have responded quicker to sex imbalances than the first countries did (see Table 5).

Table 5: National SRB Onset and Sex Selection Bans in Selected Asian Countries⁴¹

Country	National onset of skewed SRB	Introduction of nationwide legislation
South Korea	Continuous rise after 1982	1987 Revision of Medical Service Act forbidding prenatal sex determination.
China	Continuous rise after 1982	1994 Law on Maternal and Infant Health Care on prohibiting sex selection
India	First signs in the early 1980s in urban areas. National onset starting 1991	1994 Pre-Natal Diagnostic Techniques Amendment Act, ban on sex determination and selection
Vietnam	First signs in 1999 census, continuous rise after 2003	2003 Population Ordinance, ban on sex selection
Nepal	First signs reported for 2003-2007 period in urban areas	2002 National Safe Abortion Policy, ban of sex-selective abortions

⁴¹ The legislation in South Korea, India and Vietnam will be dealt with in detail in the case studies.

Table 5 lists the national onset of skewed SRB and the introduction of legislation prohibiting sex determination or sex selection in selected Asian countries. South Korea was the first country to issue a nationwide ban on sex determination in 1987, only 5 years after the national onset of the problem. India and China followed with national legislation on sex selection in 1994, approximately 13 years after the onset of the phenomenon. In the late 1990s and early 2000s sex imbalances started appearing in new regions. These included the Caucasus, Eastern Europe, Nepal and Vietnam. While authorities in the Caucasus and Eastern Europe were unaware of the growing demographic masculinization and reluctant to take corrective measures, Vietnamese and Nepalese governments were very proactive. They took prompt action to outlaw sex selection before the practice became widespread. One explanation for the timeliness of legislation is “learning from cultural reference groups” (Simmons and Elkins 2004, 175). It can be argued that response to sex imbalances in neighboring countries sensitized the governments in Vietnam and Nepal. According to this theory, cultural similarities with China and India, transnational knowledge transfers and policy learning from abroad help explain the prompt policy response in Vietnam and Nepal. Meanwhile, countries in the Caucasus and Eastern Europe did not learn from cultural reference groups in their region (as Turkey or Russia do not face sex imbalances) and were only alerted due to a European wake up call in 2011 (Stump 2011).

We further hypothesize that whether policies converge or not depends on policy windows and national negotiation processes. With regards to policy windows, government authorities need to be ‘open’ and ‘ready’ to be informed by IOs and epistemic communities. They need to authorize and legitimize outside involvement. Their willingness to do so can change throughout the legislative period, depending on the party/government in power, influential interest groups, current events and national discourses. UN agencies wait for strategic policy windows to inform national stakeholders about promising policy options. Furthermore, national negotiation processes take place that ultimately define policy focal areas. For example, some authorities may want to focus on regulating sex-selective technologies, while others rather emphasize awareness-raising. While there is a general tendency towards convergent international policy promotion (Kostenzer 2016), the country-specific efforts and the adoption of such policies ultimately depend on national agenda setting and internal negotiation processes. It is those dynamics of convergence and divergence that we seek to explore in the case studies of this investigation.

In this section we have presented some of the key stakeholders involved in addressing GBSS. We described the evolution of population policies concerning sex selection from political denial to recognition and action. We also explored the growing role of UNFPA in addressing sex selection and applied the concept of policy convergence to the field of GBSS to show how policy advice around sex selection circulates transnationally. We will revisit the notion of policy transfer throughout the country chapters and in the cross-country analysis with findings from the field. For now, we now continue with an in-depth theoretical discussion of GBSS policy intentions, instruments and impacts.

2.3. Policy Intentions

In this section we first turn to the normative question whether and why governments should or should not be concerned. Then, we frame policy instruments and interventions in relation to the motives, methods and magnitudes of sex selection. Lastly, we turn to the effectiveness of policies and interventions. These three steps will indirectly touch upon different stages of the policy cycle: problem recognition and agenda setting, policy formulation and decision-making, as well as policy implementation and evaluation.

2.3.1. Individual Rights Versus the Common Good

To unpack the intentions behind policies against sex selection, three questions come to mind that contextualize the problem for policy makers. First, is sex selection a desirable or undesirable human behavior from the government's point of view? Second, should governments intervene against sex selection? And third, what are the implications of, and constraints on, public intervention? We review the different standpoints to weigh the different arguments evenly (rather than taking sides). The overarching tension that arises from these questions for policy-makers is an age-old one: What is good for individual citizens may be bad for societies at large, and vice versa.

2.3.2. Arguments For and Against Sex Selection

Whether or not sex selection is perceived as a policy problem involves an ethical discussion (Dondorp et al. 2013; Buchanan et al. 2000; Gupta 2000; Sleeboom-Faulkner 2010). Moral and legal ramifications differ depending on how sex selection is being achieved (e.g. through pre-

implementation, sex-selective abortion, postnatal neglect or infanticide) and for which reasons it is being achieved (e.g. medical, social, family balancing).

Arguments for sex selection: Sex selection for medical reasons in order to avoid sex-linked genetic diseases is generally accepted (Dondorp et al. 2013). Given the rare incidence of this use, sex selection for medical reasons is unlikely to lead to societal shifts in sex ratio (Buchanan et al. 2000). Sex selection for social reasons is different. It may lead to demographic, social and political disruptions in the societies concerned when done on a large scale. Some scholars have argued that parents should nevertheless be allowed to select the sex of their offspring (Kumar 1985) or that sex selection is not necessarily wrong (Steinbock 2002). Especially in overpopulated and underdeveloped countries it is a powerful tool for population control: fewer girls born result into fewer future mothers. Couples won't need to keep reproducing in the desire for a male offspring, which would further slow down population growth (Bumgarner 2007).

Further arguments for sex selection are that parents would treat their children better, because they are desired (Becker 2007) and refrain from postnatal neglect and infanticide (Kumar 1985). Prenatal sex selection is thus seen as a 'lesser evil' compared to postnatal sex selection. Other scholars have argued from a rights-based perspective; for the right of individuals to be free from unwarranted governmental intrusion in personal matters of procreation (Roberts 2002), and for the parental right to genetically modify their embryos, including the sex of their future child (Ossareh 2017). This line of argumentation is linked to the right to privacy, reproductive autonomy and access to medical information. Since medical reasons are rare and population control reasons are disproportionate, the strongest reasons for sex selection are founded upon privileging individual rights and freedoms over the group's right to maintain a balanced sex ratio.

Arguments against sex selection mostly pertain to human rights and gender-related concerns. Women and children should be free from discrimination and coercion. Women may face family or social pressures to undergo repetitive second-trimester abortions against their will, which can have negative effects on their physical and psychological health. Sex selection potentially harms the embryo or fetus when girls are deselected on the basis of their sex. It can also have negative effects on the welfare of expected children who witness their parents' gender biases and may even pass those same biases on to the next generation. Opponents also see the danger of the 'commodification' of children when parents are granted control over nonessential characteristics of their future offspring. It presents a slippery slope towards opening doors for future designer babies that are routinely screened for sex, eye color, height, or other traits during

IVF/PGD. On a societal level, there is the concern that the widespread use of sex selection leads to destabilizing demographic effects and has long-term consequences on population and marriage patterns (see Chapter 1). Sex selection done for sexist motives – by valuing one sex over the other – reinforces gender inequality. The fewer girls and women are there, the more likely they are to face further discrimination by the many extra males that compete over females (Hudson and Den Boer 2004; Srinivasan and Li 2018).

Another argument against sex selection is that it further widens class disparities. The upper class will be able to afford costly high-tech IVF/PGD, which involves less social stigma and fewer psychological consequences on the mother, while the poor and rural families will turn to traditional methods, selective abortions and infanticide (Bumgarner 2007) or simply have daughters. Rich men have better marriage prospects than their poor and rural counterparts.

Table 6: Arguments For and Against Sex Selection For Non-medical Reasons

PRO	CONTRA
Parental rights <ul style="list-style-type: none"> - Choice, autonomy, reproductive liberty, right to self-determination - Discretion in private reproductive matters Social good <ul style="list-style-type: none"> - Family balancing - More desired children - Positive contribution to parent–child relationships Medical good <ul style="list-style-type: none"> - Using medical progress Lesser evil (than postnatal discrimination) <ul style="list-style-type: none"> - Medically - Ethically Population control <ul style="list-style-type: none"> - Reduces continued child bearing - Slows down population growth 	Potential health-related harm for <ul style="list-style-type: none"> - Embryo and offspring - Women undergoing procedure - Welfare of expected children Gender-related concerns <ul style="list-style-type: none"> - Discrimination (against females) - Sexist motives - Stereotyped gender role expectations - Reinforcement of gender inequality ‘Commodification’ of children <ul style="list-style-type: none"> - Inappropriate control over nonessential characteristics - Slippery slope towards “designer babies” Social injustice <ul style="list-style-type: none"> - Concern of distorted sex ratios, social instability and inequalities in countries with strong son preference - Potential unfair use of limited medical resources (only available to the well-off)

Source: own presentation based on existing literature (Dondorp et al. 2013; Buchanan et al. 2000; Gupta 2000; Sleeboom-Faulkner 2010).

In sum, the reasons against sex selection revolve around protecting women from gender discrimination, promoting gender equity, and preventing demographic imbalances. These reasons are founded in the principle to protect group needs over individual reproductive freedoms. Table 6 lists the different arguments for and against sex selection for non-medical reasons. Apart from these standpoints, governments may also reason that sex selection is negligible as long it is kept in check, meaning in the absence of structural discrimination of any one sex and demographic imbalances in the society at large.

2.3.3. Arguments For and Against Policy Intervention

The discussion on the pros and cons of sex selection leads to the question of whether or not governments should intervene to regulate the practice. Among the opponents of state intervention are *libertarians* who tend to think that individual rights trump group/state needs and who have argued that public action is not needed, because demographic imbalances will fix themselves. Their argument is rooted in the economic principle of supply and demand. The scarcity of women in high sex ratio societies will lead to an increased value of girls and women, while the value of boys tends to fall. Women and girls will benefit from sex imbalances because the preference shifts naturally to having girls due to decreased dowry prices, higher bride prices paid by potential husbands, and the overall better treatment of women (Becker 2007).

Supporters of state intervention do not believe in self-regulating forces. On the contrary, they argue that the government needs to step in in order to correct the situation. Different groups can be identified. Traditionalists and religious groups reason that children are a ‘gift of God.’ Humans should not interfere in matters of procreation; and therefore the state has to protect all life, even before birth. This group often seeks not only restrictions on sex selection, but also a complete ban on abortions. For moderate interventionists government action is justified to prevent societal harm and assure a balanced sex ratio as a “public good” (Buchanan et al. 2000; Guilmo 2007).⁴² Their argument is that the society at large is better-off with a balanced, biologically determined sex ratio because everyone has better prospects to marry and reproduce. According to Buchanan et al. (2000, 183–84), “society has good, if not conclusive, reason to

⁴² The EU also refers to balanced sex ratios as a “*global public good*” (European Union 2015).

restrict the liberties of individuals if the exercise of those liberties undermines a public good [...]. If too many aim at sex selecting, the public good is destroyed and all are worse off.” The collective consequences of sex imbalances and excess male population (see Chapter 1) can be seen as a national and international security threat. Besides assuring a balanced sex ratio, IOs and NGOs have argued that state intervention is necessary to prevent gender discrimination and human rights abuse (WHO 2011).⁴³

Bioethics researchers have suggested a middle ground by “treating different cases differently” (Dickens et al. 2005). This means restricting sex selection in countries where discrimination against girl children is prevalent and allowing sex selection for family balancing in countries without such discriminatory attitudes.

The logic behind whether or not governments should intervene against sex selection ultimately breaks down into the two major fields previously introduced. Governments are confronted with balancing individual rights with societal interests. It is their task to assess whether or not the adverse social consequences of sex imbalances are severe enough to permit restrictions of individual choice and reproductive freedom, among other rights. In many cases these individual rights and societal interests stand in direct competition with each other.⁴⁴ We discuss both major fields below.

Protection of individual rights: Only legal entities are granted rights before the law. Whether unborn children are legal entities depends on national legislations. Some countries recognize fetal rights (e.g. South Korea) or have provisions for the protection of embryos (e.g. Germany’s Embryo Protection Act, Embryonenschutzgesetz), while others do not.⁴⁵ The fundamental question here is whether choosing the sex of one’s offspring is an inherent right of reproductive choice. Should women be able to terminate a pregnancy on the basis of the fetal sex? Should public authorities assume that women are being pressured to undergo repetitive abortions or

⁴³ However, their priority also lies in safeguarding woman’s reproductive rights. IOs have thus struggled in classifying sex selection as a form of ‘violence against women’ and framing it under the human rights framework, because this could potentially imply the personhood of the fetus and endanger access to safe abortion where legal (UNFPA n.a.). The WHO has therefore stressed that, not the practice itself, but the causes and consequences of GBSS are human rights concerns (WHO 2011).

⁴⁴ E.g. the Constitutional Court in South Korea uplifted the ban on sex determination in 2005 in order to protect the rights of couples and doctors to access and perform medical services without interference. The courts decision also took into consideration that the overall SRB had normalized in South Korea (see Chapter 4).

⁴⁵ E.g. in India, it is made explicit that sex selection is not a violation of the individual rights of any one fetus, but a form of discrimination against women as a group (see Chapter 5).

medical treatment to conceive a child of a particular sex unless proven otherwise?⁴⁶ Ultimately, there is a trade-off between promoting access to reproductive technology that serves the well-being of the mother and child, versus preventing the misuse of the same technology for discriminatory practices such as prenatal sex selection. Balancing individual rights and collective interest can also become a question of social justice. When should governments infringe the liberties of all (by prohibiting prenatal sex determination), even though only few misuse this liberty for discriminatory purposes? Furthermore, governments have to consider the rights of doctors to pursue their medical profession, and the right of couples to be granted full disclosure of their medical information.

Parliaments in sovereign nations decide upon unique distributions and degrees of rights and reproductive freedoms in these cases. Although they are often guided by international law, they also each come to their unique policy platforms through their own, path dependent cultural, legal, political and economic histories. In terms of the international human rights law, it does not recognize a ‘right to sex selection,’ but rather stipulates the right to choose the number and spacing of one’s children, not the sex (Toebe 2008). International law is rather geared towards restricting access to sex selection based on the premise that the practice enhances gender discrimination of women, especially where sex imbalances are severe (ibid).

Beyond the protection of individual rights, state interventions have been justified in order to protect societal interests. The main argument is that sex selection poses a threat to demographic stability due to the high number of missing females (Bongaarts and Guilmoto 2015). Sex selection has been framed as a ‘tragedy of the commons’ or a ‘collective action problem.’ SRB is essentially the result of reproductive choices that individuals and couples have taken to achieve individual or family objectives. The sum of these choices can cause ‘negative externalities’ for the group. Each individual is better-off when achieving his or her reproductive objective: e.g. having a son translates into old-age support for the family. The society at large, however, is worse off because the societal costs of excess male population are greater than the individual gains of having a son. Even though people may recognize the societal gains of a balanced sex ratio, they act according to their personal interests. As a consequence they deplete a common resource, leading to a potentially catastrophic, aggregated effect of individual choices on a scarce common resource (Hardin 1968). That means (too) many individuals sex selecting in favor of males leave the society as a whole with (too) few females. Market forces

⁴⁶ This is the case in India according to Paragraph 23 of the PC&PNDT Act.

alone will not provide for an equal share of girls and boys, because there are incentives for individuals to act according to self-interest. In such situations of market failure, policy interventions have been justified, so that people feel the negative externalities of their action and act according to the collective interest.

2.3.4. Constraints and Alternatives to Policy Intervention

As we have seen, sex imbalances are the result of a ‘market failure’: the society as a whole is better-off with a balanced sex ratio. However, the individual has incentives to act selfishly and against social interests. This is a typical example of a collective action problem, where freedom to maximize individual utility comes at the cost of the public good. One solution to such a problem is to constrain individual freedoms through governmental intervention. But how can the government improve the situation? What are the constraints on, and alternatives to, state intervention?

In broad terms governments have two entry points for policy making. They can aim to influence the supply side or the demand side of sex selection. Influencing the demand for sex selection refers to changing son preference, usually by changing social gender norms and perceptions. Restricting the supply of sex selection refers to creating barriers so that people cannot access sex-selective services. Besides these two levels, which I frame under motives and methods of sex selection, there is a third level, which needs to be considered. Governments can also aim to influence the magnitudes of sex selection, which are the negative results of sex-selective practices in terms of sex imbalances and their long-term consequences. The operational scope of public action is constrained by several factors:

- Legal constraints: changing the demand for children of a particular sex may violate constitutional rights, the principles of gender equality and non-discrimination (e.g. subsidies for daughters or taxation on sons).
- Technological constraints: control of the supply may be difficult to implement, monitor, regulate, if the same technology is used for desirable purposes.
- Practical constraints: control of the supply may have negative side effects or risks, e.g. unsafe black market abortion services (Ganatra 2008).
- Financial and manpower constraints: policy intervention may imply high costs in financial resources and manpower (e.g. subsidies, enforcement of legal bans).

- Moral constraints: intervention may infringe personal liberties, decrease women’s autonomy or intensify postnatal forms of gender discrimination (Zilberberg 2007).

These are some of the operational constraints that need to be taken into account when designing public policies against sex selection. Governments also need to consider that interventions come with different costs and benefits for different groups (Cochran and Malone 2010). The same intervention can bring benefits to some, while imposing burdens on others (Fischer et al. 2007). As such public action generates advantages or disadvantages for different groups at different times. On the one hand, policy interventions against sex selection may directly benefit women, who otherwise are forced to undergo sex-selective abortions, and girl children, who are ‘saved’ thanks to policy intervention. In the long-term policy intervention may also have positive outcomes for the society at large, which benefits from a balanced sex ratio, as men have better marriage prospects and women are free from discrimination. On the other hand, parents seeking a son or wanting to access their medical information are direct ‘losers’ of policy intervention. Also medical doctors may encounter disadvantages due to legal barriers. Furthermore, we could even go as far as to hypothesize that women who could otherwise choose from a larger pool of males or who could generate higher bride prices face losses due to anti-sex selection policies. Table 7 summarizes the advantages and disadvantages of public action against sex selection for different groups today and in the future. A more detailed reflection about individual instruments follows briefly.

Table 7: ‘Winners’ and ‘Losers’ of Public Intervention Against Sex Selection

	‘Winners’	‘Losers’
Today	<ul style="list-style-type: none"> • Women undergoing abortion against their will • Girl child • Female fetus / embryo 	<ul style="list-style-type: none"> • Parents seeking a son • Parents not accessing medical information • Doctors providing medical services
Future	<ul style="list-style-type: none"> • Society at large • Men with better marriage prospects • Women face less discrimination 	<ul style="list-style-type: none"> • Women that could otherwise choose from a larger stock of males and generate higher bride prices • Welfare of born and unwanted girls

Source: own presentation.

Further considerations are whether there are more winners than losers to justify intervention? For example, governments may conclude that the positive effects on women, girls and the society at large of a non-sex selecting environment are more important than the gains of the couples and doctors who want to practice sex selection. Can the losers be compensated for their

losses? Can doctors be compensated for their losses in earning, and couples for remaining sonless? What are the unintended consequences of public action? For example, couples may turn to illegal and potentially harmful practices, or travel abroad for sex-selective purposes. And can the state refrain from intervening? This may signal that gender discrimination is socially acceptable in a given country and can lead to poor reputation or international pressure. These are the different levels of analysis that need to be considered.

Moreover, we want to look at the alternatives to government action (like the free market forces we discussed earlier). One alternative is community mobilization. It reasons that groups of individuals can informally work together to take care of their own problems. According to Ostrom (2005), four main factors contribute to a community's success in overcoming its collective action problems. First, the problem needs to be recognized at a local level. The community needs to be aware of the scarcity of girls and tangible benefits of balancing sex ratios. If the members of the community continue to think that they can have sons and get daughters-in-law from elsewhere (if necessary from abroad), community mobilization will not work. Second, the community needs to have autonomy to solve their own problem. The degree of autonomy that is given to local levels depends on the macro-political and institutional environment. Authoritarian regimes are less interested in independent grass-root autonomy than democratic governments. The third factor is the trust and reliability that others in the community will not take advantage by non-conforming to the group. Fourthly, local leaders can shape community mobilization by pressuring or supporting local structures. Overall, the costs of government action are minimized through community mobilization. Each individual seeks his or her own agreement with other members in the group and rule breaking is reported to third, non-governmental parties. Community mobilization seems to be a feasible corrective measure at local levels in high-sex ratio communities (see 5.5.). Through these kinds of interventions, governments could encourage communities to work towards developing their own solutions. However, such an approach is less promising when dealing with large-scale problems that require efforts on a national or even global level due to their far-reaching scale.

In this section we have reflected about the intentions behind policy intervention against sex selection and the complex trade-off between individual rights and public interests. We reviewed different standpoints for and against sex selection and government intervention and highlighted alternatives to state intervention such as a *laissez-faire* approach or community mobilization. This logic will guide us in the conceptualization of policy instruments.

2.4. Policy Instruments

Governments use different policy instruments to execute their power and influence behavior change. Their different commitments to fulfilling individual rights and preventing discrimination are embedded in their different constitutions, legislations, policies, annual plans and programs. The choice of instruments depends on the value system of policy makers (May 2012) and illustrate the relation between the governing and governed (Lascoumes and Le Gales 2007). Broadly speaking, authoritarian and communist regimes are more likely to dismiss individual rights for the public good, while democratically elected regimes are more inclined to prioritize the individual rights over public interest.

Different types of policy instruments can be applied to sex selection. These include regulations and standards, voluntary agreements, quotas and tradable permits, provision of services, a variety of economic instruments (e.g. subsidies, incentives, taxes and charges) and IEC instruments (including nudges, competitions), capacity building, advocacy, research, and multi-stakeholder coordination. Policy instruments work at multiple levels and are often influenced or carried out by multiple stakeholders. Ultimately, only government authorities at national, state and local level are entitled to use policies. One way to understand the broad categories of policies are as “sticks, carrots and sermons,” referring to the sanctions, incentives and information strategies policies follow to influence their citizens (Vedung 1998). However, increasingly IOs, NGOs and faith-based organizations, among others, influence public policies. Table 8 systematizes the different types of instruments and shows the level of involvement of the diverse stakeholders.⁴⁷

⁴⁷ Contemporary policy-making is increasingly shaped by non-state actors, IOs and epistemic communities (Haas 1992; Joachim 2007), policy transfer (Dolowitz and Marsh 2000; James and Lodge 2003), as well as cross-border governance (Cheema, McNall, and Popovski 2011). Non-state actors not only inform policies but also carry out multiple types of intervention themselves.

Table 8: Overview of Policy Instruments and Stakeholders

Policy Instrument	Forms of application	GOV	IO	NGO	EC
Regulation	Regulation of access to sex determination, sex selection, abortion and its advertisement for social/non-medical reasons. Sanctions for service providers or service seekers.	X			
Standards	Defining minimum standards, e.g. on obtaining, using, and selling technology that can be used for sex selection.	X			
Voluntary agreements	Agreements between authorities and one or more private parties (e.g. medical practitioners, marrying couples) to not engage in sex-selective behavior.	X		X	
Quotas and tradable permits	Allowance of a fixed number of authorized sex-selective abortions (which can be traded among providers)	X			
Provision of services	Variety of services for women, children, and couples, e.g. helplines, cradle schemes, adoption, family planning and counseling services.	X		X	
Subsidies, incentives	Direct payments, tax cuts, in-kind contributions to families with daughters often linked to conditionality to comply with health and educational outcomes.	X			
Taxes, charges	Taxation and charges for service providers of medical equipment, or taxing couples with sons.	X			
Information, Education and Communication	Public release of GBSS and sex imbalance related information to service providers, general public and specific target groups. Channels: TV, radio, print/online media, public events.	X	X	X	X
Advocacy, community mobilization, outreach	Lobbying for multi-stakeholder initiatives and interventions among different target groups, from international to local levels.	X	X	X	X
Research, monitoring and evaluation	Governmental funded research activities aimed at collecting data on son preference and sex selection and sex imbalances at birth, which serve to inform policies, monitor changes.	X	X	X	X
Convergence, coordination	Cross-national coordination, assimilation and transfer of policies and frameworks across different levels or department.	X	X	X	X

Stakeholder: GOV: government institutions, IO: international organizations, NGOs: non-governmental and religious organizations, EC: epistemic communities. (X) Provision of policy instruments.

Box 5: Types of Policies Addressing Gender-Biased Sex Selection

Legal bans

Objective: Restrict access to sex selection, sex determination and advertisement (supply side)

Examples: Medical Service Act (Korea), PC&PNDT Act (India), Population Ordinance (Vietnam)

Strengths: Direct instrument, influencing sex-selective behavior

Weaknesses: Weak monitoring and law enforcement, tendency to norm violation, potential limitation to access safe abortions

Gender equality laws

Objective: Promotion of equal rights, e.g. inheritance, property, education, employment (demand side)

Examples: 2005 Abolition of Family Head System (Korea), 2005 Hindu Succession Act (India), 2006 Gender Equity Law (Vietnam),

Strengths: Grant human rights, comply with international norms (CEDAW, ICPD, Beijing, MDGs, SDGs)

Weaknesses: Indirect measure, cultural barriers, sticky norms, contradictions in legal code

Awareness-raising campaigns

Objective: Change behavior, raise value of girls, address gender discrimination, create awareness

Examples: Care for Girls (China), Love Your Daughter (Korea), Save the Girl Child (India), Join hands against sex selection (Vietnam)

Strengths: Direct instrument, address root cause / social norms, target group specific

Weaknesses: Potential reinforcing gender stereotypes, misinterpretation, slow changes in social values

Financial incentives

Objective: Raise value of girls, correct skewed sex ratio, reduce infant mortality, etc.

Examples: 2008 Dhan Lakshmi Scheme (India), 1994 Apni Beti Apna Dhan (Haryana, India)

Strengths: Direct instrument, multiplier effects (education, health), motivation of addressees

Weaknesses: Often linked to family planning programs, high-budget expenses, too many conditions, mismatch in target groups, perceived compensation for 'loss' of raising daughter, misuse (for dowry)

Services, e.g. baby cradle scheme to drop off unwanted babies

Objective: Reduce sex-selective abortions and infant mortality by promoting adoption

Examples: 1992 Cradle Baby Scheme (Tamil Nadu, India)

Strengths: Temporary solution for girl's safety, reduction in female infanticide

Weaknesses: Motivation of addressees (to abandon babies), no penalization of sex selection

Relaxation of fertility regulations

Objective: Reduce family pressure by alleviating fertility control

Example: Relaxation and abolition of 1-Child Policy (China), relaxation of 2-Child-Norm (Vietnam)

Strengths: Reproductive autonomy

Weaknesses: Dispute about impact, potential increase in births vs. low fertility in absence of fertility control mechanisms, indirect measure

Social protection schemes

Objective: State (not son) sponsored measures of social protection

Example: Social insurance (e.g. pensions, health and unemployment insurance) and social assistance

Strengths: Safety network for elderly, reduced pressure on children to provide for parents

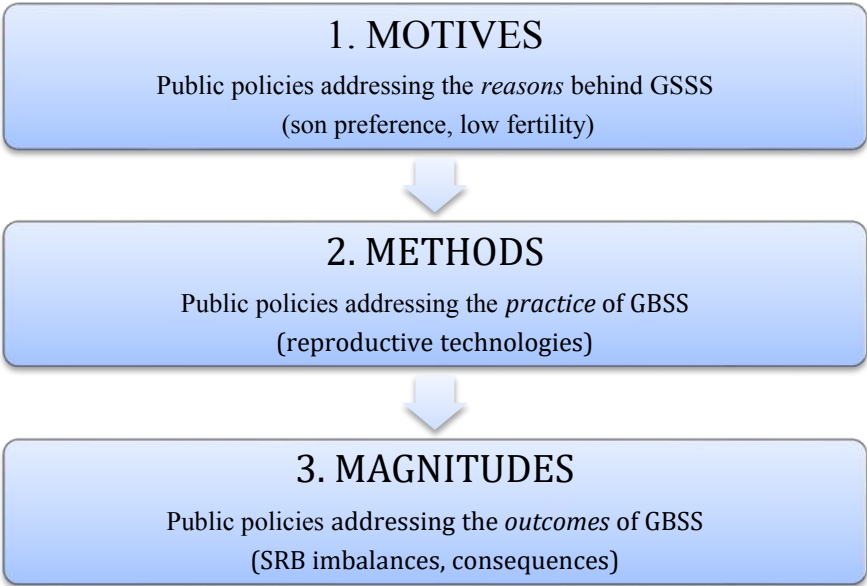
Weaknesses: Indirect measure, low coverage, informal sector, cultural barriers, high expenditure

Box 5 presents various public policies associated with sex selection as well as their strengths and weaknesses. Different policies employ different instruments (e.g. regulation, economic tools, information) to achieve different objectives: Some target sex selection and skewed SRB directly (e.g. legal bans). Others are designed for different purposes altogether (e.g. fertility regulation, inheritance rights, etc.), but have spillover effects on sex ratios. This has created a nebulous field of public policies against sex selection.

There is no single well-developed framework for the understanding of how, why, when and where different policies affect sex selection. Instead, there exist multiple frameworks that approach the problem from different angles, e.g. supply and demand; long-term vs. short-term interventions; direct vs. indirect instruments; instruments linked to the three drivers of sex selection, etc. Some of these frameworks are more developed than others. What they have in common is that each one only influences select parts of the problem. A comprehensive framework that details how policy instruments map to sex selection is missing.

The following 3-M-Model is taken from the conceptual framework developed earlier and proposes to fill this gap. It clusters policy interventions according to the motives, methods and magnitudes of sex selection (see Chapter 1). The logic behind this framework is to understand the types of policy interventions according to the level of sex selection they target. Accordingly, we divide policy instruments into the three groups that influencing the reasons, practice and outcome of GBSS (see Figure 9).

Figure 9: Policies Targeting the Motives, Methods, and Magnitudes of GBSS



This framework helps capture in a more holistic fashion the dimensions of policy intervention against sex selection. The first level “Motives” targets the demand side of the practice by seeking to constrain son preference. Policies that target motives do so by revising gender-biased legislation, adjusting fertility control policies, providing old-age security for their citizens to reduce family pressures to bear a son, or using awareness-raising campaigns to raise the value of girls. The second level “Methods” targets the supply side of the practice, regulating access to sex selection services and technology. The third level “Magnitudes” seeks to influence the outcome of sex selection, which is the sex ratio imbalance in the society and its negative consequences. It does this by either setting government-imposed targets for improving sex ratios or by adjusting to the long-term consequences with migration, marriage and labor policies. This level is often overlooked. Even though government officials and IOs frequently refer to the consequences of sex selection, public policies have seldom been discussed at this level.

This proposal (hereafter 3-M-Model) separates the people, who practice sex selection (methods), from the socio-cultural background, which shapes their reasons for doing so (motives). It further separates the outcomes of their action (magnitudes). This separation into three groups is done because each group corresponds to very different policy interventions.

This framework builds on existing work. Pande et al. (2009, 7) developed a similar conceptual framework for their overall explanation of son preference and daughter discrimination in India by referring to “Ideology, Practice and Outcomes.” Zheng (2007, 330) also refers to a similar framework for China (“son preference, sex selection of foetus, imbalanced sex ratio at birth”). However, they did not link it to policies. Elements can also be found in the supply and demand framework or the framework according to the three drivers of sex selection. While these categories resemble the proposed framework, the advantage of the 3-M-Model is that by adding magnitudes it includes policy interventions for continued adaptation to the long-term consequences of sex selection. The implication of such a model is that many of the policies that fall under ‘motives’ and ‘magnitudes’ are designed for other reasons than targeting sex selection. For clarity’s sake, only those public policies that affect sex-selective behavior or sex imbalances at birth in an intended direction can be classified as anti-sex selection policies (see definition). However, many other policies (e.g. land reforms, pension schemes, migration or marriage laws) may affect sex-selective behavior and outcomes, but are excluded from this definition. We will review the policies targeting each of these three dimensions below.

2.4.1. Instruments Targeting Motives

One way for governments to address sex selection is by tackling the underlying motives behind son preference and fertility pressures. First and most importantly, we turn to policies targeting son preference. Policies that aim to change social norms are problematic (Bicchieri and Mercier 2014), as they aim to influence cultural biases and personal choices, in this case the varied reasons why people prefer sons over daughters. Son preference is not abstract in nature, but derives from well-researched factors that shape the desire for sons, which include patriarchal family and kinship systems, economic reasons disfavoring daughters, and gender inequality (see Chapter 1). These factors are often intertwined. Policy interventions that address these factors include a wide area:

- Revision of laws, policies and programs, in order to remove existing gender biases, especially linked to inheritance, name transition, access to land and property.
- Financial incentives and tax deduction for registering property in the woman's name, in order to challenge patrilocal post-marital residence.
- Provision of social security to weaken need for sons as old-age protection shields.
- Public policies enhancing women's educational and economic opportunities (through legislation, incentives, cash transfers, quotas, IEC-campaigns, etc.).
- Awareness-raising campaigns, behavior change communication (and various other policy instruments) stressing the value of girls and promoting gender equity.
- Gender mainstreaming in policy design, implementation, monitoring and evaluation.

Sometimes laws themselves have cultural biases supporting son preferences.⁴⁸ Creating a bias-free legal environment through the revision of laws is important, especially in countries whose historic path has left them dependent on cultural constraints that reinforce gender prejudices. However, it does not seem sufficient to challenge the traditional patriarchal family system. In some cases governments have introduced financial incentives to overcome these biases, or provide social security schemes so that sons are not a financial necessity for old-age security. These social protection schemes facilitate the shift from traditional family support systems to government-engineered health, employment, or old-age insurance programs. Other ways are to

⁴⁸ The publication of *Laws and Son Preference* identifies how, in the Indian case, gender biases and discriminatory attitudes towards females in fact underpin the very laws that were designed to prevent discrimination (Singh 2013).

strengthen the educational and economic opportunities of women and change perceived biases through awareness-raising campaigns and gender mainstreaming.

Apart from this large field of laws and policies targeting son preference, fertility restrictions lower chances for sons and compound preexisting motives for people to sex select. Related policy instruments include:

- Relaxation of existing fertility control policies.
- Detachment of service provision, incentive schemes and access to political office from fertility control policies.

Government-enforced family size restrictions increase the pressure on couples by limiting their chances to conceive a desired son. Governments can therefore relax their fertility policies in order to counter sex selection.⁴⁹ Sometimes these regulations themselves are inherently discriminatory.⁵⁰ Relaxing fertility control policies, and detaching service provision from compliance with a small family norm, can make a difference. However, these measures are unlikely to cure sex selection because (a) voluntary fertility decline is a common feature of emerging nations (b) lifting fertility restrictions without tackling the root problem of son preferences is unlikely to uproot the desire for sons (UNFPA 2012).

2.4.2. Instruments Targeting Methods

Another way for governments to tackle sex selection is to target the practice directly by regulating reproductive health technologies for sex determination and induced abortions.⁵¹ These regulations include the following:⁵²

- Prohibition of any form of sex selection or sex determination for non-medical purposes.
- Prohibition of advertisement of any form of sex selection or sex determination.

⁴⁹ The former Chinese One-Child Policy and the Two-Child Policy in Vietnam are frequently associated with increases in GBSS (Guilmoto 2012a).

⁵⁰ The Chinese OCP gave allowance for a second child, if the firstborn was a girl. In Vietnam and India, (female) government officials have been under greater pressure to conform to existing family size norms in order to qualify for political office.

⁵¹ As laid out in Chapter 2, methods of GBSS include e.g. pre-implementation, preconception, prenatal and postnatal sex selection. We exclude here laws and policies targeting postnatal discrimination.

⁵² This list was inspired by the Indian PC&PNDT Act and altered.

- Regulations on late-term abortions.
- Regulation of reproductive technologies and prenatal diagnostics (e.g. to be used only for the detection of genetic defects by qualified staff in registered places).
- Prevention of the misuse of reproductive technologies for sex selection
- Prohibition of the sale of ultrasound machines to unregistered personnel.
- Punishment for violations
- Services and incentives to report illegal activities.

Banning sex selection or sex determination for non-medical reasons and its advertisement is often the first and most common response of governments, permitting them to take a clear stand that any discrimination on the basis of sex is not tolerated. Such bans are accompanied with stronger regulations on first and second-trimester abortions and the misuse of reproductive technologies to determine sex. Law enforcement is often done through the monitoring of ultrasound machines, sting operations, and through random clinic inspections. However, the fact that medical staff can reveal the sex of the fetus discretely has posed challenges to law enforcement. Punishment for violations include fines for service providers (or seekers), license removal of medical personnel, and imprisonment. Governments have also installed hotlines and offered financial incentives to report illegal activities.

2.4.3. Instruments Targeting Magnitudes

A third way to address sex selection is through public policies that can be linked to the outcomes or magnitudes of GBSS.⁵³ Increasingly governments have to deal with the negative consequences of several generations of missing women. The SRB is an immediate signal or diagnostic of the scale of prenatal gender discrimination in a given location, but extended periods of imbalance can compound the problem over whole cohorts for generations. Policies regarding sex imbalances at birth include:

- Government enforced targets for SRB improvement.

⁵³ Outcome of sex selection are skewed sex ratios and long-term consequences including marriage squeeze, changes in sexual and marriage patterns, marriage migration, gender-biased violence, prostitution, human trafficking, among others (see Chapter 2).

- Financial incentives for local health workers, government officials or communities with improved sex ratios (or sanctions for deteriorating sex ratios).
- Public display, information and education about degree of sex imbalances at birth.

These policies seek to mitigate sex selection by either directly addressing the practice or setting targets for the reduction of sex selection (e.g. lowering of sex ratio by 5 points within 2 years). Nevertheless, sex imbalances at birth continue to affect the population decades later as the imbalanced cohorts moves through their life span, with implications for education, job and marriage markets, migration, and retirement. Governments increasingly have to deal with these consequences associated with several generations of missing women. Policy responses that target the consequences of sex selection are:

- Regulation of marriage brokers, marriage migration and international marriages.
- Support schemes for migrant brides (cultural adaptation, language courses, helplines).
- Strengthening of legislation on domestic violence and femicide.
- Quotas on fixed number of migrant brides / female workers.
- Cross-country coordination, agreements between governments of sending and receiving countries, joint police investigation of trafficking.
- Enforcement of anti-trafficking laws and better legal protection of trafficked victims.

The coping mechanisms in response to the generations of skewed sex ratios are diverse. They include male outmigration, female immigration, marriage delay or alternative sexual and marriage practices. The tendency of universal marriage and the desire to marry within the same ethnic background or caste prevails in many of the concerned regions. Nevertheless, mixed marriages are increasingly promoted to bypass the shortage in brides. Until now, large countries like India have managed to cope internally through inter-caste marriages schemes and marriage migrations. Some local politicians themselves have enabled this trend in return for votes (Bhalla 2014). In the coming decades internal marriage migration will likely be insufficient to meet the demand, as millions of Indian and Chinese men will be forced into bachelorhood (Bongaarts and Guilmoto 2015). Smaller countries, like South Korea, do not have the population structure to provide for an internal marriage market and have turned to international marriage migration. Other countries, such as Vietnam, face a ‘double squeeze.’ They ‘lose’ one share of their female population to sex selection, and another to female outmigration into other regions where women are scarce.

Early research pointed to the scarcity of women as a contributing factor for the increase in marriage migration and trafficking.⁵⁴ However, scholars still debate to what degree sex imbalances are responsible for the shortage in the marriage market. Some scholars have linked sex selection in the 1980s and 1990s and the subsequent shortage of brides in South Korea to the increased import of foreign brides that started in the 2000s (Kim 2009). Others point to the larger framework where not only the rise in SRB and sex-selective migrations explain cross-border marriage practices, but also fertility decline, value transformations and globalization (Kim 2010). Scholars have also analyzed the demand for brides and female workers “brought about by two decades of sex-selective abortions and female discrimination” in parts of Vietnam and China (Le Bach et al. 2007, 394; see also Attané and Véron 2005). Specialized brokers and agencies facilitate the provision of ‘affordable’ brides. These services are openly advertised on national TV, print media and the internet.

The reasons for transnational migration, marriage and trafficking are complex and multifaceted. They are by no means exclusively related to sex imbalances. However, it is valid to argue that sex selection and the resulting female shortage are major contributing factors to these problems.

In sum, policies can target different dimensions of sex selection: they can aim at changing the *motives* couples have to sex select, restricting the *methods* of sex selection, or influencing the negative long-term effects of sex selection (*magnitudes*). Whichever dimension is targeted, the impact of these policies has to be tested against the reduction of the practice and its preconditions. In other words, policies influence the landscape in which sex selection is practiced by providing incentives, disincentives, and information that can affect parents’ decision-making and their assessment of the costs and benefits of having a child of a particular sex.

2.5. Policy Impact

Public policies are introduced because they are believed to substantially accelerate the normalization of SRB levels. In order to assess to what degree policies actually influence reproductive behavior and sex ratio at birth trends, policy evaluations become important. Evaluation can be defined as a “careful assessment of the merit, worth, and value of

⁵⁴ Other contributing factors include population aging, the need for predominantly female care workers, or East Asia women choosing bachelorhood.

organization, content, administration, output, and effects of ongoing or finished government interventions, which is intended to play a role in future, practical action situations” (Vedung 2015, 387). It is “fundamentally a testing of means” (Danielson 2007, 386), based on a clear set of expectations and a methodology that defines policy input, output and outcomes and collects regular data on the progress (May 2012). Here we offer theoretical explorations of the purpose of impact evaluations, its constraints and available evaluation models, which will be exemplified with real case illustrations. However, the actual policy impact literature will be discussed in the respective country chapters, namely 4.4, 5.4 and 6.4.

2.5.1. Purpose of Impact Evaluation

The purpose of policy evaluations is to monitor and systematically revise government interventions in order to assess their effectiveness and overall impact. Evaluation allows public officials and other stakeholders to “act as responsibly, creatively, equitably and economically as possible” in future interventions (Vedung 2015, 387). Apart from that, government officials often want to know how other constraint variables like time, cost and human resources affect policy impact. Theoretically, these evaluations serve to justify public spending and show governmental efficiency (but also inefficiency). In democratic systems, government officials make use of policy evaluations to pinpoint successes and failures of prior administrations.

2.5.2. Constraints

Policy evaluations are one of the more demanding fields in public policy analysis. As shown in the conceptual framework (see 1.4.) policies do not exist in isolation, but stand in constant interaction on a complex and dynamic social, political, economic landscape in a given context. We highlight here five key constraints of policy evaluations before turning to available evaluation models.

First of all, there is the classical problem of counterfactuals. It is difficult to establish whether or not the observed outcomes (e.g. improved SRB) might have occurred in the absence of the intervention. In medical research a placebo is given to a control group, so the efficacy of taking a drug can be compared to a group not taking it. However, policies are applied to unique localities, where the same locality cannot be tested in both the presence and absence of an intervention at any given time. Therefore, evaluators often have to build their analysis on proxies and assumptions. This highlights the fact that, evaluations are never a neutral

undertaking. In fact, they are “a normative, value-laden enterprise” depending largely on interpretations (Vedung 2015, 399).

Secondly, public policies often lack a built-in monitoring and evaluation framework. Policies themselves undergo frequent changes (or adjustments) without clear-cut beginnings and endings. It therefore becomes exceedingly difficult to hold variables and parameters constant enough to determine which policy aspects are effective or not.

Thirdly, public policies notoriously cause multi-sector side effects that can create further policy problems down the road. One good example here is the fertility control policies introduced in the 1960s and 1970s, which contributed to the emergence of sex selection in the 1980s and 1990s. Policies promoting lower fertility influenced couples to the limit births, but these couples still felt socially obliged to produce a son. Almond et al. (2013) show this kind of impact of the former One Child Policy in China and highlight how other policies (e.g. land reforms of the 1980s) also impacted reproductive behavior. These examples show that policies exist in a crowded, competitive and at times contradictory policy environment. This complexity makes good evaluation models difficult to design and hard to implement.

Fourth, evaluators often lack access to reliable data sources (e.g. the number of sex-selective abortions). In these cases, they increasingly rely on indirect methods by assessing (a) attitudinal changes based on survey data or (b) changes in reproductive behavior based on sex ratio at birth or child sex ratio trends. They can take into account indirect information like the number of beneficiaries, the allocated funds, the number of convictions, and awareness about existing legislations. These sources can help to assess policy effectiveness, but their degrees of influence on the operative variables can only provide a limited picture.

Lastly, a wide range of macro-level factors influence public policies and their impact assessment. These include for example economic, socio-demographic and technological changes, globalization and the role of multiple stakeholders influencing policy outcomes, among others (Jann and Wegrich 2007). Taking these vectors into consideration, we now turn to different models of policy evaluation.

2.5.3. Evaluation Models

Because of the constraints and complexities of assessing policies, governments need to be informed and diligent in choosing the policy evaluation model that best fits their needs.

Different models are available to assess whether a program achieved its objectives. They take various standpoints and they each have their strength and weaknesses:

The goal-attainment model asks whether a specific goal, that the policy was designed to accomplish, was met. For example, in 2015 India launched the Beti Bachao Beti Padchao Campaign. Its goal was to improve the SRB in 100 Indian districts by 10 points within one year (MoHFW 2014).⁵⁵ The goal attainment model asks: Did the SRB of the hundred districts actually improve by 10 points within one year? While this is a simple and transparent model for policy evaluation, the main criticism is that it ignores unattended side effects.

The side-effects model bypasses this problem by not only asking whether goals were met, but also by looking for unintended side effects. This consideration is central for responsible policy making and policy assessment. Of the first two evaluations models mentioned here, this tends to be the preferred one. An example is the study by Joseph (2007).

The client-oriented model, stakeholder model and the participatory policy evaluation model are somewhat related evaluation models that take the interests and expectations of a target group or of all relevant stakeholders into consideration. Their strengths lay in their democratic, participative nature incorporating knowledge from those directly involved in the intervention. Their weaknesses are that these models are particularly costly in terms of resources because they involve many different parties. We note that this model typically works within the frames of representative democracies. However, an evaluation study sponsored by the EU provides a good example of the stakeholder model evaluation being applied to a communist country (see Hanoi School of Public Health 2012).

Efficiency models like cost-benefit analysis or the cost effectiveness are based on similar economic principles, e.g. quantifying the monetary costs of a policy intervention and comparing it with its monetary benefits or non-monetary outputs. These are useful because they can be conducted at any stage (before, during or after implementation) and help policy makers greatly in assessing a program's cost-benefit efficiency. However, uncertainty (in the valuing or ranking) of costs or benefits can create biases and seriously limit the relevance of the results. Also, efficiency models are typically restricted to monetary variables, which ignore other important variables like human rights and gender equity considerations, which have no easily

⁵⁵ SRB is here measured as the number of women per 1000 male.

translatable monetary values. To the authors' knowledge, this type of evaluation model has not yet been applied to anti-sex selection policies.

A popular way to assess the policy impact is using natural or controlled experiments (Ezeh et al. 2012). Randomized control trials circumvent the counterfactual problem by comparing treatment and control areas over different periods. They have been framed as the 'gold standard,' and command significant international funding (see works of Banerjee and Duflo). A more nuanced picture of their contributions is giving by Fuente and Whittington (2015). Their strengths clearly lay in their scientific rigor. However, they show difficulties in practical implementation because randomization and treatment compliance are difficult to achieve in all environments. A similar case applies to difference-in-difference analysis. Despite being scientifically rigorous, this type of analysis may pose potential biases, e.g. that the parallel trend assumptions do not hold true. This can be prevented by accumulating more data for the pre- and post-intervention period or finding another control group for crosschecking (Albouy n.a.). Only a few scholars have employed the difference-in-difference analysis in anti-sex selection policy evaluations (Nandi and Deolalikar 2013).

This is a very brief overview of the evaluation landscape and the different models available. Each evaluation model provides partial perspectives. Different evaluation models are based on different assumptions and provide different lenses. Scholars have recommended combining evaluation models to achieve a more comprehensive review of policies (Vedung 2015). However, given the practical and resource constraints discussed earlier this seems unlikely. Whether the evaluation results produced are actually taken into consideration depends on the political acceptance of evaluations.

2.5.4. Evaluation Acceptance

Policy makers often “*sit on*” the data they produce, using only a small percentage of it (Davies n.d.). Often, authorities commission research, collect and compile data, and then provide it to national and international stakeholders for further analysis. Only a minor fraction of that data actually directly informs policy options. Time is often crucial in the political arena and sifting through immense data sets is deprioritized. Of all the issues that require attention only a fraction can be addressed at any one time. The statement, “We have to get on with the work, while you indulge yourselves in the pursuit of evidence,” adequately describes the common response researchers hear from policy makers (Banerjee and Duflo 2012, 15). Whether or not policy

makers actually take evidence into consideration, to inform future interventions and adjust current ones, depends on factors such as research independence; acceptable, digestible, timely results; openness of authorities, and alternative standpoints.

As we shall see in the three countries studied here there are very few actual examples of rigorous anti-sex selection policy evaluations. Assessing complex social systems is difficult and requires time, resources, forethought, diligence and operative know how. Different governmental systems are constrained differently on all of these variables and thus usually have some of these capabilities some of the time, but rarely all of them all of the time.

2.6. Conclusion

In this chapter we have seen that population policies (or the lack of them) play an important role in influencing family planning and shaping demographic outcomes. Governments have many different population policy goals that depend on the demographic, political, economic, social, cultural, ethnic and religious fabric of the respective country. As such, addressing sex selection is just one goal among many competing population goals.

In this chapter we reviewed the evolution of public policies against sex selection. The population control movement in the 1960s and 1970s placed major emphasis on lowering fertility. When prenatal sex selection first emerged in the 1980s, it was largely ignored because, among other things, it helped lower fertility. Only in the 1990s did population policies shift focus to population quality instead of quantity and sex selection began to be recognized as a policy problem. Over the last two decades policy interventions have been stepped up to improve gender equity and check the advance of sex selection. During this time a growing number of international and non-governmental stakeholders have entered the field influencing population policies. This altering of the policy landscape has complicated the accountability of individual actors and the evaluation of policies.

While the pace of recognizing of the problem vastly differed among affected nations, several Asian governments have demonstrated commitment to eliminating GBSS. UNFPA has played a major role in most governments' recognition, data collection and analysis. They also contributed to the formation of epistemic communities and the convergence of policy interventions against sex selection. This has contributed to a platform for knowledge exchange

and South-South learning, on which similar policy recommendations, lessons learned and policy briefs have been developed and shared.

We looked at why governments intervene against sex selection and found that national policy intentions on sex selection differ according to national legislation (protection of fetal rights vs. women's rights as a group). Despite this variation, governments across the board face the challenge of balancing the multiple and overlapping ways that individual rights conflict with societal interests. We also looked at how governments intervene and found that they have a variety of policy instruments at their disposal to address sex imbalances. We classified these different kinds of policies according to their targets, namely the motives, methods and magnitudes of sex selection. Finally, we turned to impact evaluations of policies against sex selection and discussed the availability and constraints of diverse evaluation models. Measuring the effectiveness of anti-sex selection policies is indeed one of the most under-researched areas in existing literature. We seek to contribute to this literature and overcome some of the current challenges with the research methodology described in the next chapter.

3. Methodology

This study provides a comparative analysis of anti-sex selection policies and their impact on sex imbalances (see Box 6). Drawing on the available evaluation models (see Chapter 2) and considering the heterogeneity of countries concerned with GBSS (see Chapter 1), this chapter first describes the research methodology used for comparing systems of great diversity. It then highlights the country selection criteria and describes the quantitative and qualitative data that has been employed throughout the investigation. Finally, we reflect on the personal positioning within the research and the limitations of the study before closing with a short summary.

Box 6: Research Objective

This research aims to understand public policies against prenatal sex selection, their evolution and impact on sex ratio imbalances at birth in selected Asian countries by providing a qualitative and quantitative assessment. Three countries and three distinct localities within those countries (Northwestern India, Northern Vietnam and Southeastern part of South Korea) were chosen to serve as case studies for the comparative analysis. The research is based on two axes:

- Comparative analysis of policies targeted to reduce sex selection.
- Determination of tools to assess their effectiveness.

3.1. Comparative Public Policy Analysis

Comparison has long been a popular instrument in social and political science. Since the 1970s a large body of literature has emerged in comparative politics and its subfield of comparative policy analysis (Lasswell 1968; Lijphart 1971; Skocpol 1979; Rose 1991). Comparative policy analysis aims at explaining the similarities and differences of public policies in their content and determinants (Lodge 2007). Especially in recent years this research field has flourished immensely thanks to globalization and the internationalization of politics and research.⁵⁶ As a

⁵⁶ This can be seen in the increasing number of scientific journals, platforms and conferences on the topic, e.g. Journal of Comparative Policy Analysis and the affiliated International Comparative Policy Analysis Forum; International Conference on Public Policy, etc.

result, a variety of different approaches have emerged in comparative policy analysis in terms of the concepts, tools, and types of explanation they seek to provide. As previously discussed, experiments are often difficult or impossible to conduct in the unique and complex context of the real world. Policy scholars have turned to methods such as statistical analysis, case study design or comparative historical analysis to analyze policies (Lodge 2007; Engeli and Allison 2014).

In this research, we are interested in those countries that face demographic imbalances due to GBSS and have issued policies against it. On the one hand, we know that only a limited number of countries in the world are affected by sex imbalances at birth. Some of these countries have implemented policies, other have not. Some countries are still on the verge of politically recognizing sex imbalances, despite years of demographic masculinization. On the other hand, many Western countries that have no problem with sex imbalances at birth have issued policies against sex selection.⁵⁷

This leaves us with a handful of candidate countries, mainly in Asia. These countries are too few to employ large-scale statistical analysis and too many to provide individual case studies. Above all, the concerned countries are of great diversity. Therefore, the research methodology employed here is to compare different systems that have introduced similar policies to address a common problem. Countries that are remarkably different in terms of their cultural, ethnic, religious, economic and political fabric have adopted similar responses to sex selection and sex imbalances at birth. Most often, affected countries have responded with regulations, followed by awareness-raising campaigns and in some cases incentive schemes. In order to understand why, how and to what extent policy responses are similar or vary transnationally, requires a comparative lens (Engeli and Allison 2014).

It is neither the intention of this work to provide a fine-grained understanding of anti-sex selection in one single country, even though a country like India (or one of its states) would provide sufficient material to dedicate several doctoral theses to, nor is it feasible to choose all affected countries without being forced to ignore country-specific nuances. Instead, this dissertation follows a three-country comparison in the hopes of representing the spectrum of affected countries by examining three examples of maximally differentiated cases.

⁵⁷ Darnovsky (2009) provided a non-exhaustive list of the number of countries in the world that have issued laws or policies to prohibit sex selection, listing 36 countries, but there are more. E.g Nepal, Vietnam, and South Korea were not included in the list.

Box 7: Comparative Case Study Research in Public Policy

Comparative case study research is a qualitative research method, which can be combined with quantitative data (Molloy 2010). By comparing a small number of cases, it provides an in-depth contextual understanding of the individual cases, while also allowing for general causal relationships beyond the individual case (Ragin and Becker 1992). In public policy this approach is used to analyze factors that influence decision-making (Molloy 2010, 117), but international agencies use it also for policy evaluation (Goodrick 2014). Comparative case studies have additional methodological requirements in terms of project design and research questions, because unlike single case studies they “examine covariation across case data” (Yanow, Schwartz-Shea, and Freitas 2010, 111). For further reading about the nature and requirement of case study research, see Stake (2010) and Flyvbjerg (2006).

To achieve this we first identify three countries whose socio-economic, cultural, political, geographical variables are maximally differentiated. Then we describe in detail the social and political dimensions of sex selection in each country at both the national and at a regional case study level. Lastly, once the policy landscape in each case is laid out, we compare policies across countries and regions. The combination of case studies and comparative research is a well-established analytical method used in political science and public policy research (Mill 1858; Lijphart 1971; Collier 1993; Campbell 2010; Yin 2014; see also Box 7).

3.2. Most Different, Yet Alike: South Korea, India and Vietnam

3.2.1. *Most Different Systems Design*

The countries for the comparative case study were selected through the Most Different Systems Design. What is the Most Different Systems Design (MDSD) and why was it chosen? The MDSD is a tool in comparative policy analysis that compares ‘most different’ cases that have in common the variable that is the subject of the investigation (in our case the common problem of, and policy response to, to sex selection). The method dates back to the mid 19th century

when it became known as Mill's Method of Similarity⁵⁸ and regained popularity when it was further developed by Przeworski and Teune (1970). Formal comparisons often face the inherent dilemma that there are numerous explanatory variables, while the number of cases is relatively small (Lijphart 1971). The strength of the MDSD is it bypassing this problem by studying a handful of cases that are as different as possible, except for the outcome (dependent) variable. It is based on the reasoning that "differences cannot explain similarities," thus, the guiding principle is "to test and attempt to confirm one particular finding within a wide variety of systems" (Anckar 2008, 390). In other words, the aim of the MDSD is to identify a set of common causal factors that explain a similar outcome in vastly different contexts. If outcome *w* is similar among different cases that share almost no common factors except for factor *A*, then *A* is probably the cause or effect of *w*. In sum, the MDSD searches for shared common denominators in comparing very different systems.

To give an example: Skocpol (1979) used the MDSD to provide a comparative analysis of the revolutions in France, Russia and China. These very different political, economic and social systems have all generated major revolutions. This led Skocpol to the question of what the necessary commonalities among these maximally different systems were that produced an essentially similar political event. In a similar way, the question posed here is: what are the necessary commonalities among diverse Asian governments for them produce an essentially similar policy response to GBSS and skewed SRB?

The MDSD varies from the Most Similar Systems Design (MSSD) which compares countries that appear to be remarkably similar, e.g. the 'Four Little Dragons' of East Asia (Peters 2013). The MSSD compares systems that are similar, but differ in the outcome variable of study interest. While the MSSD seeks to keep constant as many external variables as possible, the MDSD builds on just the opposite idea of having as many different external variables as possible. The shortcoming of comparing similar systems, instead of different ones, is that it is impossible to keep all possible explanatory factors constant. Scholars run the danger of not identifying and controlling for all relevant factors. This is not the case with the MDSD. The MDSD is built on maximal diversity, and is methodologically speaking the preferred method of the two. The Most Different Systems Design is especially useful for the selection of cases.

⁵⁸ John Stuart Mill wrote *A System of Logic* in 1843. Mill's reasoning was as followed: In one setting, "A B C D occur together with w x y z. [In another setting,] A E F G occur together with w t u v. Therefore A is the cause, or the effect, of w" (Mill 1843, 454).

3.2.2. Country Selection Criteria

We will now illustrate how the Most Different Systems Design has guided in the country selection process. We selected countries in geographically different parts of Asia (South, East, Southeast Asia) that differ greatly in terms of size, population, political, legal, economic, social and cultural structures, among other factors. They also are at different stages in their sex ratio transition. This means countries were chosen where sex imbalances are either emerging, plateauing or declining. Despite their differences, the countries have implemented similar instruments to target a common problem of GBSS and they have witnessed to some extent a statistically significant improvement in SRB (at a country or local level).

The question is whether these improvements can be causally linked to the same policy interventions? If the same policies in different settings produce similar results, we can carefully draw conclusions about the generic nature of these policies. In order for the comparison to work, we looked at laws and policies that have been in place for a minimum of 10 years. We also relied on availability of and access to reliable government data on SRB trends, and if present, studies based on pre/post analysis and treatment/control groups in the designated localities. Table 9 lists the selection criteria for the comparative analysis.

Table 9: Comparative Analysis Selection Criteria

	Selection criteria:
Country	Regional diversity (South, East, Southeast Asia) Diversity in political, legal, economic, social and cultural structures Diversity in sex ratio transition (emerging, plateauing, declining) Common problem of sex imbalances at birth Common set of policies against GBSS Policies have been in place for more than 10 years Statistical significant improvement in SRB (country or provincial level) Access to government data and reliable SRB data
State or Province	State or province with highest SRB within the countries Statistical significant improvement in sex ratio trends
Policy	Directly targeting sex selection and skewed sex ratio Implemented in all three countries

Countries were reviewed according to the selection criteria above. Not all countries with skewed SRB have issued policies against sex selection (e.g. countries in South Caucasus and Eastern Europe) or provide access to government data (China). After a detailed country review, South Korea, India and Vietnam were chosen, because they best fit the stated selection criteria.

The Federal Republic of India, situated in South Asia, is characterized by the vast size and heterogeneity of its population. It is a rapidly emerging lower middle-income country that has witnessed sex imbalances at birth for more than 40 years. It has introduced numerous policies and programs, including a sex selection ban introduced in 1994 supported by awareness campaigns and girl entitlements like Save the Girl Child Campaign. Since 2015, India has stepped up its efforts and expanded this campaign to Save the Girl Child, Educate the Girl Child Campaign also called *Beti Bachao, Beti Padhao* (BBBP), which targets the 100 most affected Indian districts. Despite increasingly coordinated efforts through multi-stakeholder interventions, the problem persists and is spreading to new regions that were formerly not affected. There are, however, some signs of improvement in the most affected areas, especially in Punjab, where the CSR dropped from 125.3 to 118.2 between 2001 and 2011.

In contrast, the Republic of Korea is a high-income, small-size country located in East Asia, which is characterized by a high degree of cultural homogeneity. South Korea was able to balance its high levels of SRB, which was peaking in 1990 with 116.5 male births per 100 female births within less than two decades. Sex ratios were particularly skewed in North and South Gyeongsang (and their major cities Daegu and Busan) and among higher parities. These ratios dropped and continued to normalize (also among higher parity levels) by the mid-2000s. South Korea's improvements have been commonly associated with more rigidly implemented government interventions, which include a sex determination ban introduced in 1987 and awareness-raising campaigns like *Love your Daughter Campaign* (WHO 2011).

In contrast, the Communist State of Vietnam is a medium size, lower-middle-income country located in Southeast Asia, which is more culturally diverse than Korea but less so than India. Vietnam showed a late but rapid rise in SRB starting in the early 2000s (when sex ratios were already normalizing in South Korea). Government response was prompt and included a ban on sex selection introduced in 2003 and numerous awareness-raising campaigns like the recently launched *Join hands to address the Sex Ratio at Birth imbalance Campaign*, which targeted in particular the most affected regions in the Red River Delta, including Hai Duong Province. This province is of particular interest because of a three-year assessment, which measures the impact of policies and interventions on SRB and serves as a regional case study.

Table 10 summarizes the diversity of the selected countries in terms of demographic indicators (such as population size, SRB, infant mortality rate, life expectancy, total fertility rate), economic growth (reflected in the GDP per capita) and political structures (government type, party system and legal system).

Table 10: Diversity of Selected Countries

	India	Vietnam	South Korea
Population 2015 (in million)	1,311.0	91.7	50.6
Sex ratio at birth (number of male births per 100 females), 2015	111.1	112.8	105.3
Infant Mortality Rate (per 1,000 live births), 2015	38	17	3
Life Expectancy at Birth in total years, 2015 (1960)	68 (41)	76 (59)	82 (53)
Total Fertility Rate, 2015 (1960)	2.4 (5.9)	2.0 (6.3)	1.2 (6.2)
GDP per capita, PPP (current international \$) 2015	6,104	6,034	34,647
Government Type	Federal parliamentary republic	Communist state	Presidential republic
Political Party System	Multi-Party System	One-Party System	Multi-Party System
Legal System	English based Common law (separate personal law codes according to religion)	European civil law	Mixed (European, Anglo-American, and Chinese)

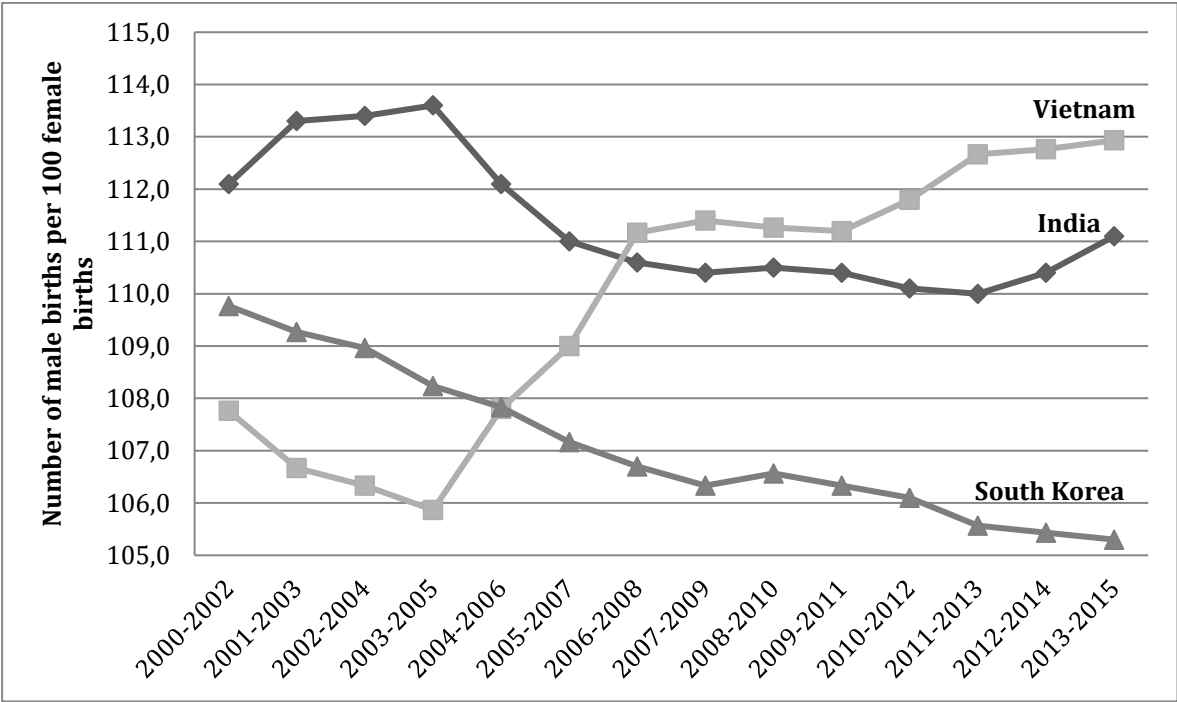
Sources: Population, infant mortality, life expectancy, TFR, and GNI data are derived from the World Bank. Political indicators are based on CIA’s The World Factbook. Sex ratio at birth data is based on national statistics.

The three countries not only differ vastly in population size (India has 1.3 billion inhabitants compared to Vietnam and South Korea with close to 92 and 51 million respectively). The countries also differ economically. India and Vietnam have, as lower-middle-income countries,

a GDP per capita that is almost six times smaller than that of high-income South Korea. South Korea’s greater wealth and development are also reflected in its lower infant mortality rate and higher life expectancy compared to the two other countries.

While the three countries had a total fertility rate close to 6 in 1960, the total number of children per women declined to close to replacement level in Vietnam (2.0) and India (2.3) while reaching ultra-low levels in South Korea (1.2) in 2015. In each case as fertility declined, SRB started to increase. In South Korea this started in the 1980s, in India in the 1990s and in Vietnam in the early 2000s. Today the three countries are at different transitional stages. The SRB has returned to normalcy in South Korea. In India, SRB has slightly reduced to 111 male births per 100 female births where it has remained over the past decade and Vietnam may also be experiencing a plateauing trend (see Figure 10).

Figure 10: Sex Ratio at Birth in South Korea, India and Vietnam, 2000-2015



Sources: Korea: KOSIS; Vietnam: GSO; India: Sample Registration System converted to male birth per 100 female births. The SRB rates are presented in a three-year moving average to minimize noise in the raw data.

The heterogeneity of the three countries is also reflected in their political systems. India is a federal parliamentary republic, Vietnam a communist state and South Korea a presidential republic. In India, there are seven recognized national political parties and over 50 recognized state level parties (Election Commission of India 2016). In Vietnam, by contrast, there is just the Communist Party of Vietnam – other parties are proscribed. The Communist party controls

most aspects of daily life with a limited freedom of press. Situated between these two extremes, South Korea has a multiparty system with two dominant political parties, the conservative Grand National Party and the center-liberal Democratic Party (CIA 2017; Encyclopedia Britannica 2017).

Lastly, there are differences in the legal systems. These are partly due to the colonial history of the three countries: India's legal system derives from the British-based common law, however, it grants separate personal law codes regarding major religions (Hindu, Muslim, Sikh). Vietnam's system is based on the European civil law inspired by the French system and has been increasingly shaped by international advisors (e.g. the Vietnamese constitution was drafted in 1992 with international technical assistance). South Korea has a mixed legal system, combining European, Anglo-American and Confucian traditions. Part of the legal code was also influenced by the Japanese colonists (Yang 2008).

As we can see, the selected countries are maximally different. We could easily extend the list to differences in religion, language and cultural diversity. Yet, despite their differences, we can identify certain similarities among the three countries. First, these countries all face the problem of skewed SRB and have responded to it through public policy. Second, Vietnam and South Korea, unlike India, share a Confucian background due to the historic ties with China. Third, the three nations were under colonial occupation and gained independence in the 20th century. Fourth, the emergence of SRB in the three countries overlaps with economic development and market reforms in the medical health care sector. Economically, however, South Korea has developed at a much more accelerated pace than the other two countries. Fifth, they also share common international ties. UNFPA has been at the forefront in all three countries collaborating with government officials to address sex selection.

In line with the selection criteria laid out above, each country also has certain localities with high SRBs that have witnessed a statistically significant improvement in sex ratio trends. These are North Gyeongsang Province in South Korea (where SRB returned to normalcy), the Indian State of Punjab and Hai Duong Province in Vietnam. Within these states and provinces particular focus is placed on Daegu City, the district of Shaheed Bhagat Singh Nagar (formerly Nawanshahr), and Hai Duong city. These localities have reported improvements in SRB and served as localities for data collection. Focus in the comparative analyses is, furthermore, placed on policies that have the stated objective to balance SRB. After having reviewed the policy landscape, legal bans and awareness-raising campaigns were identified for the comparative analysis. India issued a variety of further instruments (e.g. conditional cash transfers; baby cradle scheme) that have not been introduced in the other two countries.

3.3. Mixed Methods Research Design

This multi-site comparative case study research follows a mixed method approach. It uses both qualitative and quantitative methods to compare and complement each other. We compare secondary data from policy file analyses with primary data compiled from our own field research. A third vector will be added by cross-referencing the results with secondary demographic data sources. The first two sources are largely qualitative, while the third is primarily quantitative.

The combined use of qualitative and quantitative data has several advantages: Quantitative analysis provides rigor, internal and external validity and objectivity, while qualitative assessment provides context-specific nuances, authenticity and allows to test existing hypotheses (Loenzien 2006).⁵⁹ While early works in comparative policy analysis stressed the need for statistical methods, the field is changing and qualitative methods or mixed approaches have gained increased popularity, especially in the field of social policy (Mahoney 2007; Immergut 1990). Qualitative research is in fact designed to provide a broader understanding of the research subject and its political, social, and economic dimensions. Scholars have pointed out that qualitative assessment is of particular use when researching sensitive issues with not much existing data, as in the case of abortions (Loenzien 2006). This also applies to sex-selective abortions. The fact that the practice is illegal in the countries of research makes access to reliable data more challenging. The benefit of drawing from qualitative and quantitative sources is the ability to cross-reference findings, in order to establish the relative value of the results suggested by any one source.

3.3.1. Policy Files, SRB Trends, Expert Voices, and Participant Observation

Four principle data sources were collected and combined. These included official policy files, official statistics on SRB trends, semi-structured expert interviews and field notes taken during participant observation. Research methods and data sources are listed in Table 11.

⁵⁹ Often a false equivalence between quantitative research and objectivism, and qualitative research and subjectivism is created. In fact, both are scientific methods to test reality, while both methods also depend on human interpretation. The combination of qualitative and quantitative methods is especially fruitful in social and political science, where any one discipline falls short in adequately conceptualizing and understanding reality (deRoche and deRoche 2010).

Table 11: Research Methods and Data Sources

Research methods	Data sources
Policy file analysis	National laws, population ordinances, decrees, policies, programs, and other government-released documents such as planning frameworks and technical reports.
(Secondary) demographic data analysis	Official statistics on sex ratios provided by National Statistics Offices, Census Data, Annual Sample Surveys, data compiled by senior demographers.
Key informant interviews	In-depth semi-structured interviews with national and province/state-level government officials, medical professionals, international staff, NGO and local based experts.
Participant Observation	Field notes taken during government rallies, national, regional and international workshops and conferences on GBSS and skewed SRB, and during visits in private clinics and public hospitals.

3.3.2. Four Steps of Data Collection

Data collection took place in four steps. The first step was a literature review to build up the content specific level of knowledge necessary for the comparative analysis. In this step tentative research questions were developed and the countries for the case studies were selected. Relevant demographic and policy files in the three countries were reviewed. The focus was placed on national legislation, policies and programs targeted to address sex selection. The search for these policy files took place online and was largely restricted to English-speaking sites. National and international websites were used to access legal texts already translated into English. Government websites included for Korea the Ministry for Gender Equality and Family (MOGEF), the Korea Institute for Health and Social Affairs (KIHASA), the Ministry of Justice (MOJ) and the Constitutional Court of Korea. In the Indian case websites of the Ministry of Health and Family Welfare (MOHFW) and Ministry for Women and Child Development in India (MOWCD) were consulted. For Vietnam, official legal documents were accessed over the official government portal of the Socialist Republic of Vietnam and the website of the Ministry of Justice.

Furthermore, the Harvard School of Public Health website was consulted. This site provides English translations of population policy from different countries around the world. A matrix was developed to compare similar determinants within the different legal texts: What are the existing legal provisions/policies on sex selection? What are their general objectives? What and who is being penalized? How high are penalties? Who is the target group? Who is excluded? What is the legal environment and history? Are there other legal provisions that contradict existing legislation? Are there gender biases in legal provisions/policies that indirectly promote son preference or gender inequity? Additionally, we reviewed country specific policy statements and recommendations issued by the World Bank, the United Nations, the World Health Organization, the Council of Europe and UNFPA regional and country offices on sex selection.

As a second step, we used (secondary) demographic data to map policy interventions against sex selection with SRB trends on a national level. For this, we relied on official statistics provided by the national statistics offices in the three countries, the Korean Statistical Information Service (KOSIS), the General Statistical Office (GSO) of Vietnam and Central Statistical Organization of the Ministry of Statistics and Programme Implementation in India. Demographic data included vital statistics based on the Civil Registration System (CRS) and decennial census data (India) and annual statistics on live births by sex (Korea and Vietnam). We used this information to graph per country how SRB develops over time and in correlation with policy interventions. This mapping tool provided an overall picture, but did not allow us to causally link SRB trends to policy interventions (see policy evaluation in Chapter 2). For a systematic analysis of the measurable effects of the introduced legislation and interventions, further statistical analysis was needed.

In the Korean case study, we compared SRB trends pre-and post policy intervention in the case study regions and neighboring provinces and relied on prior analysis of a senior demographer (Kim 2004). In the Indian case study, we used district-wise SRB data for the years 2001-2011 as per Civil Registration System and the Census 2001 and 2011 for the State of Punjab to conduct a Difference-in-Difference (DiD) analysis. The goal was to assess whether the sex ratio improvements in a specific district could be linked to policy interventions. The district Shahid Bhagat Singh Nagar (former Nawanshahr) was used for the Indian case study, because qualitative evidence has pointed to stronger governmental efforts in this specific district compared to other districts. However, without having made a prior baseline survey prior and an ex-post evaluation on the ground, we could not control for spillover effects that may have taken place to surrounding districts in the Indian case. In the Vietnam case study, we made use of the

unique availability of monthly SRB series, which allowed for a Change-Point Analysis (CPA).⁶⁰ This enabled us to pinpoint the specific month the SRB started to rise and to identify corresponding policy interventions or other events that occurred around this time (Guilmoto et al. 2018). Lastly, we drew from the few existing policy evaluations in the case of Vietnam and India (Mekong Economics Ltd 2013; Hanoi School of Public Health 2012; Population Council and CREHPA 2015).

As a third step, to complement policy files and secondary demographic data analysis, key informant interviews were conducted. These in-depth interviews add crucial information to this investigation and are central to our findings. These semi-structured expert interviews were conducted in Vietnam, India and South Korea between October 2014 and July 2015 during field research (see field research under 3.3.3.). The objective of these interviews was to gather information from experts on the design, implementation and assessment of government intervention against sex selection. By interviewing experts from various levels (international, national and local) and from different disciplines (governmental and non-governmental stakeholders) we aimed to collect a more holistic, context relevant, understanding of government intervention against sex selection. Key informants included representatives from international, governmental and non-governmental organizations, scholars as well as medical professionals. Respondents were selected through a snowball sampling.

A total of 117 key informant interviews were conducted. The large sample is justified due to the comparative, multi-site nature of the study. These interviews were designed to collect comparable information from maximally different sources in accordance with the MDSD methodology. The aim was to have a wide sample that represented diverse levels of the phenomena, from individual medical practitioners, to governmental and international representatives. As a result, 34% of the interviewees were from government cadres at national and selected state levels. 21% were members of research institutes; 17% medical professionals, 12% representatives of NGOs and 9% of IOs. 7% of the interviewees were other key informants such as journalists. Overall, 52% of interviewees were male and 48% female. In total, 63% of the interviews were conducted in Hanoi, New Delhi, Seoul and 37% in selected provinces/states, mainly in Hai Duong, Punjab, and Daegu (see Table 12).

⁶⁰ CPA is a tool to analyze (SRB) trends and identify statistically significant changes (called breakpoints or change points) that occur in a time series.

Table 12: Conducted Interviews by Respondent Sex, Type and Region

Interviewees	VN	IN	SK	#	%
by respondents sex					
Female	13	27	16	56	48
Male	23	20	18	61	52
by region					
Capital	25	28	19	72	62
State / Provinces	11	19	15	45	38
by respondent type (1)					
International organizations	4	6	1	11	9
National government officials	7	5	5	17	15
State government officials	8	12	2	22	19
Professional medical bodies and medical practitioners	6	5	9	20	17
Health and women’s NGOs	0	10	4	14	12
Academics and members of research institutes	10	9	6	25	21
Other informants (patients, journalists, etc.)	1	0	7	8	7
TOTAL	36	47	34	117	100
(1) Respondent type is based on respondents’ self-classification and current position. Detailed information about the interviewees can be found in Appendix 1.					

The same semi-structured questionnaire was used for all respondents in all three countries. The questionnaire provided enough flexibility to adjust to the given locality and expertise of the respondent, while at the same time being consistent and allowing for a cross-country comparison. The respondents name or pseudonym, sex, age, and position was collected. The interview questions focused on the following key themes:

- a) Specific insights on skewed SRB and GBSS in the given locality;
- b) Public policies against sex selection the respondent is/was associated with;
- c) Stakeholders and institutions promoting or hindering policy response;
- d) Role of international agencies and local stakeholders (top-down vs. bottom-up);
- e) Implementation and monitoring of policies;
- f) Impact assessment, policy effectiveness and adjustments (policy feedback loop);
- g) Existence of personal gender preference of children.

While focus areas a) – f) were covered in all interviews, not all interviewees felt comfortable in answering g). Their response often revealed how culturally ingrained gender preferences are and how difficult it is to resist family or societal pressure to bear a son. The interviews allowed policy assessment on multiple levels. By interviewing governmental and non-governmental stakeholders from international to local levels, the collected data provided insights into similarities and differences in policy response to sex selection across countries and within a given country.

The key informant interviews lasted on average 1h and 15 minutes. However, there are outliers. Some interviews were as short as 15 min, while others lasted over 3 hours. The majority of the interviews took place at the offices of the respondents or at neutral places (e.g. cafés) that were chosen by the respondents and provided a calm and adequate environment to hold a long conversation. In two cases Skype interviews were conducted. In one case a written response was collected.

The interviews were conducted in English, in Vietnamese with the help of Ms. Le Binh and Ms. Phuong Anh as translators, and in Korean with the help of Ms. Min Jeong Kim and Mr. Min Jun Kim as translators. Most interviews were tape-recorded when prior authorization was given. When a recording was not permitted, extensive notes were taken and crosschecked with the respondents afterwards. All interviews were transcribed into English, resulting in over 1000 pages of transcribed material. Where necessary translators facilitated the transcription of the interviews. Furthermore, Mr. Gurav Singh (India) and Ms. Mai (Vietnam) greatly supported the transcription process. With the support of native speakers the ambition was to capture and document in English precisely what the respondents said.

As a fourth step, we relied on participant observation during government-sponsored rallies and during national, regional and international conferences on GBSS and skewed SRB. Extensive notes were taken at these events. Furthermore, in all three countries public hospitals and private clinics were visited. These visits served three main purposes: first, to have informal conversations with pregnant women and their relatives in waiting rooms about fetal sex determination and sex selection; second, to research prices and availability of ultrasound scans, sex determination and sex-selective abortions; and third, to search for public signs and banners within hospitals and its surroundings that raise awareness on the issue. Due to the sensitive nature of the questions, some of these visits to clinics and hospitals were done incognito and under vague pretenses. Instead of openly revealing the scholarly motives behind the questions raised in informal conversations, we rather pointed to personal interests.

3.3.3. Field Research in Vietnam, India and South Korea

Data was collected during several missions to the field. Before starting this doctoral thesis preliminary fieldwork was conducted in Armenia where I supported UNFPA as an independent researcher for the duration of two months. I also attended an international conference on sex imbalances and policy response in Strasbourg at the Council of Europe in summer 2013. In November 2013, I traveled one month in Delhi, where I participated in the Inter-Regional Capacity Building Workshop “Responding to Gender-Biased Sex Selection” organized by UNFPA. The workshop targeted UNFPA staff and selected representatives from governmental and non-governmental institutions coming from different Asian and Caucasian countries. It aimed at reviewing communication strategies, analyzing policy options against GBSS and developing the programming for UNFPA country teams, among other objectives. Participating in this 3-day conference allowed to establish first contact to Indian and Vietnamese policy makers and UNFPA representatives. I could also observe the cooperation between UNFPA and the invited experts who served as lead facilitators. During round-table sessions, policy options were discussed and “landmark policy experiences and best practices” were exchanged. Special emphasis was given to the Indian and Chinese case and lessons were drawn from the Korean case. During this initial field trip I conducted the first interviews and tested the questionnaire, which was then further fine-tuned.

Field research took then place from October 2014 to May 2015 (in Vietnam, India, South Korea) and in July 2015 (in India). Data was collected in different localities (see Table 13). The focus was placed on two localities within each country: a) the capital to gain access to governmental data and key informants from international and government cadres, and b) selected case study localities with the intention to gain access to local data and stakeholders. The Heinrich Böll Foundation funded the field research. I received logistical, organizational and administrative support from the Center for Population and Development in Paris and by different host organizations on the ground. These host organizations facilitated research in the given country immensely by providing infrastructure and a work environment, as well as contacts to key stakeholders. The host organizations and some key stations during the field research are listed below.

Table 13: Locations of Data Collection

	South Korea	India	Vietnam
Focus areas	<ul style="list-style-type: none"> • Seoul • Daegu, North Gyeongsang 	<ul style="list-style-type: none"> • New Delhi • Shaheed Bhagat Singh Nagar (formerly Nawanshahr), Punjab 	<ul style="list-style-type: none"> • Hanoi • Hai Duong, Hai Duong Province
Further data collected in	<ul style="list-style-type: none"> • Busan, South Gyeongsang 	<ul style="list-style-type: none"> • Gurugram, Haryana • Chandigarh, Punjab, Haryana • Mumbai, Maharashtra • Pune, Maharashtra 	<ul style="list-style-type: none"> • Ninh Binh (interviews with Hai Duong officials)

Vietnam (October – November 2014)	
Host institution: Institute for Population and Social Studies, Hanoi, Vietnam.	
03.10.14	Participation in talk show & arts performance on SRB imbalance, UNFPA and DOPFP of Hai Duong Province, Hai Duong City.
09.10.14	Dissemination workshop on the joint program between MOLISA & MOH on “Promoting gender equality to address SRB imbalance,” Hanoi.
21.10.14	Conduction of interviews during communication event on SRB imbalances, UNFPA, MOLISA, VFU, VWU, GOPFP-MOH, Hanoi.
07.11.14	Participation in “Sharing International & National Experience in Harnessing Opportunities from Demographic Changes for Socio-Economic Development and Implications for Vietnam,” UNFPA, Vinh Yen City.
11.11.14	Participation in the 2nd National Conference on Sexual and Reproductive Health, UNFPA, Hanoi.
12.-13.11.14	Field research in Ninh Binh Province during training for service providers, UNFPA, GOPFP-MOH, DOPFP of Hai Duong Province, Nin Binh City.
24.-25.11.14	Field research in Hai Duong and interviews with medical personnel, facilitated by UNFPA Vietnam, Hai Duong City.

India (December 2014 – February 2015 and July 2015)	
Host institution: Heinrich Böll Foundation, Center for Social Research, New Delhi, India.	
24.12.14	Participation in “My Strength, My Daughter: Symposium on PC&PNDT Act,” CSR funded by German Embassy, Gurugram.
6.-12.01.15	Field research in Maharashtra facilitated by Prof. T.V. Sekher, International Institute for Population Sciences, Mumbai and Pune.
13.-18.01.15	Field research in Punjab and Haryana facilitated by Parminder Singh, Civil Servant, Chandigarh, Patiala and Shaheed Bhagat Singh Nagar.
11.02.15	Field research in Haryana facilitated by CSR and district officials, Gurugram.
16.02.15	Participation in Indian Women Press Conference on “Implement Supreme Court Ruling - Banning Online Sex-determination Ads”, New Delhi.
07.-13.07.15	Organization and discussant during “International Policy Dialogue on Prenatal Sex Selection,” HBF, Center for Social Research, New Delhi.

South Korea (February – April 2015)	
Host institution: Graduate School of Public Health, Seoul National University, South Korea.	
26.02.15	Meeting with Dr. Nam-Hoon Cho, Senior Government Advisor, KIHASA Research Fellow, and key informant on Korean population policies, Seoul.
04.03.15	Field visits to private clinics and public hospitals to interview medical personnel, Seoul.
06.03.15	Meeting with Heeran Chun, Demographer at Jungwon University and researcher on sex selection in South Korea, Goesan.
08.03.15	Participation and conduction of interviews during International Women’s Day, Award Ceremony, Korean Women’s Association United, Seoul.
19.03.- 05.04.15	Field research in North/South Gyeongsang, facilitated by Planned Parenthood Federation of Korea (PPFK), Daegu and Busan.

Between October and November 2014, field research took place in Vietnam. The Institute for Population and Social Studies (IPSS) in Hanoi supported me in obtaining a research visa and hosted me during this period. Prof. Lu Bich, director of the Institute, and her staff provided guidance and input during the entire stay by facilitating field trips, pointing to existing research, and discussing research findings. Prof. Nguyen Dinh Cu, former director of the Institute, also established contacts to senior government officials in the National Assembly and the Communist Party of Vietnam and accompanied me to some of the meetings. The field research coincided with a large-scale national campaign titled “Join hands to address the Sex Ratio at Birth imbalance,” which was jointly organized by the United Nations Population Fund (UNFPA) and the General Office of Population and Family Planning (GOPFP) in cooperation with other national and province level government agencies (see calendar above).

This provided the unique opportunity to conduct interviews and observe participants during a wide range of government campaigns against sex selection. These included, but are not limited to, dissemination workshops, thematically related conferences and communication events, talk shows, arts performances, theater plays, and bike rallies to raise awareness on SRB (mainly in Hai Duong and Hanoi). The field research in Hai Duong was made possible thanks to the support of UNFPA, in particular the Gender Coordinator of UNFPA Vietnam, Ms. Phan Thi Thu Hien, and UNFPA officials in Hai Duong. They provided access to local policy makers and implementers, as well as representatives from the Women’s Union and Farmers Union. Field research was also conducted during training for service providers, which allowed me to interview local medical professionals. Ms. Le Binh and Ms. Phuong Anh accompanied me as translators during these various trips to the field.

Between December 2014 and February 2015, and again in July 2015, field research took place in India. The Heinrich Böll Foundation India and the Center for Social Research hosted my research stay in New Delhi. Thanks to Center for Social Research several trips to Gurugram were made. There I participated in awareness-raising efforts with local authorities on the implementation of the 2015-launched Beti Bachao Beti Padchao (BBBP) Campaign that targeted the 100 Indian districts with the worst sex ratio. Furthermore, field research was conducted in Maharashtra, where early efforts to tackle sex selection were made, which inspired national legislation. Some signs of promising sting operations, work with the judiciary, and assessments of conditional cash transfers emerged from this data set.

In India the focus was placed on Punjab, which showed improvements between the 2001-2011 censuses. Civil servant Parminder Singh facilitated the field mission in Chandigarh, Patiala, Shaheed Bhagat Singh Nagar (Formerly Nawanshahr). He worked under Deputy Commissioner

(DC) Krishna Kumar in Nawanshahr introducing the Nawanshahr model that received wide policy attention. DC Kumar implemented strong action to crack down on sex selection in collaboration with civil society groups in the 2005-2007 period. Field trips to the district were arranged to interview local government officials, NGOs and faith-based organizations that have been involved in former and current efforts to tackle sex selection.

After the 2014 Indian election government posts were newly assigned. Many of the local officials were new to the field and often unwilling or hesitant to share information. Some government representatives and UN staff reported that under the Modi administration barriers were altered that hindered authority from participating or collaborating in research studies. Also the vast size of country and its population, and the heterogeneity of the phenomenon make the policy landscape much more diverse. Multiple actors at multiple levels are engaged in multiple interventions simultaneously. Therefore, more time was spent in India than in the other two countries.

Furthermore, Heinrich Böll Foundation India and the Center for Social Research showed great interest in my research topic and jointly organized a 2-day “International Policy Dialogue on Pre-natal Sex Selection” in New Delhi. The conference brought together scholars from India, South Korea, Vietnam and the US in order to exchange research findings at an international level. I supported the recruiting of the conference speakers coming from abroad and moderated the international session. The conference was centered on lessons learned and challenges different countries faced in addressing sex selection. It produced policy recommendations linked to gender mainstreaming, gender equality laws and other legal provisions, conditional cash transfers, IEC campaigns, social media campaigns, sex selection bans and monitoring of technology and discussed matters of transnational knowledge and policy transfer.

Between February and May 2015, field research took place in South Korea. The Health Demography Department at the Graduate School of Public Health at the Seoul National University hosted me. Prof. Youngtae Cho, director of the department, and his team facilitated contact to key informants and helped me to access studies, articles and reports on sex selection and son preference in Korean. Furthermore, Dr. Nam-Hoon Cho, Senior Government Advisor and KIHASA Research Fellow set up several meetings with national policy makers and provided valuable information on Korean population policies and public policies against sex selection. Field research in North and South Gyeongsang was facilitated by the Planned Population Federation Korea. Field trips were made to Daegu and Busan, where I interviewed local politicians and health care providers. In Daegu I was able to interview several doctors who openly reported on sex-selective abortion practices. Due to the illegality of these practices

these are rare research findings. Ms. Min Jeong Kim accompanied me as a translator during interviews conducted in Seoul and Mr. Min Jun Kim during field research in Busan and Daegu. Data collection was complicated in South Korea because sex selection is considered a problem of the past. Focus has shifted to natalist policies and an ageing society. Experts could not be identified easily, and those identified often rejected to participate in the interview (see 4.6.2.).

3.3.4. Data Analysis

All qualitative data was compiled and assessed with the support of the NVivo software. NVivo is one of many computer-based analysis tools for qualitative data analysis, which allows storing, organizing, managing and analyzing qualitative information. The policy documents, transcribed interviews, and memos taken during participant observation were uploaded into NVivo. Information on each country case study was stored separately, but could also be linked across cases to specific themes. This facilitated the country-based and cross-country analysis. Several steps were employed in the qualitative data analysis:

- Data immersion.
- Coding of emerging themes.
- Crosschecking and redefinition through the application.
- Presentation of results.

The first step was to reread the transcribed material and policy files, getting familiar with them and looking out for reoccurring themes. The text search function allowed searching for specific topics of interest. These included concepts such as transfer, learning, lessons drawing, IOs, etc. Secondly, emerging themes were coded. For this, specific text sections were assigned to different nodes, which is essentially a grouping of similar extracts. Thirdly, coded information was crosschecked and redefined through NVivo. The application provides options for queries and the retrieval of information to test emerging theories. The last step was the retrieval of the results. For this, NVivo offered different tools to display findings in the form of tables, word clouds, and statistics.

Through the use of NVivo the analysis could be traced back to the underlying data sources using queries, memos and nodes. This was especially useful when handling large amount of data. In fact, computer-based analysis is recommended with complex studies that involve a

large volume of text (Mack et al. 2005, 151; Bassett 2010). In our case the key informant interviews included over 100 text files and more than 1000 pages of transcribed data.

3.3.5. Data Accessibility, Quality and Comparability

This thesis is based on multiple data sources: policy files, demographic data, interviews, and observation. Due to the diversity of the countries and locations, data varied significantly in accessibility, quality and type. This made data comparability more difficult.

Policy files: South Korea, India and Vietnam are based on different legal and political systems. Sex selection is regulated according to national legislation in Medical Law (South Korea), the PC&PNDT Act (India), Population Ordinance and diverse Government Decrees (Vietnam). These legal texts vary in hierarchy and importance. The constitutions (as highest law) of all three countries safeguard the life of women and prohibit discrimination made on the basis of sex. Furthermore, the three countries have ratified international laws to prevent gender discrimination such as the CEDAW.

Demographic data: Access to reliable sex ratio at birth trends varied across countries. Annual and even monthly SRB data could be accessed for Vietnam and South Korea, but not so for India, where birth registration is weak. Also, the countries have different forms of measuring sex imbalances. In the Indian case we also made use of the child sex ratio (0-6) instead of the SRB. Sex ratios were converted from the Indian calculation (females per 1000 males) to the international calculation (males per 100 females) in order to enhance comparability.

Interviews: Access to key informants varied across countries. Overall more participants were interviewed in India (48) than in Vietnam (36) or South Korea (34). This is due to the large size of India and the multiple players at multiple levels involved in addressing sex selection. In India data collection was delayed because governmental posts were newly assigned after the general elections in 2014. As previously mentioned, the conservative government also limited its participation with research projects. In Vietnam easy access to government information was granted, due to strong political will and the involvement of UNFPA. Due to the absence of NGOs in the country, more members from research institutions were interviewed. In South Korea, only a few key informants from international and government cadres could be identified. To bypass this shortage other groups (journalist, patients) were consulted. Several interview participants fitted more than one category. In India, scholars are also sometimes activists and

serve in governmental committees at the same time. Their type illustrated in Table 12 is based on respondents' self-classification and their current position.

Participant observation: In Vietnam and India, participant observation took place during rallies, awareness-raising, media campaigns, and international conferences on GBSS and skewed SRB. In South Korea that was not possible because sex selection is no longer a problem. Therefore, diverse women's groups and participants were observed during events of March 8th International Women Day in Seoul.

3.4. Shortcomings of the Study and Personal Reflection

In this section we discuss shortcomings of the study and give a personal reflection on the positioning of the author within this research.

3.4.1. *Policy Landscape as a Dynamic System*

We have to take into consideration that the case studies presented here are dynamic, not static, and constantly respond to environmental influences. Sex ratios fluctuate, policies change, and actors come and go. The data collected between 2014 and 2015 was accessible to me at that moment. A different investigator at a different time would have had access to different information. This creates the general limitation in terms of reproducing and testing the results generated from qualitative data analysis under complex real world condition.

In fact, modern paradigms for understanding complex dynamic systems have entered policy research (Reilly and Linds 2010). The dynamics of epistemic communities that come together, separate, evolve and shape the policy networks that emerge, interact, reproduce, and maintain long-lasting relationships (in the form of continuous exchange between IOs and epistemic communities). We can illuminate the interconnectivity between different stakeholders in these dynamic systems, but reducing them to their individual parts does not represent the dynamic or emergent nature of the phenomenon. Thus, one of the general limitations of this study is that it is a snapshot of a dynamic system that in 2018, when this study is released, will have evolved.

3.4.2. Limited Depth Case Study

Comparing different countries and collecting a large data set for the sake of understanding the logic, instruments and impact of sex selection policies in different settings is essentially what makes this investigation unique. It is at the same time a major point of criticism. Multi-national and multi-site case studies have been criticized for providing limited depth (Robinson 2010). It is true that the large scale of this research project was at times overwhelming and prevented a fine-grained detailed analysis. I could have anticipated and bypassed this problem by narrowing the research scope from the beginning (choosing one country, one site, one aspect of the policy cycle, one methodology). However, this would have changed the nature of this inquiry. Our interest is in the big picture that requires a broad and ambitious approach. What this investigation lacks in micro-level details, it hopes to compensate with a macro-level overview that brings important insufficiencies of anti-sex selection policies to light.

Country Scope: Readers may question why I did not focus on one single country (e.g. India) or compare countries that are more similar (e.g. China, Vietnam and South Korea). As described above that would have gone against the logic of comparative public policy analysis and the Most Different Systems Design employed here (see 3.1 and 3.2.). Prior case studies have justified their multi-national, multi-site approach by collecting insights from more fine-grained and intensive case studies along the way (Elger, 2010). The same is done here by referring to and drawing from existing research and local studies. While the multi-case study design offers some important country-level insights at the local levels of these countries, further micro-level studies will be needed to complement these findings.

Research Scope: The investigation touches on different areas of the policy cycle:

- Agenda setting: the role of international agencies and epistemic communities in raising awareness about GBSS and skewed SRB as a policy issue
- Policy formulation: policy transfer, the selection of internationally promoted policy instruments
- Implementation: implementing agencies, instruments and implementation gaps
- Evaluation: policy efficacy and shortcomings

Essentially, any one of these aspects would have been sufficient to dedicate a doctoral thesis to. Respected policy researchers may claim that sticking to one aspect of the policy-making cycle is essential to legitimize ones research. Their point is valid. But it would defeat the purpose of

understanding precisely the cyclic nature of the sex selection policymaking process (e.g. why would policies that show difficulties in implementation and lack efficacy be uniformly promoted internationally?). In order to understand the interdependencies of this process around sex selection, we opted for breadth instead of depth.

Resource constraints: This study would have benefited from more extended periods in the field, but like all research, this study was done under financial and time constraints. Throughout the course of this investigation, but especially during field research, I made use of opportunities that presented themselves. At times this changed the course of data collection to areas that were not previously targeted or anticipated.⁶¹ My research stay in Vietnam coincided with large-scale campaigns against GBSS. Similarly, in India, the *Save the Girl Child, Educate the Girl Child Campaign* was launched during my stay. This allowed the participation in political events and IEC campaigns. However, the fact that this study relies on data collected during a limited time with limited resources may contribute to certain information and attentional biases.

3.4.3. *Language, Culture, Patriarchy and a 'Western Lens'*

Like most cross-country comparisons, this research included interactions with different linguistic and cultural groups (Robinson 2010).

Language barriers: I do not speak Korean, Vietnamese, Hindi, or Punjabi. This meant that the exchange of information was mostly limited to English. Sometimes this language barrier limited the precise exchange of ideas and concepts. To overcome language barriers, I enlisted the help of native speakers that served as translators during the interviews. Fortunately, many of the key informants spoke good English. The translators facilitated the setup, conduction and follow-up of the interviews and assisted in the transcription process. The translated semi-structured questionnaires provided further guidance. Unlike linguistic research where every word counts, the interviews circled around key concepts, which did not require a word-for-word translation. While it was important that the message was conveyed clearly, exact translation was often not necessary.

⁶¹ E.g. field research in Gurugram was added because of the involvement of Center For Social Research there. In Korea, I expanded the circle of people I interviewed due a shortage of key informants from government cadres and IOs.

Cultural barriers: The help of the native speakers, translators, and colleagues within the host organizations was not only fundamental to overcoming language barriers but also cultural barriers. They helped me to interpret cultural expressions. I felt this was a nurturing process for both sides, because as a specific phenomenon got questioned, it allowed for reflection on issues that otherwise didn't seem to need further explanation. Cultural expressions can sometimes be banal (like the way South Koreans cut their apples) or very far-reaching (like the respect shown for the elderly in Vietnam and South Korea).

Patriarchy was one of the cultural barriers I was confronted with.⁶² This does not come as a surprise, because all three countries are based on patriarchal values, where gender roles are constructed in a way that more power is given to men over women. GBSS and skewed SRB are in themselves expressions of a society that values males over females. This affected my research in different ways. In India, for example, it affected my personal mobility and security. In terms of research, patriarchal norms sometimes got into the way when interviewing male informants. First, some questions (like the final interview question on personal gender preference of children) were sensitive in that they revealed personal son preference, or highlighted patriarchal standpoints, discourses, and structures. Second, some interviewees felt I violated cultural norms, e.g. by talking about sensitive topics such as sexuality.

These patriarchal attitudes of policy makers were especially visible in India, which inspired my research on political masculinities (Rahm forthcoming). One Indian policy maker reminded me over Masala Chai that it is the role of a woman to serve the tea when he poured me a cup. Other male interviewees were at times verbally aggressive, in a way that I felt I had to defend myself. Moments like these helped to reveal gender-specific stereotypes and expectations. Other situations were less easy to interpret. My female Korean translator was asked after the interview whether she was married or had a boyfriend by one of the senior policy makers. Obviously, this personal question had nothing to do with interview we had just conducted. I reflected whether this question was due to patriarchal attitudes or rather the fact that the Korean government is currently investing in matchmaking, trying to encourage the younger generation to get married.

⁶² Patriarchy means literally “rule of the father”. According to Jaffe (2010, 661), “Patriarchy is maintained through the family, the polity, religion, the economy, and specific forms of sexuality and is reinforced through symbolic representation and language”.

'Western lens' to study 'Eastern phenomenon': Another cultural barrier can be detected in the overall lens this study uses. Public policy analysis itself and many of its concepts have come out of the US and to some degree Europe. In fact, Western and U.S. scholars have dominated this field of research for several decades. People may very well criticize this investigation for using a 'Western lens' to understand 'Eastern policies.' To overcome this, I consciously tried to review and incorporated works from Asian scholars.

3.4.4. Self-reflection: Between Researching and Informing Policies

According to Robinson (2010) the case study investigator and his or her research are objective when they exclude human emotions, wants, values, as well as preconceived preconceptions. As much as objectivity is ideal, it is often impossible to achieve. Reflecting on the authors' position is important for quality control in qualitative research (Berger 2015). As is true for all studies, the social position, professional experiences and personal belief systems of the researcher influence her or his research. This also applies to the present study. Personal traits and experiences have shaped and influenced this research.

To give a simple example: The fact that I am tall prohibits me from blending in and quietly observing the terrain during field research in Asia. Instead I stand out, often several heads taller, than people around me. The fact that people take notice of my presence slightly changes the dynamics of my observation. Moreover, the fact that I am a woman conducting research on a gender-sensitive subject in patriarchal countries is another aspect that has influenced this research. Respondents may have responded differently to a man conducting the same work.

Prior work experience also played a role. The fact that I had worked previously for local women's rights NGOs, government entities, and IOs have shaped my understanding for the frequent tension between local realities, national agendas and global harmonization efforts. I have worked several years for the German international development cooperation, consulting on regional networks active in various fields linked to sustainable development. These expert groups are actively supported by IOs and they often inform policies in their home countries. This has made me more sensitive to issues linked to policy transfer and the role of international agencies and epistemic communities.

In 2012, prior to this doctoral thesis, I did a short research stint at the UNFPA office in Armenia, who kindly hosted me as an independent researcher. I got familiar with the problem of GBSS

and realized that policy research on sex selection was extremely scarce. My initial research was on “international best practices” to prevent gender-biased sex selection in Armenia (Rahm 2012). Now looking back after several years of research, I question the notion of “international best practices.” Today I am more cautious about the idea of lessons drawn from abroad, even more so now that I see the great demand and interest there is for it. As a member of a research team working on sex selection based in Paris, I have witnessed that international and national stakeholders frequently turn to scholars for advice; advice that goes beyond the analysis and interpretation of pure data.

Increasingly researchers including myself are asked to provide policy recommendations on how to address sex selection. Throughout the course of this investigation, I have become part of the system that I study, by directly or indirectly informing policy options through policy briefs, panel discussions and international conferences. I have played back into the system by having shared some research experiences with study participants, thus moving from an outsider position to an insider position (Berger 2015). The benefits of this are an improved understanding of stakeholders, processes and interventions. The hazards are personal biases because of reduced objectivity. I hope to enhance the rigor and trustworthiness of the current study by acknowledging my own position as a researcher.

3.5. Conclusion

This research compares public policies against sex selection in three countries that are very different: South Korea, India and Vietnam. We employ comparative case study research making use of the *Most Different Systems Design*. This methodology provides a platform for the systematic exploration of the similarities and differences between the intentions, instruments and impacts of anti-sex selection policies in these three countries. The research follows a mixed method approach combining qualitative and quantitative data and drawing from policy files, key informant interviews, participant observation and secondary demographic data gathered over 10 months of field research in India, Vietnam and South Korea. In all three countries, the host organizations and a variety of other institutions and individuals facilitated the data collection immensely. Without their support this study would not have been possible.

4. South Korea

South Korea is situated in East Asia. It borders the East Sea (Sea of Japan) to the east, the East China Sea to the south, the Yellow Sea to the west, and shares a heavily militarized border with the Democratic People's Republic of Korea (North Korea) to the north. Although the Korean peninsula is relatively geographically isolated, its proximity to China has influenced much of its social, cultural and political history (Armstrong 2009).

Demographically, South Korea is of particular interest for this investigation. It was one of the first countries to record skewed sex ratios at birth in the 1980s, and one of the first ones to renormalize its SRB by the late 2000s. By 'solving' its skewed sex ratio problem in just two decades, the country has become an international poster child for policy response to sex selection (WHO 2011). But is it really a policy 'success story?' We open up our country studies by turning to Korea in the search for answers. We seek to explore the reasons behind the rapid SRB transition in general, and the impact of public policies on SRB in particular.

To readers who know South Korean history the rapid decline in sex imbalances may not come as a surprise, as South Korea is known for its rapid transitions. The country transformed from a high fertility, rural and poor country in the 1960s to an ultra-modern and ultra-low fertility country by the turn of the century. This remarkable and rare modernization over a limited time and space is known as "compressed modernity," which has been defined as follows:

"Compressed modernity is a civilizational condition in which economic, political, social or cultural changes occur in an extremely condensed manner in respect to both time and space, and in which the dynamic coexistence of mutually disparate historical and social elements leads to the construction and reconstruction of a highly complex and fluid social system" (Chang 2017, 33).

Economically, South Korea witnessed a remarkable growth and transformed itself from being one of the poorest countries in the world to a major industrial power with a GDP per capita rising from around US\$ 100 in the early 1960s to over US\$ 27,000 in 2016 (World Bank 2017a). With economic growth at an annual average of about 10% for over 30 years (ibid), South Korea became the 'Miracle on the Han River.' By 1996, the country joined the Organization for Economic Co-Operation and Development (OECD) and had transformed from an international aid recipient to an international donor country. South Korea stands today as one of the wealthiest high-tech industrialized nations of Asia, one of the 'Four Asian Tigers' (next to Singapore, Taiwan, and Hong Kong).

Politically, South Korea also underwent drastic changes during the compressed modernity period. After World War II Korea was shaken by Japanese colonial rule and entered a period of division and war, which resulted in the partitioning of North and South Korea. Despite this unrest, South Korea (unlike its northern neighbor) managed to transform itself from an autocratic military regime to a democracy holding its first free and fair presidential elections in 1987. This political democratization gave rise to a civil society that became increasingly concerned with, and supportive of, women's rights.

These rapid economic and political changes also contributed to rapid social changes especially in the realm of the family (Chang 2017). The centrality of the family has been maintained as a key feature of the Korean identity, which means that the family has a strong influence over one's public and private life. However, family size and structure along with traditional patterns of cohabitation have been fundamentally transformed by industrialization, urbanization, growing wealth and education (Chung and Das Gupta 2007).

Cultural changes were equally intertwined and drastic, and not without tensions throughout the adaptation process. South Korea's Confucian heritage has traditionally emphasized collective well-being over individual interests. Confucianism has governed both private and public relations for centuries, imposing clear hierarchies, which have become increasingly challenged by 'Westernization.' Women in particular have felt the clash between tradition and modernization as their role in society has been shifting. Whereas women were formerly dependent on their fathers before marriage, husbands during marriage and sons in old age as part of a life cycle continuum of female-male subordination, women's role has now expanded beyond the patrilineal family system into the public sphere.

In some ways South Korea's comparably small, ethnically homogenous and linguistically unified population has facilitated these rapid changes. Ethnic nationalism in Korea has received much scholarly attention (Shin 2006) and has been the source of a "profound sense of cultural distinctiveness and superiority" (Kyung-Koo 2007, 8). Even today South Koreans define themselves much more through their race or culture than other countries' citizens, as a global BBC poll showed (BBC 2016). Koreans have also held on to traditional values such as son preference well into modernity, making it a country "for which no easy sociological account is available" (Chang 2017, 32). In this context we locate yet another transition, the sex ratio at birth transition, as one reflection of the complex economic, political, social, and cultural changes the country has undergone.

First, we look at the background of son preference, lowering fertility and access to abortion in South Korea, before exploring the rise and fall of sex imbalances and public policies against sex selection. Following this, we provide an in-depth quantitative and qualitative policy assessment in order to determine the degree to which SRB renormalization can be attributed to policy response. To see how policy affected sex selection in one of the regions with very high levels of SRB, we then turn to our regional case study, Daegu. Finally, we analyze the results and comment on how they differ from international discourse on anti-sex selection policy and take a look at the situation in South Korea today.

4.1. South Korean Context

4.1.1. Tracing Back Son Preference: From Confucianism to Colonialism

Historically, South Korea was greatly influenced by the Chinese culture. As such, Confucianism shaped much of Korea's religious and political structures, social norms and value systems, as well as their preference for sons. Korea's close cultural ties with China allowed Koreans to borrow culturally from China while remaining to a large extent politically distinct. Many customs in the arts, legal institutions, and the Chinese written language (until replaced by the Korean alphabet in the 15th century) were borrowed from the Chinese and transformed into distinct Korean forms (Armstrong 2009).

Confucianism spread during the time of the Three Kingdoms (57 BCE–668 CE). In 372, the First National Confucian Academy was established to spread Confucian teaching and the readings of the Confucian classics. Confucian thought was not only a means to maintain the aristocratic social order but it also served to foster national unity even before Korea was officially unified (Lee 1984). The political unification of the Korean peninsula was established during the Goryeo Dynasty (918–1391). The Korean religions were a mix of ancient versions of Shamanism and Buddhism adopted from the China. Later, during over 500 years of Joseon Dynasty rule (1392–1897) Confucian ideals gained greater popularity and Confucianism became the official state philosophy.⁶³

⁶³ Although Korea adopted Confucianism from China, it also maintained native folk religions, communication with spirits of nature and deceased. Christianity was introduced only in the 20th century.

Confucianism is based on the ideal of male superiority within a patrilineal family structure and this ideal shaped Korean gender relations for centuries. Hierarchical social relationships between generations, classes and the sexes are thought to maintain harmony between nature and human affairs. Women's social role was to function as devoted wives and dedicated mothers whose central role in the Confucian world was to produce a male heir to perpetuate the husbands' family line (Kim 1994). First-born males were essential to preserve the family line. Failure to conceive a son was considered one of the seven evils⁶⁴, for which women were held accountable and for which men could leave their wives. Many aspects of this patrilineal ideal have remained unchanged into modernity and can be thought of as the foundations for son preference in Korea (Park and Cho 1995).

After the Joseon Dynasty at the turn of the 20th century, Korea was isolated and weak. Its policy of isolationism had made it a 'hermit kingdom.' Japan fought with China over dominance in Korea and annexed Korea in 1910.⁶⁵ The following 35 years under Japanese colonial rule were harsh and oppressive for Koreans, especially during wartime mobilization (1937-1945). During this time, many Korean men were forced to work in Japanese factories or were sent as soldiers to the front, while tens of thousands of young Korean women were forced into sexual slavery to serve as 'Comfort Women' for Japanese soldiers. Koreans were pressured to give up their names in exchange for Japanese names, which many eventually did in 1939. The Japanese also tried to break the hold of Confucianism on the Koreans and convert them to Shintoism, but this attempt at religious hegemony was strongly contested by Korean nationalists.

Both Chinese and Japanese influences left their footprints in Korea's legal code, which officially endorsed patriarchal family structures, male succession and supremacy. A main pillar of son preference in Korea has been the family head (*hoju*) system that gave exclusive civil rights to the man as the head of the family (see also 4.3.5). There has been a long debate over the origin of that system. Some argue it derived from dynastic Chinese origin and Confucian tradition (e.g. Kim 1994). Other scholars claim that Japanese colonists imposed the *hoju* system to tighten their control over Koreans (e.g. Yang 2008). While the Japanese abolished their

⁶⁴ Other evils were disobedience to the in-laws, adultery, jealousy, hereditary disease, garrulousness and larceny (Kim 1994, 148).

⁶⁵ In this sense Korean cultural heritage was strongly influenced by Eastern imperialist powers and differs from both India and Vietnam who were colonized by Western imperialist powers.

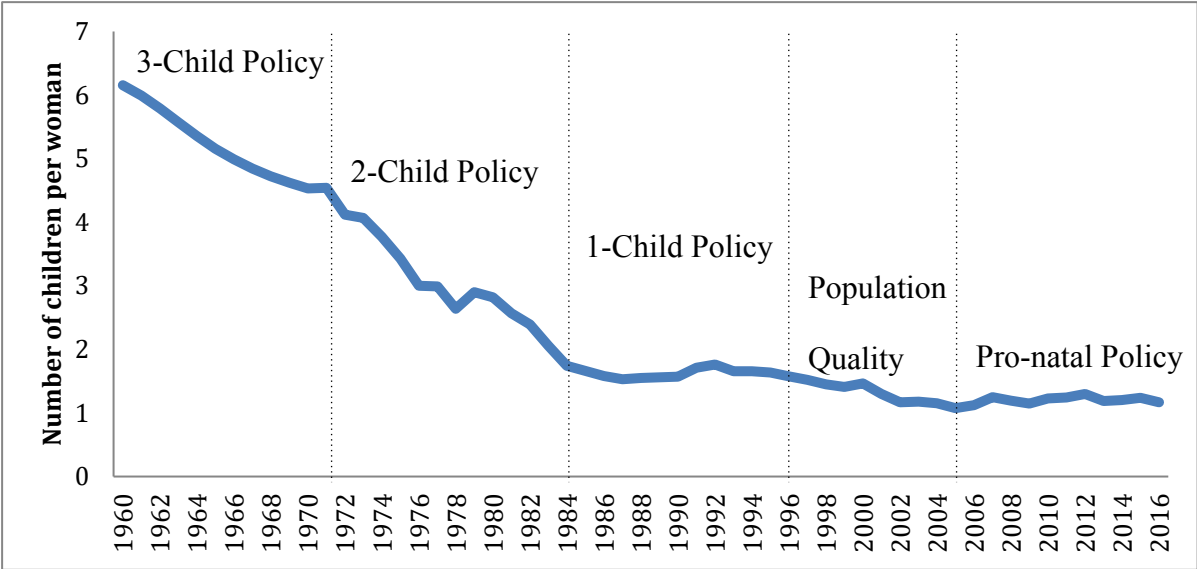
family household system in 1948, the Korean Family Head System was preserved until declared unconstitutional in 2005.

After World War II, Korea began to be pulled in two opposing geopolitical directions: a Communist North and a Capitalist South. The Korean War (1950-1953) left both sides devastated and thousands of lives were lost. While North Korea fell under the protection of China, South Korea was economically, politically and culturally influenced by the United States. Despite the end of the cold war, Korea remains divided into two equally hostile states, which are perpetually in a tense condition of armed truce (Armstrong 2009). North Korea under Communist rule has remained a poor and troubled nation, while South Korea has witnessed the unprecedented economic growth of compressed modernity in close combination with economic reforms and population control.

4.1.2. Fertility Decline as the Motor for Modernity

South Korea introduced its first population control program in 1962. At the time, the country was very poor. Family planning was placed on the top of the national agenda as fertility decline was seen as a precondition for economic growth (Cho 2009). After the Korean War, South Korea's population was marked by a baby boom and a high level of infant and child mortality. The population growth rate peaked at 3.0% in 1960 and the total fertility rate was about 6.0 children per women (ibid). To encourage economic growth, a rigorous national family planning program and economic reforms were introduced under the strong leadership of (dictator) Park Chung-hee. During his presidency from 1961 to his assassination in 1979, fertility halved from 5.9 to 2.9 and would further decline over the coming decades. Figure 11 shows the total fertility rate and shifting population policies in South Korea between 1960 and 2016. An overview of population campaigns from 1960 to 2010 can be found in Appendix 2.

Figure 11: Total Fertility Rate and Population Policy Shifts in South Korea, 1960-2016



Source: TFR data obtained from World Bank (2017b).

The Planned Population Federation of Korea (PPFK) played an important role in the implementation of the governments’ anti-natalist population policies. This non-profit organization was founded under the Maternal and Child Health Law (Article 16) to implement the governments’ population and reproductive health campaigns from 1961 onwards.⁶⁶ The Korean government functions as the main contractor of this NGO, but the PPFK is also encouraged to generate revenue from third parties. Within one year of existence, PPFK had already established 13 branches, one in each province. At first, small families, ideally with three children, were promoted through awareness-raising campaigns, family planning songs, free contraception and sterilization services. Women were offered financial incentives for the prevention of unwanted pregnancies. In the 1970s, family planning efforts were stepped up, e.g. through income tax exemptions for small families (Cho and Lee 1999). In 1971, a two-child campaign was launched as two children were seen as sufficient to drive Korea on the road to prosperity (see Figure 12 with campaign posters from various years). While some campaign posters were designed to control male sexuality in light of the seemingly ‘threatening’ population growth (e.g. poster with the red pepper, which is a homophone for penis in Korean), other campaigns focused on the non-discrimination of girls as the 1974 slogan “Daughter or son, stop at two and raise them well” (SK30).

⁶⁶ The organization has changed its name several times over the decades, but it continues to exist to date.

Figure 12: Family Planning Posters, South Korea, 1970s-1980s



Source: PPFK Posters, varies years, provided by interview partner SK30.

In the 1980s the Korean population exceeded 40 million and the government endorsed a One-Child campaign with the objective of reducing population growth to 1% (SK30). Family planning became a high-level government priority and continued under the successor of Park Chung-hee. During an interview the former Director of the Family Health Division at the Ministry of Health and Welfare stressed this high level of governmental commitment when he said: “President Chun Doo-hwan [in office during 1980-1988] fully supported family planning work. [He] always emphasized, 'population growth is dangerous.' Population growth rate in 1981 was 1.5. The President said, 'please reduce population growth rate!’” (SK06). Back then, regular reports to the president were provided and family planning updates had to be mentioned in the first line (SK06).

By 1983, the primary objective of lowering fertility to replacement level had been achieved within only two decades (see Figure 11), much quicker than the Asian average. Nevertheless, the government launched the One-Child Campaign in 1984 with slogans like “Even two children per family are too many for our crowded country” (see the poster with two fingers in Figure 12). The total fertility rate had dropped further to 1.74 by 1984. After 1986, the government budget for family planning was substantially reduced, but the government and PPFK continued to alert the population about the threat of high fertility. In 1987, the government started to operate Population Clocks that produced high profile population figures and stressed the importance of family planning (see the poster with population clock in Figure 12). In the same year, One-Child Family Clubs were rolled out nationwide. It was not until 1996 that this anti-natalist population policy was officially abolished. While low fertility is nowadays seen as a policy problem (the government has shifted to a pro-natalist population policy in 2005), the fertility control program (1962 to 1995) was an important motor for modernity (Cho 2009).

4.1.3. Access to (Illegal) Abortion and Fetal Rights

One of the key elements of Korea's fertility control program was its tacit promotion of abortion, despite its illegal status. According to the Korean Criminal Code, abortion has been prohibited since 1953. It is punishable for both women and doctors (Republic of Korea 1953). According to Korean legislation, a human life starts with conception and should be safeguarded from that point on. The Constitutional Court recognizes fetal rights as declared in 2008:

“Each human is the subject of the right to life under the Constitution, and the fetus, a life in formation, should be so entitled to a right about its life. Therefore, each fetus is the subject of the constitutional right to life, and the nation has the responsibility to protect its life under Article 10 of the Constitution” (Sung 2012, 285).

Despite the Constitutional Court protecting the right to life and the illegality of abortion, pregnancy terminations were, and are, very common in Korea (Wolman 2010). In fact, the government actively promoted illegal abortions in cases of contraceptive failure as a means of family planning (*ibid*). Abortion was so popular that, in 1990, married women were estimated to have on average more abortions (1.9) than live births (1.6) (Westley 1995). There are no official abortion statistics because of its illegal status. Yet, according to the National Fertility and Family Survey of 1997, 44% of married women (aged 15-44) reported having undergone at least one abortion (KIHASA 1998 as cited in UNDESA 2004, 79). A 2005 survey conducted in 25 hospitals and 176 private clinics indirectly estimated the annual number of induced abortions at a national level to be close to 340,000 (Ahn et al. 2012). Despite the scarcity of information on the actual number of abortions, it is safe to say, “the issue of abortion in Korea is one where the law neither affects nor reflects reality” (Kim 1999, 313). We will revisit this discrepancy shortly (see 4.3.1).

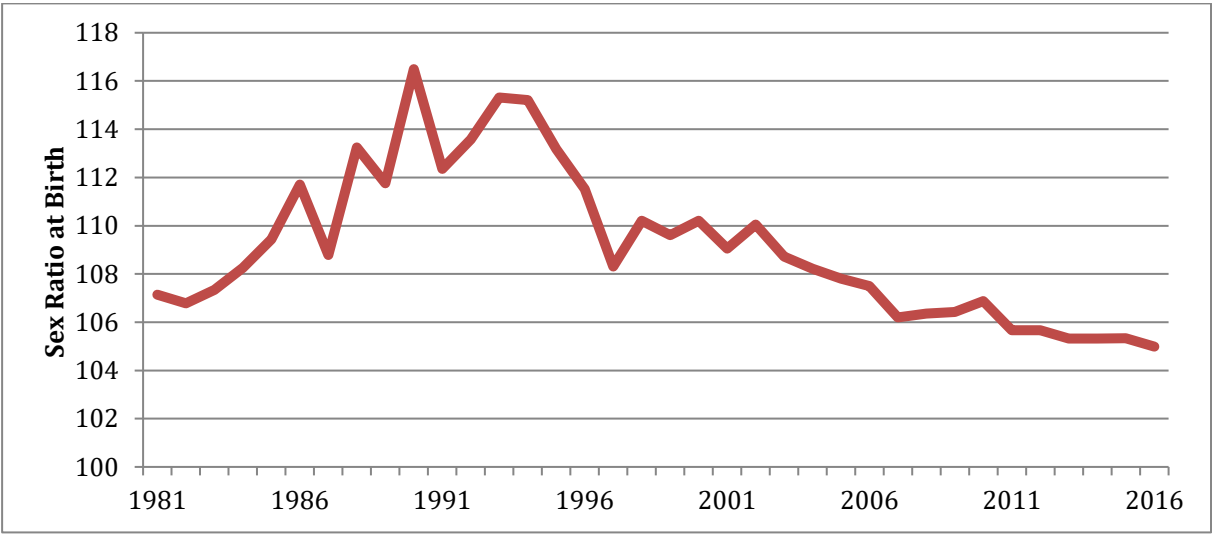
Korea's decline in fertility, abetted by abortion services and the influx of modern ultrasound created a new problem, sex imbalances at birth. Son preference had persisted for centuries and, at least initially, proved immutable, even in the face of rapid economic development and social transformation (Das Gupta et al. 2003). The conjunction of an ancient son preference with lowering fertility and the spread of medical technology, which allowed not only the affordable identification of the fetal sex, but also the safe subsequent abortion of unwanted females, made for a powerful mix and sex ratios started to rise.

4.2. Rise and Fall of Sex Ratio at Birth

4.2.1. National Trends

Before the 1980s there were slight irregularities in the sex ratio at birth documented by Park (1983), but it was not until the 1980s that the national SRB started to continuously rise above the natural norm of 106. Figure 13 shows the national SRB trend in South Korea between 1980 and 2016. South Korea’s sex ratio at birth increased from normal levels of around 105 in the early 1980s to above 115 within only 10 years, reaching levels of 116.5 male births per 100 female births in 1990. The trend shows peaks in certain typical years, such as 1990 (Year of the Horse) and 1994 (Year of the Dog) that according to the Moon Calendar are inauspicious years for girls (Lee and Paik 2006; Park and Cho 1995). From 1994 to 1997, the SRB rapidly declined from 115.2 to 108.3 respectively, and then gradually declined, with slight rebounds after the 1997 and 2008 economic crises, until reaching normal levels in 2016 (see Figure 13).

Figure 13: Sex Ratio at Birth, South Korea, 1981-2016

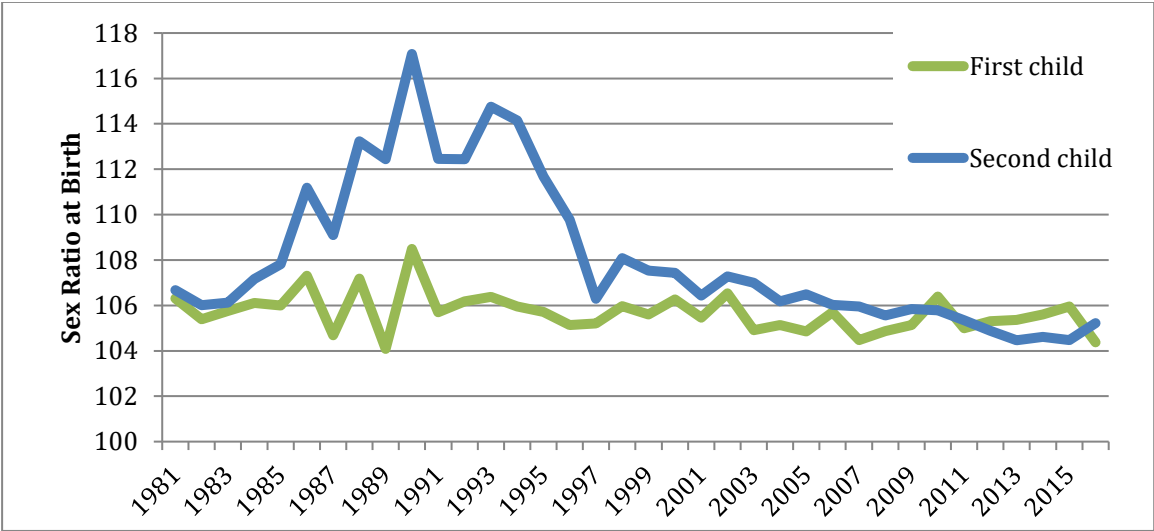


Source: KOSIS (2017b)

The national SRB data hides important variations across birth order. Figure 14 and Figure 15 show that couples are more likely to influence the sex of their offspring at higher parity levels in order to ensure the birth of a son. While the SRB at first birth was close to normal levels, SRB at second and especially at third and fourth births was severely skewed towards sons. Yet, even for these higher parities we witness a significant drop in SRB between 1994 and 1997,

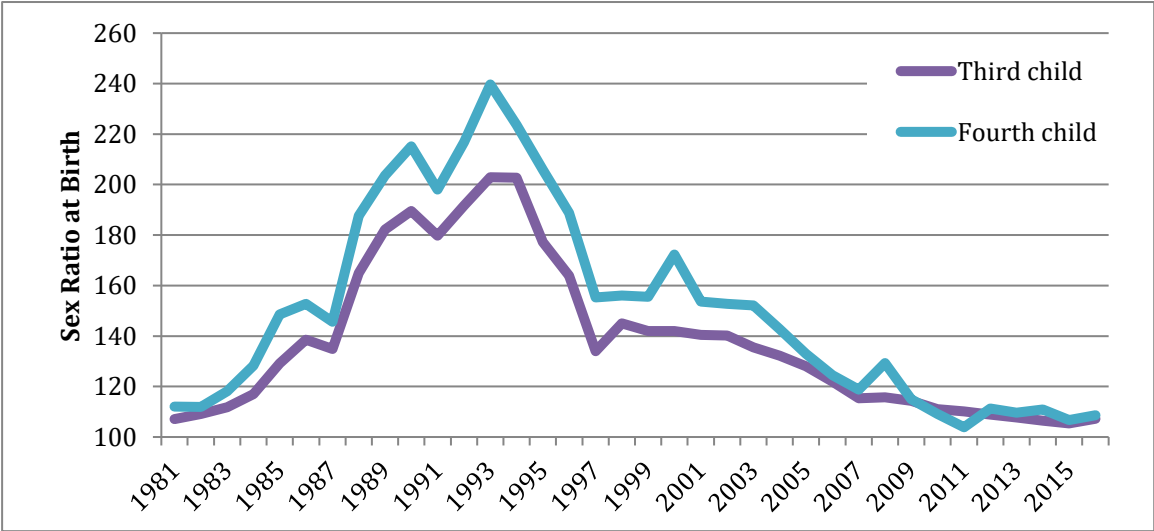
followed by a steadier decline after 2003. In 2016, SRB at higher parities was still slightly skewed, but since there are very few higher-order births, the overall SRB was not affected.

Figure 14: Sex Ratio at Birth, First and Second Birth Order, South Korea, 1981–2016



Source: KOSIS (2017b).

Figure 15: Sex Ratio at Birth, Third and Fourth Birth Order, South Korea, 1981–2016



Source: KOSIS (2017b)

National trends in the South Korean SRB show a classic bell curve pattern. Like other Asian countries, the rise of the South Korea’s sex ratio at birth has been closely correlated with the preconditions of son preference and falling fertility, aggravated by the arrival of medical technologies that allow families to use ‘family planning’ tools to ‘optimize’ their gender

composition. While Korea is much more culturally homogenous than the other two countries examined in this study, there are some important regional variations that can be observed.

4.2.2. Regional Trends

Skewed sex ratios at births have been observed throughout South Korea, yet the Southeastern part of the country was a particular hotspot. Figure 16 shows the SRB in South Korea per region in 1990, 2000, 2010 and 2015.

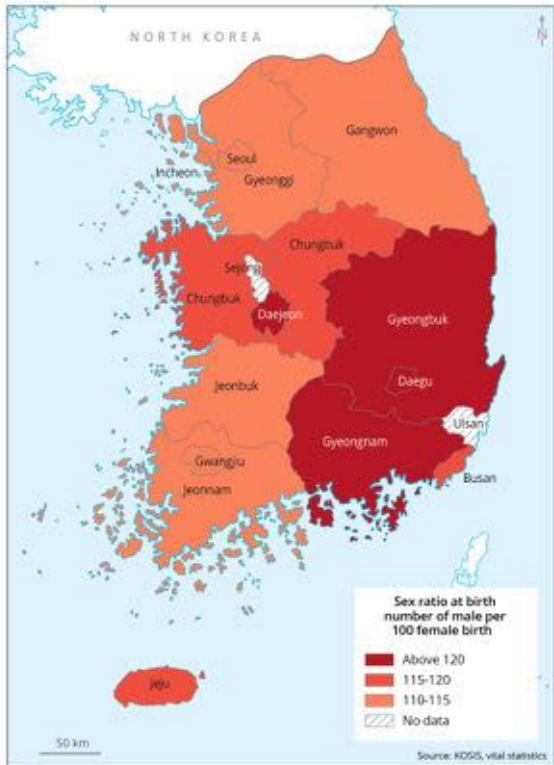
In 1990, all regions in the country had a SRB above 110, but levels were particularly high (above 120) in the Southeastern part of the Korean peninsula, in the provinces of North and South Gyeongsang and their major cities Daegu and Busan. These regions are considered to be more conservative and patriarchal than the rest of Korea (Kim 2004; Chun and Das Gupta 2009).

By 2000, SRB dropped below 115 throughout the entire country with a more balanced sex ratio in the West than in the East. By 2010, SRB dropped further, to below 110. The earlier West-East divide changed to a North-South divide with slight imbalances in the South and a completely 'cured' SRB in the North. Recent figures indicate that all regions, except for Daejeon, Incheon, Sejong-si and Jeju, reached normal levels by 2015 (Figure 16).

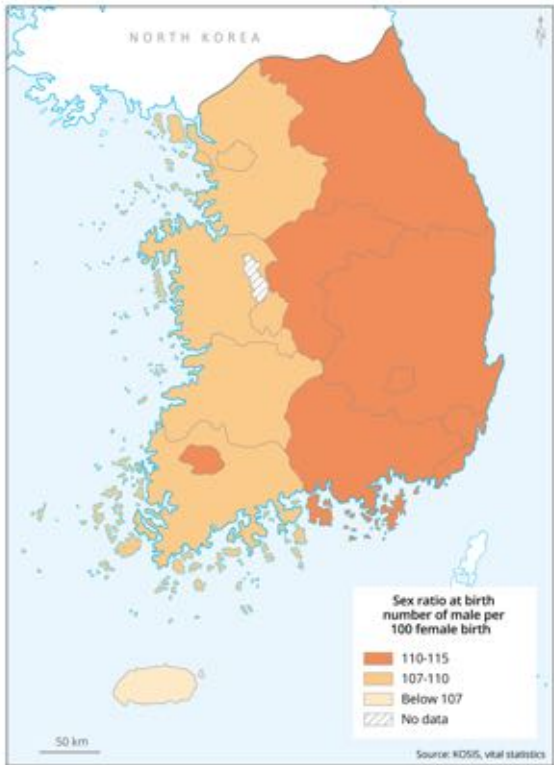
Within only 25 years, South Korea transformed from a country with a severely skewed sex ratio at birth to a country with a perfectly balanced sex ratio. Even formerly highly affected areas now consistently show a SRB within the normal range of around 105. In order to explore the potential reasons behind this rapid SRB decline to normalcy, we turn to national laws and policies against sex selection.

Figure 16: Sex Ratio at Birth in South Korea per Region, 1990-2015

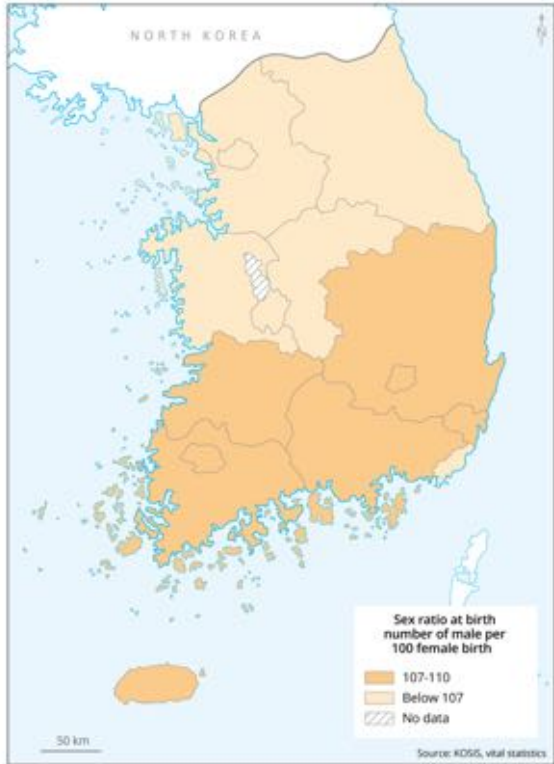
Sex ratio at birth in South Korea, per region, in 1990



Sex ratio at birth in South Korea, per region, in 2000



Sex ratio at birth in South Korea, per region, in 2010



Sex ratio at birth in South Korea, per region, in 2015



Source: KOSIS, various years.

4.3. National Laws and Policies Related to Sex Selection

Korea was one of the first Asian countries to recognize its problem of rising sex ratios at birth and one of the first Asian countries to introduce public policies against sex selection. The first policies were introduced in the late 1980s. These policies were strengthened in the mid 1990s after the landmark ICPD conference and by the mid 2000s sex selection was no longer seen as a policy issue. Throughout these two decades, the Korean government addressed sex selection from different angles, introducing a variety of instruments like legal bans on abortion, sex determination and sex selection, awareness-raising campaigns as well as gender equity laws. What follows is a chronological review of government efforts against sex selection.

4.3.1. Criminal Code Banning Abortion

Abortions were made illegal under the Korean Criminal Code in 1953 (Articles 269 and 270, Amended by Act No. 5057 on December 29, 1995). In 1965, the Supreme Court affirmed the illegality of abortion as an inappropriate form of family planning. Nevertheless, as seen before, abortions continued to be widely available and practiced as a means of family planning. The ban on abortion was relaxed within the 1973 Maternal and Child Care Act (Article 14), which granted access to abortion during the first 24 weeks of gestation under certain conditions. These conditions include risks to the health of the mother, genetic disorders, infectious diseases, rape, and incest. This broad spectrum of exceptions allowed doctors to offer abortion on demand despite its illegality (Wolman 2010).

Abortion penalties for women undergoing the procedure can be up to one year of prison or a fine of US\$ 1,800, and for doctors performing the abortion between 2 and 10 years in prison and the removal of their medical licenses for up to 7 years. However, prosecution rates have been negligible. According to Supreme Court legal statistics, the average annual number of abortion cases prosecuted between 1964 and 1973 was 22.3. This number reduced to only 5.9 from 1974-2009 – the period when South Korea witnessed its highest sex imbalances. In most cases, the court stayed the sentences or their execution, e.g. of 22 cases between 2005 and 2009, 21 were stayed and 1 person received a fine (Sung 2012, 289). Governmental efforts against induced abortions were only strengthened in the late 2000s. These extremely low rates of prosecution during the height of Korea's sex selection problem indicate that 'fear of the law' was not an active factor in reducing sex selection.

4.3.2. Medical Service Act Banning Sex Determination

Along with the general ban on abortion, the newly democratic government in 1987 issued a legal ban on sex determination that was enshrined in the Medical Service Act (Article 19.2). This article prohibited doctors from revealing the sex of the fetus and reads as follows:

Article 19-2 (Prohibition of Embryonic Sex Differentiation, etc.)

(1) No medical person shall diagnose and examine a pregnant woman for the purpose of differentiating the sex of the embryo, and help another person to perform an act for the similar purpose.

(2) No medical person shall divulge to the pregnant woman or her family or other person the sex of the embryo, which he has discovered through a diagnosis or examination of the embryo or the pregnant woman.

[This Article Newly Inserted by Act No. 3948, Nov. 28, 1987] (MoHW 1995)

In 1994, this Medical Service Act was further strengthened. Two reforms in relation to sex determination were made. Firstly, medical persons who violated the provisions of Article 19-2 could lose their medical licenses. And secondly, penal provisions were raised to imprisonment of up to three years or a fine of up to 10 million won (US\$ 8,700). The January 7, 1994, Amendment of the Medical Service Act also included the provision that any complaints received shall be investigated and prosecuted, but as we will see only few people would end up filing complaints against doctors for sex determination.

In the process of gathering qualitative data, I interviewed one of the first advocates of the sex determination ban in Korea. I wanted to know who raised awareness about this new policy issue. Since South Korea had no examples of other countries issuing a similar legislation, who pushed for this policy response? The interviewee responded:

“I worked for the Korea Institute for Family Planning later named KIHASA [Korea Institute for Health and Social Affairs]. Every year we conducted a national seminar on population and family planning program. I presented a study on that new issue [sex imbalances]. I told everybody the population problem is not solved. If one problem is solved [high fertility], then the other new problem comes up [sex imbalances]. So we have to continuously watch the trend of population by [using] statistics. Many people said that the sex ratio at birth is very important to improve the population quality. The government accepted my idea and revised the Medical Law. The Medical Law revision belongs to the Ministry of Health [and Welfare]. Still today population policy issues

belong to the Ministry of Health [and Welfare]. So they easily revised the law” (SK01, former KIHASA representative, 75, male, Seoul).

The quote reveals three interesting features. First, policy response against sex selection was data driven. KIHASA issued a study that stressed the severity of sex imbalances and provided policy recommendations on how to address this “new issue.” As the first round of legal prohibition introduced in 1987 proved insufficient, penalties were altered and the law was “easily revised” in 1994. Secondly, policy response to sex selection was personally driven. The respondent and a small circle of scholars were able to raise awareness, gain political allies and initiate legal change. Thirdly, as the quote illustrates, policy response against sex selection was seen as a means to “improve population quality” and to comply with international norms. In the same year that the Medical Service Act was revised, the International Conference on Population and Development (ICPD) took place. This conference marked an overall shift in international policy directions from population control to population quality, which also inspired South Korea’s shift in population policy shortly after.

In the post-ICPD era, population policies were adjusted to fall in line with the new international framework (Cho and Lee 1999). The Ministry of Health and Welfare established the Population Policy Deliberation Committee in December 1994, which was tasked to develop a new population strategy based on population quality and welfare. The Korean Institute for Health and Social Affairs (KIHASA) functioned as the secretariat and was tasked to monitor trends and prepare background analyses (KIHASA and UNFPA 1996). The Korean government officially abolished the anti-natalist policy and adopted the new population policy with emphasis on population quality and welfare in 1996. One key objective in the new population policy was to balance skewed sex ratios in the scope of advancing women’s reproductive health and rights. Thereafter, from 1996 onwards, more emphasis was placed on addressing sex selection and curbing skewed sex ratios at birth.

In 2008 the Constitutional Court declared the ban on sex determination inconsistent with the Constitution. The Constitutional Court noted that the ban violated women’s rights and restricted the freedom of medical professionals (Wolman 2010). The Court also concluded that son preference had decreased and sex ratios had come down to acceptable levels (judgment of Constitutional Court, July 31, 2008). The article on sex determination remained effective until the end of 2009 when it was amended to the following:

Article 20 (Prohibition of Fetal Gender Prediction, etc.)

(1) No medical personnel shall conduct a diagnosis or examination of a pregnant woman for the purpose of predicting the gender of a baby, or help any other person to commit such act for the same purpose.

(2) No medical personnel shall inform any pregnant woman, her family member or any other person of the gender of a fetus he/she becomes aware of in the course of performing a diagnosis or examination of the fetus or pregnant woman before 32 weeks of pregnancy. <Amended by Act No. 9906, Dec. 31, 2009> (MoHW 2016)

Under this 2009 revision, active sex determination continued to be illegal, but informing the parents about the fetal sex after 32 weeks of gestation became legal when it was unintentionally revealed during a medical procedure. The amended article remains effective to date. Medical professionals, who determine the fetal sex before 32 weeks of gestation, face imprisonment for up to two years, or a fine up to US\$ 8,700. Interestingly, in December 2016 another Medical Service Act Amendment (No. 14438) raised the fine to up to US\$ 17,400.

4.3.3. Bioethics and Safety Act Banning Preconception Sex Selection

As the Constitutional Court challenged the ban on sex determination, yet another ban was issued. The Ministry of Health and Welfare introduced the Bioethics and Safety Act in 2008. Article 23 prohibits preconception or pre-implementation sex selection as well as sperm sorting for sex-selective purposes. Penalties for violations of this provision include imprisonment with forced labor for up to two years or a fine not exceeding US\$ 26,000 according to a 2015 amendment (MoHW 2017b). Interestingly, the prohibition on preconception sex selection was introduced when SRB had already renormalized.

The three legal bans presented above were designed to criminalize and reduce access to abortion, sex determination and sex selection. They all aimed at addressing the methods of sex selection, by limiting access to medical services or medical information. Besides this supply-based approach, the Korean government also aimed at changing the demand for sex selection, by raising awareness about the ‘value’ of daughters and the ‘vices’ of abortions.

4.3.4. Love for Daughters, Babies and other Pro-life Campaigns

Awareness-raising on the equality of sons and daughters goes back several decades. In the 1970s the Planned Population Federation of Korea (PPFK) introduced isolated campaigns to remind couples to practice family planning without discriminating against daughters. The first information and education campaigns (IECs) on sex selection were launched in 1996 as part of the aforementioned paradigm shift to population quality and welfare. By the 2000s concern about sex selection had diminished, but increasingly efforts were made to tackle low fertility, population ageing and imbalances in the marriage market (partly consequences of an earlier sex-selecting generation). The post-2005 pro-natalist population policies were accompanied by pro-life messages and more sincere efforts to tackle illegal abortions. Thanks to 50 years of documentation of PPFK campaigns we can easily trace these efforts back in time.

In the 1970s and 1980s the Korean government was mostly concerned with lowering fertility. However, the first campaigns stressed the value of daughters like the 1974 slogan “Daughter or son, stop at two and bring them up well” or the 1983 slogan “A daughter raised well surpasses ten sons” which was made in response to a traditional Korea proverb that said, “One son is worth 10 daughters” (SK05). While these slogans remain in the collective memory of Koreans today (e.g. several interviewees mentioned these slogans), a policy expert acknowledged, “at that time the IEC [Information, Education, Communication] was very weak. Nobody cared [about] illegal behavior” (SK01). Within the scope of the One-Child Campaign launched in 1984, PPFK produced the 1986 film “Beloved, beloved daughter of mine” encouraging single child families with daughters (PPFK 1987). Despite these few initiatives, it was not until the mid 1990s that IEC efforts were intensified “just after the unbalanced sex ratio was revealed at worst [sic]” (PPFK 2013, 5).

In 1993, PPFK launched a sex counseling helpline for youth. One in five women using the hotline reported having had an induced abortion (PPFK 1991, 20). As a consequence, PPFK rolled out a campaign to prevent induced abortions and the Vice President of PPFK warned about growing sex imbalances due to gender preferences on TV. A monitoring system was set up to assess peoples’ response to campaigning and craft new messages linked to maternal and child health, son preference, and the one-child policy. In 1994, one year after the campaign against induced abortion, a noticeable drop occurred among women using the helpline. While PPFK received 4784 calls by females of which 961 reported induced abortions in 1993, only 812 women used the helpline in 1994, of which only 16 reported induced abortions. However,

despite the falling reporting rates, sex ratio at birth and sex-selective abortions were at their peak at that time (PPFK 1991, 1995).

Another noticeable change occurred in 1994 regarding the language and images used in the PPFK annual reports. While the 1993 cover showed a father and his son wrestling, the 1994 cover portrayed the intimacy of a breastfeeding mother with her infant. For the first time the organization made clear reference to a “new problem emerging” with the “sudden increase of [the] number of children born to middle-aged couples and imbalance in the sex ratio of newborn babies due to the preference for boys” (PPFK 1995, 10). The monitoring team that was established one year prior reported the pervasiveness of “Old-fashioned Boy Preference in Radio and TV programs” (PPFK 1995, 22). As a response, 450 booklets titled “Imbalanced Sex Ratio” were printed and circulated, a negligible number compared to 360,000 copies of the monthly booklet “Happy Home” promoting small size families. Probably not unrelated to the shift in messages was the fact that PPFK members welcomed several UNFPA officials in 1994 as part of international consultations and ICPD preparations.

In 1995, PPFK organized a seminar to develop a “Strategy for the Prevention of Induced Abortion and Son Preference.” It dealt with the unbalanced sex ratio at birth and ‘respect for life,’ and brought together governmental and non-governmental actors, scholars, medical personnel, as well as religious representatives. In the same year, PPFK launched its first “all out advocacy campaign across the country to eradicate the deep-rooted son preference attitude of people and to correct unbalanced sex ratio with a view to preclude future population problem of unbalanced sex ratio” (PPFK 1996, 10). Messages were spread via press releases and ads on TV, radio, and print media (in subways, monthly PPFK magazines, reports, books, and brochures). The campaign focused on the magnitudes of sex selection and its long-term consequences in terms of marriage squeeze. PPFK (1996) slogans included:

- “Do you want to import your daughter-in-law?”
- “There are more bridegrooms than available brides to be.”
- “Too short of brides, but too many bridegrooms, it is not a problem of the future [but of the present]!”

The German pharmaceutical company Schering (producer of oral contraceptives) co-financed this first campaign to correct sex imbalances (and promote sexual education) with US\$ 35,000 (PPFK 1996, 25). Several interviews and public debates on sex imbalances, missing brides, female infant abandonment, son preference and women’s rights occurred in this year. PPFK

published their monitoring results to encourage mass media outlets to refrain from messages that promote son preference and discrimination against women (PPFK 1996, 22). Also, the first concerns about low fertility and ageing population appeared as UNFPA director Dr. Nafis Sadik traveled to Korea to promote family planning policies in the low-fertility era.

In June of 1996, the Korean government announced its official shift in population policy focus to population quality. As a consequence, efforts against sex selection became more systematic. The Korean Culture and Sexuality Research Center was established to solve the sex ratio problem and reduce abortions in line with the new population paradigm. The Center was tasked to (a) assess the actual state of induced abortions by collecting demographic and medical data and to (b) inform policy options (see Figure 17).

Figure 17: Opening of the Korean Culture and Sexuality Research Center, 1996

The Culture and Sexuality Research Center was opened on 1 July 1996 to solve the unbalanced sex ratio, to prevent induced abortion and to invigorate sexuality education for youth in accordance with the New Population Policy announced on 4 June 1996 by the Korean government.



Source: PPFK (2013, 20)

One of the first research activities of the center was to conduct interviews with 1,100 women in 1996. These interviews showed that the majority of surveyed women (63,5%) had undergone one or more abortions. Besides research efforts, the Ministry of Health and Welfare released recommendations on how “to hold human life dear as well as solving unbalanced sex ratio and preventing induced abortion to enhance maternal and child health” (PPFK 1997, 28). In line with the new government agenda, PPFK organized street campaigns and distributed IEC material. For example, 25,000 bumper stickers warned about the future consequences of sex imbalances and stressed the value of human life. Besides, PPFK, UNFPA, and the Ministry of Health and Welfare gave a press conference to raise awareness about new population challenges such as GBSS (see Figure 18).

Figure 18: Press Conference on Population Challenges, South Korea, 1996



Source: PPFK (1997, 5).

PPFK also sensitized mass media personnel, conducted studies and workshops on issues related to women's development, and produced a 20 min long drama on the prevention of sex imbalances titled "Miss Mo Ik Hui's Landing Operation" (PPFK 1997, 33). Furthermore, PPFK launched together with the Ministry of Health and Welfare a project titled 'Love Babies' with the "objective to celebrate the birth of new life and hold human life dear and support [...] the prevention and treatment of feeble-minded and immature babies to create a healthy society full of love" (PPFK 1997, 13). This anti-abortion and pro-life project lasted for over a decade and provided various kinds of assistance for the prevention and treatment of babies with disabilities.

The theme to 'love' one's child would soon be picked up again. In 1997, UNICEF supported PPFK in producing a 20 second trailer called "Please Love Babies" as a PR strategy to sell UNICEF cards. Later in the same year the "Festival to Promote Love of Daughters to Restore Natural Sex Ratio" took place during the celebration of the 45th anniversary of PPFK. The festival included discussions, drawing competitions, awards ceremonies, and the display of prize-winning works for the best posters. 150 people attended the festival including the prize winners, their families, PPFK volunteers and staff as well as journalists (see Figure 19). The aim of the festival was to raise awareness and restore the natural sex ratio due to the "son preference norm in Korean society and sex-selection induced abortion after sexual detection" (PPFK 1998, 18). The Ministry of Health and Welfare, International Planned Parenthood Federation, and the pharmaceutical company Korea Organon Co. sponsored this festival, which would later become known as the "Love Your Daughter" Campaign.

Figure 19: PPFK Festival to Promote Love for Daughters, South Korea, 1997



A Festival to Promote Love of Daughters held to restore natural sex ratio in celebration of the 45th anniversary of PPFK foundation. It was conducted with prize awarding of selected works, discussions and display of prize-winning works.

Source: PPFK (1998, 5).

Further campaigns that took place in 1997 included the following:

A Citizens' Grand Forum was held to restore the national sex ratio. Invited discussants developed the following recommendations on how to address sex imbalances: 1) abolish discrimination in the family system; 2) enhance education, technical training and job opportunities of women; 3) strengthen punishment for both doctors and clients engaged in sex determination, sex selection and induced abortion; 4) promote equal status among family members and equal household responsibilities through IEC.

Training materials designed to deal with sex imbalances included two videos "Where is my bride?" (50 min) and "Half of a Pair, XX and XY" (25 min) which were produced on request of the Korean Culture and Sexuality Research Center.

A pro-life poster campaign was on display for 3 months in Seoul's Metro stations. The poster showed a female fetus calling his father out of the womb and read, "I want to celebrate my own birthday. I want to be born with the blessing of mama and papa. I am frightened of abortion for being a girl. Please protect my life" (PPFK 1998, 15). The poster is shown in Figure 20.

Figure 20: Pro-Life Poster Campaign in Seoul’s Metro Stations, 1997



Source: PPFK (1998, 16).

Similar campaigns against sex selection and induced abortions continued throughout 1998. Another award ceremony was held in November of 1998 with 150 people attending. Public slogans were awarded for the restoration of the natural SRB, such as “Life is [...] born not by selection but by love” (PPFK 1999, 19). Posters also pointed to the shortage of girls in classrooms, “Teacher, can you give me a female pair, if I do well?” which remained in the memory of several of my interview partners (e.g. SK04, SK29). Furthermore, heated discussions on the value of sons versus daughters were also broadcast on cable TV. PPFK representatives gave interviews to restore the SRB and counter sex-selective abortions, e.g. by discussing whether “women born in the year of the Tiger [are] really ill-fated?” (PPFK 1999, 16). The Korean Culture and Sexuality Research Center conducted a survey to assess the impact of a video film called “Where is my bride?” It found that the film was a good tool for campaigning, but the government should incorporate the notion of gender equality more strongly into future campaigns. As a result, three further films were produced that year linked to sex imbalances (PPFK 1999, 46).

IEC efforts were continued in 1999, but to a lesser extent. Son preference was less openly addressed than before. Instead an anti-abortion poster campaign funded by Organon Ltd Pharmaceutical with US\$ 8,700 was placed in Seoul’s Metro Stations reading, “I don’t want to be written off! Induced abortion is really an action to write off a life” showing both a girl and a boy that are crossed out (PPFK 2000, 18). The poster is shown in Figure 21.

Figure 21: Anti-Abortion Campaign, South Korea, 1999



Source: PPFK (2000, 18).

From the late 1990s onwards campaigns started to diversify. The Korean Culture and Sexuality Research Center – established a few years prior to solve the unbalanced SRB issue – increasingly turned to matters linked to sex education. The annual PPFK monitoring dealt with variety of topics related to family health, gender equality and women’s development. Female contraceptives and a women’s lubricant called “love partner” were promoted to assist married couples “in leading a healthy and smooth sexual life” (PPFK 2000, 30).

To sum up, between 1995 and 1998, the Ministry of Health and Welfare and PPFK conducted various awareness-raising campaigns to eradicate son preference and correct unbalanced sex ratios. These campaigns were informed by research conducted by a center especially established to address sex imbalances, and by regular monitoring and evaluation. The awareness-raising campaigns addressed the 3 M’s of sex selection. They targeted the motives by addressing gender stereotypes and constraints for women’s development. They targeted the methods through pro-life and anti-abortion campaigns with clear messages to value life and refrain from abortion. They targeted the magnitudes by warning about the future shortages of brides in the marriage market and the mismatching in classrooms due to scarce girls and surplus boys. Interestingly, some of these campaigns have remained in the memory of South Koreans today, as they are frequently referred to during conversations. Perhaps most importantly, these campaigns were largely introduced after the SRB had started to fall.

South Korea received a lot of international attention for their “Love Your Daughter” campaign. According to the PPFK records this event was a single festival in 1997 with just 150 participants. Within South Korea, much more attention was given to the multi-year campaign

“Love Babies” to prevent and treat mental retardation, respect human life, offer counseling to parents of disabled children. Another aspect of the South Korean ‘success story’ that is often internationally ignored is that the anti-sex selection campaigning was strongly based on a pro-life agenda. By the early 2000s, sex selection and son preference were no longer policy issues, but the focus on preventing abortions was still strong.

Over the years, new issues emerged. What remained consistent were the pro-life messages such as “induced abortion is to remove a life of a baby” (PPFK 2004, 54). Since 2003, PPFK increasingly used online portals for their campaigns. Websites came under the names of “liferespect.org,” “baby love site,” “loving life” or “lovebean.org.” They provided information on pregnancy, childbirth, and the prevention of induced abortion, and were in line with the overall campaigns of the Ministry for Health and Welfare at the time. The messages were crafted with the support of the Catholic University (PPFK 2010), which may partly explain the pro-life content. Along with awareness-raising, important changes in the legal code were being introduced to uproot son preference in the patrilineal family system. These changes finally led to the abolishment of the Family Head System.

4.3.5. Abolishment of the Family Head System

The South Korean family law has long favored a patrilineal kinship system and male interests. Women were not considered equal members with equal rights in their birth clan. Upon marriage women were removed from the family register of their natal family, but they were not recognized as full members of their husband’s register either. Husbands could decide where to reside and had strict control over assets and custody of the children, also upon divorce. The so-called hoju (family head) system introduced in 1953 was rigorously defended over decades as the formal family registration system under the Civil Law. The family head was passed down the male line from the father to his first son. Daughters could only become the family head when there were no surviving males (Koh 2008). The system was only abolished in 2008 after the Constitutional Court found it incompatible with the constitution in 2005. The abolishment of the hoju system was a great success for gender equity in Korea, which was accomplished only after decades of extensive lobbying by Korean feminist groups and international, national and local activists. Although women were first granted rights to inheritance in 1977, their share was just 25% of their brothers (Den Boer and Hudson 2017). In 1984, South Korea – still under a military regime – ratified the UN’s Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). Since then, international pressure has been

building for the country to reform its family law from a patrilineal and clan-based system, where interests, name and wealth were carried exclusively in the male line, to a gender equitable family law (Kim 1994). These included: joint decision-making over residence, the registration of the woman's name in her husband's family register (and vice versa if desired), the abolition of automatic paternal rights to child custody, and the equal share of inheritance for daughters and sons (Den Boer and Hudson 2017). Nevertheless, the fundamental aspect of a male family head controlling family affairs was maintained. It was not until 2003, when women got the legal right to be family heads. In 2005, the Constitutional Court ruled that the hoju system was unconstitutional and individual birth records replaced the earlier male family register. According to the new family registration system every family member was given an individual record book. Children could subsequently adopt the surname of their mothers. Property rights were revised and couples had equal access to the marital home. In short, legal and institutional biases that had infringed women's rights over half a century were finally uprooted and women were granted equal rights on par with men. This last pillar of Confucian heritage – or for other a “mountain” of male supremacy – was finally removed at the beginning of the 21st century after a long period of feminist activism in Korea (Yang 2008).

4.3.6. Wider Set of Reforms Linked to Fertility, Pensions and Social Security

We also need to acknowledge a wider set of reforms that took place in the 1990s and 2000s, which are not directly related to sex selection, but indirectly affected reproductive choices. These factors relate to fertility policies, pension schemes and old-age support.

In 1996, when the government introduced its official shift in population policies, objective three of the new policy was “to strengthen social and institutional support policies for a balanced sex ratio through improvement of women's social status and gender equality” (Lee 2013, 7). As a result, the government also introduced a wider circle of initiatives to uproot gender discrimination.

In 1997, South Korea became a member of OECD. Its status changed from a beneficiary of international financial aid to a provider of international financial assistance (PPFK 1997, 11). In the same year, South Korea was hit by an economic crisis, resulting in a slight rebound in skewed sex ratios at births. As previously noted, times of economic hardship often lead to parents feeling more pressure to produce a son to provide for them in old age. However, at the same time, important social reforms were made in South Korea in the late 1990s with regards

to health, elderly care, pension reforms, public assistance and social welfare. For example, in 1999 the national health insurance system was unified under one single administrative body and compulsory participation to the national pension system was introduced for people between 18 and 60 years (see Peng 2009, 2004). Even though these provisions were weak by European standards, they did provide a safety and security net. Citizens no longer felt the need to rely exclusively on their sons for old-age support.

In the mid 2000s, when the total fertility rate reached a historic low (one child per woman), the government introduced a shift towards a pro-natalist population policy with the 2005 Basic Act for Low Fertility and Ageing Society. This new population policy had two main objectives: (a) encourage childbirth and (b) minimize the negative effects of a rapidly ageing society. Over the next decade, significant attention was put into boosting fertility and providing welfare for the aged, for example with the creation of the Korea Elderly Protection Agency in 2006.

As the government launched its first Five-Year Plan (2006-2010) to address low fertility and ageing society, it rolled out a 1-2-3 Campaign, which encouraged pregnancy within 1 year of marriage and having 2 children before the age of 30. Part of the program was the provision of medical resources to cover artificial insemination for couples with fertility problems, medical recovery from male and female sterilization, and financial incentives for families with 2 or more children. Despite these efforts, the government faced difficulties in increasing fertility. In the first 9 years after the launch of the new population policies US\$ 118 million was invested (60% on low fertility, 40% on ageing society) according to one policy maker, who stated that this was “too much money, while fertility remained quite the same” (SK01).

In 2015, the 3rd Low Fertility and Ageing Society Plan was launched and the government subsidized IVF treatments for infertile couples with up to US\$ 11,000 per baby (SK30). Despite these major financial investments, fertility has remained at ultra-low levels below 1.5 children per woman, indicating that fertility policies had little effect on people’s reproductive choices. These reforms were not done to address sex selection per se, but rather aimed at addressing low fertility and countering population ageing. However, they can be seen as a means of freeing couples from pressure to comply with fertility control policies and improve the situation of old-age protection, which would then lower the need for sons as old-age protection shields.

In summary, South Korea has addressed sex selection from different angles. In order to address motives, the Korean government mixed early messages against gender discrimination into their fertility control campaigns. It also provided pensions schemes for old-age support in the 1990s and revised the legal code to promote gender equity in the legal transmission of the family name

and assets in 2005. In order to address the methods of sex selection, Korea banned sex determination in 1987 and strengthened this prohibition in 1994. The government also introduced a legal ban on preconception and preimplementation sex selection in 2005. A separate ban on abortion had existed prior to the emergence of sex imbalances since the 1950s. While these demand-side and supply-side policies dominated the policy landscape until the early 2000s, since then, the government has largely lost interest in anti-sex selection policy. Instead the Korean government has shifted its attention to pro-natalist population policies and the long-term consequences of several generations of missing women. As such, the South Koreans are now increasingly concerned with the magnitudes of sex selection.

4.4. Impact of Public Policies on Sex Ratio at Birth

One of the key questions that researchers have been curious about for a long time is: did public policies normalize sex imbalances in South Korea? Several researchers have suggested so (Kim 2004; Den Boer and Hudson 2017), while others have contested policy efficacy (Guo et al. 2016; Cho 2017). Unfortunately, no studies are available that formally assess the impact of policy interventions on sex ratios at birth in South Korea.⁶⁷ We start out by assessing the impact of anti-sex selection policies and the reasons for SRB decline in South Korea. After this national level impact assessment, we will zoom in to analyze the role of policy in our regional case study.

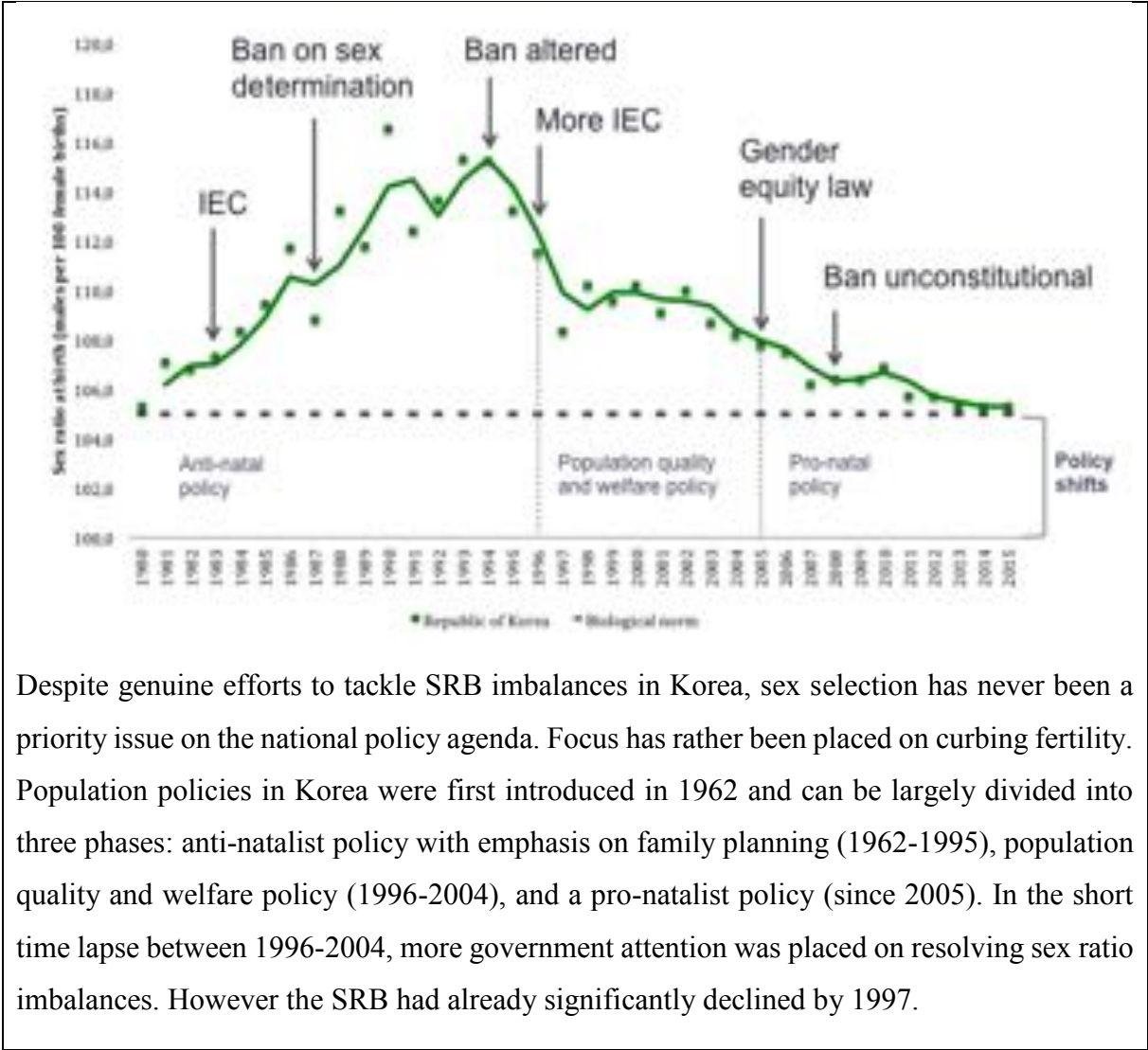
4.4.1. Did Anti-Sex Selection Policies Cause the Decline in SRB?

The landmark policies to counter sex selection in South Korea included the first IEC campaigns in the early 1980s, the ban on sex determination in 1987, the strengthening of the Medical Service Act in 1994, enhanced campaigning against sex determination and induced abortions from 1996 onwards, the changing of the Family Head System in 2005 and the abolition of the ban on sex determination in 2008. Meanwhile, Korea's SRB rose steadily until the early 1990s,

⁶⁷ Only Ebenstein (2014) tested in a working paper the influence of pension schemes on SRB. He used Korea's rapid expansion in providing national pension schemes during the 1990s for a Difference in Difference Analysis between self-employed versus salaried workers (who had been benefitting the pension program prior to the expansion). The author concludes that, "*the large scale social insurance program in South Korea led to a normalization of the sex ratio at birth. As predicted, the groups targeted in the pension expansion experienced a large decline in the sex ratio at birth*" (Ebenstein 2014, 7).

dropped rapidly between 1994 and 1997, and after a slight rebound declined gradually to normal levels by 2013. Box 8 maps Korea’s SRB trend line to general shifts in population policy and to specific policy changes linked to sex selection.

Box 8: SRB-Policy Mapping, South Korea, 1980-2015



Despite genuine efforts to tackle SRB imbalances in Korea, sex selection has never been a priority issue on the national policy agenda. Focus has rather been placed on curbing fertility. Population policies in Korea were first introduced in 1962 and can be largely divided into three phases: anti-natalist policy with emphasis on family planning (1962-1995), population quality and welfare policy (1996-2004), and a pro-natalist policy (since 2005). In the short time lapse between 1996-2004, more government attention was placed on resolving sex ratio imbalances. However the SRB had already significantly declined by 1997.

Interestingly, the uniform decline in SRB after 1994 occurred simultaneously, across regions, parity and socio-economic levels suggesting that this new trend occurred rather homogeneously nationwide, unlike the patchwork of regional differences that is more common in heterogeneous countries like India. We checked for other shifts in fertility behavior like declining birth rates in that particular period that could possibly explain the sudden drop in SRB, but we did not detect any abnormalities.

Additionally, given the fact that the Medical Service Act was strengthened⁶⁸ when SRB peaked in 1994, it could be assumed that this policy change sent out a strong signal to the medical community and resulted in a behavior change among doctors practicing sex selection. This strong temporal connection between the 1994 policy change and the SRB decline is suggestive. Given the homogeneity of the country and the well-established media channels, it is also plausible that messages on new legislative changes spread quickly through the country informing reproductive choices and medical practices. In the absence of counterfactuals, such a hypothesis is difficult to prove. The question is did the Medical Service Act introduced in 1987 and strengthened in 1994 lead to the decline in SRB? In order to answer this question, we turn first to the qualitative data collected during field research before examining conviction rates.

The qualitative interviews revealed that there are many different opinions on the influence of the Medical Service Act on sex selection. The expert opinions can be divided into two groups, those that think the sex determination ban made a difference, and those who don't. Three out of 34 experts suggested that sex determination ban might have made a difference.

One doctor stated that, policy “helped” but was not the key factor (“I’m sure the government intervention helped, but to me, ... it was not the number one factor” SK22).

One scholar stated that, media reports could have scared doctors and discouraged them from sex selecting: “Two cases drew the medial attention at the time, but not so many cases [were reported]. But those kinds of reports from the media could be very effective, discouraging medical doctors from going through that process” (SK02).

One policy maker referred to the psychological impact of the sex determination ban on medical practices (“Maybe 2 or 3 doctors lost their medical licenses. Such influence spread throughout the nation. Such a psychological influence is very effective”). The same policy maker acknowledged that, “the Medical Law is very symbolic” and had only a small impact on SRB by stressing, “Our SRB declined since the enactment of the Medical Law. But that is only the small portion of the decline” (SK01).

⁶⁸ Penalties for doctors engaging in sex determination were increased to up to 3 years of prison and fines of up to US\$ 12,000.

The majority of informants suggested that the policy did not play a role in the SRB downturn including 5 policy makers, 3 doctors, 3 scholars, 3 PPFK representatives involved in the policy role out, and 1 individual. The most frequent arguments in order of priority were:

1) Convictions were rare. Very few doctors were punished for sex determination.

“Only a few doctors got their licenses taken away. This law was not spread in our society. Both doctors and women operated on the black market” (SK12, KIHASA representative, male, Seoul).

“We can say that this kind of regulation and legislation was not that effective [...] not many cases were reported” (SK05, demographer, 42, female, Cheongju).

“How many doctors were actually convicted? It’s extremely low from five to ten. As far as I know it’s unofficial” (SK11, KIHASA representative, male, Seoul).

2) Policy makers were unable to enforce the sex determination ban. It was a formality.

“That practice cannot be controlled by law” (SK06, former representative of the Ministry of Health, 78, male, Seoul).

“There was only a law as a mere formality in Korea” (SK12, KIHASA representative, male, Seoul).

3) Cases of sex determination and selection were not reported. Only some incidents became public because of self-reporting due to family disputes.

“The government doesn’t know because we [doctors] have no duty to report. [The government found out] when there was trouble within the couples, within the families, and they don’t want it. For example, [in one case] the father doesn’t want the abortion, but the woman does. Then the father reported his wife to the police. Because of trouble between the couple or the family, they [would] go to court. That is how sex discrimination or abortion was disclosed, but the number of cases was very small. We have no data on the sex-selective abortion, no data. No statistics or government data. Only the crime report is there, because it is not the duty of the doctor or the office or the hospital to report” (SK09, Gynecologist, 58, female, Seoul).

I: “Did doctors have to file certain reports? Did the administrative burden increase due to the changes in Medical Law?” P: “It was not the case in Korea” (SK19, nurse, 58, female, Daegu).

Due to low conviction rates, enforcement difficulties and the lack of reporting, the Medical Service Act was largely an ineffective deterrent to sex selection. Furthermore, policy makers revealed that until 1996 sex selection was often seen as a welcome phenomenon since the policy focus was placed on lowering fertility. The government did not step up efforts to make the bans on sex determination and abortion effective largely because they conflicted with the dominant policy context.

“The reason why the government allowed artificial abortion is linked with population policy. It was a way to reduce the fertility. The population policy of the government was to reduce the fertility. So allowing abortion and sex selection was an easy way to reduce fertility” (SK11, KIHASA representative, male, Seoul).

Another policy maker from the same institute suggested that, “if you implement this [anti-sex-determination] policy the parents will give birth until the son is born, so in that case the fertility rate will increase” (SK12). This quote implies that the government resisted pushing for law enforcement because an increase in fertility was to be avoided at all costs. Thus, the sex determination ban is unlikely to have impacted South Korea’s SRB transition.

Besides the ban on sex determination, the Korean government had introduced first isolated awareness-raising campaigns in the early 1980s encouraging couples to practice family planning without discriminating against daughters. These were launched at a time when sex determination and sex-selective abortions gained popularity in South Korea. After 1996 awareness-raising was stepped up, for example with the “Festival to Promote Love for Daughters” in November 1997. According to one teacher, the impact of such campaigns was weak: “People have their own ideas and thoughts about their lifestyle, so I don’t think they are influenced by government slogans” (SK18). Nevertheless, if awareness campaigns were to show fruits, the earliest we could expect a lower SRB would be 9 months later. We would then expect to see the drop in the mid-1998. By that time, however, SRB had already declined significantly. Therefore, awareness-raising campaigns did not cause Korea’s SRB to decline.

The government stepped up its efforts to prevent induced abortion in the later half of the 2000s. Again, this happened long after the SRB decline, when levels had already reached below 108. I asked one doctor if there were recent instances where women in need of an abortion were unable to access abortions because doctors were afraid of the legal consequences. The response was:

“Yes. It is the case in Korea now. Doctors do not perform abortion because the law prohibits it. As the data shows, there are some crimes reported like that. They [doctors]

fear they [will] go to court; they do not want to go to court, they are afraid. That means, some doctors do not perform the abortion procedure. But I don't know the statistics exactly" (SK09, Gynecologist, 58, female, Seoul).

The interviewee stressed that doctors were increasingly scared to practice abortions, but that this was a more recent trend, and did not apply to the 1990s. Two other interviewees – both representatives of PPFK – referred to the enhanced enforcement of the abortion ban from 2009 onwards (SK15, SK16).

In order to further assess whether public policies made a difference in changing medical practices, we now examine conviction rates. Figures on conviction rates are scarce and the numbers and times vary significantly according to different sources. Some claim that first convictions were made in the early 1990s, while many other references point out that first convictions occurred only after 1996 (see Table 14).

Table 14: Convictions for Fetal Sex Determination, South Korea, 1990-2008

Time frame	Number of convictions	Source
January 1990	8 doctors had licenses suspended	(Park and Cho 1995)
March 1996	First administrative punishment for violation of the Medical Service Act (1 month license suspension)	"First Sex Determination Arrest in South Korea" (Agence France Presse, Oct 1, 1996, as cited in Kim 1999, 314).
October 1996	First doctor arrested and charged for sex determination	
1999	10 doctors are awaiting trial	(Cho and Lee 1999, 89)
1997-2005	18 doctors lost medical licenses for sex determination	(Yang 2009, 17). Based on data obtained from the Korean Medical Association.
2004-2008	2 doctors convicted for sex determination	Ministry of Health, Welfare and Family Affairs (The Korea Times 2008)

According to a widely cited paper by Park and Cho (1995), the Korean government canceled the licenses of 8 doctors who had performed sex determination on 31 January of 1990. In a later paper commissioned by UNFPA, Cho and Lee (1999) stated that a total of 10 doctors were

awaiting trial for illegal sex determination in 1999. In a personal interview conducted in 2015, one of the authors stated that, “no physicians have been punished. One doctor was punished to stop that clinic for two to three months, but he did not go to jail” (SK01).

According to news sources the “First Sex Determination Arrest in South Korea” was not made until 1996 (Kim 1999, 314). A different source confirms that medical licenses were not suspended until the late 1990s, after SRB had already declined significantly. Yang (2009) accessed criminal records and records provided by the Korean Medical Association. In total, 18 doctors had had their licenses suspended or canceled by January of 2005 (seven in 1997, six in 1999, three in 2000, two in 2002). Further sources reported on two doctors convicted for illegal sex determination between 2004 and 2008 (The Korea Times 2008). While there is dissonance across sources, the overall conviction rates are negligible.

According to Yang (2009, 17) “this phenomenon is a result of lacking political will to sanction sex-selective abortions” [own translation]. For Yang, the Medical Service Act was not the appropriate means to tackle sex discrimination in Korea. The Act did not seek to govern the actual behavior of people. Instead, it just prohibited doctors from revealing the sex. The author refers to equally low conviction rates made for illegal abortions in general. In 1999, KIHASA estimated 160,000 cases of induced abortions, but only 42 cases were reported to the Supreme Prosecutor’s Office in 1999, and until 2004 just 8 illegal abortion cases were brought to trial (Yang 2009, 17). Compared to the size of the problem, convictions on the grounds of sex determination and abortion were marginal. One could argue that despite these low conviction rates, just the presence of a ban could have changed the behavior of doctors and patients in the 1990s, a notion which was not supported by the medical professionals interviewed.

To sum up, a superficial analysis of the introduction of public policy and SRB trends would suggest that the Medical Service Act had an effect on sex-selective practices, especially given the fact that SRB dropped just as the ban on sex determination was strengthened. Upon closer analysis, however, there is little evidence that the Medical Service Act led to the downturn in SRB. Given the low conviction rates, the fact that the government was not really concerned about sex selection until 1996, and that abortion had been widely practiced despite its illegality, suggests that the reasons for the SRB decline are largely unrelated to the sex determination ban in South Korea.

4.4.2. Reasons for Improved SRB in South Korea

The qualitative field data reveals that the reasons reported by experts for the reduced demand in sex selection were: (1) a shift in family norms, (2) socio-economic development, and (3) improved status of women in the society. A few interviewees also reported on (4) the impact of policy interventions, yet, as we have outlined above, their impact is not clear. We will now present these reasons in detail, before exploring (5) their interconnectedness and (6) the preconditions for SRB improvement.

4.4.2.1. Shift in Family Norms

The most commonly attributed reason for SRB renormalization by experts was a shift in family norms. As laid out in the introduction of this chapter, Korea underwent a massive socio-economic transformation, which greatly impacted family life and norms. Many interviewees pointed out that the influence of the older generation on family affairs declined significantly during this transition. For example, one doctor said, “women are not influenced anymore by the older generation. There is less pressure of the parents-in-law” (SK04, Gynecologist, 45, male, Seoul). At the same time, there is the emergence of single households. People can now choose to live separately from their parents as the following quotes show. A journalist reported, “Despite Confucian ideas young people care less and less for the elderly. Single households are on the rise in Korea” (SK28, Journalist, 39, male, Busan). Meanwhile, a hospital director stated, “These days, when people get married, they are independent, having a separate house...” (SK22, hospital director, 79, male, Daegu). Several interviewees pointed to the reduction in family solidarity. For example, the same hospital director stressed, “Before families used to help each other more. Nowadays, people sometimes even neglect their parents...” (SK22).

There is also evidence that the elderly – feeling neglected or confronted with a novel degree of independence – are increasingly relying on daughters for affection. As another hospital director expressed it, “From the point of view of parents, they have realized after the independence of their own children that it would be easier, possible and feasible to depend on their daughters rather than their sons” (SK31, hospital director, 52, male, Daegu). Interviewees emphasized that the value of daughters has increased noticeably. Some even felt that “daughters are better than sons” (SK06, SK18), for example in caring and showing affection to their parents. As another interviewee stated, “What people want from their children is not a bowl of rice but tender loving care” (SK05).

An important aspect in this regard is that the younger generation practices less ancestor worship and a ceremony called Jesa. A Busan-based Sociology professor explains:

“Jesa is a special ancestral ceremony performed on the day on which the ancestor passed away. For example, we have 4 Jesas: one for my husband’s grandfather, held on the day on which my husband’s grandfather passed away; one on the day on which my husband’s grandmother passed away; and one the day on which my husband’s great-grandfather and great-grandmother passed away. We have Jesas, in addition to New Year and Thanksgiving. But nowadays, my mother-in-law is trying to consolidate them into just 2 Jesas, instead of 4 per year. She persuaded my father-in-law and his brother. Finally, we just consolidated the Jesas for my husband’s great-grandparents, so now we have 3 Jesas. I mean, all these things have to be performed by the 1st son. These traditions have become very weak. Many of friends do not have this ceremony [any longer]. That can be one of the reasons for the decrease in the sex ratio at birth because nowadays... the son’s obligations have become weak, like the ancestral ceremony is becoming less and less. So there’s no need for the desire to have sons” (SK26, Sociologist, 42, female, Busan).

The quote illustrates that the custom of ancestor worship is on the decline. Since sons are not expected to worship ancestors any longer, the pressure from family members to conceive a son has reduced. As seen in the quote above this change is mainly due to a matter of convenience for people. The idea is to “consolidate” days of celebration, because each event is linked to significant preparation and housework, which is mainly carried out by women. The quote also illustrates women’s increased negotiation power within the household to change existing customs. Here the mother-in-law convinced male family members to change the custom and consolidate the ceremonies to fewer days. Another respondent noted a similar tendency where, for example, death rites have changed in Korea out of convenience for family members.

“Before the mid-1990s, any person who dies must come back to their home. They must die in their own home. If they do not die in their own home, their spirit would go astray; they do not find the road to heaven. In 1993 or 1995, one of my uncles died in the hospital [...]. When I arrived at the hospital, my family members said that I should carry the uncle to the ambulance to bring him back home, even though he had already died. But the medical doctor did not pronounce him dead. Of course, the doctor also accompanied us in the ambulance, and when we got home with the body, then the doctor pronounced him dead. That was the very traditional law in Korea, to carry old, dying people to ensure that they die in their own home. If not, the spirit would go astray forever.

But since 1995, I've never seen a person who carries the patient to their home. During those times before 1995, many funeral services were provided in their own homes, and then they would go to the grave. But from around 1995 [onwards], we have many new funeral services, which are held at the general hospital, in another building. If a person dies in the general hospital and the funeral service is held in the next building, it is very convenient. So, since that time, many people [have] used that method" (SK15, PPFK representative, 57, male, Seoul).

The custom was to ensure that people died in their own homes. Medical and funeral services were built around this custom. Since the mid-1990s this custom has changed. According to the interviewee, this change was out of convenience for family members who can arrange for funeral services in the same hospital where the person deceased. The change in death rites is yet another example of weakening family customs linked to ancestor worship in Korea. Several interviewees stressed that the younger generation would rather enjoy their present life than worship past lives: "Many of the youngsters, in particular, these days understand that the real pleasure of life is more important than past traditions" (SK15); "People want to enjoy their life. There are lots of people who think their life is more important than family" (SK18); "These days, people like to enjoy their lives, rather than sacrificing their lives" (SK22).

In sum, traditional family values that used to give rise to son preference have decreased in Korea. The shift in family norms is visible in the emergence of single households; reduced influence of the older generation on family decisions; greater value of daughters providing affection; changes in death rites and ancestor worship.

These findings are supported in recent literature. Den Boer and Hudson (2017) analyze the shift from a multi-generational household to a nuclear household during the same period when SRB declined. A rapid drop took place from 80% of elderly living with one of their children in 1980 to 50% in 1990 to 30% in 2000 and 20% in 2012 (based on national sources cited in Den Boer and Hudson 2017, 12). These statistics support the reasons that were given by experts that change in family norms and cohabitation have influenced the shift away from sex selection.

4.4.2.2. *Socio-economic Development*

The second most common reason that experts gave for the reduced demand in sex selection was the socio-economic development and the rapid changes that South Korea underwent with urbanization and modernization. This does not come as a surprise because prominent scholars have suggested it before (Chung and Das Gupta 2007). Interview partners noted that the

economic development also affected couples' desire for smaller families and ultimately contributed to a shift in family structures. Here are some of the voices in this regard:

A demographer and public health scholar stated that, "the cultural norms and people's attitude towards gender have changed during that time, along with social changes and economic changes" (SK05). At the same time, the costs of child rearing have gone up, which is seen as a major concern for many people, whether old or young, male or female:

"From birth to graduate school a child costs about US\$ 200,000" (SK06, former representative of the Ministry of Health and Welfare, 78, male, Seoul).

"We couldn't really keep producing [to have] a son because the cost of raising kids has skyrocketed" (SK08, teacher, 25, female, Seoul/Busan).

In modern Korea, it is a common perception that people simply cannot afford to have more than one child. As a representative of the Korean Women Development Institute summarized it, "parents are much more concerned about their kids. They have fewer kids and invest more in them" (SK33). Several other interviewees confirmed the notion that families can only afford one child in the light of high child rearing expenses.

"Parents have to spend a lot of money to educate their children. Education fees are very high. They send their children not only to public schools but also to private institutes to educate them more and more. They don't want several babies, but rather focus on one child to raise him or her successfully" (SK29, Gynecologist, 38, male, Busan).

"In my generation, people just want one baby because they have to spend too much money to care for babies in Korea for education and other things. So they just want one baby, and even if that one baby is a daughter, they like it" (SK18, teacher, 26, female, Daegu).

Similarly, the costs of marrying are high, as men are traditionally expected to provide housing ("when a couple marries, the man provides the house, and it is too much money" SK18, teacher, 26, female, Daegu). Furthermore, stable and well-paying jobs have become rare. Subsequently, younger people are less motivated to get married and have children as expressed in the following quote.

"In the 80s and 90s, an individual would go to college and graduate, and search for a job. People could apply to 4 or 5 companies and get accepted into all of them. It wasn't hard for people to get a job, it wasn't hard for them to get married, and it wasn't hard

for them to earn their way up, buy a house and make a living. Now, it's almost impossible" (SK13, member of Korean labor party, 23, male, Seoul).

In sum, the large expenses for marriage and child rearing on the one side and the competitive job market on the other side have led many Koreans to postpone marriage, have fewer children and ultimately pay less attention to the sex of the child.

4.4.2.3. *Increased Women's Status*

The third reason for declined SRB relates to the increased status of women.

"The reason [for declined SRB] is the improved women's status [...]. When it comes to employment participation and women's status in political or economic life, we can't see the high status of women in Korea, but there has been a big change in education. Also, women's influence, particularly in the household, is huge" (SK05, demographer, 42, female, Cheongju).

Over the past decades Korean women have gained more rights and autonomy. Their improved status may not have resulted into equal political or economic participation with men, but it has resulted in greater education and decision-making power, especially concerning reproduction. According to the interviewees,

"Women have more say in reproductive decision-making" (SK04, gynecologist, mid-40s, male, Seoul). "As women's rights and education levels improved, they started to participate in the society and they also started to practice decision-making regarding giving birth" (SK25, PPFK representative, 59, male, Busan).

Interviewees referred to the fact that women control more domestic and family affairs while men are considered breadwinners. These traditional role models are slowly shifting, as prior barriers and constraints for women's empowerment and gender equality are being lifted:

"Nowadays, there are females entering the military academies and there are many more female soldiers. In all facets of society, such as finance, government and law, there are a lot more women. A lot of the restrictions, which used to be placed on women, have been lifted now. Therefore, the inequality between a son and a daughter has been eradicated" (SK20, head of private women's clinic, male, Daegu).

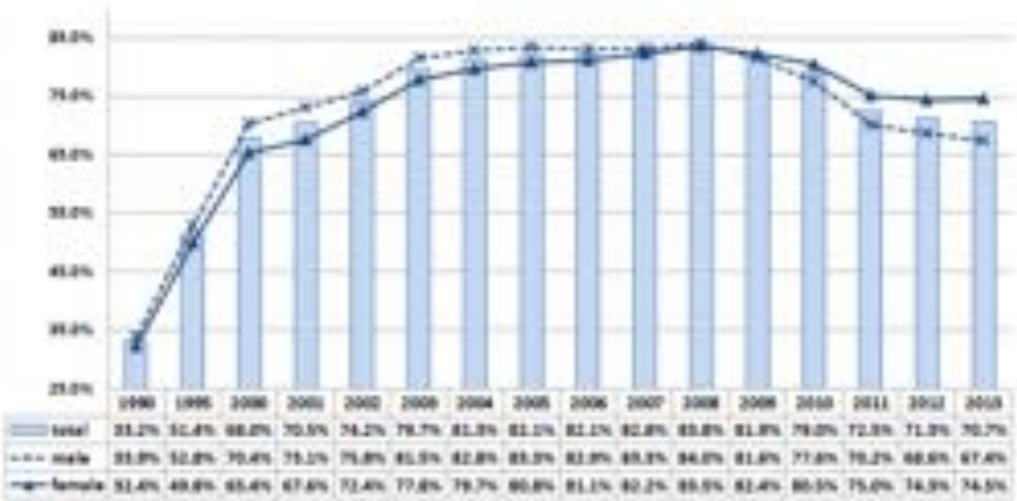
According to the first female law professor of an elite university in Seoul, women (like herself) have newly gained access to many fields of society which they could not access before, yet they are still underrepresented in work life for structural and cultural reasons:

“Anticipated income with the same educational level is lower for women. Some women could choose to stay home, but that is not the entire explanation. South Korea is interesting in the sense that a lot of well-educated women do not work” (SK34, Professor, 55, female, Seoul).

As women’s status increases, women care less about the sex of the fetus (SK09, SK19). Their increased status has also been linked to greater educational outcomes, delayed age of marriage and better job opportunities. The result has been reduced pressure for sons (SK33).

Since several respondents stressed the linkage between improved women’s status and female education, we take a closer look at educational levels by sex. Figure 22 shows that Korea’s Advancement Rate, the percentage of higher education entrants among high school graduates by sex. The rate has increased substantially over the past one and a half decades. While 1 in 3 high school graduates went on to university in 1990, it was 50% in 1995 and close to 70% by 2000. We can see that women who were once behind men in higher education have caught up, and in 2009 the number of women surpassed men in universities.

Figure 22: Higher Education Entrants by Sex, South Korea, 1990-2015



Note: Advancement Rate=(Higher Education Entrants among High School Graduates / High School Graduates) x 100

Source: Kim et al. (2015, 28)

Better educational outcomes have also contributed to more horizontal family relations:

“Another important thing is that women marry later... The relationship between them and their mother-in-laws becomes more horizontal. Women have more power to speak up and make their own decision” (SK25, PPFK representative, 59, male, Busan).

Meanwhile, social surveys in Korea show that women still predominately take care of domestic work, while more men are in remunerated employment (KOSIS 2017).

4.4.2.4. *Policy changes*

Lastly, interviewees pointed to a number of policy changes that have shaped gender relations in Korea. These policy changes relate to:

(a) Fertility relaxation intertwined with the change in the number of desired children, as the following quote illustrates: “*Our generation wanted sons but could not have more children. The next generation decided for themselves that they don’t want more children*” (SK19).

(b) Changes in the Family Head System and equal inheritance rights of men and women as the following quotes illustrate:

“Due to the change in the hoju system, now a woman can be the head of a household. Due to such changes, there are not many distinctions between men and women nowadays” (SK20, head of private women’s clinic, male, Daegu).

“The equal inheritance law contributed to that change in the 1990s. Also the Family Law established in 2005 stressed gender equality in family life and in particular men’s participation in family life. The Ministry of Gender Equality and Family has many policies to encourage men to participate in family life” (SK33, representative of the Korean Women Development Institute, female, Seoul).

Women were granted equal inheritance to men as of early 1990. While equal inheritance for sons and daughters may have positively influenced SRB trends, the male Family Head System was only abolished in 2005, after SRB had already approached normal levels.

(c) A larger political atmosphere that favors and promotes gender equality:

“At the end of 1990s, we had the women’s rights movement in Korea, so there was a new law regarding gender equality implemented in Korea. I think these types of environmental changes to favor gender equality and all these movements, they may have had effect, a little bit” (SK26, Sociologist, 42, female, Busan).

Given the inconsistent timing between the SRB decline and the introduction of these gender equity policies, their link to SRB reduction is weak.

4.4.2.5. *Interconnectedness and “defamiliation”*

Many experts declared that reduced SRB was a consequence of multiple efforts and effects. These were integrated and intertwined, making it impossible to separate the influencing factors at the time and pinpoint to what exactly made the difference. For example, one interviewee stated, “The family value or the Confucianism system is decreasing in Korea because of the change of cultural thinking, marriage tradition or economic status” (SK09).

As social norms to support elderly weakened, the costs benefits of having a son changed: “The social norm to support their family is getting weak. People don’t expect their son to support them. The costs and benefits of having a son are changing” (SK11, KIHASA representative, male, Seoul). Several respondents mentioned that there is also a trend towards daughter preference. A 58-year-old nurse stressed, “The society is turning to a matriarchal society. Now it is better to have daughters than sons who become strangers after marriage” (SK19). A 59-year-old PPFK representative noted, “The society changed from father based to mother based and we prefer daughters” (SK25). Within one generation, there is evidence of a reversal of reported gender preferences, but couples do not act on their preference any longer. That means, so far, no sex selection in favor of girls has been detected.

Furthermore, increased female autonomy has contributed to a process that Chang (2014) has coined under “defamiliation,” which he defines as “a social tendency of individuals trying to reduce the familial burden of social reproduction by intentionally controlling the effective scope and duration of family life” (Chang 2014, 42). He continues by stressing that, “defamiliation denotes decreased, not abolished or deserted, family life and relations” (ibid). According to Chang, Korean women increasingly protect themselves from excessive family burdens. Plummeting fertility is only one sign of this trend. Other signs are increased levels of divorce, separation, late marriage and single life.

In order to highlight these trends, Table 15 presents key figures on “defamiliation” in South Korea contrasting the situation in 1990 (or the earliest available reference years) and 2015. The drop in fertility and marriage rates, increased women’s age at marriage and childbirth, higher divorce rates, greater number of female single households and female-headed households can all be seen as signs of defamiliation, which, as we have learned, have contributed to the fundamental change in Korean family traditions. New terms have come up, such as Bihonyeoseong (non-marrying) or Mihonyeoseong (yet-to-marry or unmarried). More and more women consciously decide to stay unmarried or childless.

Table 15: Decreased Family Life in Figures, South Korea, 1990 and 2015

“Defamiliation” in Figures	Unit	Year	Unit	Year
Total fertility rate	1.59	1990	1.24	2015
Marriage rates per 1000 persons	25	1990	13.8	2015
Age at first marriage of women	25	1990	30	2015
Age of mother at first childbirth	26	1993	31	2015
Divorce rate per 1000 persons	2.85	1990	5	2015
Nr. of female single households (mio)	0.57	2000	1.3	2015
Nr. of female-headed households (mio)	2.70	2000	5.6	2015
Nr. of male birth per 100 female	116.5	1990	105.3	2015

Source: KOSIS (2017a)

4.4.2.6. *Preconditions for SRB improvement*

Lastly, a few interviewees pointed to important preconditions that facilitated the decline in sex ratios at birth. These were (a) the small country size, which allowed for (b) well established and effective communication channels. One PPFK representative stated for example, “Korea is a very small country. The national broadcasting channel is the most effective one in Korea. The local outlets are not that effective in changing people’s attitudes” (SK25). Furthermore, (c) strong centralized leadership and (d) a cooperative network were said to have made a difference as illustrated in the following quote made by a former representative of the Ministry of Health and Welfare: “In Korea the provincial government has no power. If the central government instructs them, they have to follow [...]. We had a good cooperative network” (SK06).

In summary, qualitative data reveals a significantly different picture of the Korean policy ‘success story’ than the one canonically reported in international communities. Although Korea did instigate a significant policy push to address the motives, methods and magnitudes of sex selection, there is little evidence that these policies were instrumental in the SRB renormalization. The awareness-raising campaigns were at odds with the long-standing policies encouraging low fertility and were introduced when SRB had already come down. The legal bans and provisions, although comprehensive, went unenforced and thus were largely ignored by the medical community. On the other hand, detailed qualitative data reveals that the experts closely involved in SRB renormalization attribute most of the success not to policy initiatives, but to transitions in economics, households, women’s rights and other broader features of compressed modernity. Now that we have explored the reasons for improved SRB in South Korea, we turn to the regional case study to examine the micro features of how this macro transition occurred.

4.5. Regional Case Study: Daegu

In the regional case study we want to take a closer look at areas that have reported severely skewed SRB in the past, namely the provinces of North and South Gyeongsang, and Daegu City in particular. These regions are well known for their conservative cultural traditions. Severely distorted sex ratios have been attributed to “*stronger son preference and gender discrimination against women*” in these particular localities (Kim 2004, 872). Nevertheless, the situation has changed. We want to know what role policy played in the decline in SRB in one of the formerly most affected areas. Were these regions more resistant to change, or were they even leading the way? And how did policy play out on the ground in these areas?

4.5.1. Background, Stakeholders and Intervention

The city of Daegu has a population of 2.5 million and is the 4th largest city in South Korea. It is located in the Southwestern part of the Korean peninsula surrounded by North Gyeongsang Province (with 2.7 million people), to which it was formerly the capital (from 1896 – 1981). In 1981, Daegu was put under independent administration, but it was not until 2016 that the provincial capital of North Gyeongsang moved from Daegu to Andong (see Figure 23).

The same national policies earlier introduced applied to Daegu, and the campaigns against sex selection there developed in line with national efforts. According to one government official,

special policy efforts were placed on regions with the worst sex ratio (SK01). Does that mean SRB trends changed quicker there than elsewhere because the government targeted especially concerned regions? Or, on the contrary, did change come about slower than elsewhere due to the strong patriarchal setup of the concerned regions?

The local government and local PPFK branches were in charge of implementing policies designed by KIHASA and the Ministry of Health and Welfare. PPFK records allow us to gain insights into regional efforts undertaken by the Daegu Office. PPFK Daegu Branch was established in 1962 and was integrated into North Gyeongsang Branch from 1963 onwards. It changed its name just like the mother organization several times in the 80s, 90s, and 2000s with each new population policy paradigm shift. The current name is the Population Health and Welfare Association Daegu / Gyeongbuk Branch.

Figure 23: Map of Daegu and South Korea

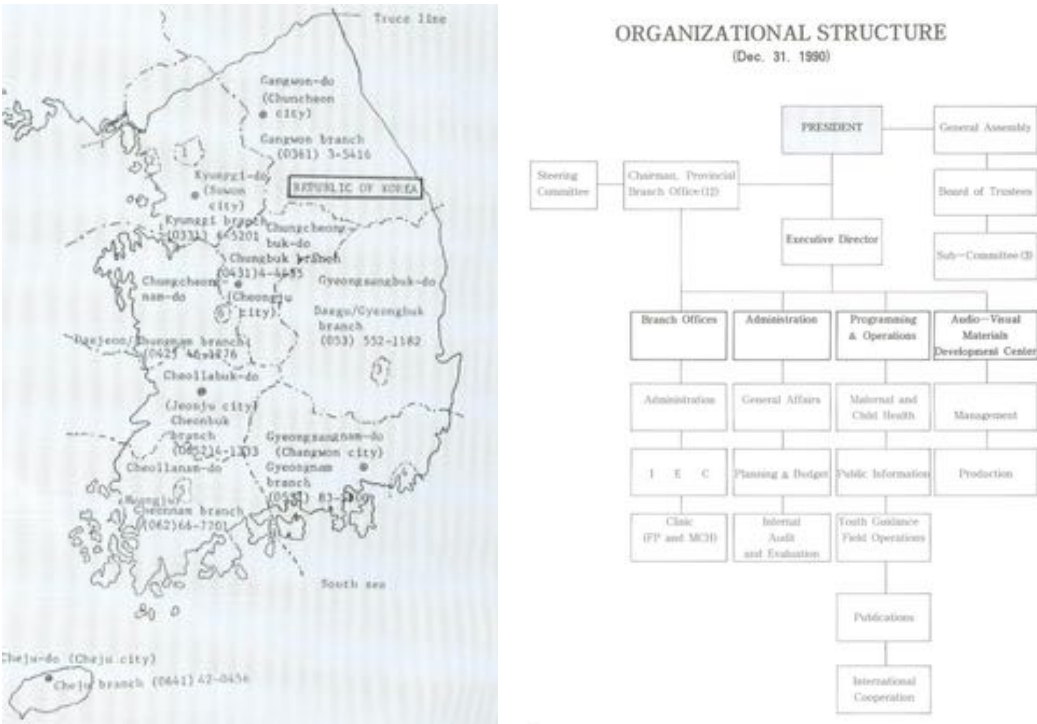


Source: Google Maps (2017)

Since its opening, the Branch has implemented governmental policies and campaigns linked to health and welfare to improve the well-being of residents. The established health centers offered sex education and various maternal and child health services. In 1985, PPFK opened its first mother-child health clinic. In 1990, the membership base reached close to 4200 members. This made the Daegu/Gyeongbuk Branch the second-biggest branch at the time after South Gyeongsang. According to the PPFK annual report the campaigning and educational materials reached 250,000 people and over 100,000 youths in Daegu and Gyeongbuk in 1990

(PPFK 1991). PPFK’s annual national budget in 1990 was about US\$ 8 million, of which 33% come from the national government, 10% from the provincial government, and 10% co-funded by IPPF and UNFPA. The rest was funding generated by PPFK. It is unclear how much money went to the regional offices but given the size of the Daegu/Gyeongbuk Branch we can assume that the office was equipped with substantial resources to carry out their campaigns. The administrative and organizational structure of PPFK in the early 1990s is illustrated below.

Figure 24: Administrative and Organizational Structure of PPFK, 1990



Source: PPFK (1991).

As we saw earlier, it was not until after 1996 that PPFK and the government introduced a shift away from fertility control policies. In line with the new population agenda, the Daegu Office shifted its focus to offer counseling on sexual violence and sex education for the youth in 1997. It concentrated more on issues related to family health and welfare from 1999 onwards. Starting 2000, the PPFK headquarters encouraged its provincial branches to become more independent and develop their own projects according to provincial priorities. Subsequently, more visibility was given to branch activities.

In 2000, the Daegu Branch conducted the “Festival of XX and XY” with the objective to “liberate women from the mental pressure to give birth to at least one son, protect maternal and child health, promote the respect for the life of human beings, and solve unbalanced sex ratio” (PPFK 2001). A picture of the campaign is shown in Figure 25.

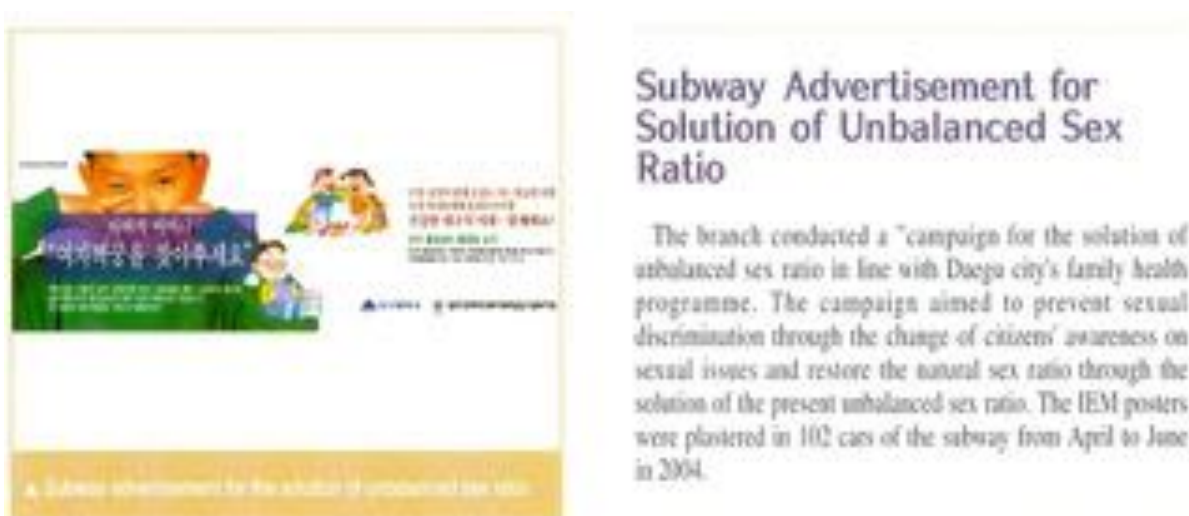
Figure 25: Festival to Eradicate Son Preference in Daegu, South Korea, 2000



Source: PPFK (2001).

Over 2000 people participated in this campaign, which was held at two local universities. The events included speeches, poems, signature campaigns, and video films, which were received “with great favorable responses from the participants” according to PPFK (PPFK 2001, 46). Four years later, a second campaign against sex imbalances was carried out, which included advertisements in subways for the prevention of sex imbalances. This latter campaign was carried out in cooperation with the Daegu family health program and aimed at preventing sexual discrimination and sex imbalances through awareness-raising. Posters were plastered in 102 subways from April to June of 2004 (see Figure 26).

Figure 26: Poster Campaign Against Sex Imbalances, Daegu, South Korea, 2004



Source: PPFK (2005).

These were the only two documented campaigns, held in Daegu in 2000 and 2004 respectively, according to PPFK annual reports. We can assume that lesser undocumented campaigns were carried out to sensitize citizens about the issue at the time. By 2005, the PPFK Daegu Branch shifted to a pro-natalist campaign and no longer raised awareness on sex selection. For example, a 2005 poster in metro stations warned about the seriousness of low fertility and population ageing (see Figure 27).

Figure 27: Pronatalist Poster Campaign, Daegu, South Korea, 2005



Source: PPFK (2006).

PPFK Daegu Branch continues to operate today by implementing population policies and campaigns. Recent efforts include the 2013 “smile dad camp” which offers trainings for fathers to strengthen their bond to their children, or the 13th round of match making (or speed dating) parties for unmarried men and women in Daegu in 2017 (PPFK Daegu 2017).

To sum up, according to PPFK records limited campaigns against sex selection were carried out in Daegu and these occurred between 2000 and 2004. They included a three-month poster campaign and a festival with over 2000 attendees in the early 2000s.

4.5.2. Quantitative Assessment of SRB Trends

Let us continue by examining SRB trends in Daegu and surrounding provinces. The SRB stood at around 130 male births per 100 female births in 1990 and rose with birth order to levels beyond 300 for third parity and higher. By 2015, the picture has changed completely and the SRB is consistently in the range of normal levels, around 105 in North and South Gyeongsang

and Daegu (see Table 16). The recent variations slightly above or below the norm, which can be observed at third parity or higher, can be linked to small birth samples.

Table 16: SRB by Parity in Daegu, North/South Gyeongsang, South Korea, 1990, 2015

	1990				2015			
	Total	1st child	2nd child	3rd +	Total	1st child	2nd child	3rd +
Daegu	129,7	109,1	140,9	390,2	106,9	106,2	107,9	106,2
North Gyeongsang	130,7	110,4	135,0	293,8	105,5	107,2	104,5	101,7
South Gyeongsang	124,7	109,5	128,5	290,5	105,1	104,9	104,3	109,8
Whole country	116,5	108,5	117,1	193,3	105,3	105,9	104,5	105,6

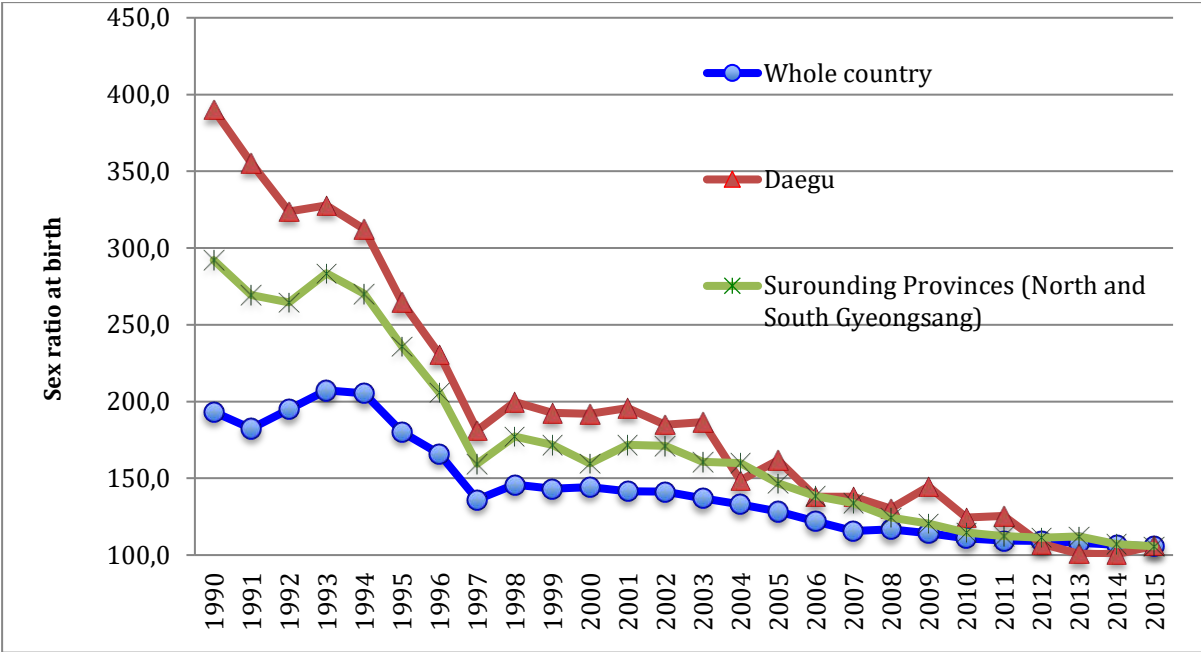
Source: KOSIS (2017b).

The question is whether we can link the significant drop in SRB to policy interventions. Therefore, we need to look at annual figures. We are particularly interested in higher parity orders because these groups are most vulnerable to sex selection in the absence of a male offspring at first or second parity and can act as early indicators of changing trends.

Figure 28 shows SRB for third parity and higher in Daegu, its surrounding provinces and South Korea between 1990 and 2015. It has to be noted that the number of total live births reduced drastically in the same period, from 33,269 live births in Daegu in 1990 to 19,438 in 2015. While in 1990, close to 13,000 people were born at second parity, this number reduced to 7,679 in 2015. The number of births at 3rd parity in 2015 was below 2,000 births. To avoid noise in the data given to the small number of births, we present a three-year moving average.

As Figure 28 shows, in 1990 the SRB at third parity was close to 400 male births per 100 female births, while surrounding provinces stood at 300 and South Korea at 200. By the time that the Medical Service Act was strengthened in 1994, the SRB had dropped in Daegu while remaining largely the same level in the surrounding provinces and even rising in the country as a whole. The ratio dropped rapidly and uniformly after 1994 at all locations to levels between 140-170 by 1997. This was followed a slight rebound during the economic crisis in 1997 followed by a steady decline to normal levels for third and higher birth orders.

Figure 28: SRB, 3rd Birth and above, Daegu, Surrounding Provinces, Korea, 1990-2015



Source: KOSIS (2017b)

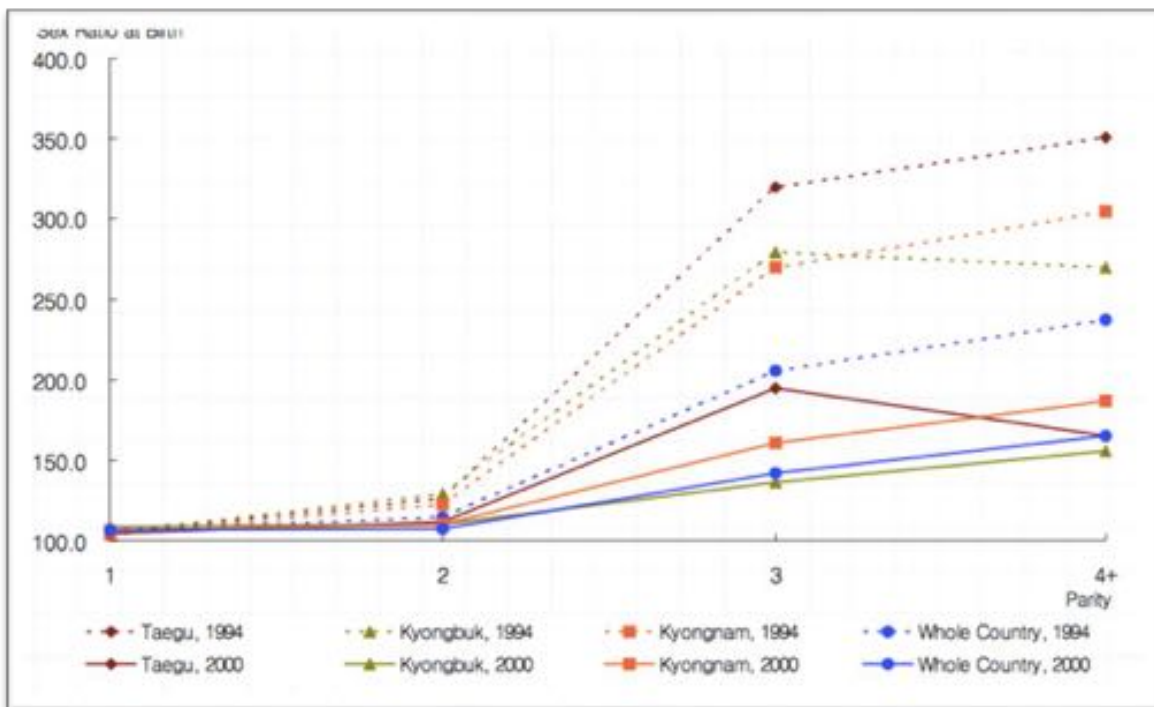
The data presented above shows that the major decline in SRB happened uniformly across regions and parity levels between 1994 and 1997 followed by a more steady and slow return to normalcy. Daegu – once one of the worst affected regions – has transformed uniformly with the rest of the country. As we have discussed earlier this uniform transformation can be largely ascribed to the homogeneity of the country.

The improvement made in Daegu in such a short period is remarkable. Figure 29 gives us a different view of what happened during the mid-late 1990s. Here we visualize the SRB by parity order in Daegu, North and South Gyeongsang and Korea between 1994 and 2000.

Daegu, North and South Gyeongsang all witnessed a sharp rise in the SRB from second to third parity in 1994. However, by 2000 the SRB at higher parity almost halved. The improvements that were made in Daegu and North Gyeongsang were larger than in surrounding provinces. Again if we look at SRB by region and age of mother, Daegu and North Gyeongsang are top performers because the SRB reduced more than in surrounding provinces (see Figure 30).

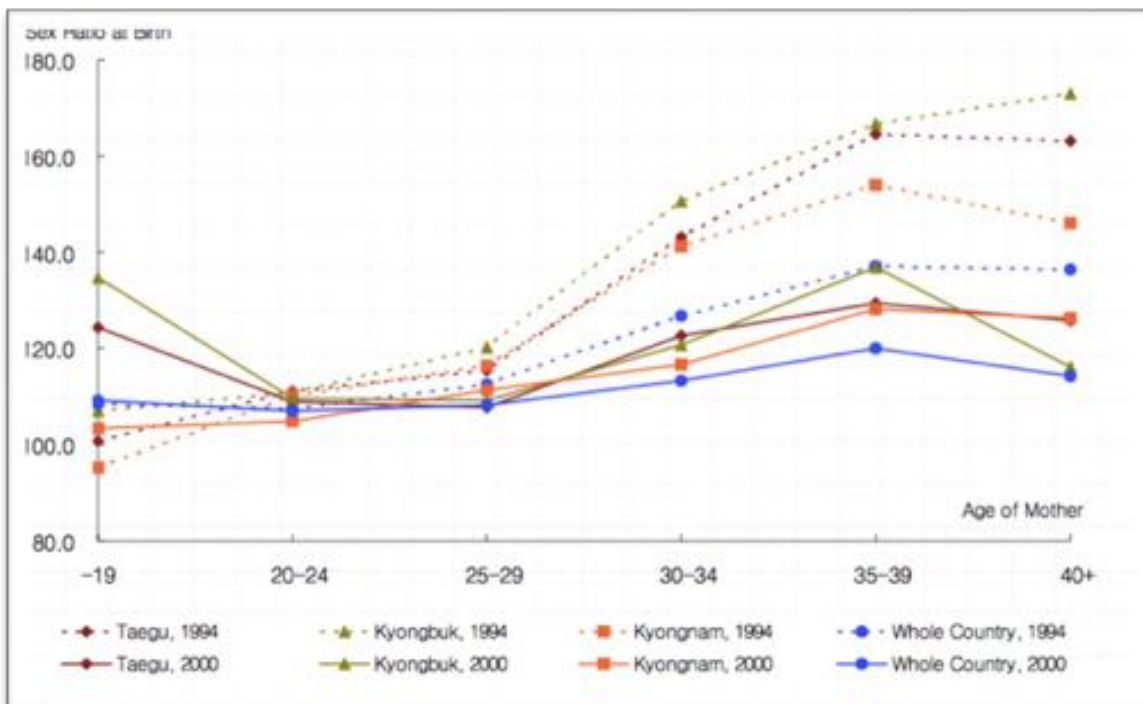
It is crucial to stress that this transformation and the major decline in SRB happened before any campaigns were rolled out in Daegu. Awareness-raising campaigns were introduced between 2000 and 2004, at a time when SRB at third parity and higher had already witnessed a substantial drop and was plateauing just below 200 male births per 100 female births. From 2003 onwards the SRB continued to decline as previously mentioned.

Figure 29: Sex Ratio at Birth by Region and Parity, South Korea, 1994 and 2000



Source: Kim (2004).

Figure 30: SRB by Region and Age of Mother, South Korea, 1994 and 2000



Source: Kim (2004).

Kim (2004) assessed regional variations trying to identify significant variables related to high sex ratios at birth in Daegu, North and South Gyeongsang. His regression analysis revealed, however, that the geographic locations do not have specific characteristics linked to fertility, family and household structures, practice of family planning or medical facilities. The only differences drawn from the analysis were that the three regions had fewer Protestant and Catholic churches, and that historically a greater number of top-ranking male government officials came from the concerned regions.

Kim concluded that, “these factors are likely to have strengthened the conservative stance towards son preference in these regions” (Kim 2004, 870). Nevertheless, as we have seen, “Korea has experienced relative uniformity of son-selecting reproductive behavior using these technologies irrespective of residence, geographical region or socio-economic status” (ibid 2004, 873). This explains the nationwide rise but also the nation-wide fall in sex ratio at birth. This data suggests that the SRB declined irrespectively of anti-sex selection policies. Quantitative analysis reveals that nothing extraordinary happened. Sex ratios at birth reduced in Daegu like everywhere else in the country.

4.5.3. Qualitative Assessment: Voices of Local Doctors and Citizens

For the qualitative assessment, we conducted 14 semi-structured interviews in Daegu and Busan in early 2015. Interviewees included 6 medical professionals, 1 local health officer, 1 PPFK representative, 1 researcher, 1 media representative and 4 interviews with the local population. Interestingly several interview partners expressed their reservations and cautioned me not to travel to Daegu to conduct interviews. I was told that people were “*not tender to women*” (SK02), that Daegu “*city is very famous for conservatism*” (SK17). These concerns seemed unjustified since I had only friendly and helpful encounters in Daegu. However, it took longer than elsewhere to set up interviews, which could be a sign of a more traditional society, where hierarchies ought to be respected and processes ought not to be rushed.

While I was waiting for interviews with local policy makers, I took the opportunity and visited several hospitals in Daegu trying to find doctors willing to talk to me about sex-selective practices in the 1990s. Few doctors were as open as Dr. S., a retired honorary doctor, who still functions as a hospital representative and oversees affairs without being involved in the daily hospital business. Dr. S. dedicated several hours on two occasions to explain in detail the situation in the 1990s. His first-hand accounts are as follows.

In the early 1990s, Dr. S. returned to his hometown Daegu after having studied medicine in the US. He was “*shocked*” when he learned that female fetuses were being aborted on a large scale. He reported,

“What I actually observed, when I came back to Korea from the US in 1990, which was about 25 years ago, almost shocked me. What was going on was, with the help of ultrasound sonogram, almost any doctor could tell the sex of the baby about 14 to 16 weeks into pregnancy. Then, if it was a girl rather than a boy, the woman would go to a doctor’s office and terminate the pregnancy. At that time, it was illegal to terminate the pregnancy just for that reason, but actually it was done. The law wasn’t that strict. By law, it’s not legal. [But] people did that. A lot of obstetricians terminated the pregnancy upon request of the mothers rather than fathers. Next time a woman gets pregnant and goes to the doctor’s office, if it was a boy, then she would go through the term and give birth” (SK22, honorary hospital director, 79, male, Daegu).

He confirmed that, “*most doctors accepted their [women’s] request to perform the procedure for money. Because that was how doctors made money at the time*” (SK22). Doctors could earn between US\$ 500-700 per sex-selective abortion when done at 14-15 weeks of gestation, which was a lot of money at the time. For second-trimester abortions (after 22 weeks of gestation) prices would go up to US\$ 1000 (SK22). Several doctors reported the coordinated price fixing of illegal abortions by groups of doctors in Daegu (see Box 9).

Box 9: Doctor Voices on Price Setting of Abortions in Daegu

Two doctors and one nurse based in Daegu confirmed that the prices for illegal abortions were fixed. One hospital director, age 52, reported in an interview:

P: Legally, people know that abortion is prohibited. In the recent five years, if you are wealthy you travel to Japan or China to get abortions. But there are still abortions performed in small clinics. They practice it saying, ‘please don’t say that we do it, then we will do it for you.’

I: Is it a matter of how much one can pay?

P: It depends on the gestation age. They decided it on their own depending on the week (4, 8, 10 weeks, etc.). There is a meeting among local doctors in Daegu, Busan, etc. They decide the price for artificial abortions.

I: Can you explain?

P: Depending on the gestational age, different prices are set. For example, in this province the doctors get together and decide the price.

I: Is it like an oligopoly where a small number of providers control the market and set the price?

P: There may be economic terms to describe this. But the treatment is almost the same everywhere inside the country. In Seoul, the treatment is a little bit more expensive compared with other regions.

I: Do you know the prices? Can you tell me?

P: I can't talk about the price because it is closed information. Doctors' society has set it. I know that Laura wants to know, but even Korean women do not know how much they should pay for an abortion before meeting a doctor. If there is a delay of one week, the price will go up. The minimum payment is US\$ 500 [and goes up] to US\$ 5,000 depending on how risky the operation is and depending on the gestational age" (SK31, hospital director, 52, male, Daegu).

Prices for late-term abortions also go up due to doctors' moral conscience. One doctor stated that aborting a mature fetus was like 'killing' ("*Actually, it is killing the baby... you feel less guilty when you think of it as an abortion rather than killing the baby*") (SK22). The doctor specified that sex-selective abortions usually took place at 16 weeks of gestation. Only sometimes did women hesitate or found out at a later stage and requested abortions after the 20th week of gestation.

"Some women come in too late and by the time they get to know the sex of the baby, the baby may be 22 weeks, but that's a rare case. Sometimes, the pregnant woman refuses to go through the termination, and it takes time for her family members to persuade her. So when she comes in for the procedure, she may be into 22 or 23 weeks of gestation, or something like that. At that time, doctors are very reluctant to do the

termination because the fetus is too mature by that time. There is more guilty feeling, like killing the fetus. These are rare exceptions, but that kind of procedure usually takes place at 16 weeks of gestation” (SK22).

In order to minimize feelings of guilt for aborting healthy females, some doctors would perform the check-ups, while others did the abortion (SK22). Often doctors received information about women seeking an abortion from midwives. Midwives were given a finder’s fee for providing such information. The doctors and midwives confirmed that sex-selective service were an organized business between both parties.

“Midwives used ultrasound and provided the sex determination service, and when they find out it’s not the sex that they were looking for, the midwife would take those patients to the doctor’s office for the procedure. They introduced [one another] and the doctor performs the procedure, and the doctor would pay the premium to the midwife as a kind of finder’s fee. That’s how it usually happened” (SK22).

Dr. S. stated that whenever a midwife would bring a patient to the doctor’s office for a termination, the doctor would “double-check [that the sex of the fetus was female] and do the job” (SK22). Different justifications were given for the abortion to cover up the traces. For example, the abortion was declared to be due to hyperemesis characterized by severe nausea and vomiting. Nevertheless, actual complications during the procedure were rare.

Dr. S. confirmed that he himself was actively involved in performing sex-selective abortions like many of his colleagues. I asked him whether he had any estimates on how many sex-selective abortions took place at the time. He responded:

“Let’s say, my father’s practice had at least 300 childbirths per month. Perhaps, in that kind of scale, this is just a rough idea, but probably anywhere from 30 to 50% in the 1990s. Probably about 1/3 was pregnancy termination requested by patients for son preference [...]. If there were 10 deliveries a day, sex-selective abortion would be 3 to 5” (SK22).

He confirmed that “it was a trend” throughout the 1990s to abort females. I also asked him about his personal experience with sex-selective abortions. His response was:

“My personal experience? In the early 1990s, when I got back to Korea, it was going on a lot. Ultrasound machine was available, so it was very easy to detect the sex. On

average, [I performed] about 2 or 3 [sex-selective abortions] per day. Someday more, someday none. But it was always there. But I don't remember when it stopped, but I'd say probably in mid 1990s it dwindled after that [...]. I would say it went on until 2000... The demand dwindled, and that kind of practice gradually stopped" (SK22).

Dr. S. who once performed sex selection on a daily basis saw the practice gradually declining. Given the illegality of sex determination and abortion, I wanted to know how he and his colleagues got around regulations and avoided punishment. Dr. S. reported:

"It was not a big deal. First of all, we had to be careful. If any suspicious person comes and asks questions, we just had to be careful. Those people that were coming in to ask questions, they knew that the doctor was doing something illegal. But we were doing that with monetary compensation. They knew that. So, if they are unhappy with the service of the doctor, or if they hold grudges against the doctor, they could become whistleblowers. They could go to the police and report on the doctor. At that time, the person who asked for the service of pregnancy termination, it's also illegal for them as well. However, legally, the police were trying to catch the doctors, so they did not punish the whistleblower, who was asking for the information in the first place.... Most of the professionals who performed this service, they got away. Once in a while, an unlucky guy got caught and it would be reported in the media for provision of illegal medical practice. But that was a rare case" (SK22).

Doctor S. confirmed that convictions were very rare. No sting operations were conducted to identify wrongdoers. A few whistleblowers appeared so they "had to be careful," but law enforcement was not done after the 2000s.

"I think a little after 2000, the government stepped in to enforce the law. Who performed termination due the sex of the fetus would be punished, like the imposition of penalties or revocation of license. So as of today, I don't think anyone does the termination of pregnancy because of predetermination of sex of the fetus through ultrasound sonogram. No one does that. Not just because the government stepped in ... but I think people's concept has changed" (SK22).

The interviewee stressed that to him, the most important reason for the decline in SRB was social change "rather than government intervention." He continued with, "I'm sure the government intervention helped, but to me, the change in the social mindset was the number

one factor.” Furthermore, the respondent stated, “I think demand made the difference. I don’t think the government policy or enforcement did the job” (SK22).

According to Doctor S. and other Korean interviewees, Korea’s SRB transformation was more due to social than political change. The decline was a matter of reduced demand from the side of the pregnant woman, rather than a matter of reduced supply.

Doctor S. also noted that while the demand for sex selection has disappeared almost completely, new medical procedures are being increasingly requested. For example, on a daily basis young women come in seeking a hymen reconstruction before entering marriage. This is seen as a way to ‘regain virginity.’ The doctor noted that that was another expression of traditional thinking in Daegu, that women are expected to be a virgin before marriage.

We have given voice to a doctor who was engaged in sex selection throughout the 1990s. I also conducted interviews with several young adults, which I mark here as young voices – rather than expert interviews.

I met a female activist aged 25 during the celebrations for the International Women’s Day who was from the larger Daegu area. During our conversation she reported, “My family is very patriarchal, really patriarchal. It could just be me, becoming more and more sensitive about feminism. But every time I visit, I just realize how conservative and patriarchal they are, how anti-feminine they are” (SK08). Family members would frequently make detrimental comments about her appearance (“get your teeth straightened”) and the fact that she was not married (“when are you going to find a husband?”). As the interviewee was growing up, she felt being discriminated against. Her grandmother, who would raise her and her siblings, would give privileges to her younger brother in terms of more or better food and attention. At some point the interviewee confronted her family with the fact that she felt discriminated and her father admitted having son preference: “He pretended, he was trying to be very unbiased or equal, but we could actually tell, and I said that I could actually tell and he admitted that it was actually true” (SK08). Another young woman from Daegu, a 26-year-old teacher, reported a similar notion of discrimination, characterized by subtle signs that were yet always present. For example, “When I visited grandma’s house they wanted to hug my brother first” (SK18).

It was suggested that people from Daegu hold on to traditional values and gender roles more strongly than in other regions. One interviewee reported a “wall between men and women” where clear roles are assigned to either gender (SK18). For example, women are expected to

prepare food for family gatherings, while men worship the ancestors. “During the ancestor worship ceremony, we [women] need to prepare foods. We can’t see the ceremony. Only men participate in the ceremony” (SK18).

I also interviewed the staff of the hostel I was staying at curious to understand what drove South Korea’s transformation according to their opinion. In one of the conversations, I had a vivid discussion with two males in their early 30s who had been raised in Daegu. One lived abroad for several years and both had been exposed to an international crowd in their early adult years due to their profession. Both men were eager to make me understand that family norms in South Korea or Daegu in particular cannot be judged from a Western individualistic lens but rather from an Eastern collective lens. Box 10 gives excerpts from that interview.

Box 10: Young Voices on Social and Family Transformations in Daegu

P: Women have a lot of control and influence in family life in Korea.

I: Which is expressed through?

P: Family. In general, family is more important than job opportunities... I would say that family is the most important aspect in Korea.

I: Simplistically speaking, would you say women are more responsible for matters inside the family/home and the men are more responsible for matters outside the family/home?

P: Kind of but...it’s not as simple. When you look from a western perspective, it’s looking from a more individual perspective, but that’s not how Asian people look at it. Not even just the family perspective, but also extended family perspective. You can’t separate the individual out of that.

I: So, in the extended family perspective, there are clear roles for each family member?

P: Yes, compared to the Western society, it’s a lot more defined.... You are actually being a bad person if you’re acting as an individual, rather than sacrificing for the collective [well-being], which starts with your family, then your extended family, and then the Korean society as a whole.

I: At the end of the day, it is about ensuring the family’s survival?

P: Not just survival, it’s fitting into society... Any person, man or woman, who steps out of his or her role, will hear that [that is not OK]. In case of women, you talk about the career options. But if a man tried to do something out of the traditional role, he would get the same

treatment... You're looking at it from one perspective, when the collective outlook is completely different.... Most Western people do not understand the collective thinking, or place harsh judgment on it. I'm not saying everything's perfect. There are a lot of problems in both societies, but there are a lot of good things in both societies too. So it's easy to pick just the bad things out of context, but if you look at the whole of what it is being achieved, it's a little more complicated.... Confucianism has influenced the society and how it operates. The value system it has created is very important to understand.

I: If not gender equality, what do you think is the current challenge of the Korean society?

P: Jobs and family. Jobs, in terms of getting good work. That's even the basis of a family [...]. If you don't have a decent job, it's almost impossible to have a functional family.

I: Why is that?

P: Because you can't support your societal and functional role without being able to support yourself and your family, and extended family... No one wants to marry someone who is unable to support the family and the extended family. Marriage is still very dictated by the parents, meaning they don't necessarily choose, whom you should marry, but they can essentially reject the person you marry, like a veto power almost...

I: Did you marry with your parent's consent [to interview partner P2]?

P2: Yes. Well, I tried. Actually my wife's parents rejected me. My parents rejected her too, but ... they had to understand because I already had a baby [...].

P: But his parents are more important than the wife's parents in terms of the society.

I: Your parents-in-law didn't want you to marry their daughter. Why?

P2: It was very funny. At first, my mother-in-law liked me, but then she said 'no' because she went to a fortuneteller, and the fortuneteller said that I would be cheating. So she didn't accept me...

I: Her family rejected you because of what that fortuneteller said?

P2: Yes.

I: How did you convince her family to change their mind?

P2: I didn't convince them. I tried to meet her brother. I was on my knees in front of her family, but that didn't work.

I: What was the reason for your parents [to reject her]?

P2: My parents didn't like her for two reasons: 1) My wife is older than me, and 2) my wife is better educated than me. She is a doctor. But my family accepted because I had a child.

I: Now they like her?

P2: Yes, but it still feels a bit uncomfortable. My parents are still worried that I will get ignored because I am undereducated [compared to her] and because they think about how I am perceived from the outside and how my wife looks at me; how my wife's family looks down on me. My parents worry about me. They say, 'Stay with her forever. Do not cheat on her. Don't make her angry.'

I: Why do they tell you that?

P2: Because they know me. [Laughter. End of the conversation.]

This excerpt shows how young couples are trying to navigate their way through meeting family expectations and having a functioning family life. According to one of the interviewees the “biggest challenge” is having a decent job, which is seen as a prerequisite for having a functioning family (“If you don't have a decent job, it's almost impossible to have a functional family”). Such expectations place the burden to provide for the family predominately on men, who are expected to perform their (traditional) societal roles as providers for their family and extended family. Social tensions arise as women achieve higher educational outcomes or even earn more compared to their partners. The interviewees stressed that this places a bad image on the husband portraying him as a ‘weakling’ who is unable to sustain his family. This reflects badly on the entire (extended) family.

The excerpt also illustrates the clashes between older and younger generations in terms of childbearing, marriage, income and social status. For the older generation, it was unacceptable to have a child before marriage and unite with a woman who is older and higher educated than the man. Before parents had veto power to deny the marriage of their children if they thought it was inappropriate. These traditions are slowly being challenged.

Above we gave voice to doctors and young adults. Lastly, we turn to local policy makers and implementers. I conducted two interviews, one with the director of the family planning division of the city government, and one with a director of the Korean Population and Health Association (PPFK). We discuss this last, because these interviews technically do not belong to the Daegu sample as they were conducted with Busan-based officials. The interviews were set up with the

support of the PPFK headquarters and took place in Busan, because even after several weeks of waiting Daegu officials were unavailable for interviews.

The director of the PPFK Busan Branch stressed that Busan – similar to Daegu – was formerly highly affected by skewed sex ratios at birth. “The problem was serious compared to other areas. The Busan area is known to be conservative, that’s why the SRB imbalance problem was more serious” (SK25, Director of the PPFK Busan Branch, 59, male, Busan). The interviewee gave concrete figures of how SRB had declined in the region. He emphasized that government efforts were carried out after 2000. “From 2000, sex selection continued through abortion in order to give birth to a son. What our institution did to solve the SRB imbalance was to promote a balanced sex ratio in early 2000s through campaigns” (SK25).

These findings coincide with the PPFK annual reports discussed earlier. That means that awareness-raising campaigns in Busan (similar to Daegu) were only carried out after SRB had already significantly declined from levels of around 125 in 1990 to 113 in 2000 in both regions. The campaigns at the time focused on preventing son preference, prostitution and homosexuality. “Our institution carried out the campaigns. The main goal was to fight the son preference and prevent prostitution, homosexuality issues” (SK25). It was believed that an increase in sex imbalances would encourage men to engage in extra-marital sexual practices with women or men, thus messages for the promotion of heterosexual relations within marriage and the prevention of prostitution and homosexuality were incorporated into the campaigns. The campaigns were rolled out at grassroots levels, and focused on mass communication, but the interviewees did not recall details about dates and concrete events.

According to the informant, no monitoring tools were in place to assess local activities, but people’s perception had changed thanks to the campaigns: “There was no direct monitoring but people’s perception was known to have changed through the campaign” (SK25). Again, the timing of the implementation of the campaigns (between 2000 and 2004) seems to contradict their claims of effectiveness because SRB had already lowered and was plateauing around 112-113 male births per 100 female births by that time.

I also interviewed the head of the family-planning department at the Busan city government. The interview was no longer than 10 minutes because it quickly turned out that the officer could not provide information about their campaigns against sex selection. Instead, he was eager to learn how different European countries are addressing low fertility. He stated,

“We didn’t make a particular policy on sex ratio imbalances. The difficult part of the Korean society now is the low fertility rate. It’s lowest among the OECD countries. In Korea, Busan is the city with the lowest fertility rate. The sex ratio imbalance problem is not as big of a problem [but low fertility is]” (SK27, Director of Family Planning Division at the Busan city government, 45, male, Busan).

The interviewee emphasized that Korea was eager to raise ultra-low fertility levels and that the government focused on providing incentives for couples to date and reproduce. The local government organized matchmaking events four times a year between women working in department stores and male bankers. Despite significant efforts, the results of such efforts have been negligible according to the interviewee. The official stated that they were able to bring together 15 couples over the past 5 years, “obviously too little to boost fertility” (SK27). According to these local officials, South Korea is currently addressing community issues that partly result from the consequences of long-term sex imbalances and low fertility levels.

In sum, the qualitative findings confirm the weak influence of the sex determination ban on sex selection. Expert interviews with doctors based in Daegu revealed (a) a wide availability of sex-selective abortions and sex determination throughout the 1990s, (b) poor to no enforcement of legal ban, and (c) cartel building and price-fixing among the medical community. Drawing from the larger set of expert interviews (all 34 interviews conducted in Korea) the reasons reported by experts for the reduced demand in sex selection were: (1) changes in family norms, (2) the country’s economic growth, (3) improved status of women in the society, and (4) larger changes in the policy landscape. However, the specific policies that experts referred to (e.g. the abolition of the Family Head System in 2005) were introduced after SRB had already approached normal levels.

At a national level, the SRB declined in concert with the strengthening of the Medical Service Act. However, the Act was poorly enforced and conviction rates were low. At a regional level, the SRB in Daegu declined already 4 years before the national turnaround occurred, and 10 years before policy efforts were carried out in Daegu. By the time Daegu introduced anti-sex selection campaigns, SRB had already approached normalcy.

According to these results, anti-sex selection policies introduced by the Korean government were ineffective. We have seen that neither the legal bans on sex determination and abortion, nor Korea’s awareness-raising campaigns, nor the larger set of policies promoting gender equity had a significant impact on the normalization of SRB.

4.6. Discussion

4.6.1. No Strong Signal of Policy Efficacy

There is little evidence that South Korean policies were effective in curbing sex imbalances. South Korea is often, and mistakenly as it turns out, taken as an “international best practice” (WHO 2011). The international community has often exported South Korean policy models in terms of providing ‘lessons learned’ for other countries. Ironically, there is little evidence that the South Korean policy model worked. For the Korean policy makers and key stakeholders there is little incentive to correct this misperception. It seems easier for them to enjoy the international wave of perceived ‘success’ than it is to reexamine a long gone problem. This is not surprising especially after the clear success of their family planning policies in lowering fertility. Some observers have suggested that the anti-natalist policies may have worked in fact too well (Haub 2010), since fertility levels have successfully come down, but also remained ultra-low despite significant governmental resources to increase fertility. Given all this, it is not surprising that national experts are often unwilling to revisit the case of sex selection, a phenomenon, which is framed here under ‘institutional amnesia.’

4.6.2. Institutional Amnesia Hinders Assessment

The policy impact analysis was hindered because government officials and scholars alike often lack motivation to revisit the case. Key informants from KIHASA (responsible for developing, testing and implementing population policies in Korea) point to the lack of evidence that supports either side (policy success or failure) (SK11, KIHASA representative, male, Seoul). In 1996, the Korean government became eager to tackle sex imbalances and introduced diverse supply-side and demand-side policies against sex selection. However, twenty years later, surprisingly few people remember what happened at the time. Putting together the pieces of the Korean policy puzzle has not been easy. Many details remain unclear. Interviewees do not remember or may not want to remember, especially politicians and policy makers. One sign of this reluctance was the fact that it was difficult to get interviews with key players. In analyzing the potential reasons for this collective amnesia I identified the following possible factors:

1. The short-term demographic cycle needs to be considered. Sex imbalances were a short-term phenomenon in South Korea. Compared to other countries like China and India, the SRB transition happened rather fast. The full cycle from high to low SRB was completed

within only 25 years. South Korean experts may not remember because unlike India or China the phenomenon simply appeared and disappeared too quickly.

2. The short-term political cycle may play a role. There are quick turnovers in Korea's political administration. The political term for members of the National Assembly is four years and five years for presidents. However, several Ministers for Health and Welfare were in office for less than 15 months (MoHW 2017a). The quick turnovers and the constant adjustment to novel policy issues may have affected the collective memory.
3. Policy makers are too busy or feel uncomfortable in giving interviews ("To be frank, they are too busy these years. They have too many things to handle, so they don't feel that comfortable about giving interviews" (SK02, Sociology Professor, 63, male, Seoul).
4. When asking to interview retired officers, who were formerly key players in addressing sex selection, the same respondent noted, "I could give you many names and phone numbers, but I'm not sure that they will be eager to spend time with you at the moment. Once they retire, they give up everything" (SK02). Retirement in South Korea may mean people no longer feel obliged or entitled to answer questions.
5. Hierarchy and culture also play a role. The younger generation has great respect for the older generation. It is considered impolite to ask for favors from seniors, instead one is expected to give favors to them. I was told, "They are 10 to 20 years older than me" and "I can't force them to be with you" (SK02). The notion that one asks for favors only from younger and not older people is based on Confucian ideals.
6. People could simply be too old and not remember. It was said that even if policy makers were willing to talk to me, they may not remember well: "To be very frank with you, they could give you chance to talk, but they may not have that solid memory. They can just keep talking about the things, which happened 20 or 30 years ago, that they were that eager to do something for the country without mentioning tangible evidence or materials. Once they become over 80, you don't expect that much, right?" (SK02).
7. The language barrier may also have played a role why interviewees may have felt uncomfortable to participate in an interview. One respondent said, "Besides, they don't feel that comfortable in talking in English" (SK02). Both language and cultural barriers are explored in Chapter 4.
8. The subject itself is a delicate matter. It was said that government officials "don't feel comfortable giving someone an interview on this subject" (SK02) and that "son preference

and sex ratio at birth are not fashionable topics anymore, so not so many people are working on that topic any longer” (SK26). Neither has sex selection ever been a big policy issue: “We had a huge problem with the sex ratio distortion. But not many people paid attention to it, even in academia. That tells us how the Korean society dealt with that issue of SRB. We thought it is not normal or natural, but it is not something you study or make a huge production about it in terms of policies” (SK32). The current government is too busy with other population objectives, so that they lack interest in revisiting the case. “I don’t think the researchers and policy makers are interested in that [anymore]” (SK05). Instead, focus is placed on countering low fertility (SK01, SK06, SK08). Sex selection was said to be no longer a problem (SK27).

9. The lack of evidence may also explain why the government is unwilling to assess the policy impact. According to one scholar, “We don’t have evidence. The government should at least try to collect evidence and if they cannot they should ask academia to help them” (SK32). The same informant draws from the current policymaking process, where the impact assessment is based on (expert) opinion rather than actual evidence: “The Korean government makes policies based on opinion, not evidence. Opinions from experts, they say” (SK32). According to the respondent, “policy makers cannot wait until research findings come out. Usually in academia you have to wait until the studies come out. The government cannot wait” (SK32). No one wants to comment on a situation where there is no clear evidence for efficacy one-way or the other.
10. Lastly, the funding for family planning campaigns and research dropped. “Frankly speaking, in the 1990s, the budget and support from the government dropped very quickly because the government understood that the family planning was achieved already. They felt that they didn’t need to provide anymore funding to family planning” (SK15). In 1996, the Korean Culture and Sexuality Research Center was established to solve sex imbalances, but research activities on sex imbalances lasted only 3 years before other issues appeared on the policy research radar. Due to the financial disincentives, there is no motivation to revisit the case.

These potential factors may explain why Korean scholars and policy makers have not been eager to redirect attention to understanding what happened 20 years ago. This is despite the substantial international interest to measure policy impact of the Korean ‘success story.’

4.7. Conclusion: Focus on *Magnitudes* in Post-Sex Selection Era

This chapter started out with a background of son preference rooted in Confucian heritage and influenced by colonial rule. We saw that policies for lowering fertility were seen as motors for rapid development in Korea, so access to sex-selective technologies, including abortions, were available despite their illegality. With the rise of sex selection, policies against sex selection were introduced which included a triple ban on abortion, sex determination and preconception sex selection. However, these legal constraints were poorly enforced and only stepped up after SRB had begun to normalize.

Along with these legal, supply-orientated approaches, awareness-raising campaigns were also introduced to increase the value of girls, and encourage couples to practice family planning without discrimination against daughters. Campaigns themselves addressed the 3-M's of sex selection by (a) targeting gender discriminating and promoting gender equality (motives), (b) stressing the illegality of abortions and sex determination (methods), and (c) warning about the negative consequences of sex selection and emerging problems in the marriage market (magnitudes).

Besides legal bans and awareness campaigns, other important gender equality laws were passed. The hoju system was abolished, which was seen as a major accomplishment for gender equality in South Korea. Also wider reforms linked to fertility regulations, pensions schemes and old age protection, were introduced throughout the 1990s. Thus, South Korea can be easily regarded as a poster child for addressing sex selection from multiple angles. However, the analysis showed that anti-sex selection policies played a minor role in the SRB transition and were never a priority for the government. Instead, the evidence points to other drivers that explain the decline in SRB namely, a shift in family norms, socio-economic development, and enhanced women's status. Detailed quantitative and qualitative analyses show that policy changes were minor drivers in SRB renormalization.

In the regional case study we turned to Daegu. Daegu's SRB decline visibly started in 1990 and then accelerated after 1994 in line with national SRB trends. Policy efforts were introduced in 2000 after SRB had already declined. We gave voices to the doctors actively practicing sex-selective abortions in the 1990s and to citizens reporting about shifts in social and family norms. Meanwhile, local government officials showed greater interest in discussing current population problems than revisiting old ones.

We also discussed the implications of these findings. South Korea is falsely portrayed as a policy ‘success story.’ The SRB turnaround is often ascribed to effective policies, a claim which we found to be unjustified. ‘Institutional amnesia’ is getting in the way of correcting this image by revisiting this case. This collective ‘amnesia’ was linked to a variety of factors such as cultural barriers, hierarchical social structures, short-term phenomena and political cycle. The result was that key informants were hesitant to report on policies and practices of the past. In the meantime, the population clock is ticking (again), but this time in a different direction. Korea has been recording ultra-low fertility since over a decade. The governmental focus has shifted drastically, but the younger generation has proven resistant to pro-natalist policies. Since 2005, authorities have become more concerned with “matchmaking” in order to boost fertility, counter population decline, and deal with the consequences of generations of missing women.

The resulting marriage squeeze has partly mobilized international marriage migration, which has become increasingly popular in South Korea. Especially rural and less educated men are excluded from the marriage market and seek brides from abroad. Between 2007 and 2015, the number of female international marriage immigrants increased from 75,467 to 125,073. South Korean men often prefer migrant brides from neighboring countries due to cultural similarities. Close to 70% of all migrant brides in 2015 came from China, preferably with Korean ethnic background, or Vietnam (KOSIS 2017).

The emerging commercialism of the marriage market opened up the need for regulation. As such, the Korea government has introduced (a) regulations for marriage brokers and international marriage migration, (b) quotas on fixed number of migrant brides (often coming from China and Vietnam where sex selection is also practiced), (c) support schemes for migrant brides (cultural adaptation, language courses, helplines), (d) new legislation on domestic violence and femicide.

The Korean government signed agreements with other countries to determine the legal number of marital immigrants and started to offer integration programs targeted to migrant brides to facilitate their cultural adaptation. Local NGOs have formed to provide psychological, medical and legal assistance to migrant brides who fall victim to domestic violence. South Korea has thus been more concerned with addressing the magnitudes of sex selection, while the practice itself is seen as a distant problem of the past.

Ultimately, what made the difference in South Korea was not restricted access to sex-selective services. Nor was it a rebound in fertility to ease peoples’ demand for a son. Instead, son

preference declined and daughter preference emerged. While earlier generations followed the mantra, “no son, no lineage, no future” is it now “not a bowl of rice, but tender loving care” that people wish from their offspring. Daughters are commonly regarded as giving more emotional and psychological support than sons. This is an important lesson that the South Korean case teaches us. Technology is still there, low fertility is still there, but son preference has eased. This is of particular relevance for countries, which seek to address sex selection by limiting methods and restricting access to sex-selective technologies, like India.

5. India

India occupies the greater part of Southern Asia – bordering Pakistan and Afghanistan in the west, Bangladesh and Myanmar in the east, and China, Tibet, Nepal and Bhutan in the north. India is the second most populous country in the world. Its 1.26 billion inhabitants account for roughly one sixth of the global population (Srivastava et al. 2017).

Culturally, India has one of the deepest and richest heritages in the world. Along with the Fertile Crescent in the Middle East and the Yellow River in China, the Indus Valley in Northwestern India hosted one of the first civilizations in the world dating back over 5000 years. Religious traditions like Vedanta Hinduism and social hierarchies like patriarchal kinship and the caste system all trace their roots to the ancient traditions and practices of this area.⁶⁹ Over the centuries, other cultural influences were also brought into this mix. European influences from Alexander the Great to colonial trade expansions mixed with various Islamic invasions to form the complex pastiche of political, economic, religious and social vectors that characterize this many-colored land. Historically, there were numerous efforts to unify this vast mosaic that blanketed the South Asian subcontinent.⁷⁰ However, it was not until the 19th century, that Britain established colonial rule over most of Southern Asia and unified this cultural patchwork politically and linguistically.⁷¹

The British rule ended when India gained independence in 1947 and parted into two states (India and Pakistan). The newly created Republic of India adopted its Constitution in 1949. As a federal parliamentary republic India consists of 29 states and 7 union territories (including the National Capital Territory of Delhi). It is considered a modern democracy based on traditional western ideals like adult suffrage, an independent judiciary and a free press (Guha 2008). Like

⁶⁹ First records of the emergence of socio-economic classes, kinship, caste system go back to the 6th Century BCE (Singh 2008) and coincided with the rise of cities and kings in North India. The social and political changes at the time had important implications for gender, family and household relations. “Strict control over women’s sexuality and reproductive potential was essential for the patrilineal transmission of property and for the maintenance and perpetuation of the endogamous caste structure” (Singh 2008, 295).

⁷⁰ Diverse leaders had aspired India’s political unification during their various regimes, including the Buddhist Ashoka, the Mughal Emperor Aurangzeb, the British Wellesley, and most recently modern India’s first prime minister Nehru. Meanwhile, diverse regional forces like the ancient rulers of Kalinga (modern Odisha), the Rajputs, the Marathas, the Sikhs, or contemporary leaders of Kashmir, Punjab, and Assam have all struggled against central control and for autonomy (Walsh 2006).

⁷¹ Linguistic unification was achieved by making English the official language of education (Ellis 2009).

many similar political systems in the west, the states in India are granted a substantial degree of control over their own affairs. Unlike most western governments, the Indian states diverge extremely in linguistic, cultural, geographic, and economic variables. One might imagine that a strong government would be necessary to keep these many contrasting regions united. On the contrary, the Indian government has been described as a “soft state” (Myrdal 1970). By “soft state” Myrdal means,

“All the various types of social indiscipline which manifest themselves by deficiencies in legislation and, in particular, law observance and enforcement, a widespread disobedience by public officials and, often, their collusion with powerful persons and groups [...] whose conduct they should regulate. Within the concept of the soft states also belongs corruption” (Myrdal 1970, 208).

Despite this relative ‘softness’ of the state apparatus, India has remained unified for over half a century. This seems surprising, especially when picturing how socially diverse the country is. In India social conflicts run along at least four major axes: those of caste, language, religion, and class (Guha 2008).

Caste encompasses the two Indian concepts, *jāti* (the group one is born into) and *varna* (the place of that group within the social stratification). There are four *varnas* and within those over 3000 *jātis*. Apart from that, there is the socially disadvantaged exterior or scheduled caste, long considered as ‘untouchable’ in Hindu scriptures. Linguistically, the Constitution of India recognizes 22 official languages with Hindi and English being the official languages used by the government. On the grounds of religion, Hindus make the vast majority of India’s billion-plus population, constituting 79.8% of the population. Muslims are, with 172 million, the second-largest group (14.2%), followed by Christians (2.3%), Sikhs (1.7%), Buddhists (0.7%) and Jainists (0.4%) (Census India 2011). Economic class disparities are also wide. India hosts some of the richest people on earth – over 100 billionaires of whom 4 are women.⁷² Meanwhile almost two thirds of the population lack access to modern sanitation and one-fifth lives on under 1.90 US\$ per day (World Bank 2016).

According to Guha (2008),

⁷² According to the 2017 Forbes ranking, India is the fourth country with the richest people worldwide (Dolan 2017). India’s billionaires accumulate a net worth of over US\$ 320 billion equivalent to approximately 13% of India’s GDP in 2017.

“These axes of conflict operate both singly and in tandem. Sometimes a group professing a particular faith also speaks a separate language. Often the low castes are the subordinate classes as well. And to these four central axes one should perhaps add a fifth that cuts right across them: that of gender. Here, again, India offers the starkest contrasts. A woman [Indira Gandhi, 1963-1978] served as prime minister for a full fifteen years, yet in some parts of India female infanticide is still very common” (Guha 2008, xix-xx, emphasis in original text, brackets added).

Against this backdrop of a vastly heterogeneous society, discrimination against girls and women is a crosscutting theme. It is one of the major axis of social segregation being both culturally ingrained and economically driven. Women in India across caste, language, religious and class barriers face many disadvantages. Throughout their life cycle, they are exposed to different forms of discrimination such as prenatal sex selection, infanticide, child marriage, reduced access to education, health care and nutrition, early pregnancy, gender violence, rape and dowry related deaths (Solotaroff and Pande 2014). We can easily see how difficult it may be for a “soft state” to challenge these diverse forms of gender discrimination, especially given the long history of son preference and daughter aversion in India.

This chapter on India follows the same general outline as the previous chapter. First we look at the history of sex selection and sex imbalances in the country. Then we present national public policies against sex selection and turn to the quantitative and qualitative data to better understand the evolution and impact of these policies. We continue by assessing the regional case study of Nawanshahr. Finally, we discuss the implications of our findings.

5.1. Indian Context

5.1.1. Son Preference and Daughter Aversion During Colonial Times

India has a long history of disfavoring girls. Early accounts of infanticide in North, West and Central India reach back to the 17th and 18th century when the practice was reportedly so widespread among the Rajputs that numerous villages had no female children below 6 years old (Vishwanath 1998). Besides the Rajputs, other elite land owning and warrior groups became known for practicing infanticide. Different reasons have been given to explain the practice, including economic hardship and scarcity of resources, but all of these reasons are largely rooted in the patrilineal and patrilocal kinship systems, especially in Northwest India.

In patriarchal family systems, sons are seen as assets and daughters as liabilities. Traditionally, only sons inherit land, assets and the family name. In a country where caste systems are rigid, a family's pride of place is passed on through its land, assets and family name, and only a son can inherit that pride of place. Also, in the Hindu religion only a son can give his parents their last rites after death. So it is not only an asset to have a son to carry on your physical possessions and social status, but also to carry out your metaphysical transition to the next incarnation. Daughters, on the other hand, are often regarded as a family burden. Daughters not only require physical protection, but they also require investment in their upbringing and marriage (in the form of dowry).

Once married, daughters no longer contribute to their birth family, as they then move and contribute to their husband's household and family. The dowry payment functions as a form of prestige. It is regarded as necessary in order to marry daughters into families of a higher social rank or even caste.⁷³ This form of hypergamy has played an important role in the rationale behind discriminating against girls. Especially daughters born into elite castes – for whom it would be difficult to marry up – were frequently killed in order to avoid sizable dowry payments and with it the risk of losing one's agricultural land (Vishwanath 2007). For these complex familial and economic reasons, it has been common throughout different parts of India to disproportionately invest in sons over daughters and to fatally neglect or even kill girls.

The British were the first to report, study and condemn excess female child mortality. They outlawed infanticide with the Female Infanticide Prevention Act of 1870, after already having introduced laws to abolish sati and allow widows to remarry (Nair 1996). The law authorized the maintenance of birth and death records to better monitor the practice, and stipulated penalties (imprisonment and fines) for legal violations. Apart from legal action, the British publicly 'named' and 'shamed' higher castes that engaged in such 'barbaric' and 'backward' cultural practices. For example, the 1921 census report listed Indian castes according to those that had 'a tradition' of female infanticide and those that did not. Postcolonial scholars have parodied the patronizing role of the British in phrases like Spivak's famous quote, "White men [are] saving brown women from brown men" (Spivak 1994, 93). Instead of "saving" Indian women some scholars have suggested that the British censorship of Indian 'traditional' practices was a way to express supremacy and establish control over the region (Purewal 2010; Bhatnagar et al. 2005).

⁷³ In this regard there is some fluidity in the caste system.

In fact, the colonial rulers did not seriously challenge the underlying patriarchal roots of harmful cultural practices against women. Quite to the contrary, very few colonizers advocated female emancipation while the majority tacitly endorsed traditional patriarchal values (Hutchins 2015). For example, the judge and member of the British viceroy's council in India (1869–72) Sir James Fitzjames Stephen regarded women's subordination and their obedience in marriage "not a servile but an honourable and blessed thing."⁷⁴ While Stephen made a name for himself for codifying and reforming the Indian Law, he himself was skeptical about the British influence on Indian family traditions. He stated,

"To try to regulate the internal affairs of a family, the relations of love or friendship, or many other things of the same sort, by law or by the coercion of public opinion, is like trying to pull an eyelash out of a man's eye with a pair of tongs. They may put out the eye, but they will never get hold of the eyelash" (Stephen 1991, 17–18).

By openly condemning backward Indian family practices, the British could express their moral superiority, justify their control over both public and private spheres and underpin their claim of power – without having to challenge the system that disfavors women. The double standard was evident. On the one hand, cultural practices such as female infanticide were publicly denounced, studied, analyzed and legally prohibited. On the other hand, the patriarchal family system underpinning such practices was not questioned, but rather maintained as it was as seen necessary to ensure the social order of colonial rule (Purewal 2010). Some even suggest that the British further fueled female infanticide by introducing land reforms and imposing heavy taxation on landowning castes (Hvistendahl 2011). As higher castes started to lose their lands, they demanded higher dowries from lower castes. As a consequence, female infanticide spread to castes formerly unaffected. Furthermore, members of the very clans that engaged in harmful practices towards women (e.g. Rajput) served as strategic allies and soldiers to the British. The following extract summarizes these double standards:

"The British agenda for reform was represented as being beneficial to women, as a civilising mission that would rescue Indian women from barbaric practices. This rationale gave the colonisers a moral upper hand over the male Indian elite, a mandate of cultural superiority that could be used to build political hegemony. And yet British notions of women's equality were far from absolute: not only did hierarchical gender relations exist in Victorian England, but Indian women were never treated as equivalent

⁷⁴ Stephen papers "*Letter to Minnie*" dated 19.12.1869 as cited in Hutchins (2015, 50).

to British women. Moreover, the British demarcated Indian patriarchal communities and their practices as the norm because these reflected their own vision of patriarchy as an optimum model, and thereby marginalised Hindu, Muslim and other ‘tribal’ matrilineal communities and even customary practices within patriarchal communities that gave women some autonomy from the family” (Basu 1999, 174).

It has become clear that the political elite during colonial times both openly condemned, and subtly supported, manifestations of gender discrimination and patriarchal values. This is an important factor to stress because it sets the foundation for the further exploration of the inherent contradictions within policy response against sex selection in modern India. In many ways, the political elite still operates from within the same patriarchal context that contributed to sex imbalances in the first place. In many ways, current efforts against sex selection can be interpreted as direct descendants from a not so distant colonial past.

While the roots of son preference and daughter avoidance go back to prehistoric times, the British were the first to systematically record and politicize gender violence. Historically daughter avoidance is linked to family practices, kinship systems, dowry payments and land ownership and took shape in the form of postnatal gender discrimination. More modern expressions of daughter avoidance (e.g. selective abortions) are seen by some as a continuum of India’s long history of female infanticide, neglect and abuse (Gupta 2000; Miller 1987). Prenatal sex selection only appeared in the late 20th century as fertility declined and services became available, but to many they are just modern expressions of ancient gender biases.

5.1.2. Fertility Decline and Family Planning

India’s history of population control has played a key role in the emergence of prenatal sex selection. Historically, Indian population policy was driven by the Malthusian concern that the linear expansion of food supply and other resources would not be sufficient to nourish the exponential expansion of populations. Thomas Malthus’s idea served 19th century British colonial interests well because the elite were eager to maximize revenues and minimize state welfare programs both domestically and overseas. By teaching almost 30 years at the East India Company College in England (1805-1834), Malthus educated the young elite who would become the next generation of British colonial administrators and imperialists. His conviction, that population growth was causing periodic famines in India and therefore needed to be controlled, influenced generations of population workers, politicians and scholars (Harkavy and Roy 2007).

The growing “population problem in India” (Wattal 1916) quickly became a matter of international and national concern. India’s first birth control clinics date back to 1923 when a “neo-Malthusian league” was established in Madras. At this time, “the most vocal proponents were upper-caste Hindus upset that popular movements were challenging their privileges” (Connelly 2008, 93). Overall, a variety of different justifications for population policies became apparent early in the 20th century. These justifications ranged widely from Spencerian eugenics that focused on controlling the reproduction of the poor and ‘unfit’ masses and encouraged the reproduction of the elite, to ideas of early feminist emancipation as a justification to liberate Indian women from excess numbers of births.⁷⁵

After independence, Nehru’s cabinet was urgently tasked to address population growth. India became the first country in the world to officially launch a population control policy in 1952. Around the same time, two important IOs were also founded – the International Planned Parenthood Federation and the Population Council – both would become key players in population policies. Over the next three decades a major focus was placed on family planning and lowering fertility in India. Efforts were continuously stepped up with every Five Year Plan, partly because of rising pressure from international agencies.

In the 1960s, birth control clinics were set up in cities to provide contraceptives like condoms, diaphragms and IUDs. Through IEC campaigns, the government hoped to raise awareness of, and create demand for, these new clinics and conceptive methods. However, this clinic-based approach proved largely ineffective and was replaced by a more outreach-orientated approach in 1963. Government goals for contraceptive methods (Sterilization, IUDs, condoms) were passed on to states that further passed down directives to district levels. Subsequently, “an army of family planning workers was deployed” making house-to-house visits and providing incentives for couples to accept family planning (Harkavy and Roy 2007, 308).

In the 1970s, vasectomies were promoted through camps (Visaria and Ved 2016). India also started to legalize abortion due to high rates of maternal mortality often linked to unsafe abortion practices. In 1971, the Parliament passed the Medical Termination of Pregnancy Act, which allowed abortions for economic and social reasons up to 20 weeks of gestation. The stated objective of the act was to provide safe and legal abortions to women. In practice though,

⁷⁵ Margaret Sanger herself visited India in 1935 to promote birth control. She was also involved in establishing the International Planned Parenthood Federation (IPPF) in Bombay in 1952.

abortions were increasingly being promoted as a ‘family planning’ way to lower fertility throughout India (Hirve 2004; Arnold, Kishor, and Roy 2002).

Early on, international agencies became involved in assisting, if not shaping, family planning in India. Among its major advocates were the Population Council, the Ford Foundation, USAID and the World Bank. Significant financial and technical assistance were provided to the Indian government in the hope that population growth would be strongly addressed. Due to its recent colonial past, international aid was met with great skepticism. It was regarded as another form of colonialism, “technical colonialism in family planning” (Harkavy and Roy 2007, 319). India’s discontent with the global power asymmetry shined through with the famous statement “development is the best contraceptive,” made by the Indian delegate during the 1974 World Population Conference in Bucharest. Behind the slogan stood the assertion that the “Third World” including India was interested in more than just contraceptives from the “First World,” namely in a new global economic setup that would bring actual development (Hodgson 2009, 503). Shortly after, ties with international family planning agencies were broken when Prime Minister Indira Gandhi announced a state of emergency and embarked on a path of national self-reliance (1975-1977).

The drive to reduce population became so pressing that the government promoted harsh sterilization programs. India galvanized its “soft state” status by stepping up its top-level political support. Family planning became increasingly coercive. State laws were passed that made sterilization mandatory for couples with more than three children. Local civil servants pressured community members to undergo sterilizations in order to meet population targets. Especially the rural, poor and underprivileged were targeted. An estimated 8.3 million people were sterilized between 1976 and 1977, many forcefully (Haub and Sharma 2006).⁷⁶ By the time the intensive family planning drive was ended, millions of Indians had suffered from governmental oppression (Gwatkin 1979). Despite the political backlash of the emergency period, the course to lower fertility continued.

In the 1980s, family planning was expanded as part of the Sixth Five-Year Plan (1980-1985). The government set the target to reach a net reproduction rate (NRR) of 1 by 1996. The rate expresses the average number of daughters born to a female throughout her reproductive lifespan and controlled for mortality. In other words, the target was that an Indian woman would

⁷⁶ Around same time at the other end of the spectrum, sex-selective services became available in urban public hospitals and were increasingly being requested by the Indian elite to avoid unwanted female births (Hvistendahl 2011).

have on average no more than one daughter to replace herself. Thus, limiting the birth of daughters was seen as a politically expedient means to slow down population growth for decades.

In the 1990s, the NRR target of 1 was revised and further delayed to be achieved by 2016 (Visaria and Ved 2016). The new developments in family planning in India and elsewhere (e.g. state coercion, government enforced population targets, the emergence of sex-selective abortions) led the international community to shift their global agenda from a population quantity to a quality-driven approach enshrined in the landmark 1994 International Conference on Population and Development (ICPD).⁷⁷ In response to the ICPD, the Indian government removed centrally set contraceptive targets and introduced a community needs assessment approach to family planning. The aim (in theory) was to grant voluntary family planning and enable men and women to achieve their personal reproductive goals.

In 2000, the National Population Policy formulated its main goal of reaching a TFR of 2.1 by 2010 and of stabilizing the population at 1.45 billion by 2016 (Visaria and Ved 2016).⁷⁸ In order to meet this goal, states continued to focus on population control policies and imposed a two-child norm among certain government cadres. Incentives to undergo sterilizations often came as a ‘packaged deal.’ They served as a requirement to qualify for public entitlements. Even though contraceptive targets were officially removed, the mindset and the incentive base to control population growth have not disappeared and continue to prevail today.

Despite significant national and international efforts to curb population growth in India, these efforts have met with limited success compared to other Asian countries. Fertility levels in India are still slightly higher than in most of Asia. The Indian population more than tripled between 1950 and 2015, from 376 million to 1.31 billion Indians respectively, while the TFR decreased from 5.9 to 2.3 children per women during the same period (UNDESA 2015).

While the TFR has come down, the decline has been slower than compared to other Asian countries. It has been argued that population control policies in India could have been more effective had they not ignored regional variations in readiness, conditions and norms (Harkavy and Roy 2007). The regional patchwork of India is poorly suited to ‘one size fits all’ policy

⁷⁷ This shift in the global agenda shows that policy feedback and learning from past policy experiences also applies in international governance.

⁷⁸ A further important objective of the National Population Policy was to achieve 100% registration of births, deaths, marriage and pregnancy.

solutions. Another potential reason for the limited policy efficacy is India's status as a "soft state." The lack of a strongly centralized government combined with the high degree of cultural heterogeneity would not be a recipe for strong political responsiveness.

In this section, we have briefly reviewed fertility decline and family planning promoted by international and national stakeholders in India. The Malthusian emphasis on population control has been the guiding principle of population policy efforts for more than a century. In fact, it is still prevalent today. A recent government report issued by India's Central Statistics Office argues, for example, from a Malthusian perspective by stating that, "population need [sic] to be controlled to match the resources that mother earth can produce" (CSO 2017, 25).

Undoubtedly family planning efforts have improved the lives of many by reducing poverty, maternal mortality and infant mortality, but there is still room for improvement (Cleland et al. 2006). Regarding sex selection, the spread of family planning throughout the 20th century came with two major side effects. Firstly, reduced fertility has put pressure on couples to conceive the desired son with fewer births. Especially for urban well-off couples, family planning meant having smaller families with at least one son. Secondly, family planning led to a rapid medicalization and modernization of the health care industry in India. As modern technologies clashed with a tradition of son preference, new reproductive services became a popular means to deselect daughters.

5.1.3. Access to Sex Selection Technologies

Reproductive technologies enabled and reinforced sex selection. In the 1970s, it became known that women were eager to use new technologies like amniocentesis for sex determination and newly legalized abortions for the termination of their pregnancies when carrying a female fetus (Ramanamma and Bambawale 1980; Miller 1985). A 1975 journal article by doctors from the All-India Institute of Medical Sciences (AIIMS) in New Delhi first published these findings and argued that sex determination could serve as a means "put an end to this unnecessary fecundity" as couples clearly opted for sons and showed no hesitation in deselecting daughters (Verma et al. 1975, 384). According to some observers, these early sex selection trials were set up with substantial technical and financial support from the West (Hvistendahl 2011).

At the time, few hospitals in larger cities were equipped to offer sex determination and not every patient could afford it. What started out among a few well-off, urban couples quickly spread throughout the country and picked up speed as India transformed economically. Miller

wrote in 1985 “there appears to be an eager market for sex-selective abortions, although the cost of the service still makes the procedure too expensive for the very poor” (Miller 1985, 3). In the light of future savings (avoiding dowry payments) more and more people were willing to invest in sex-selective abortions. Those services become available early on in wealthier states, like prosperous Punjab, that got rich through the Green Revolution. With economic and technological development came a well-developed health care system with advanced medical colleges and hospitals (Miller 1985). Other states soon followed.

After the economic reforms introduced in 1991, India as a whole embarked on a rapid route towards economic growth, urbanization and modernization. Antenatal care, medically assisted birth and institutional delivery grew continuously. This meant a growing number of people gained access to vital health care services, including prenatal diagnostics, especially in regions that were formerly deprived of such services. Prenatal diagnostics were initially designed to detect genetic disorders, but were increasingly being used to find out the sex of the fetus and prevent the birth of a female child (Gupta 2000).

Table 17: Live Birth Distribution, by Type of Delivery Attention in %, 1980-2014

Type of Facilities		1980	1985	1990	1995	2000	2005	2010	2011	2012	2013	2014
1	2	3	4	5	6	7	8	9	10	11	12	13
Institutional Support (Government or Private Hospitals)	Rural	11.0	13.3	16.2	17.4	17.5	24.4	33.9	60.7	67.9	69.7	73.2
	Urban	37.7	47.4	52.8	59.6	55.3	70.4	84.2	87.8	92.0	92.1	93.2
	Total	17.4	19.9	22.9	23.2	25.2	34.3	60.3	66.6	73.1	74.4	78.3
Qualified professional	Rural	13.2	17.2	20.2	27.6	27.7	29.4	16.2	13.1	13.8	14.4	13.4
	Urban	27.3	24.9	26.1	30.9	34.1	15.3	10.8	8.0	7.5	6.1	5.4
	Total	16.7	18.7	21.3	28.2	29.0	26.4	15.0	13.7	12.4	12.7	11.3
Untrained family and others	Rural	75.8	69.5	63.5	55.0	55.4	46.3	30.0	24.2	20.4	15.9	13.4
	Urban	33.0	27.7	21.2	9.3	11.1	14.0	5.1	3.1	2.8	1.7	1.4
	Total	61.9	61.4	51.8	46.7	46.5	30.2	24.5	19.8	16.6	12.9	10.2

Source: Office of Registrar General, India, SRS, as cited in CSO (2017, 29).

Table 17 shows the distribution of live births by type of medical attention received by the mother at the time of delivery in percent between 1980-2014 (based on Sample Registration System data). Urban women were granted access to institutional support and qualified medical

professions relatively early on, while rural women have been catching up especially since the 2000s. Table 17 indicates that in 1980 only 17.4% of women gave birth in institutionalized settings. This number increased mildly to 25.2% by 2000 and then jumped from 34.5% in 2005 to over 60% in 2010. In 2014, 78.5% of women gave birth in institutional settings according to SRS data. Between 1980 and 2014, the share of deliveries attended by untrained personal continuously decreased from 65.9% to 10.2% (see Table 17).

Drawing from a different source a relatively similar picture emerges. Table 18 shows trends in maternal care indicators for the last birth in the 5 years before the survey based on data obtained from the National Family Health Survey NFHS-3 (2005-06) and NFHS-4 (2015-16). All indicators regarding maternal health and delivery care improved between the two surveys. The percentage of women who received antenatal check-ups in the first trimester and those who had at least 4 antenatal care visits grew by 14.7% and 14.2% respectively. Noticeably, the share of institutional birth doubled between the two surveys and stood at close to 80% for births in the 5 years prior to the 2015-2016 survey. Similarly, the percentage of medically assisted births raised by 34.8% to over 80%, while the number of home deliveries decreased. Significant governmental efforts have been put into registering pregnancies and improving institutional deliver. Particular focus has been placed on women in rural areas (e.g. with the promotion of financial incentives under the Janani Suraksha Yojana Scheme) to ensure women's coverage with adequate antenatal and delivery care and close the gap between rural-urban coverage (see Table 18).

This distinct rise in antenatal care and institutional medicine undoubtedly brought many health benefits for mother and child. But it also opened the doors to sex selection. Policy pushes towards lowering fertility and legalizing abortion in the 70s, and the continuous rise of reproductive technologies since the 1980s and 1990s created an environment where sex selection could flourish. The urban population benefited early on from access to this new technology. By the time the first signs of prenatal sex selection were showing up in demographic records, abortion was legal, safe, affordable and accessible in urban settings. Sex determination had become a routine part of prenatal care. Many who wanted to terminate an unwanted female fetus had both the means and the ends to do so.

Table 18: Trends in Maternal Care Indicators, NFHS-3-4, India

Indicators	NFHS-4 (2015-16)			NFHS-3 (2005-06)
	Urban	Rural	Total	Total
Maternity Care (last birth in the 5 years before the survey)				
Mothers who had antenatal check-up in the first trimester (%)	69.1	54.2	58.6	43.9
Mothers who had at least 4 antenatal care visits (%)	66.4	44.8	51.2	37.0
Registered pregnancies for which the mother received Mother and Child Protection (MCP) card (%)	87.7	90.0	89.3	na
Mothers who received financial assistance under Janani Suraksha Yojana (JSY) for births delivered in an institution (%)	21.4	43.8	36.4	na
Delivery Care (for births in the 5 years before the survey)				
Institutional births (%)	88.7	75.1	78.9	38.7
Institutional births in public facilities (%)	46.2	54.4	52.1	18.0
Home delivery conducted by skilled health personnel (%)	3.0	4.9	4.3	8.2
Births assisted by a doctor, nurse, other health personnel (%)	90.0	78.0	81.4	46.6

Source: NFHS-4, NFHS-3.

By the turn of the century, ultrasound had even spread to rural and remote areas. Portable devices imported from China were becoming increasingly popular and this modernizing trend in the health care industry has continued (Gupta 2000; Arnold, Kishor, and Roy 2002). Today India has close to 55,000 ultrasound clinics and sex selection has allegedly become a multi-billion dollar business despite its illegality (George 2016).

Newer techniques (e.g. PGD, IVF, sperm sorting) have also been on the rise in the Indian market. A Mumbai-based doctor couple was among the first to report about the use of PGD and IVF for sex selection in India. Between 1999 and 2001, they transferred 106 embryos using artificial reproduction.⁷⁹ All couples opted for sons. Many of them reported that they turned to

⁷⁹ This was before the 2003 amendment of the PC&PNDT Act prohibiting preconception sex selection.

pre-implementation sex selection after having undergone one or several sex-selective abortions despite its illegality (Malpani et al. 2002). Numerous studies have followed that pointed to widespread “misuse” of technology for sex selection (see e.g. Patel 2007; Purewal 2010; Sharma 2011; Sundar et al. 2015). Celebrities openly engage in preconception sex selection (e.g. Bollywood actor Shah Rukh Khan). This sends a strong signal that sex selection is socially acceptable, desirable and worthy of imitation. It is against this backdrop of old-age motives, lowering fertility and increased access to modern reproductive technologies that sex selection in India has become increasingly popular.

5.2. Rise and Plateauing of Sex Ratio at Birth

India has had a skewed sex ratio for quite some time even though the sex ratio at birth is difficult to calculate due to incomplete birth registration (Sen 2003; Das Gupta and Mari Bhat 1997; Seth 2010). The sex ratio at birth varies significantly across sources. Demographers have circumvented this gap by using the more robust census data to measure the implied sex ratio at birth or they have simply focus on the child sex ratio (CSR) ages 0-6, which reflects both pre- and post-natal discrimination.

The CSR has shown a worsening trend over the past decades. It has continuously increased from 103.7 in 1971, to 104.0 in 1981, to 105.8 in 1991, to 107.9 in 2001 and 108.9 males per 100 females in 2011.⁸⁰ Child sex ratios are determined by the sex ratio at birth, but are also influenced by postnatal neglect, infanticide, or age misreporting. While female infanticide and neglect have played and continue to play an important role in distorting sex ratios (especially in rural and less developed parts of North India), it is increasingly sex-selective abortions that distort sex ratios in India.

In the upcoming section we first review the national SRB trends before examining regional sex ratio data. For comparability reasons, we use mainly the international measurement of male births per 100 female births, instead of the Indian measurement of females per 1000 males, unless indicated otherwise.

⁸⁰ India Census Reports for respective years (see Census India 2011).

5.2.1. National Trends

Available data sources on sex ratios at birth include the Civil Registration System (CRS), the Sample Registration System (SRS), the National Family Health Survey (NFHS), sex ratios at birth estimated from Census data (ages 0-1), as well as SRB obtained from hospital and institutional birth records.

Civil registration data from the beginning of the 20th century showed an SRB close to normal levels (106.8), but it became more masculine in the 1940-1946 period (109.6). This was mainly driven by sex imbalances in the northwestern parts of India, where sex ratios have been historically inclined towards males, while the rest of India showed levels within or close to the normal range. Hospital records collected between 1949–58 based on 2 million births confirmed an SRB within normal range of 106.4 (Ramachandran and Deshpande 1964). By the late 1960s, SRB estimates based on the Sample Registration System pointed to 108.1 in India (105 in Kerala and 113 in Rajasthan) (Seth 2010). Sex ratios at birth became more masculine throughout the 1980s. Data collected between 1981 and 1990 in urban medical establishments and based on six million births showed a sex ratio at birth of as high as 112.4. Also, Sample Registration System data indicated a continuous rise in SRB well above 110 (from 109.6 in 1981-1991 to 111.9 in 1991-2001 to 113.3 in 2001-2006). Contrary to that, the SRB derived from Census data (1981, 1991, 2001) and the National Family Health Surveys (NFHS-1 and 2) indicated levels much closer to the biological norm (Arnold et al. 2002; Kulkarni 2009). Early estimates of SRB in India are summarized in Table 19.

This data shows how the estimates differ significantly across sources. They all paint quite a different picture and involve multiple problems linked to sample errors, underrepresentation, misreporting, and irregular or incomplete coverage. However, broadly speaking, various sources indicate that the sex ratios became more masculine at a national level in the 1990s. Some outliers record a high level of SRB of 112 among institutional births already between 1981 and 1991, yet it is worthwhile remembering that, at that time, only one in every five women gave births institutionally.

Table 19: Estimates of Sex Ratio at Birth in India, 1901-2000, Various Sources

Nature of data	Source	Reference period	Sex Ratio at Birth	
			(males per 100 females)	(females per 1000 males)
Civil Registration	Visaria (1968)	1901-10	106.8	936
“	“	1911-20	107.2	933
“	“	1920-29	107.9	927
“	“	1930-39	108.3	923
“	“	1940-46	109.6	912
Hospital Births	Ramachandran and Deshpande (1964)	1949-58	106.4	940
SRS	Bhat (2002)	1968-69 (Rural)	108.1	925
“	“	1982-86	109.6	912
“	“	1994-98	112.4	890
“	Premi (2001)	1981-90	109.5	913
“	India, Registrar General (2001)	1996-98	111.0	901
Institutional births	Premi (2001)	1981-91	112.0	893
“	“	1990s (in some states)	109.9	910
Children ever born (to women of ages 20-29): Census 1981	Bhat (2002)	Some period prior to 1981	107.3	932
Census 1991	“	... to 1991	107.4	931
Census 2001	Kulkarni (2007)	... to 2001	106.5	939
Births last year Census 2001	“	2000-01	110.4	906
Birth Histories NFHS-1	Arnold <i>et al.</i> (2002)	1988-92	105.2	951
“ “	Arokiasamy (2007)	1983-86	107	
“ “	“	1987-90	106	
“ NFHS-2	Arnold <i>et al.</i> (2002)	1993-97	107.0	935
“ “	Arokiasamy (2007)	1991-94	108	
“ “	“	1995-96	107	
SFMS	India, Registrar General (2005a)	1997	111.2	899

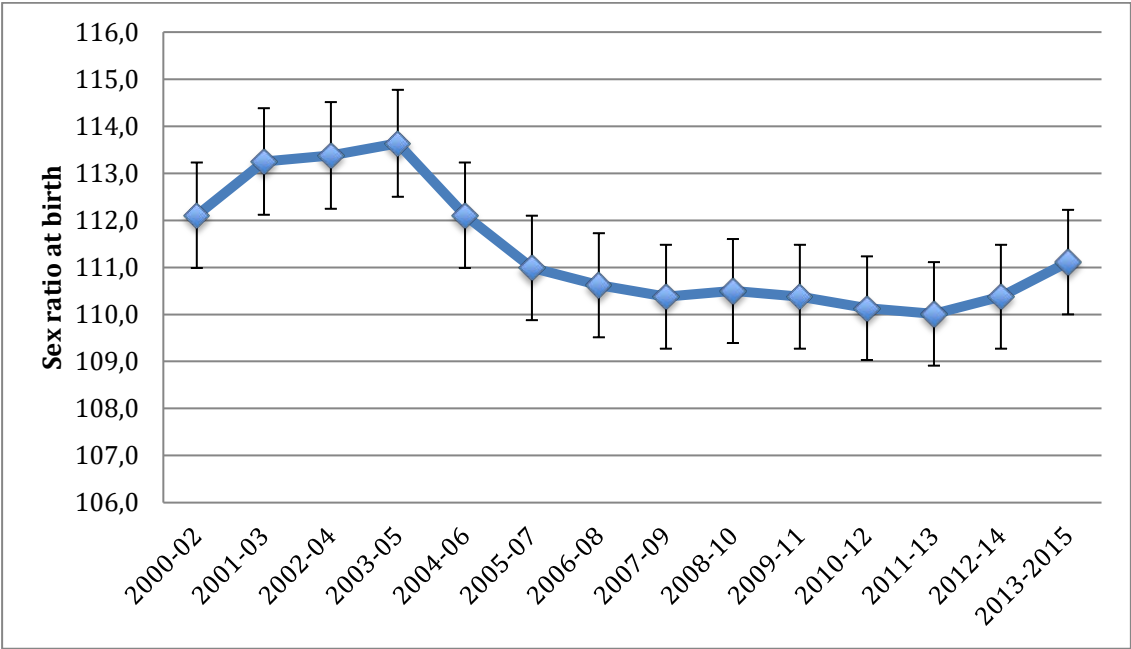
SRS: Sample Registration System; NFHS: National Family Health Survey. SFMS: Special Fertility and Mortality Survey 1998. Source: Kulkarni (2009)

For the period after 2000, data quality somewhat improves due to increased levels of birth registration, but the aforementioned problems of incomplete coverage, sample errors and underrepresentation still persist (Rajan et al. 2015). The sex ratio at birth has been above or close to 110 male births per 100 female births since the turn of the century across all data sources, yet there are some conflicting tendencies. According to Census data, based on about

20 to 21 million births, SRB became more skewed between 2001 and 2011 from 110.5 to 111.2 respectively (Census data, see Rajan et al. 2015). According to CRS data, based on 21.8 million births with a registration level of 83.6% in 2011, the sex ratio at birth improved between 2001 and 2011 from 114.3 to 110.0 respectively. According to SRS data, based on 157.626 births per year with a 95% confidence interval, SRB also improved between 2000-02 and 2010-12 from 112.1 to 110.1 respectively. Lastly, according to the National Family Health Survey, based on 700,000 surveyed women, the sex ratio at birth for children born in the last five years improved between the NFHS-3 (2005-06) and the NFHS-4 (2015-16) from 109.4 to 108.8 respectively.

The Census and CRS figures benefit from being based on a large number of births, but there are large states in India where birth registration is still below 80% (e.g. Uttar Pradesh) or where female births are systematically underreported (e.g. Bihar). Despite these inconsistencies, the 2011 figures lie in a relatively narrow range (Rajan, Srinivasan, and Bedi 2017). For a complete time series after 2000, we present here data published by the Office of the Registrar General of India in the Sample Registration System (SRS) as a three-year moving average. The trend in SRB for the period 2000-2015 is presented in Figure 31.

Figure 31: SRB in India Based on SRS Data, 2000-2015



Source: Sample Registration System, 3-year moving average, 95% Confidence Interval.

According to this data, SRB increased progressively reaching levels of 113.6 in the 2003-05 period. After 2003-2005, SRB improved noticeably to 110.4 in the 2007-09 period, where it has remained, with minor fluctuations, since. Most recent SRS data points to a slight increase

in SRB to 111.1 in 2013-15. The drop between 2005 and 2007 and the recent increase in SRB are also mirrored in data derived from the Civil Registration System – even if the CRS data points to a sharper increase in SRB reaching 113.5 in 2015, with a birth registration level of 88.3% (Rajan et al. 2017).

Inconsistencies across data sources make it difficult to give a precise picture. Yet, drawing from a variety of sources we can summarize that national SRB trends in India have become more masculine over the past four decades. The SRB seems to have peaked in the 2003-2005 period and since then it has plateaued. Currently, the SRB remains significantly skewed in favor of males and there are recent signs that SRB is rising.

5.2.2. Regional Trends

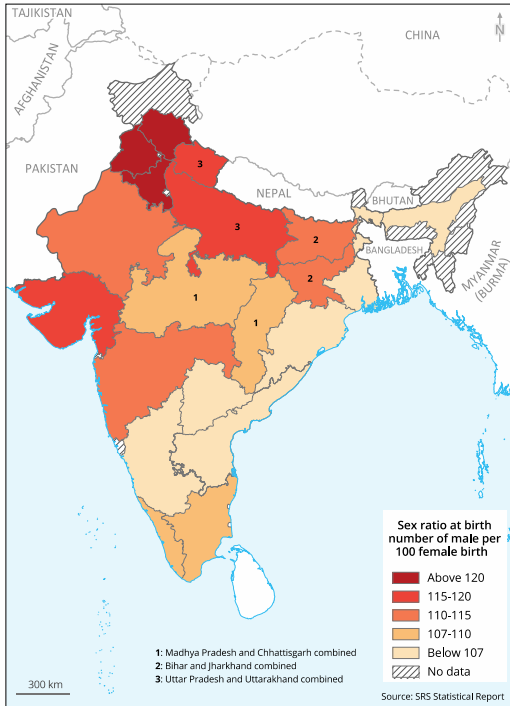
As India is an extremely heterogeneous country, vast regional variations exist within these national SRB trends. Many states in the Southeastern part of India have had an SRB close to 105 indicating that sex-selective abortions are rarely occurring. Meanwhile, many northwestern states have continuously reported high levels of SRB above 120 indicating that sex-selective abortions are rampant. This North-South divide is linked to differences in son preference and kinship systems and has gained much scholarly attention (see e.g. Klaus and Tipandjan 2014). Yet, regional trends are also shifting.

There are limitations in accessing reliable sex ratio at birth estimates for state and district level and significant variations exist across data sources (see Appendix 3).

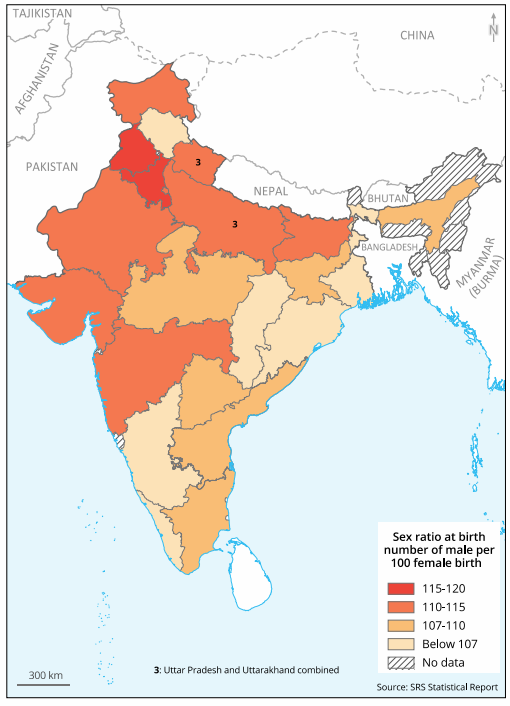
Nevertheless, if we look again at the SRB between 2001 and 2011 across data sets, a more conclusive picture emerges for the regional trends than for the national trends observed earlier: According to census data, SRB improved between 2001 and 2011 in a number of northwestern states (Chandigarh, Delhi, Haryana, Himachal Pradesh, Punjab, Rajasthan, Uttarakhand), while it worsened in a number of Eastern states that traditionally show weaker son preference (Assam, Bihar, Jharkhand Meghalaya, Mizoram, Nagaland, Odisha, Sikkim, Tripura, West Bengal). Similarly, according to SRS data and CRS data, SRB improved between 2000 and 2010 in a number of northwestern states, while it became more skewed in parts of East India. Recent estimates based on the SRS and CRS data suggest a further worsening of SRB in states like Haryana, Rajasthan, and Gujarat. These trends are easily observable in the following maps.

Figure 32: SRB in India per State Based on SRS Data, Selected Years, 2000-2015

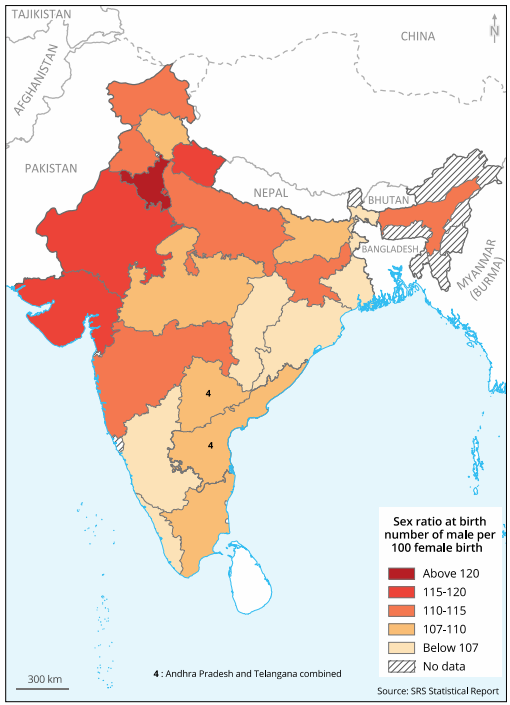
Sex ratio at birth in India, per state, in 2000-02



Sex ratio at birth in India, per state, in 2010-12



Sex ratio at birth in India, per state, in 2013-15



Source: Sample Registration System India, various years.

Figure 32 shows statewide trends for the years 2000-02, 2010-12, and 2013-2015 based on data obtained from the Sample Registration System. Historically, the Northwestern part of the country has been more severely affected than the Southeast. This is still true today, yet some changes have occurred over time. In the 2000-02 period, SRB reached levels above 120 in the Northern tip (124.4 in Haryana, 121.1 in Himachal Pradesh and 129.0 in Punjab), while levels between 115-120 were recorded in Bihar, Gujarat, and Uttar Pradesh. The rest of the country showed elevated levels between 107-115 except for the Southeast belt of Andhra Pradesh, Assam, Karnataka, Odisha and West Bengal, which recorded a normal SRB.

A decade later, in 2010-12, the picture had changed and two important trends emerged. First, the Northwest has witnessed some improvements. The most significant drop took place in Himachal Pradesh, from a level of 121.1 in 2000-02 period to a normal level of 106.5 ten years later. Significant improvements were also recorded in Punjab, Haryana and Gujarat to levels of 115.9, 116.7 and 110 respectively in 2010-12. Second, the rest of the country with few exceptions (Karnataka, Kerala, Odisha and West Bengal) witnessed an increase in SRB. That means some of the most affected areas have seen slight improvements, yet prenatal sex selection has spread throughout the country.

The most recent data (2013-15 period) confirm the trend that SRB is spreading, particularly in the Northern and Western part of the country. We can note further slight improvements (e.g. in the state of Punjab), but at the same time sex imbalances are on the rise in major Indian states (e.g. Assam, Gujarat, Haryana, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh).

As shown in the maps above, there is significant regional diversity in sex ratio trends. Considering the quality of SRB estimates in India, maps have to be regarded with caution. Nevertheless, Northwest India, where SRB levels have historically been the most skewed, has seen some improvements, most notably in Punjab. We will later follow up on this and analyze whether these improvements can be linked to policy interventions drawing from district-level data (see 5.5.). For a district-level analysis we also refer to the UNFPA publication “Missing” (UNFPA India 2014). It maps the child sex ratio (ages 0-6) per Indian District, which is considered to be more robust than SRS and CRS data.

There are further variations in SRB linked to religious backgrounds. The 2011 Census data indicates that child sex ratios are severely skewed towards males among Sikhs (120.8), Jains (112.5), Hindus (109.5), and to a minor degree among Buddhists (107.2). Moreover, there are class differences. Sex selection started among the Indian elite (who were the first to have smaller families and gain access to modern technologies) before the phenomenon spread

throughout the country. As such, sex imbalances are more pronounced in urban areas, among higher castes and among the richer, land owning and more educated social strata. Especially higher birth orders with prior female births are significantly skewed towards males (Arnold et al. 2002). As India undergoes rapid economic transformations, the newly emerging middle class in formerly unaffected regions seems to be driving prenatal sex selection. With these rising levels of SRB, the need for policy intervention has grown.

5.3. National Laws and Policies Related to Sex Selection

After India's independence, a growing number of laws, policies and programs have been introduced to strengthen the position of women and guarantee their constitutional rights. Diverse laws were established governing marriage and inheritance, labor and work conditions, maternity, welfare, social protection, education and socio-economic development. While there have been improvements made across the country in altering the status of women, progress has been highly unequal across regions.⁸¹ Often gender equity laws were nationally introduced, but were inconsistently implemented locally. Frequently, existing laws went unenforced and were only strengthened after national (feminist) protests, led by individuals and organizations upset about the 'soft' or simply absent implementation.⁸² Policy response against sex selection fits into this broad pattern. The Government of India has introduced a variety of laws, policies and programs to address it and has subsequently had to strengthen its efforts to enforce these reforms in response to civil protests.

This upcoming section reviews Indian public policies in relation to sex selection and abortion in a chronological order. We start out by presenting India's Five-Year Plans. We then describe in detail PC&PNDT Act, its strengths and weaknesses, since much of India's fight against sex selection has centered on this particular Act. Subsequently, we introduce other landmark policies that have changed the legal, political or social landscape linked to sex selection in India. Throughout the analysis, we pay attention to whether these policies target the motives, methods and magnitudes behind the phenomenon. Finally, we review the impact of these policies and their influence on national SRB trends.

⁸¹ Consider female literacy rate in India as an example. In 1951, only 8.9% of Indian women were literate vs. 65.5% in 2011. While in Kerala 92% of women are literate, Rajasthan has with 52.6% the lowest female literacy rate in the country according to the 2011 Census.

⁸² E.g. the laws on dowry and rape were tightened after national protests (Alfano 2017).

5.3.1. National Commitments and Shifting Goals in India's Five-Year Plans

The Five-Year Plans have been a cornerstone of India's political planning since independence. Since these plans have been fundamental to, and indicative of, governmental priorities, it is worthwhile to take a look how gender specific programming has shifted over the decades. This allows us to establish national policy priorities and it helps us to map when attention on sex selection first arose and how it has been framed at the national level.

Early 5-Year plans envisioned that women would automatically benefit from the overall socio-economic development of the country. The focus was mainly placed on women's welfare and family planning in general. The Fifth Plan (1974-1978) started to integrate women's welfare with developmental services. The Government initiated research on women with the 1974 report by the Committee on the Status of Women in India highlighting the socio-cultural, economic and political inequalities to be focused on during the International Women's Year and Women's Decade. The report *Towards Equality* pointed for the first time to sex imbalances and prioritized differentials in mortality.

The Sixth Plan (1980-1985) marked the official shift from women as welfare recipients to women's development. It put a spotlight on declining child sex ratios and culturally rooted son preference. The focus was placed on awareness-raising and the need for data collection.

The Seventh Plan (1985-1990) addressed female infanticide, neglect, differentials in nutrition and health care, and pointed to the worsening child sex ratios (between 1971 and 1981). Major programs included girl's school enrollment and awareness campaigns on the importance of the girl's health and the demographic, socio-cultural implications of sex imbalances. The Government also intended to involve NGOs in improving child sex ratios.

The Eighth Plan (1992-1997) introduced conditional cash transfers to benefit women and children, while actively promoting abortion as a means of family planning. The National Action Plan for the Girl Child (1991-2000) was introduced, which aimed to ensure the survival and protection of the girl child, prevent sex selection, and to stop the worsening child sex ratios.

The Ninth Plan (1997-2002) marked the shift towards women's empowerment and the elimination of all forms of discrimination against girls including prenatal sex selection. These goals were also enshrined in the 2001 National Policy for the Empowerment of Women. For the first time, the Ninth Plan made explicit references to sex selection, sex-selective abortions

and female “*feticide*.” It stressed the need to step up law enforcement and awareness-raising to improve worsening sex ratios. Declared policy objectives were to prevent the misuse of technology with the PNDT Act and to promote women’s reproductive rights and choice, while also endorsing a 2-Child Norm. These political objectives caused inherent dissonances since reproductive freedom in small family settings meant that reproductive technologies were increasingly misused to avoid female births.

The Tenth Plan (2002-2007) marked the shift to a rights-based approach. It aimed to achieve “gender justice” through (1) improving child sex ratios, (2) eradicating female feticide and infanticide through law enforcement and harsh punishments, (3) enhancing the reproductive rights of women, (4) improving women’s access to employment, assets and political participation, (5) providing funds for women, (6) changing legislation to remove gender biases, (7) stopping violence against women and girls, “with the strength of the law and order authorities both at the center and state levels” (Planning Commission 2012).

The Eleventh Plan (2007-2012) continued with promoting a strict law and order approach, while granting more freedoms to states and districts to adopt strategies that suit local situations. Meanwhile, the transfer of promising policy approaches across states was actively promoted. The first references to skewed sex ratios at birth were made (before only child sex ratios were addressed) and concrete targets were introduced to normalize SRB. The Plan promoted the survival of the girl child and “her right to be born” (Planning Commission 2012). The Plan also offered financial incentives to states to improve their sex ratios, while recognizing that SRBs are worse in prosperous states and communities.

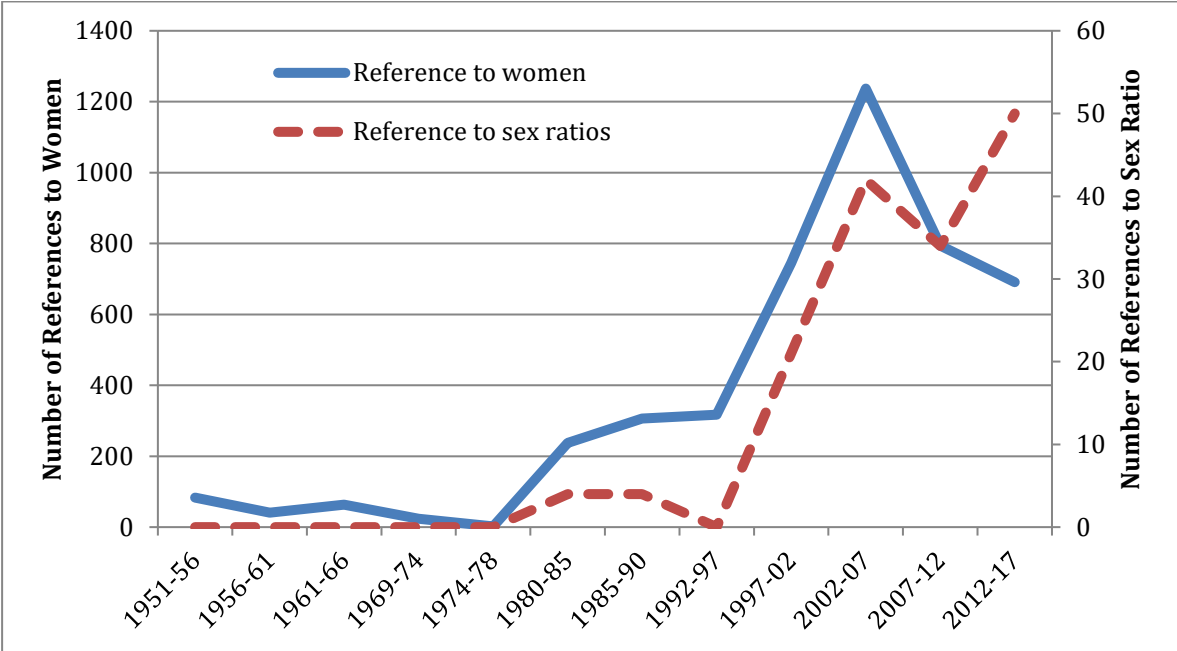
The Twelfth Plan (2012-2017) recognized the severity of sex imbalances in India and the inefficacy of prior policy efforts. It stated,

“the decline [in CSR] is especially disturbing as it is occurring in spite of a strong legal and policy framework and various government incentives, including conditional transfers and incentives schemes, various media and messaging efforts. If not reversed, it will alter demography, erode gender justice, social cohesion and human development” (Planning Commission 2012).

The Twelfth Plan called for urgent action to reverse child sex ratios through: (1) strengthening the law enforcement of the PC&PNDT Act, and (2) “relentless public awareness.” The new governmental target was to improve the child sex ratio from 109.4 in 2011 to 105 in 2017 (a

goal which was not met). The government focused on specific states where child sex ratios are particularly skewed or have worsened. The efforts relied on multi-stakeholder interdepartmental cooperation with different ministries being involved. The MoWCD was in charge of “engendering existing schemes,” raising awareness and improving child sex ratios within the National Strategy for Care and Protection of the Girl Child. The MoHFW also oversaw the enforcement of the PC&PNDT Act. The Ministry of Panchayats Raj was tasked with incentivizing panchayats to improve child sex ratios and create women and child-friendly local communities. The Ministry of Statistics and Programme Implementation was in charge of better SRB/CSR trend monitoring and the sharing of best practices.

Figure 33: References to “Women” and “Sex Ratio” in India’s 5-Year Plans, 1951-2017



Source: Planning Commission (2012). India’s 5-Year Plans, 1951-2017.

The Five-Year Plans are available as digital files on the planning commission website (Planning Commission 2012). This digital format allows applying a word search function – of the words “women” and “sex ratio” – throughout the 5-Year Plans. The results are shown in Figure 33. We can see that references to women increased in the 1980s and especially after the mid 1990s. References to women peaked in Tenth Plan (2002-2007) – mentioned over 1200 times – before declining to just under 700. References to skewed sex ratios first appeared in the Sixth and Seventh Plan and then increased, almost in parallel with references to women, from the Ninth Plan onwards. In the last 5-Year Plan sex ratios were mentioned 50 times. The simple number

of references to “women” and “sex ratio” doesn’t reveal the context in which these references are made, nor does it take into consideration that the overall page numbers of the reports has increased substantially. Yet, we get an idea how gender-related issues have gained importance over the years in national policy programming (see Figure 33).

To sum up, awareness, within the 5-Year Plans, of son preference, skewed sex ratios and the emergence of prenatal sex selection has constantly increased among Indian policy makers since the 1980s. Interestingly, the initial motive-based approach with a focus on changing mindsets shifted towards a more method-based approach by focusing on the PC&PNDT Act and the prevention of the misuse of technology for sex selection through a law and order approach. After this review, we now take a closer look into the respective laws and policies.

5.3.2. Medical Termination of Pregnancy Act

Abortions were penalized under the Indian Penal Code in 1860. They remained illegal in India until 1971, when abortions were decriminalized with the Medical Termination of Pregnancy (MTP) Act as a result of women’s group lobbying. The Act was passed by the Indian Parliament in 1971 and came into force on April 1st of 1972. The MTP Act legalizes abortion on demand up to 20 weeks of pregnancy for reasons and conditions laid down in the Act, mainly related to health concerns of mother and child, cases of rape, or contraceptive failure. Abortions need to be performed by registered medical practitioners within the requirements stipulated by the Indian Medical Council. For second-trimester abortions (12-20 weeks), two registered doctors need to authorize the abortion, except in the case of an emergency (Arnold, Kishor, and Roy 2002). Misconduct can lead to medical license removal.

The main objective of the Act was to lower maternal mortality and morbidity due to unsafe abortions. As seen in earlier sections, the promotion of safe abortions was not just seen as a woman’s rights issue but also as a means of population control. In fact, the Eighth 5-Year Plan (1992-1997) explicitly stated that the MTP Act continued to be an important means of birth control. The MTP Act was amended in 2003. As a result, states were given greater power to approve licensed institutions that could offer abortions under the Act. The amendment also aimed at preventing unqualified persons and unauthorized institutions from performing pregnancy terminations. In 2014, the Ministry of Health and Family Welfare released a draft of the MTP Amendment Bill proposing to further relax the MTP Act. The new bill proposed to raise the upper limit of legal abortions to 24 weeks, to widen the provider base to nurses and

homeopathy practitioners, and to remove the need for a second medical opinion. The proposed changes derived from studies conducted by the Population Council between 2006-2011 and “evidence-based recommendations made by the World Health Organization in its updated guidance for safe abortions” (Phanjoubam 2017, 1; WHO 2012). While a relaxation of the MTP Act was intended to remove barriers for women and girls to access safe abortions, it came with the inherent risk for sex selection to become more widely available despite its illegal status.

5.3.3. Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act

In the 1970s the first reports came in that the newly legalized abortions were being misused in combination with amniocentesis to deselect daughters. This motivated feminist groups to go to the streets and lobby for policy response against this new form of gender discrimination. The Government of India subsequently banned sex determination in public (but not in private) hospitals in 1978. Meanwhile, abortion services spread rapidly through private clinics. Advertisements appeared indicating that couples were better-off investing a minor sum into prenatal sex selection in order to avoid the high dowry payments for their daughters later on. As political focus was placed on lowering fertility, these developments did not cause great political concern. Quite to the contrary, prenatal sex selection was a welcoming development for some policy makers. Fewer girls born reduce the number of potential mothers, which would reduce population growth.

I interviewed one of the first Mumbai-based activists, who has lobbied against sex selection since 1972. She claimed that early on bureaucrats and health officers would commonly respond with statements like, “Ma’am, your priorities are wrong. Less population means less reproduction. Why don’t you understand?” (IN13). Even other feminist activists at the time were skeptical. “They thought I was reading too much science fiction” (IN13). Common responses to early lobbying against sex selection were: “In our country people don’t even have safe drinking water. Do you think they have time to analyze amniotic fluid?” (IN13).

The same interviewee later became a founding member of the “Forum Against Sex Determination and Sex Preselection” (FASDSP) that formed in Maharashtra in 1985. The Forum organized protests and rallies for new legislation (see Figure 34).

Figure 34: Daughters' Rally Organized by FASDSP on 14-11-1986 (Children's Day)



Source: Vibhuti Patel personal archive.

Their lobbying showed fruits and resulted in the Maharashtra Regulation of Prenatal Diagnostics Techniques Act (1988), which served as a role model for subsequent national legislation. On September 20th, 1994, after persistent bottom-up activist pressure and the disturbing child sex ratios of the 1991 census, the Parliament passed the Pre-Natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act (PNDT Act). The Act came into effect on January 1st of 1996. It regulates the use of prenatal diagnostic techniques for detecting genetic, chromosomal or sex-linked disorders and prevents the misuse of such techniques for the purpose of prenatal sex determination and sex-selective abortions.

While feminist groups had success in lobbying for national legislation, early campaigns against sex selection had a problem. On the one hand, activists fought against sex selection but for access to safe abortions, which resulted into two separate legislations (the PNDT Act and MTP Act). On the other hand, the campaign against sex selection had many anti-abortion messages. Activists later recognized their mistakes in unintentionally fueling a pro-life agenda (CEHAT 2003). Yet, at this stage the framing of sex selection as “feticide” or “killing of unborn female fetuses” had already been done. The government has used the same language in recent years (see e.g. Five-Year Plans issued between 1992 and 2012). This language is problematic because it frames pregnancy terminations as acts of “killing” in a setting where abortions are legal.

Despite the PNDT Act, sex-selective technologies became increasingly popular and sex ratios increasingly became skewed. The enforcement of the Act had been practically nonexistent up to the early 2000s (Arnold, Kishor, and Roy 2002). Pressures to have smaller families – both driven by changing social norms and population policies – intensified the use of technology across caste, class, religious and geographic boundaries in disfavor of girls (UNFPA 2007). This government inaction inspired the activist Sabu George to file a public interest litigation at the Centre for Enquiry into Health and Allied Themes (Mumbai/Pune) and MASUM (Pune) in

2000. Their mandate had been to step up enforcement and upgrade the Act to hold it at par with the rapidly emerging technologies (e.g. Pre-Conception and Pre-Implementation techniques). As a result of this litigation, and the worsening SRB revealed by the 2001 census, the Supreme Court of India gave directives on May 4th of 2001 to all state governments to make an effective and prompt implementation of the PNDT Act. Meanwhile, the Department of Family and Welfare started to issue national advertisements about the criminal nature of sex selection (CEHAT 2003). Even medical associations like the Medical Council of India, the Indian Medical Associations and the Federation of Obstetrician and Gynecologist Societies of India started to request doctors to abstain from offering sex-selective services (Arnold et al. 2002; CEHAT 2003).

In 2003, the PNDT Act was amended to the Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act, short PC&PNDT Act. The amendment meant a widening and a deepening of the scope of the law. For one, it banned new reproductive technologies that could be used for sex selection (e.g. IVF, sperm sorting). As one scholar put it, “once the policy changed, it covered new technologies even future technologies that might come up” (IN01). Secondly, the language had changed from the “regulation” to the “prohibition” of sex selection (UNFPA 2007).

The amended Act has the following key features: (1) it prohibits sex selection before and after conception; (2) it regulates the use of preconception and prenatal diagnostic techniques for the detection of genetic diseases by restricting the use to registered institutions and qualified medical personnel; (3) it prevents the misuse of such techniques for sex selection; (4) it prohibits the advertisement of sex determination and sex selection; (5) it prohibits the sale of ultrasound machines to non-authorized persons or institutions; and (6) it includes punishments for violations of the provisions of the act.

Regarding punishments, the PC&PNDT Act explicitly targets medical service providers and those assisting in sex selection and protects pregnant women from any penalties. For doctors and clinic owners the act provisions up to 3 years of imprisonment with a fine of up to US\$ 150 for the first offense, and up to 5 years of imprisonment with a fine up to US\$ 750 for a subsequent offense. Doctors can lose their medical license, which is suspended with the Medical Council if the court presses charges. For a first offense conviction, doctors’ names can be removed from the medical register for 5 years or permanently in case of a subsequent offense. Family members who assist in sex selection must up to 3 years of imprisonment with a fine of up to US\$ 750 for the first offense, and up to 5 years of imprisonment with a fine of up to US\$ 1500 for a subsequent offense. Note that the financial penalty is significantly higher for family

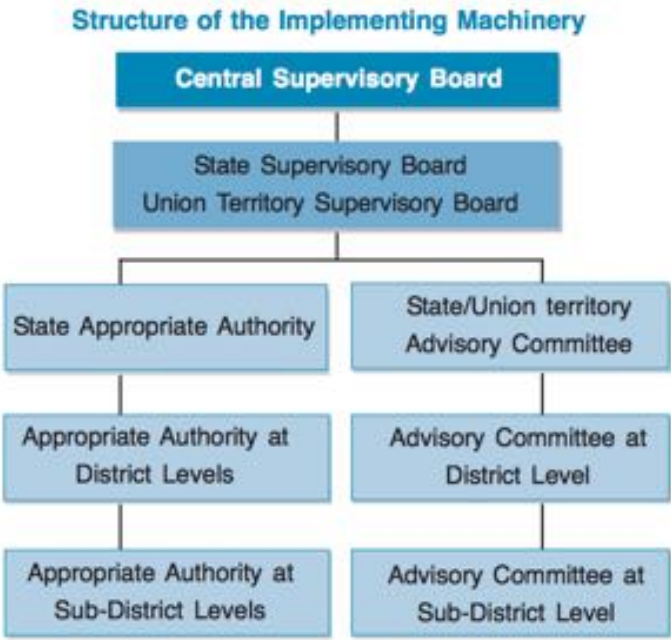
members than for doctors. For the illegal advertisement of sex selection the act provides up to 3 years of imprisonment, with a fine of up to US\$ 150.

A decentralized administrative body was set up to implement and monitor the compliance with the Act from national to local levels (see Figure 35). It includes the Central Supervisory Board (CSB), State/UT Supervisory Board, as well as Appropriate Authorities (AAs) and Advisory Committee/s (ACs) at state, district and sub-district levels. The CSB is under the Chairmanship of the Minister for Health and Family Welfare. Its main role is to monitor the implementation of the Act. Parallel to the national level there are State-level Supervisory Boards, who monitor and review the implementation of the Act in their respective states/UTs. The State/UTs level Appropriate Authorities (AAs) are a multi-member body in charge of enforcing the law and penalizing offenders. The AAs are empowered to seize and seal machines and equipment and record law violations, commission witnesses and conduct sting operations to reveal wrongdoers. The Advisory Committees offer support to AAs at the respective state, district, and sub-district levels (UNFPA 2007, see Figure 35).

Despite these comprehensive administrative bodies, the implementation of the PC&PNDT Act has progressed slowly and has been highly uneven across the States/UTs. Some States have made progress, other have not yet started. After the 2003 amendment, the Supreme Court has issued two further guidelines to improve the implementation of the PC&PNDT Act— in 2013 and 2016. Yet, as of March 2016, only 350 convictions and 100 medical licenses were suspended under the PC&PNDT Act nationwide (Bapna 2017).

Without a doubt, the central government has tried to step up enforcement of the PC&PNDT Act through numerous avenues: e.g. the issuing of Quarterly Progress Reports and Progress Cards on the implementation, restrictions on sex determination advertisements for online search engines, stricter registration of ultrasound machines, enhanced reporting and record keeping processes, and by making decoy/sting operations an integral part of the Act (see Twelfth 5-Year Plan). Yet to date, large gaps remain.

Figure 35: Structure of the PC&PNDT Implementing Organism



Source: UNFPA (2007, 21)

One of the major obstacles to banning sex determination is gathering evidence for convictions because sex determination can be done discreetly. I interviewed a senior legal advisor, who referred to the evidence needed to hold up in a court case:

“There are several points. One is that the clinics have to put a board [sign] saying that sex determination is prohibited in India. Secondly, they should have a book in English or the local language of all the rules of the act and the premises. Thirdly, there should be a copy of the consent of the women who have undergone sonography. Fourth is that the doctor cannot disclose the sex of the fetus even if he sees the whole body [of the fetus]. Fifth is there should be a referral slip from a doctor for the radiologist. Sixth is the ‘F’ form, which is for sonography procedures. Seventh is that the registration certificate [for sonography machines] needs to be displayed. This says who is operating how many machines and what are the registration numbers. If there is any violation of this, then we can prove there is a breach of law” (IN12).

According to interviewees, the upside of this type of bureaucratic system has been that it is easier for implementers to gather evidence for subsequent convictions. The downside has been an increase in administrative burden and the occasional harassment of innocent doctors. This has led to the growing frustration among radiologists and their desire to reform the Act since 2015 (Bapna 2017). Apart from gathering evidence through stricter record keeping, government

authorities have tried to infiltrate ultrasound providers with the so-called “silent observers”⁸³ to catch doctors in the act of sex determination. This approach was challenged, and abolished, after political lobbying from UNFPA (UNFPA Evaluation Office 2017).

The interviewees pointed to numerous other strengths and weaknesses related to the PC&PNDT Act, which we will review now.

5.3.3.1. *Strengths of the PC&PNDT Act*

Regarding strengths, the interviewees from various governmental and non-governmental sectors expressed their content with the Act itself. Statements were made such as “The PC&PNDT Act is a very powerful law” (IN06). Identified strengths related to (1) the legal framework, and (2) the collaborative platform and awareness the Act has generated, as can be seen in the following quotes:

(1) Legal framework: Six of the interviewees made statements like “the law is quite strong” (IN01) referring to the strong legal basis of the PC&PNDT Act. Positive comments were also made about the robust reporting mechanisms and the overall legal burden on doctors instead of women.

- Strong legal basis: “Clearly, India has one of the sharpest policies and legal frameworks linked to gender” (IN26). “The Act has some very good provisions for accountability. It also thinks of a structure under which the Act can be monitored. It talks of creating awareness among the implementing authorities [...]. It’s a good act to follow” (IN42).
- Robust enforcement mechanism: “The law itself requires medical practitioners to submit their compliance forms, which should then be audited” (IN06).
- Targeting doctors not clients: “The PC&PNDT Act was crafted to only punish doctors, not clients” (IN09). While the majority of interviewees saw this as a strength of the PC&PNDT Act in order to not further “victimize” women, some policy makers spoke out in favor of punishing both parties, doctors and patients, including women (e.g. IN30).
- Guilty until proven innocent: “It is a very powerful law. It is the only law where the accused is guilty until proven otherwise... Suppose someone says that I am practicing female feticide. The onus is on me to prove that I am not” (IN06).

⁸³ Silent observer or active tracker is an electronic device that connects to ultrasound machines. It allows authorities to monitor and record the scans taken by doctors in order to reveal any misuse.

(2) Collaboration and awareness under the Act: Apart from the legal basis, interviewees commented positively about the fact that the Act has created awareness and has mobilized people and institutions to address sex selection. Multi-stakeholder collaboration (of state and non-state actors) was seen as a clear asset. Interestingly, most references to the link between awareness-raising and the PC&PNDT Act came out of Punjab (all 11 interviewees stressed this link in up to 31 references in one interview).

- Involvement of NGOs under the Act: “In the Act there is an advisory committee. NGOs are a part of this advisory committee. The role of NGOs is to plan the decoy cases and gather intelligence about where these [illegal] activities are going on and to give advice to the appropriate authorities for planning sting operations” (IN10)
- Multi-stakeholder collaboration: “Awareness and PC&PNDT Act have made a difference. Now every department is working on that, even NGOs” (IN30).
- PC&PNDT Awareness in Punjab: A former PC&PNDT Nodal officer noted: “We undertook many measures, besides implementing the act. Awareness on [the] PC&PNDT Act is number one in the country in Punjab” (IN21). Another policy maker, a former district official, stressed: “Quick results can only happen if awareness and enforcement go hand in hand” (IN46).

5.3.3.2. *Weaknesses of the PC&PNDT Act*

Regarding weaknesses, the interviewees pointed to a number of difficulties with the Act, apart from the bureaucratic burden earlier mentioned. These relate to (1) law enforcement, (2) corruption, and (3) misinterpretations and ignorance of the law. Selected quotes illustrate these points:

(1) Lack of law enforcement: Almost all interviewees (42 out of 47) made references (up to 60 times in one interview) to difficulties in law enforcement. In particular, they stressed the role of weak institutions, regional diversity in law enforcement, lack of monitoring and overall difficulties with the implementation of the law.

- Weak institutions: “Institutions in India, the law enforcement agencies in India, in general, are kind of collapsed” (IAS Officer, IN16). “The law is fine, problems are with the implementation” (IN01).
- Regional diversity in enforcement: “Certain states have not even set up PCNPDT committees” (IN13). “The situation varies. Some districts have done well. Some districts

have not even started” (IN04). According to interviewees, patients seeking sex-selective abortions make use of these regional variations in law enforcement and travel, if needed, across states. “People even want as their first-born child a son. They go to states that are underserved and less monitored” (IN22).

- Lack of monitoring: “Sadly inspection and monitoring is lacking all over India” (IN12). “The state was supposed to have monitoring boards and in many places they were not put in place, they do not meet, or they are not properly implemented” (IN02). “People are not really monitoring the schemes very well to see whether they are being implemented on the ground or not” IN01. “Monitoring this practice is not good” (IN04).
- Difficulties in implementation: “Many are misusing mobile ultrasound devices. That makes it difficult to have all ultrasound machines registered” (IN30).

(2) Corruption: In total, 22 interview partners stressed the pervasiveness of corruption in over 39 references. They referred to the practice of doctors bribing authorities or witnesses and obstructing the inspection work, but also pointed to authorities harassing doctors for bribes.

- Bribing authorities: “Punishing doctors is very difficult. Authorities can easily be bribed” (IN09). “Corruption is a major reason to why policies don’t succeed” (IN20).
- Bribing witnesses: “There is a possibility that the doctor may take away the star witness. It happened 3 times... She [the star witness] got hostile and got 2 lakh rupees [US\$ 3,000]. These culprits [doctors] are ready to pay any amount of money. It is the biggest difficulty in all of India to protect your witness... there is huge corruption” (IN12).
- Obstruction of inspectors: “They [authorities] get a phone call asking them to leave the doctor and not take action against him, and not file a complaint and not seal a machine. I have faced this. I had once gone to UP [Uttar Pradesh] to inspect a machine. We had to leave the clinic after the inspection. Do you know why? Because the doctor was very influential. He called his local political people. They came to the clinic and started threatening us and we had to leave the clinic. It always happens. It is just not reported” (IN04).
- Harassment of doctors for bribes: “There is also a lot of corruption in the lower levels of the implementation of laws like the PC&PNDT Act. The people who are supposed to monitor and enforce the law often just take money and let it happen. They will often take money and give the certificate of compliance to those who are contributing to sex selection. Then they harass those who are not contributing. I know a radiologist who was constantly

harassed because she did not give money to the authorities. She had done everything to comply with the law, but they kept on harassing her” (IN01).

(3) Misinterpretations/ignorance of the law: A number of interviewees expressed their concerns that actions were taken outside the premise of the PC&PNDT Act, which could potentially infringe women’s rights and access to abortion. Interviewees also stressed that couples used their right to abortion to bypass existing regulations.

- Actions taken outside the premise of the law: “Certain people [authorities] went explosive and people [authorities] went out of the gambit of the PC&PNDT Act in different districts of Punjab. That was also where women were targeted” (IN21).
- Couples bypassing the PC&PNDT Act with reference their right to abortion: “The moment some law is made people start finding out loopholes in it. Our law says sex selection and killing is not allowed. But if there is a case of rape or it is contraceptive failure then, of course, you can go for an abortion. What people say and the doctors do is that it is a contraceptive failure or that the mother is not ready to have the baby because the pregnancy resulted from forceful sex by her husband or anybody else, and so it has to be aborted. They twist the law according to their needs” (IN23). Another interviewee pointed out that the “clarity between MPT and PCNPDT is more on paper than in the field” (IN04).

In general, interviewees agreed that India would be clearly worse off without the Act. Many of them also argued that just focusing on doctors and the medical community would not solve the problem. As one UN representative noted, “The PC&PNDT Act, by itself, is an important measure but it’s not sufficient” (IN39).

In sum, India has created a comprehensive legal framework with the enactment of the Pre-Conception and Pre-Natal Diagnostics Techniques (PC&PNDT) Act to prevent the misuse of technology for sex-selective purposes. The campaigning against sex selection goes back to the 1970s and government efforts “to catch erring doctors and radiologists” have been scaled up over the years (John 2015, 1). According to John, “it has been a hard-won campaign which faced an uphill task in curbing the practice due to the common prevalence of a power nexus between major clinics, medical practitioners, and state level monitoring bodies” (ibid). Some dedicated government officials have made headway by placing the issue at the top of the political agenda and by conducting sting operations in cooperation with NGOs and the media to expose doctors and put them behind bars. Yet, some have warned that such an intervention could have unintended side effects by turning the campaign against abortions in general.

The overall aim of the Act has been to reduce access to sex selection by targeting the medical industry. It can be discussed whether such a supply-side or methods-driven approach aimed at criminalizing can work without challenging the patriarchal setup that produced gender biases (Eklund and Purewal 2017). In order to understand better what India has done to raise awareness and enhance the values of girls we must look beyond the PC&PNDT Act to the IEC awareness-raising campaigns.

5.3.4. Awareness-Raising Campaigns: “Saving the Girl Child”

A second major pillar in the fight against sex selection – next to PC&PNDT Act – has been awareness-raising. The idea is to challenge the underlying mindsets and raise the public opinion of girls, thus following a more motive-based approach. A vast number of actors are involved in these campaigns, including state actors, a large heterogeneous group of NGOs, IOs, media outlets, members of the medical community, religious organizations, etc. operating on national, state, district, block levels. It is impossible to give credit to all the efforts that have been made over the years. The goal here is rather to paint a broad picture of national awareness-raising to change mindsets and “celebrate the girl child.” We also aim to show how the messages, channels, and stakeholders have evolved over time.

Not much literature has come out on this topic. Joseph (2007) has collected posters and campaigns but mostly of non-governmental campaigns at the state or district level. Naqvi (2008) provides insights on the images and icons used in governmental mass media outlets against sex selection. Population First has also released several publications on gender sensitive campaigning around sex selection and related gender issues. UNFPA and Breakthrough (2014) developed a communication guide for awareness-raising which identified different governmental and NGO campaigns, their target audiences and challenges.

The girl child was first put into the spotlight of national awareness-raising through regional integration. In December 1989 India hosted the 5th Meeting of the SAARC Technical Committee on Women in Development. SAARC Members endorsed the celebration of 1990 as the “SAARC Year of the Girl Child.” National action plans were discussed and the years 1991-2000 became known as the “SAARC Decade of the Girl Child.” As a result of these regional integration efforts, India presented its National Action Plan for the Girl Child in 1992 stressing the importance of promoting the survival, protection and development of girls. December 8th was reserved for national awareness campaigns delivered by Heads of States/Governments

within the larger region. Awareness-raising was stepped up in 1996, when PNDDT Act⁸⁴ came into effect.

As the implementation of the PNDDT Act turned out to be difficult and civil activists demanded stronger policy response, the government funded a short film on sex selection called *Atmajaa* (Born from the Soul). The film was screened on national television and during several events. It told the story of two Indian women and the pressures they faced by family members to conceive a son. It also pointed to gaps in the implementation of the PNDDT Act by showcasing a committed gynecologist, who helps the authorities to implement the ban on sex determination (Naqvi 2008). In 2004, this movie was expanded into a TV series under the same name *Atmajaa*. The Indian government and Plan International funded the series. The idea was that a Bollywood format (52 episodes long) would reach a wider audience and trigger greater change than any governmental warnings.⁸⁵

Despite these first efforts, the messages at the time were not always gender sensitive. Early campaigns often portrayed mixed or even contradictory messages, which indirectly promoted gender biases or a pro-life agenda. For example, awareness campaigns frequently included voices of female fetuses or absent girls, who talk to their would-be parents wanting to know why they were “killed” instead of being given the opportunity to make their parents happy (Naqvi 2008, 18-19). These campaigns aimed at creating a feeling of shame or guilt among the audience. Sex determination and sex selection was not just portrayed as a legal crime, but also as a moral sin.

Similarly the title of the soap opera “Born from the Soul” was supposed to carry an emotional appeal to not engage in ‘sinful’ sex-selective abortions. While such an emotional approach may be powerful in raising awareness, the fact of referring to abortion as ‘killing’ and giving ‘voice’ to unborn girls, may have come with the unintended side effects of infringing on abortion rights. As one interviewee noted, “The undesired effect in the awareness generation materials, which have pictures of fetuses with blood spilling, all of which are very anti-women and anti-abortion, can be problematic” (IN03).

⁸⁴ The PNDDT Act was introduced in 1994 and came into effect in 1996.

⁸⁵ I had the opportunity to meet the actress who played the daughter that escaped sex selection in the TV series during field research. When I met the young woman she was studying for her final exams and getting ready to go to college in the United States. She forms part of a remarkable family, in which three generations (grandfather, mother and daughter) have dedicated and continue to dedicate large portions of their lives for political activism against sex selection (through media, NGO, academic and political engagements).

In 2005, the National Plan of Action for Children (including girls) was introduced. This series of awareness-raising campaigns focused more on implementing the PC&PNDT Act than on changing mindsets in favor of girls. Numerous problems can be identified with the types of campaigns done in the late 2000s. Below we present three poster campaigns launched by the Indian Ministry of Women and Child Development between 2008 and 2010 and highlight their shortcomings (see Figure 36).

Figure 36: Anti-Sex Selection Media Campaign by MoWCD, 2008-2010



Source: Images are based on the Indian Ministry of Women and Child Development, National Girl Child Day, 24th of January annually, since 2008, selected years (UNFPA and Breakthrough 2014; DFI 2010).

The first poster of our sample was launched on January 24th of 2008, which became the National Girl Child Day to be celebrated annually since 2008. The poster shows a married couple in three different rows and periods, namely 2007, 2019, and 2031. With each row the number of male competitors per married woman increases. The poster calls attention to the future marriage squeeze and the impending shortage of brides. It portrays the woman as a marriage commodity and men having to compete for scarce females. The campaign lacks clear messages on the socio-demographic consequences. It simply suggests that eye-teasing or (sexual) harassment towards women will increase. There is no reference to root causes either.

The indirect message asks for more protectionism of women who will become increasingly vulnerable, as men increasingly outnumber them.

The second image shows the logo of the national “Save the Girl Child” Campaign launched in 2009. The logo shows the eyes, head and ponytail of a girl looking up to the horizon, behind a bright red sun suggesting a new dawn. The campaign seeks to achieve what its title suggests: “Save the Girl Child.” “Save” is written in bold blue letters and “the girl child” in bold red letters both in Hindi and English under the image of the girl. The campaign neither has a direct target group nor gives indications, how girls shall be saved. However, if we assign the colors blue and red to gender, the poster could suggest that it is the role of men to protect girls from harm and be their savior. I discuss this notion of saving or protecting vulnerable girls in India’s fight against sex selection elsewhere in a paper on political masculinities. I conclude that many political messages indirectly contribute to unequal gender relations because according to this logic women and girls constantly require male protection in order to be safe or saved.

The third poster is yet another example of masculinized campaigning around sex selection. The Ministry for Women and Child Development launched the 2010 poster campaign titled “Where would you be if your mother was not allowed to be born?” It focuses on male wants and needs with the underlying logic to “end female feticide” so that more ‘heroic’ sons can be born. It shows pictures of a famous male cricket player, a military officer⁸⁶, and a renowned classical musician. These pictures imply that great sons would not be alive if their mothers had been aborted. The implication drawn from this message is that women are only important because they bear sons. The campaign thus indirectly promotes son preference.

These three examples show how inherently gender-biased some early campaigns on sex selection have been. This is even more concerning, since the campaigns were launched by the Ministry of Women and Child Development (WCD), whose mission it is to advance the rights and well-being of women and children. Nonetheless, messages have evolved over the years.

In recent years campaigning has become more coherent and in line with the international platforms that promote human rights in general and gender equity in specific. Since the mid-2000s more and more stakeholders have entered the policy arena to inform or even shape interventions against sex selection, most notably IOs, NGOs, faith-based organizations and academics. As a result, sex selection campaigns have changed. New players have added various

⁸⁶ This person by mistake happened to be a Pakistani military officer instead of an Indian officer.

agendas linked to their institutional backgrounds and increased the need for “coordinated and convergent efforts ... to ensure survival, protection and education of the girl child” (MoWCD 2014). Thus, over time we are seeing a growing tendency of multi-stakeholder collaborations.

It is important to note that coordination and convergence have been actively promoted by UNFPA India. A 2017 evaluation finds that UNFPA “has contributed to both creating a large coalition of support for addressing gender-biased sex selection, and to preventing backlash or negative political consequences” (UNFPA Evaluation Office 2017, 6). A senior UNFPA representative noted, “no agency can run a campaign communicating to a billion people” (IN26). Still, UNFPA has made strong efforts to harmonize communication around sex selection while placing special emphasis on protecting women’s reproductive rights. The agency has done so through, (a) the creation of Girls Count, an umbrella organization of over 400 NGOs working on raising awareness to stop sex selection and counter patriarchy throughout the country, and (b) more discreet lobbying with the Government of India to assure that reproductive rights of women are safeguarded in political campaigns and policies (UNFPA Evaluation Office 2017).

As a result recent campaigns have become more gender sensitive. A 2016 media campaign of the same Ministry for Women and Child Development is titled “*Be the change you wish to see in the world,*” after a quote by Mahatma Gandhi (MoWCD n.d.). The campaign has changed its messages by (a) attributing positive social values to ‘powerful’ women like the astronaut Kalpana Chawla or the Olympic medal-winning wrestler Sakshi Malik and (b) celebrating their achievements (see Figure 37).

This shift away from politically masculinized and anti-abortion messages reflects the changing political dynamics in India. It implies that the social realities are not static, and that messages can be changed. Deeply embedded cultural norms like son preference are difficult to change overnight. They are “sticky norms” and at times decision makers can reinforce the very same norms that lawmakers intended to change (Kahan 2000). However, by changing the policy messaging India has started the unsticking process.

Similar to messages, the channels have evolved over time. This is in a great part due to technological advancements and the widespread use of social media. Traditionally channels have included radio, TV ads, print and poster campaigns (we just saw several examples), reports, messages in hospitals, community outreach programs such as rallies, walks, workshops, signature campaigns, theater plays, celebrations, and interactions with different target groups

(youth and religious groups). While these traditional channels still play an important role, campaigning is increasingly done through social media outlets like Twitter, YouTube and Facebook. The Twelfth 5-Year Plan emphasizes the role of digital media for behavior change communication as a powerful tool to reach out to younger generations. ‘Saving girls’ offline moved to ‘celebrating girls’ online.

Figure 37: Anti-Sex Selection Media Campaign by MoWCD, 2016



Source: Ministry of Women and Child Development, India. (MoWCD n.d.).

One example is the *#SelfieWithDaughter* campaign. It was started by a former sarpanch in June 2015 in the village Bibipur, Haryana with the aim to motivate people to share their photos as proud parents of a girl, who would then help to improve the child sex ratio. It gained momentum when Prime Minister Modi officially endorsed the initiative as part of the larger “*Beti Bachao, Beti Padhao*” (Save the Daughter, Educate the Daughter) scheme (see **Box 11**). Nationally and internationally proud parents of daughters have been tweeting their self-portraits (including former US President Obama). BBC Monitoring ranked *#SelfieWithDaughter* as one of the most influential hashtags for women in 2016. In 2017, India’s President Pranab Mukherjee launched a mobile application on behalf of the government and publicly declared, “*Selfie with Daughter* has become a worldwide movement against female feticide and sex selection” (The Hindu 2017). Certainly, it needs more political and social accountability to raise the status of girls in India than sharing self-portraits online. However, the positive messaging around girls – away from masculinized and negatively charged approaches – is a start.

Box 11: *Beti Bachao, Beti Padhao* Scheme

The Government of India has further increased efforts to fight sex selection with the launch of the *Beti Bachao, Beti Padhao* (hereafter BBBP) flagship program under Prime Minister Narendra Modi in January of 2015. BBBP means literally “*Save the Girl Child, Educate the Girl Child.*” This joint initiative of the Ministry of Women and Child Development, the Ministry of Health and Family Welfare and the Ministry of Human Resource Development is implemented through a national campaign with targeted action in 100 select districts where child sex ratios are particularly skewed towards males. A total budget of US\$ 170,000 is allocated per district for three years (2014-2016) to be spent on interdepartmental consultation and meetings, capacity building, trainings, monitoring and evaluation, reporting, innovative approaches to tackle sex selection, and community mobilization (MoWCD 2014). The scheme was expanded to cover 61 additional districts in 2016.

The overall goal of the scheme is to “Celebrate the Girl Child and Enable her Education.” Stated objectives of the scheme are to (1) prevent gender-biased sex selection, (2) ensure the survival and protection of girls, and (3) ensure girls’ education. Earlier focus was placed entirely on “*Saving the Girl Child.*” The BBBP scheme has altered its scope to include the girl’s well-being after she survives sex selection. The concept of education was added with the overall aim of empowering girls.

The scheme lists a number of measurable targets in order to achieve the program’s objectives:

- Improve the sex ratio at birth in 100 gender critical districts by 10 points in a year.
- Reduce gender differentials in under five-child mortality rate from 8 points in 2011 to 4 points by 2017.
- Improve the nutrition status of girls - by reducing number of underweight and anemic girls under 5 years of age (from NFHS-3 levels).
- Ensure universalization of the Integrated Child Development Services (ICDS) Scheme, girls’ attendance and equal care monitored using Mother Child Protection Cards.
- Increase the girl’s enrollment in secondary education from 76% in 2013-14 to 79% by 2017.
- Provide girl’s toilet in every school in the 100 districts by 2017.
- Promote a protective environment for girls through implementation of Protection of Children from Sexual Offenses (POCSO) Act 2012.

- Train elected representatives/ grassroots functionaries as community leaders to mobilize communities to improve child sex ratios and promote girl's education.

Source: MoWCD (2014)

According to a senior officer of the MoWCD, the goal is not only to improve sex ratios but also ensure girls' access to schools and sanitation, which is seen as a form of "good governance" (IN43). The BBBP scheme aims to provide school toilets for girls, because according to the interviewee "there are many interlinked problems like molestation and rape due to the lack of toilets" (IN43). IOs have supported the Government of India's shift in emphasis to awareness-raising and empowerment over the past years. As a result there has been a noticeable change in the communication strategy. However, given the security threat to females in India, protection and women's security is an ongoing concern.

5.3.5. Financial Incentives for Families With Girls

On the same day, Prime Minister Modi introduced the BBBP Campaign he also launched another scheme to benefit girls, the Sukanya Samridhi Account. Under this scheme a bank account is opened in the name of the girl before the age of 10 years. A minimum deposit of US\$ 15 is required and any amount over US\$ 1.50 can be deposited subsequently, not exceeding US\$ 2,250 per year. The government provides an annual interest rate of 8.4% for the savings account of the girl and no income taxes are charged. Fifty percent of the savings can be withdrawn when the girl turns 18 years. The account will remain operative until the girl turns 21 years. This is type of intervention is an extension of earlier conditional cash transfer programs.

Since 1997 the Government of India and several states have introduced a vast variety of conditional cash transfers and financial schemes to benefit girl's survival, health, nutrition and education. These incentives were mostly directed at below poverty line households and not at the upper or middle-class households that are more inclined to engage in prenatal sex selection. This new approach of providing a savings account to girls and offering above market-level interests rates could actually be a more promising approach as it may attract a wider circle of applicants, especially the more economically literate families.

How do Conditional Cash Transfers (CCTs) function? Incentives are given to families to invest in the well-being of their daughters. CCTs usually target poor and low-income households and

are frequently given to mothers under certain conditions linked to the well-being of their children. These conditions are often linked to school enrollment, health, nutrition, and vaccination, date of marriage and sometimes to the family-planning efforts of parents (Sekher 2012).

The logic behind CCTs is to increase the economic value and decrease the perceived economic burden of daughters, by providing direct financial incentives, often including free or subsidized services. CCTs became popular in India in the 1990s after inspiration and lessons drawing from other countries that adopted similar approaches especially in Latin America. In these countries and cultural contexts, scholars reported that the CCTs had positive effects on increasing school enrollment, health and immunization of children, and raising the overall living standards of families (Kervyn de Lettenhove 2012).

Concrete examples for girl child financial schemes are e.g. the Balika Samriddhi Yojana (1997), the Kishori Shakti Scheme (2000) or the Dhanalakshmi Scheme (2008). Sekher (2012) provides a review of existing schemes and identified their weaknesses. What many schemes have in common is a problem with implementation. There is a high degree of bureaucracy involved in the application process linked to eligibility criteria and registration procedures, which make it difficult for largely uneducated families to access these cash incentives. Families face difficulties in opening accounts without having proper documentation or necessary assets. Besides hurdles for potential applicants there are several internal obstacles linked to capacity building and awareness about the schemes by bureaucrats. As a result, there are problems like the delay in money transfers, corruption, lack of complaint structures, poor implementation, and insufficient monitoring and evaluation.

Impact studies have shown the positive implications of CCTs in improving schooling, better education and survival rates of girls. There are also synergies between different programs that can strengthen their effectiveness. However, not much is known about their impact on sex ratios at birth. According to Sekher, it is unsure whether the girl child will be allowed to live on the basis of financial incentives. In a personal interview Sekher specified that, “these schemes are only for the girls who survived. The question is, will it change the attitude of parents who want only 2 sons? The basic question is, will she [the girl child] be allowed to be born?” (IN09). In other words, whether short-term incentives for parents to invest in daughters actually translate into long-term change is not well established as of now. Recent research has shown that the Dhan Lakshmi Scheme has had a positive impact by reducing prenatal sex selection at 2nd birth order in Punjab, while the results for first and third birth order and other regions of India did not show a significant impact on SRB (Biswas 2017).

A research team at the Population Council has recently conducted a study on the grassroots effects of interventions against sex selection, including CCTs. One interviewee reported from field experiences in two districts of Haryana, where the study was conducted. She noted that there were no strong signs that CCTs reduce sex-selective behavior, but by increasing the status of girls the schemes may contribute to positive generational changes:

“Clearly, the conditional cash transfer programs are making girls much more valuable. That is one thing. But whether people will stop using gender-biased sex selection because they know that CCTs are available, is not clear. We don’t think that there is such a strong link with that. Perhaps what is happening is that raising the status of girls, educating them, it may have a generational effect” (IN28).

Apart from the unclear effects on sex ratios, there is an apparent mismatch in target groups. CCTs target below poverty line families, while sex selection is more prominent with middle upper class families that may show little interest in the relatively small gains provided by the schemes. Moreover, CCTs are often linked to fertility control policies. Beneficiaries of CCTs are often encouraged to undergo sterilization. The link to family planning programs has been criticized by various interviewees (e.g. IN01, IN04, IN15, IN39) for sending out the wrong message and diluting the original message of enhancing the welfare of girls.

In summary, financial incentives represent a shift in the approach of how the government addresses sex selection away from policy instruments aimed to go after the methods of sex selection, towards a more motive or demand-driven approach (see also Sekher 2012). By compensating couples for the expenses spent on their daughters, the schemes seek to change the (economic) value attributed to girls. Yet, the long-term strategy seems questionable. Once incentives are removed, economic insecurities prevail and families are likely to rebound to the default position of valuing sons over daughters.

In a sense, CCTs are similar to the “law and order” approach. They represent more temporary bandages than a long-term solution, because they do not really challenge the son preference ideology. Positive and negative incentives (e.g. financial incentives and legal sanctions) require the constant attention of the government and rigorous enforcement. Otherwise people will go back to the prior state of affairs because their attitudes towards girls and women have not changed. For a “soft” state in particular it seems difficult to implement and maintain an infrastructure that promotes the status of girls through incentives.

5.3.6. *Wider Set of Reforms Linked to Inheritance, Dowry, Family Laws*

Given the vastness and diversity of the country it is impossible to reflect here on all the policies and their nuances. We selected the major policies introduced at a national level to combat sex selection or those that can be associated with the practice directly. A wider set of reforms was initiated over the years that indirectly contribute to the prevention of sex selection in India. These larger reforms were designed to eliminate existing legal barriers for women, prevent discrimination and grant women equal access to social, economic and political spheres:

- *Dowry Prohibition Act* (1961) prohibits the giving or taking of dowry making it punishable with imprisonment for at least 5 years and a fine of minimum US\$ 225. However, the implementation of the act has been very weak. Even though the situation improved after several amendments of the Dowry Prohibition Act and the Indian Penal Code in the 1980s, the conviction rate remains low. Most of the dowry cases are not persecuted or brought to trial, mainly because of political inaction and impunity (Singh 2013).
- *Equal Remuneration Act* (1976) provides for equal pay for equal work to both women and men. It explicitly prohibits any form of discrimination in pay and employment on the basis of the sex (Article 16). The act was amended in 1987 to increase penalties and strengthen law enforcement.
- *73rd Constitutional Amendment Act* (1992) reserves one third of the total seats for women in Gram Panchayats, the local elected bodies. Since 2010, the Women's Reservation Bill is pending to reserve the same share of seats for women in the Lok Sabha (Lower House) and the state legislative assemblies.
- *National Policy for the Empowerment of Women* (2001) promotes women's empowerment and prohibits any form of discrimination against women and girls. A special clause speaks out against any form of discrimination against the girl child.
- *National Pension System* (2004) seeks to provide retirement incomes and protect people in old age. It started with governmental employees and has been expanded in 2009 to all citizens including those working in the unorganized sector.
- *Protection of Women from Domestic Violence Act* (2005) has been passed to protect women from any type of abuse in marriages or in relationships. Under the Act women can – in theory – claim monetary relief and they have a right to residence in cases of violence. However, women are not granted equal entitlements upon divorce (Singh 2013).

- *Hindu Succession Amendment Act (2005)* grants daughters equal rights to property inheritance as sons. Before the 2005 amendment, sons had greater privileges because they could inherit a share equal to that of their father, while daughters could only inherit a share of their father's share of the joint family property. The amendment removed legal barriers for women to access and own an equal share of land. However, according to legal scholar Singh (2013) the Act still falls short of giving complete equality to women because exceptions can be made e.g. to avoid land fragmentation. State laws often deny women equal rights of succession and can have stronger impact locally than national laws.
- *Maintenance and Welfare of Parents and Senior Citizens Act (2007)* grants provisions for financial security and old-age pension and care. The Act makes sons and daughters equally responsible for caring for their parents, from whom they inherit.

These larger reforms do not tackle sex selection directly. The link to sex selection is rather indirect, as the reforms address son preference ideology. It can be hypothesized that with the expansion of women's social, political and economic participation, with reforms in social security and inheritance, the need for a male offspring will eventually decline. As such, these larger reforms seek to address the underlying motives for GBSS. Despite the strong existing legal framework, many of the laws listed above fall short in producing a measurable impact. Singh (2013) provides a comprehensive analysis on the interaction of laws and son preference in India highlighting existing gaps and necessary arenas for political action and legal reform.

5.3.7. Association of Political Parties, Skewed Sex Ratios and Son Preference

Scholars have argued that sex selection is prevalent in societies where pre-modern political and administrative systems have used patrilineality to govern their people (Das Gupta 2009; Kaser 2008). Modern governments have introduced many political, social, and legal reforms in order to change traditional social hierarchies, kinship system and son preference. Yet, gaps remain (Singh 2013). Son preference attitudes are still widely spread in the society – also among politicians.

Recent research has shown that small increments in female political participation can lead to large female child survival gains and may also have a positive impact on the enforcement of the PC&PNDT Act (Biswas 2017). Meanwhile, scholars have suggested a link between skewed sex ratios and conservative political parties that promote traditional Hindu family values (Chamarbagwala and Ranger 2006b). People who hold on to traditional family values

(including son preference) may feel more inclined to vote for conservative parties, that mirror their belief system. Thus according to the same authors, a conservative son-preferring culture is reflected in peoples voting behaviors (Chamarbagwala and Ranger 2006a). Furthermore, those regions where the conservative BJP party achieved the greatest gains in the past 2014 elections were also the regions with the worst child sex ratio according to 2011 census data.⁸⁷

This should not be misinterpreted to mean that BJP voters or party members engage in sex-selective practices. Such claims would be far-fetched and without evidence. In their election manifesto, the BJP actually strongly stressed the need to address sex imbalances and have introduced numerous campaigns since 2015 as we have seen. Yet, the idea that seems worthwhile conveying is that policy makers are certainly no aliens to their communities. They form part of the same communities and share similar mindsets, attitudes and behaviors. We give voice to one policy maker based in Chandigarh to further explore this idea:

“It’s not that simply [the] state should make some policies. Who makes the policies? Our politicians or bureaucrats. They are part of the same society. So if there is something bad with the society, why is there something bad in the society? Why society doesn’t care if the girl is killed in the womb? You might like to think about those also answer. Because ultimately, no doubt we can say that the policy was good or bad. But what is a policy? Policy in a democracy is the aggregation of the demands of the people, which are being aggregated by the politicians and then they will come out in the shape of a policy” (IN16).

The quote illustrates how politicians form part of the same culture that policies (would need to) seek to reform. It is therefore not surprising that a number of policy makers I interviewed revealed personal son preference and gender biases, expressing quite openly how “in [the] Indian family culture, socially, everybody wants a son” (IN11). Another policy maker justified his personal son preference with the fact that “in India we have a well-knit family unit. My grandfather and my grandmother stay with my parents. I will also like my grandchildren to stay with me” (IN36). He continued by stating that a daughter would be married off into another family and “she’ll not be able to help me financially and support me when I am old” (IN36). Besides old age security, policy makers stressed the physical security concerns of daughters as one reason for why they preferred sons. One female policy maker explained:

⁸⁷ Personal conversation with Guilmoto, 14.11.2016.

“A girl child even today is a big responsibility. For instance, I am a working mother and if I have a daughter, I have to have special arrangements at home to take care of her. I can’t keep a male help. OK! Wherever she is to go, I have to accompany or at least send a female with her. For example, I have to take her to a swimming class. With a male child, it is not a big issue. You drop the child and you come and pick up the child after one hour, and you are mentally free. What if it is a girl child? In India at least, there is a fear at back of your mind that something might happen” (IN17).

For this policy maker it was a matter of convenience to have a son rather than a daughter, a way for her to be “mentally free” and not having to worry about the safety of her daughter. Other quotes illustrated quite strongly existing gender biases among policy makers interviewed. These are dealt with again in a separate section (see 5.6.2). More research is necessary to understand the delicate relationship between political affiliation, son preference and skewed sex ratios.

5.4. Impact of Public Policy on Sex Ratios at Birth

5.4.1. *Contested Efficacy*

Despite three decades of interventions to reduce sex selection, we know very little about the effectiveness of policies against sex selection in India. In Chapter 2 we presented different methods for policy evaluations as well as their strengths and weaknesses. Appropriate methodologies are often difficult to employ because of the aforementioned reason of counterfactuals (see 2.5.2.). Policies are usually introduced at a national level making formal comparisons between treatment groups and control groups near to impossible. Prior research on the efficacy of anti-sex-selection policies in India is indeed rare (UNICEF and UNFPA 2014). Numerous scholars have expressed their opinions e.g. on “How to Fix India’s Sex-Selection Problem” by Kalantry (2017), yet only few studies formally assess policies against sex selection. We here present available qualitative and quantitative policy impact evaluations linked to (1) awareness-raising campaigns, (2) CCTs, and (3) the legal ban of sex selection in India.

(1) Assessment of messages and campaigns against sex selection:

Joseph (2007) gives a qualitative assessment of the Indian campaign against sex selection and explores ways forward. This UNFPA commissioned study analyzes the reasons for the continued sex imbalances and points to shortcomings in the awareness-raising campaigns around sex selection (e.g. unclear and contradictory messages, lack of commitment, no specific target group, poor reach). Similarly, Naqvi (2008) provides a qualitative assessment of mass media messages to reduce sex selection, including governmental campaigns. This BBC World Service Trust feasibility study examines the knowledge and attitudes related to sex selection and mass media consumption patterns in four states (Delhi, Haryana, Punjab and Rajasthan) based on focus group discussions and in-depth interviews. It points to shortcomings in existing campaigns linked to confusing and contradictory messages, e.g. linked to legal provisions and images portrayed of women.

(2) Assessments of conditional cash transfers:

Sekher (2012) offers a review of existing CCT schemes introduced between 1992 and 2008 and points to the regional differences in the implementation (e.g. from great popularity in Haryana to complete lack of response in Punjab). Sinha and Yoong (2009) compare treatment and intervention areas in Haryana showing that the CCT *Apni Beti Apna Dhan* (Our Daughter, Our Wealth) launched in 1994 has had a positive effect on the health of young girls. However, it had inconclusive effects on mothers' preferences for sons. The International Center for Research on Women (ICRW) evaluated the impact of CCT's on delaying the girl's age of marriage (Nanda, Datta, and Das 2014). A formal comparison of two districts in Haryana could not link sex ratio improvements to either CCT's or educational entitlements for girls such as free schooling materials (Jejeebhoy et al. 2015). Meanwhile, a recent dissertation has shown the positive impact of the 2008 Dhan Lakshmi Scheme on the prenatal sex selection in Punjab using a Difference-in-Difference approach (Biswas 2017).

(3) Assessments of the PNDT and PC&PNDT Act:

Several researchers have pointed to the difficulties in the implementation and monitoring of the PC&PNDT Act (see e.g. Joseph 2007; Guilmoto 2009; Guo et al. 2016). Gaps are often linked to inadequate resources and capacity building. Subramanian and Selvaraj (2009) employ a logistic regression approach to analyze the odds of the birth of a boy child between the pre-ban and post-ban periods. Using five rounds of data from the National Sample Surveys (NSS), they find no significant difference in the odds of male births before and after the 1996 PNDT.

Srinivasan and Bedi (2011) point to improvements in the child sex ratio in Tamil Nadu. They link improvements to districts that were heavily ‘treated’ by the government’s “cradle baby scheme,” the “girl child protection scheme” and the implementation of the PC&PNDT Act.

Nandi and Deolalikar (2013) provide one of the often-cited impact assessments in relation to the Indian sex-selection ban. The authors conduct a difference-in-difference analysis based on village-level and town-level child sex ratio data obtained from the 1991 and 2001 census making use of a policy variation. They compare Maharashtra state, where the PNDT Act was implemented in 1988, to surrounding states of Gujarat, Andhra Pradesh, Karnataka, Madhya Pradesh and Chhattisgarh, where the Act came into effect in 1996, and conclude that the PNDT Act prevented a further worsening of existing gender imbalances. The analysis builds on the assumption that the Act was implemented uniformly when in fact early implementation was nonexistent. As seen in earlier sections, the Act was only amended in 2003 (thereafter PC-PNDT Act) in response to civil pressure for the lack of law enforcement.

Jejeebhoy et al. (2015) collected and analyzed district-level data in Haryana in a formal comparison between two similar districts. They concluded that improvement in the child sex ratio, observed in one district but not in the other, were not linked to enforcement of the PC&PNDT Act but rather due to community mobilization among district authorities, NGOs and religious leaders.

Due to the contested effectiveness of anti-sex selection policies, it is necessary to further analyze the influence of public policies on sex imbalances. We do this by providing a) a macro-analysis of national sex ratio at birth trends in line with major policy interventions, and b) a more fine-grained qualitative and quantitative assessment of a specific intervention rolled out in the state of Punjab.

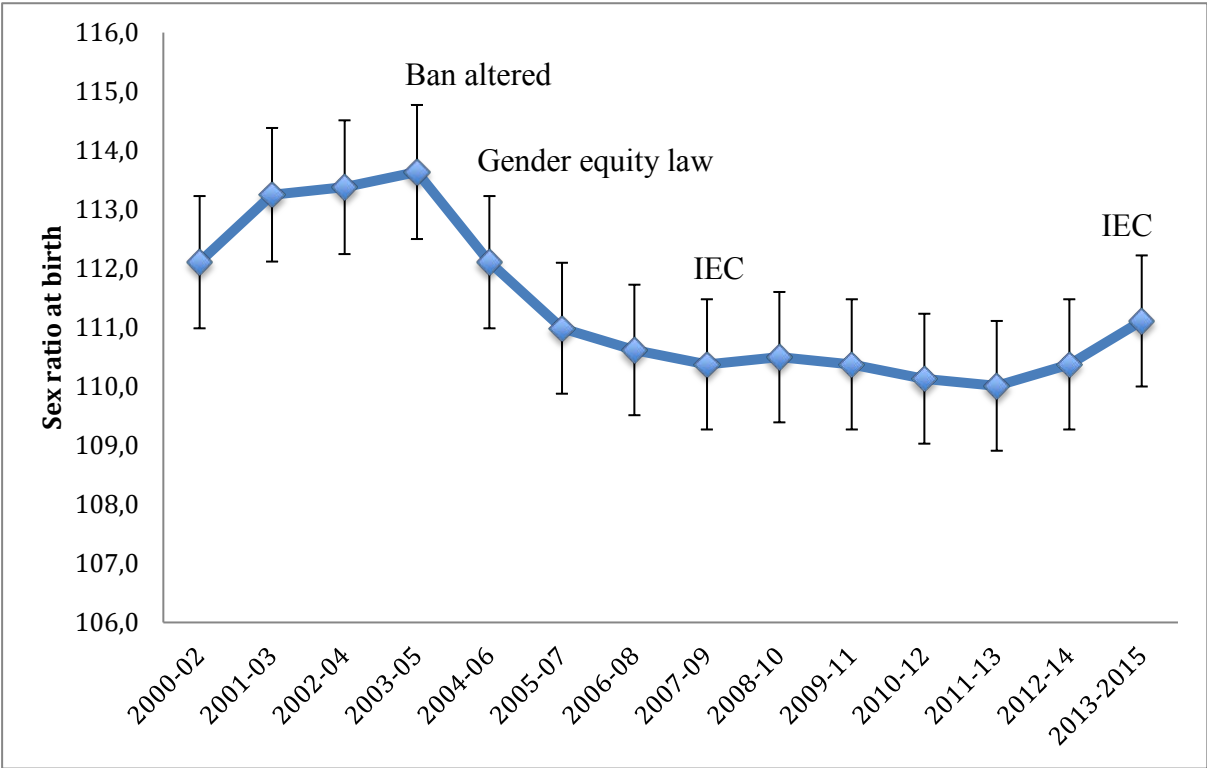
5.4.2. Can We Interpret National Policy and SRB Trends?

The rationale is to look first at national and then at local level in order to better understand the impact of anti-selection policies. The ambition in this section is to provide the reader with an overview of national SRB trends in line with major policy interventions introduced in India (as done for the other countries of investigation). Such an endeavor is not without problems due to the lack of reliable annual SRB estimates for India.

As seen in section 5.2. there are two sources that provide annual sex ratio at birth data: the Civil Registration System and the Sample Registration System. Both sources have their limitations.

Even though birth registration has significantly improved over the past one and a half decades from 56.2% of births being registered in 2000 to 88.3% in 2015, there are still major states like Bihar, where the level of birth registration is low (i.e. 64.8% in 2015). This makes the SRB figures obtained from the CRS system, especially for earlier years, not very reliable. Due to these limitations, the Office of the Registrar General in India has regularly provided data from the Sample Registration System. However, due to the small sample sizes, sex ratio at birth trends are only provided for three-year moving averages, which poses further challenges for our annual SRB-policy mapping.

Figure 38: SRB Based on SRS and National Anti-Sex Selection Policies, India, 2000-15



Source: Sample Registration System, 3-year moving average, 95% Confidence Interval. Note: National policies refer to 2003 PC&PNDT Amendment, 2005 Hindu Succession Act, and the 2008 Save the Girl Child and the 2015 Save the Girl Child, Educate the Girl Child IEC-Campaigns.

Taking this into consideration, we revisit in Figure 38 the same SRS-based sex ratio at birth series, we had shown earlier, now adding major policy interventions introduced after 2000. Figure 38 shows that the SRB climbed up to above 113 male births per 100 female births in the 2003-05 period. After that SRB improved to 111 in 2005-07 and 110 in 2007-09. Given the

three-year average, this is a notable decline that took place between 2003 and 2007. It is statistically relevant and confirmed across other SRB sources (Kulkarni 2009).

One might feel tempted to relate this SRB improvement occurring after 2003 to the major policy changes at the time. In 2003, the PC&PNDT Act was amended and policy efforts were stepped up throughout the whole country. The Hindu Succession Act was introduced in 2005 to give equal inheritance rights to women. After 2007 scholars have noted a type of “policy fatigue” (IN27), which could explain why the trend has stagnated between 2007 and 2014 despite the national Save the Girl Child Campaign launched in 2008. Most recently SRB has risen (again observable across data sets), just when Save the Girl Child, Educate the Girl Child Campaign has been launched under Prime Minister Modi in early 2015.

The results of the policy mapping illustrate that despite significant efforts to curb sex selection since the 1980s, SRB is still significantly skewed in favor of males in India. It could be suggested that the efforts after 2003 have shown some fruits in reversing the trend. The noticeable SRB decline after 2003 occurred when policy efforts (altered ban, revision of inheritance law) were introduced. The decline could thus be associated to policy changes or just be due to random fluctuations. Given the inconclusiveness of the national data and the vastness and heterogeneity of India, a more detailed analysis is required. In order to gain a better understanding of the influence of policies on SRB, we turn to a particular region that showed major improvements, the state of Punjab. We are interested in a particular district Shaheed Bhagat Singh Nagar, where policy efforts are supposed to have made a difference in curbing sex selection.

5.5. Regional Case Study: Shahid Bhagat Singh Nagar District, Punjab

Shaheed Bhagat Singh Nagar (hereafter SBS Nagar), formerly known as Nawanshahr District, received national and international attention for an anti-selection campaign that was carried out by local authorities between 2005 and 2007. It became known as the “Nawanshahr Model.” The Nawanshahr Model was praised as a ‘best practice’ on how to address sex selection. Even the Supreme Court of India gave notice to replicate the Nawanshahr experience in other districts and affected states. The goal here is to provide a quantitative and qualitative assessment of the intervention to establish whether, first, it led to fewer sex-selective abortions and, second, what

unintended side effects, if any, can be identified. To the author’s knowledge, this is one of the first studies to assess the impact of the “Nawanshahr Model.”

Shahid Bhagat Singh Nagar District is located in the Eastern part Punjab in the Northwest of India (see Figure 39). It is surrounded by five districts touching Hoshiarpur in the North, Rupnagar in the East, Ludhiana in the South and Jalandhar and Kapurthala in the West. SBS Nagar is one of the smaller districts of Punjab with an area of 1,267 km² and a population of 612,310 people according to the 2011 Census. Forty percent of its population belongs to scheduled castes. Sixty-five percent are Hindus and 31 percent are Sikhs. SBS Nagar like many other Punjabi districts has high incidences of sex selection and a severely skewed SRB.

Figure 39: Districts of Punjab



Source: Department of Rural Development and Panchayats, Punjab

After the 2001 census, the state of Punjab was identified as a hotspot for sex selection and was put under political pressure to improve its sex ratios. Between 2001 and 2011, the child sex ratio improved significantly in Punjab from 125.3 to 118.2 (-7.1). This improvement was even more notable in SBS Nagar, where the CSR improved from 123.8 to 113.0 (-10.8) between the last two censuses (Census India 2011).

In this case study we aim at assessing whether and why sex ratios have significantly improved and whether policy has made a difference. The question is why and how did sex ratios in SBS

Nagar improve? We start by introducing the background and the stakeholders involved in the SBS Nagar intervention.

5.5.1. Background, Stakeholders and Intervention

In the early 2000s, there was increased pressure to improve the sex imbalances in SBS Nagar. The legal ban on sex selection had already been in place for a decade in India, but implementation was lagging and SRB was peaking. With the PC&PNDT Amendment and the Supreme Court's ruling to step up enforcement, the campaign against sex selection was gaining new momentum. The Nawanshahr Model focused on awareness-raising, community mobilization and enforcement of the PC&PNDT Act. It was spearheaded by then Deputy Commissioner (DC) Krishan Kumar and was backed up by members of the civil society.

DC Kumar launched the campaign in May 2005. He played a central role in sensitizing and motivating a variety of state and non-state actors to jointly take action against sex selection. Among his first activities was to set up an intervention team and create an umbrella organization of local NGOs called the UPKAR Coordination Society. The umbrella organization UPKAR united 35 NGOs and 4000 members in the district to work on sex selection as a crosscutting issue (Purewal 2010). The Deputy Commissioner became the chief patron of the organization and held monthly follow-up meetings. DC Kumar's team in cooperation with UPKAR carried out a series of district-wide meetings to raise awareness about the severity of sex selection and build up social and political pressure against it. Campaigns were organized at district, block and village level and included rallies, demonstrations, meetings and workshops. UPKAR members also held public mourning events (shoka sabha) in front of houses where sex selection was reported to have occurred.

DC Kumar personally reached out to village representatives (Panachayat) and heads (Sarpanchs) to ensure that each village was fully aware of the issue and to remind local officials of their duties to report wrongdoing. Village leaders were also reminded that noncompliance with their official duties had consequences as they would be held accountable for the SRB trends of their village. Furthermore, Anganwadi and ASHA workers (village health workers responsible for maternal and childcare) were instructed to keep records on expecting women, like their name, phone number, age, the sex of their previous children, conception date and expected delivery date. A monitoring system was designed to automatically generate information about women's pregnancy based on the data collected. This allowed officials to monitor pregnancies. DC Kumar's team set up a call service at the district office that phoned

expectant mothers to check up on them and show interest in their pregnancy. In parallel, a toll-free helpline was set up to report sex selection offenders. Moreover, DC Kumar regularly held meetings with female students (between 11th grade and college level) to involve them in collecting information at the ground level. Financial incentives were given to encourage the students to report cases of sex determination and selection in their communities.

Apart from creating awareness and mobilizing a wide variety of actors, strong focus was placed on law enforcement. Government officials conducted sting operations, raided clinics and mobilized local police forces. As a consequence, the price for abortion and sex determination went up in the district, as doctors became increasingly afraid of getting caught for sex selection (Joseph 2007).

Overall, the tenure of DC Kumar (2005-2007) was characterized by a high-level personal commitment with special focus placed on three areas:

1. Awareness-raising at district, block and village level.
2. Law enforcement and strong action against sex selection offenders, with the help of the police, village leaders, health workers and local informants.
3. Coordinated action and commitment of a variety of state and non-state actors.

After the departure of DC Kumar in 2007, a period of political 'lethargy' took place, as strong law enforcement lagged. However, UPKAR Coordination Society continued its work with modified strategies. The NGO has recently placed stronger focus on spiritual mobilization. Instead of mourning in front of individual houses where female fetuses have gone missing, UPKAR members target the concerned village at large. The NGO organizes different awareness-raising campaigns including marches, spiritual walks before sunrise (prabhat feri) and social media campaigning.

On the government side, law enforcement has become lax and official sting operations and raids of clinics have become rare. Nevertheless, in 2015, at the time of field research, the local government in SBS Nagar offered US\$ 750 for whistleblowers, who reveal the wrongdoing of doctors. Local authorities also organized workshops, seminars and speeches to raise awareness about sex selection.

5.5.2. Quantitative Assessment: Difference-In-Difference Analysis

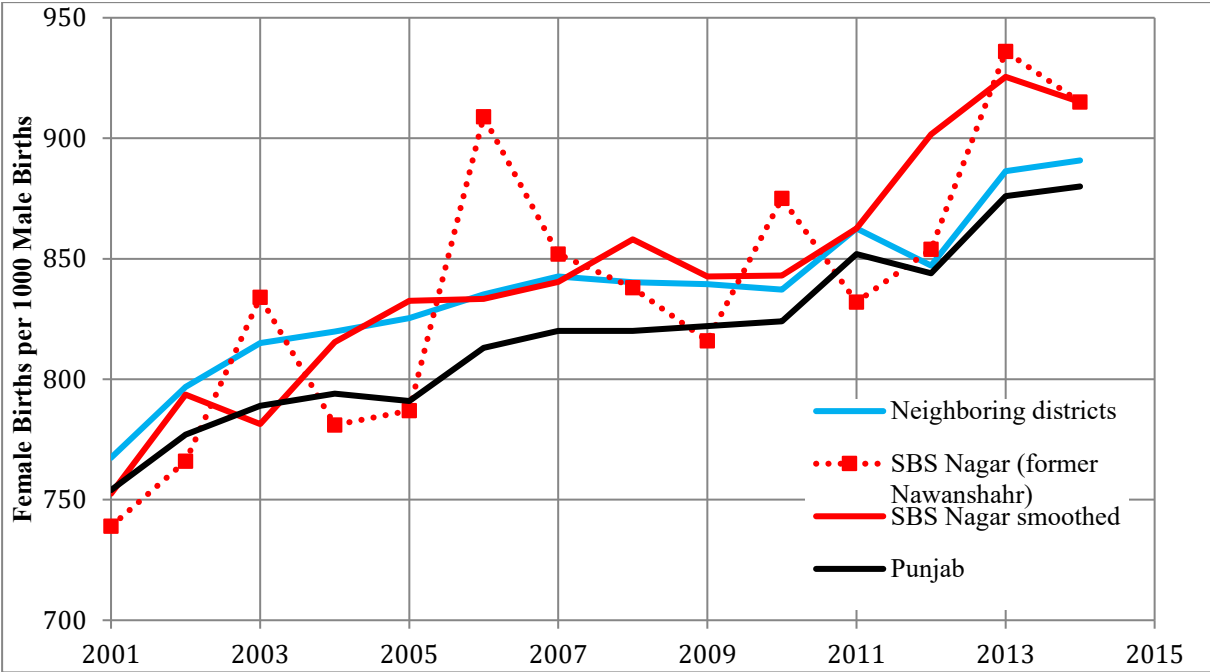
In the quantitative analysis we ask whether the sex ratio improvement in SBS Nagar was statistically significant and can be linked to the intervention period of the “Nawanshahr Model” (i.e. 2005-2007). We conduct a Difference-in-Difference analysis of sex ratio at birth trends comparing the intervention area (SBS Nagar) to its neighboring districts (namely Hoshiarpur, Rupnagar, Ludhiana, Jalandhar, and Kapurthala) and Punjab as a whole, which allows us to establish the net impact of the intervention and assess how many girls have been “saved” due to the intervention. We assume that the Nawanshahr Model was unique to the district of SBS Nagar and was not rolled out to the same extent in the surrounding districts or the state of Punjab as a whole. Even if some spill over effects may occur in neighboring districts, we would then expect to see greater improvements in the intervention area than the non-intervention areas. We use SRB data based on the Civil Registration System for the years 2001-2014. Unlike some other states, Punjab has a birth registration level of 100%. Due to a small number of births in SBS Nagar a 3-year moving average was computed.

We deviate here from our usual calculation (male per 100 female births) to present the reader with the original data set published by the Civil Registration System, which uses the number of females per 1000 male births. This allows the reader not only to better cross-check the calculations, but facilitates the argument by showing the number of girls that were ‘saved’ thanks to the intervention, rather than the number of male births that were ‘avoided.’

Figure 40 shows the overall SRB trends in all three localities between 2001 and 2014. During this period the sex ratio at birth improved in all settings as reflected here by the upward trend. Between 2001 and 2014, the sex ratio at birth improved from 739 to 915 in SBS Nagar, while changing from 767 to 891 in surrounding districts, and from 754 to 880 in Punjab. Compared to the control areas, SBS Nagar improved the most. By 2014, the three localities all reached SRB levels around 900 female births per 1000 male births. While this is a major improvement compared to levels 15 years prior, SRB has still not reached the biological norm of 950 females per 1000 males (Indian measurement).

The 2004-2007 period is of particular interest for our investigation. Here we see a sharp rise in SRB in SBS Nagar between 2005 and 2006 from 787 to 909, when the Nawanshahr Model was carried out. However, this could also be explained by random fluctuations. A more robust indicator is the smoothed trend line (here in red) based on the three-year moving average. The smoothed line rises in parallel with surrounding districts, but starts to deviate after 2011 when the census was issued.

Figure 40: SRB in SBS Nagar, Neighboring Districts and Punjab, 2001-2014

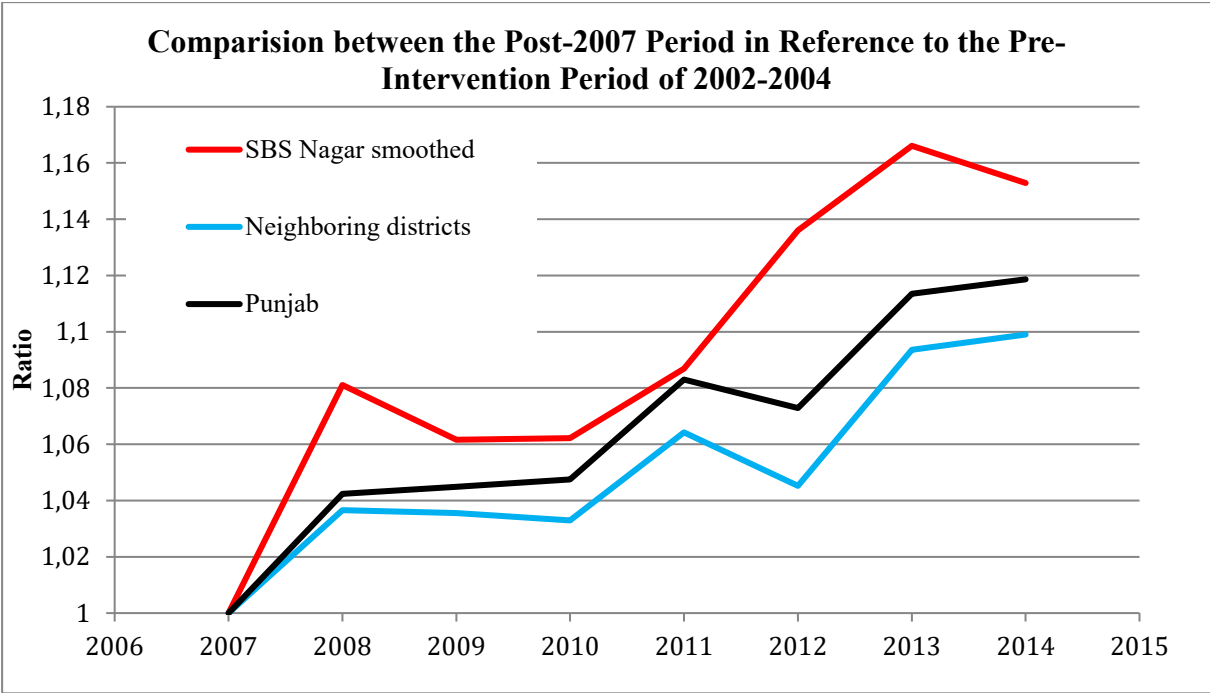


Source: computed from Civil Registration Service data. Note: the biological norm is 950 females per 1000 male births.

We investigate further whether the SRB improvement observed in the period of interest can be linked to the policy by looking at the rate of improvement. We compare the average SRB during the pre-intervention years (aggregated birth during 2002-2004) to the post-intervention years (after 2007) in SBS Nagar (intervention area), neighboring districts and the state of Punjab as a whole. Absolute trends are omitted and only smoothed trends in a 3-year moving average are presented (see Figure 41)

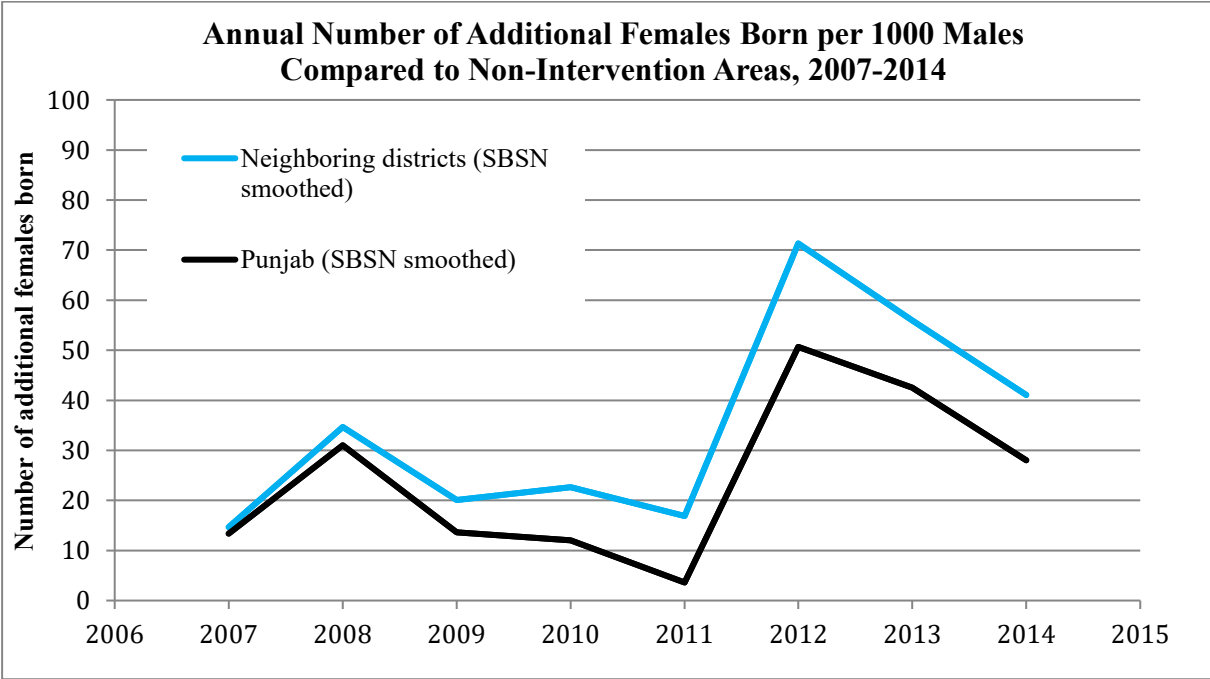
Figure 41 shows that there is a positive trend throughout Punjab in the post-intervention period indicating that all three localities performed better after the 2005-2007 intervention. However, the improvement is even greater in the intervention area. In 2014, SBS Nagar shows a 15% rise in SRB levels compared to the pre-intervention period, while the improvement is only 10% and 11% in surrounding districts and Punjab respectively. SBS Nagar improved significantly after 2007 (when the Nawanshahr Model ended) and after 2011 (when new Census data was released), while the trend in surrounding areas and Punjab moved at a slightly slower pace.

Figure 41: Ratio of SRB Improvement in SBS Nagar, Neighboring Districts and Punjab



Source: computed from Civil Registration Service data

Figure 42: Net Impact of the “Nawanshahr Model”



Source: computed from Civil Registration Service data

Figure 42 shows the net impact of the Nawanshahr Model, comparing the intervention area with the non-intervention areas before and after the intervention. The chart refers to the overall number of “extra” girls that were born per 1000 males thanks to the intervention. Or differently put, Figure 42 shows the number of girls per 1000 males that are missing in surrounding districts and Punjab due to the absence of a similar policy intervention. We can observe a positive impact (above 0) linked to the intervention. The net impact of the Nawanshahr Model compared to surrounding districts ranged between an annual plus of 13 girls in 2007 to an annual plus of 52 girls per 1000 males in 2012. In 2014, the number of extra female births was 41 per 1000 males. The net impact of the Nawanshahr Model compared to Punjab was also significant, yet less pronounced than compared to the surrounding districts. The annual improvement fluctuated between 13 additional female births per 1000 males in 2007, to 4 in 2011 and 28 in 2014).

In conclusion, there has been an overall improvement in SRB in the post-intervention period throughout Punjab. However, the greater improvement in SBS Nagar compared to control areas is statistically significant and can be directly linked to the period of the “Nawanshahr Model” implemented by DC Kumar between 2005 and 2007. The improvements made in SBS Nagar are not a random statistical deviation, nor a function of the region’s overall improvement.

5.5.3. Qualitative Assessment: Stated Reasons for SRB Improvement

In order to complement the quantitative findings, qualitative evidence was gathered during field research conducted in SBS Nagar in spring 2015. The qualitative assessment seeks to investigate the reasons for SRB improvement in SBS Nagar, the role of policy and the unintended side effects of policy intervention. Interviews were conducted with key stakeholders directly involved with designing and implementing the Nawanshahr Model in 2005-2007 (including DC Kumar and his team). I also interviewed Punjabi state officials active during that period. The data set was collected in Nawanshahr and neighboring Chandigarh and includes a total of 11 interviews (6 policy makers, 2 NGO representatives, 2 scholars and 1 medical practitioner). I also made use of the wider circle of 45 Indian experts, especially in the discussion. As described in Chapter 3, the interviews were guided by a semi-structured interview schedule, recorded when prior authorization was given, transcribed and then analyzed using NVivo software following a thematic analysis described by Braun and Clarke (2006).

The interviewees gave several reasons, why the sex ratio at birth improved in SBS Nagar and Punjab at large. These reasons are, in order of prevalence: 1) ‘fear of the law’ through strict

enforcement of the PC&PNDT Act, 2) individual leadership by key stakeholders, and 3) community mobilization.

(1) 'Fear of the Law'

There was a consensus among interviewees (state and non-state actors) that the rigorous enforcement of the PC&PNDT Act was a driving factor that made the difference in SBS Nagar and Punjab. 'Fear of the law' was most often mentioned in reference to improved levels of SRB (35 references were made by 14 experts interviewed). Here are some examples:

“It was the fear of law which ultimately forced people to change their attitude” (IN16, Former Implementer of the Nawanshahr Model, 39, male, Chandigarh).

“What has helped the sex ratio is the fear of law... The law and order approach really created an element of fear, a strong element of fear in the minds of the people” (IN15, Professor of Demography, 53, male, Chandigarh).

These quotes illustrate that fear was generated at the grassroots level. As mentioned, different instruments were used to create this fear. These included sting operations, raiding clinics, grassroots whistle blowers, and applied pressure on local authorities to report wrongdoing. While the premise of the PC&PNDT Act is to target medical professionals, who illegally provide sex-selective services, the Nawanshahr Model also built up pressure on families, and women in particular, by closely monitoring their pregnancies. Based on personal information collected by ASHA and Anganwadi workers, a female operator at the DC Office made regular calls to pregnant women to follow up on their pregnancies as the following quote shows.

“A phone call was made by the [DC] office to call the pregnant ladies on the expected date of delivery. ... If someone said that there was no pregnant lady [in this house] or that it was the wrong number or 'how you can call us?' then she [the female operator] gave the doubtful cases to the Deputy Commissioner. She made such calls every Monday. She reported to Deputy Commissioner and said, 'I made calls to these 6 people and no one was responding. They were having doubts. Then the Deputy Commissioner told us to investigate the situation and see what the general public and civil surgeon have to report on the same [case]. Then we could make a guess that in this area such situation [sex selection] is occurring” (IN18, Implementer and Civil Society Member, 59, male, Nawanshahr).

While major emphasis was placed on creating fear 'outwards,' towards service providers and service seekers, ultimately, it was also generated 'inwards,' among public authorities, police,

and elected representatives at district, block and village levels. The then Deputy Commissioner made it clear to all of the authorities in his district that they had strict law enforcement duties and that there would be personal consequences, if anyone failed in those duties. When DC Kumar requested the support of the police:

“Officials were very much afraid of the Deputy Commissioner Mr. Krishna Kumar. He was very strict. He said, ‘If the doctor escapes, I’ll arrest you [...]. I want the doctor in jail.’ Then he [DC Krishna Kumar] told the Deputy Superintendent Police, ‘If the doctor escapes, you will be in trouble.’ Then the doctor was arrested” (IN18, Implementer and Civil Society Member, 59, male, Nawanshahr).

As the quote shows, fear of the law also means fear of public authority, in this case the Deputy Commissioner. An important tool for building up social fear was the use of sting operations. Pregnant women were recruited to expose sex selection offenders. These women – who volunteered or received financial incentives – had to sign a prior agreement that they would not misuse any information on the fetal sex for sex selective purposes. Then they would enter targeted clinics with hidden recording devices and marked banknotes to reveal sex selection offenders. Sting operations were rigorously prosecuted and quickly became ‘infamous’ in the local medical community.

In short, the majority of experts saw ‘fear of the law’ as a key factor in the Nawanshahr Model. The implementation of that fear was multi-level. It started at the leadership level and trickling down to district, block and village officials in order to generate awareness, fear and behavioral changes at a grassroots level. As we shall see, the other two components (personal leadership and community mobilization) also contributed to creating an environment where fear could drive grassroots level changes.

(2) Personal Drive and Leadership

Another key reason why SRB improved in SBS Nagar was the leadership of individual actors who took sex selection up as a personal matter.

“Krishna Kumar was kind of a hero in this tribe. So his name simply, when people say that Krishna Kumar is coming, it means something. He was so passionate about this issue... The team was definitely headed by Krishna Kumar and the NGO had a very good role” (IN16, Former Implementer of the Nawanshahr Model, 39, male, Chandigarh).

DC Kumar was recognized as a chief commander and a ‘hero of his tribe.’ His strong commitment became evident through numerous interviews. He was both motivating and demanding, as the following quote illustrates:

“On 13 May 2005, Mr. Krishna Kumar joined as deputy commissioner of this district... We had a meeting with him on the other issues too. Then, on next Sunday morning, he called me at 5 AM. He said to me, ‘Mr. G., you visit my office. And do you have some NGO contacts?’ I said, ‘Yes.’ Then he said, ‘You make a call to all NGOs [who are your contacts].’ That was how it started” (IN18, Implementer and Civil Society Member, 59, male, Nawanshahr).

This latter quote shows the unusually high level of dedication towards this issue. DC Kumar’s idea on how to tackle sex selection could not wait until a weekday or a reasonable hour to call people. Interviewees repeatedly mentioned his unexpected and strong commitment, sometimes going even across administrative boundaries:

“One day he got [the] news that a lady from our district, his district, is going to some other district for a termination of the pregnancy. He actually raided the premises of the doctor beyond his jurisdiction [...]. That was, if you ask me, kind of illegal, but the way he made it legal, was he caught the doctor and handed him over to the magistrate of that area” (IN16, Former Implementer of the Nawanshahr Model, 39, male, Chandigarh).

Early morning phone calls and going beyond his jurisdiction to arrest doctors are just two examples of the strong personal dedication of DC Kumar. Behind the personal drive was his deep-rooted conviction that sex selection can be successfully addressed in a very short time span when law enforcement and awareness-raising go hand in hand:

“If you do visible enforcement, awareness will pick up and if you do awareness, enforcement will pick up” (IN46, Former District Commissioner, 45, male, Nawanshahr).

DC Kumar was personally involved in creating awareness and ensuring strict enforcement. This broadcast a sign: sex selection is no longer tolerated in Nawanshahr. Several interview partners showed similar types of strong commitment. Sometimes they would even put their own lives at risk in their willingness to challenge the status quo. Three interview partners reported that they received death threats for working against sex selection. While there were times when they feared for their own lives, their work also came with the significant gratification of having saved the lives of others. For example, the former PC&PNDT State Nodal Officer of Punjab active in

the 2000s reported, “My life was in danger.” He continues with “You will definitely agree with me, it is difficult to save one life. It’s difficult and we saved one lakh [100,000 girls] approximately” (IN21). The former District Commissioner reported a similar source of pride and gratification: “At the end of the tenure, I would say that this is the one thing that gave me maximum satisfaction. This will remain with me and I would love to do it [again], given a choice” (IN46). Policy makers stressed the need for their intervention because according to many of them female fetuses have “no agency,” “no one to speak out for them,” so they declared it to be their personal mandate to “save” them from being selectively aborted.

(3) Community Mobilization

Besides fear and leadership, interviewees stated that mobilizing civil society in a coordinated and sustainable manner also played a key role in improving sex ratios in SBS Nagar. The fact that the community “owned” the issue was said to have made a big difference. “I have the hobby to work for the society” (IN18). With these words, Mr. G. welcomed me at the UPKAR NGO in Nawanshahr. He has run the NGO for over a decade and he remembers the work and influence of DC Kumar vividly.

Together with DC Kumar, Mr. G. created the NGO that spearheaded the cooperation against sex selection. DC Kumar not only motivated others to take the issue seriously, he also helped to build sustainable structures by creating an umbrella NGO that would persist after his departure. This kind of enduring cooperative infrastructure gave continuity to tackling sex selection within the district both beyond the administrative reach and personal tenure of DC Kumar. A representative of the Ministry of Health and Family Welfare at a central level noted,

“The Deputy Commissioner of Nawanshahr mobilized the NGOs and the society. People of that community came forward and they became the ambassador of that cause. [...] That was one strong aspect of it” (IN40, Representative of the Ministry of Health and Family Welfare, 37, female, Delhi).

There was consensus that multiple stakeholders contributed to the improvement in SRB. For this reason it is difficult to link progress made in Nawanshahr to anyone actor. It appears that although strong top-down leadership took a heavy-handed and inspiring role, different actors from different levels also applied themselves diligently to achieve results. As such, multiple actors claim that their contributions stood out:

“Everybody is taking the credit. State law enforcing agencies, they think that it is because of them. Then that Nawanshahr person [DC Kumar] thinks that it because of

tracking of pregnancy [...] how much of it is true [I can't say] and the other conditions, which have been triggered by local groups, the panchayats, the Sikh religious groups [...]. They also did something" (IN29, Former Minister of Health and Family Welfare, 72, male, Delhi).

It is important to note that these coordinated efforts did not just take place between 2005 and 2007. One of the unique features of the Nawanshahr Model was that the District Commissioner (DC) set up sustainable structures. After 2007, the NGO UPKAR has continued to raise awareness on sex selection and its negative consequences. They continue to collaborate with the District Commissioner's Office. For example, UPKAR receives block-level data on all female births in Nawanshahr, and they provide gift packages (baby suits, peanuts and sweets) along with greeting cards signed by District Authorities to celebrate the birth of girls. Traditionally, the celebration of newborns (lohri) is only done for boys in India.

Depending on the political will and drive of the DC in office at any given time, the NGO has more or less leverage to take action against sex selection. For example, sting operations that were conducted during the tenure of Mr. Kumar have been difficult to implement after 2007 without the support of the district government. Therefore, focus has shifted to "exploiting the spiritual faith of the public" and "spiritually arresting" villagers who sex select. In this regard, messages like the following are used:

"If you give birth to a male child after having killed the female child, the male child will become [drug] addicted; he will be a thief; he will stay in jail for the whole life, because the soul of the first female child will never allow the male child [that follows] to live happily in the family" (IN18, Implementer and Civil Society Member, 59, male, Nawanshahr).

Note that the NGO UPKAR has the declared mandate to address "two social evils" in Punjab, "the addiction for drugs and for sons" (IN18). We can see that the approach of law and order has shifted from legal to 'spiritual' punishment. In a metaphysical sense, 'fear of law' still plays an important role, only that the guiding law is not issued by the government but by the moral laws of faith-based organizations.

The three reasons laid out above (fear of the law, personal leadership, and community mobilization) are interconnected. Any one person could not have implemented the Nawanshahr Model. Individual leadership only showed fruits because it could mobilize the masses. Also 'fear of the law' and personal drive goes hand in hand, as the following quote of the former

PC&PNDT State Nodal Officer of Punjab shows: “So first was to create a fear of law. I personally took many inspections across the state and took harsh decisions” (IN21).

Personal commitment was seen as necessary to build up pressure at a state level that would trickle down to the district and sub-district level. As a consequence of these three intertwined reasons, the community took notice that the situation in Nawanshahr and larger Punjab had shifted. A critical number of people realized that it was no longer possible to ignore the law. They were afraid that if they would continue to actively or passively support sex selection, this would have negative consequences. Ultimately the Nawanshahr Model illustrates how local governments can use strong leadership to mobilize communities to intervene against sex selection with significant and long-term effects.

Although these were the three reasons that were the most prevalent in the interviews, there are also some correlated considerations that were not often mentioned, but nonetheless have played important roles in the Nawanshahr Model. These included: (a) political will as the PC&PNDT Act had been amended in 2003 and political pressure for action was rising when the Deputy Commissioner came into office in 2005; (b) targeted action with political focus and government resources placed on treating the worst affected districts in Punjab, including SBS Nagar; and (c) the small district size and a good infrastructure facilitated the law enforcement, making it easy to commute and maintain communication networks.

After having reviewed the stated reasons for improved SRB levels in SBS Nagar, we will now continue with a discussion of the policy side effects. We still place a focus on Punjab, yet also draw from the larger qualitative data collected.

5.6. Discussion of Policy Effects

We have seen that the three intertwined aspects of ‘fear of the law,’ personal leadership and community mobilization can make a difference in improving sex ratios in Punjab. However, the Nawanshahr intervention also received wide criticism for its side effects, especially from NGOs and IOs. Two of the main concerns expressed by interviewees were pregnancy tracking and excessive fear of the law. We discuss these side effects along with the persistence of sex selection in SBS Nagar and ways forward.

5.6.1. Pregnancy Tracking: Targeting Women or Improving Maternal Health?

Pregnancy tracking refers to the monitoring of expecting mothers during critical periods of their pregnancy, e.g. 3 months, 5 months, 8 months, delivery, as well as 6 months after birth. It is done by grassroots health workers, who live in the community and monitor the well-being of the mother and child throughout the pregnancy. These health workers can then report irregularities to authorities. Authorities maintain digital records such as birth history and expected delivery date. This allows officials to filter and screen women who run high “risks” to undergo sex-selective abortions, e.g. those with previous female children.

Monitoring women’s pregnancies was one of the main pillars of the Nawanshahr Model. Grassroots’ health workers collected the personal information of pregnant women (e.g. name, age, contact information, prior births, sex composition) and then make regular check up calls to monitor them. Digital record keeping of pregnancies allowed officials to determine approximate delivery dates and check on women and their families:

“At the end of the 9th month, we could take out a list of all those women who might have delivered babies by now. And, then you ask them, ‘How is the baby? Is it a baby girl or a baby boy?’ There are three possibilities: Baby boy and it is very good, baby girl and it is very good, or there is no baby. No baby means there might be something wrong. It might be a general case of abortion due to some general problem [...]. But that case needs some inquiry” (IN46, former district officer, 45, male, Nawanshahr).

A monitoring system was used to identify and check up on pregnant women to make sure they were not sex selecting. Ostensibly, this was done to improve maternal and child health. However, this tracking system required government officials to investigate suspicious pregnancy terminations and thus put significant pressure on local women, despite their overarching legal protection under the PC&PNDT Act.

This type of intervention has gained support throughout India as an effective way to fight sex selection. However, the ethics of pregnancy tracking are highly contested. This was reflected in the qualitative sample collected: Seven of the interview participants were in favor of pregnancy tracking (6 politicians, 3 coming from district levels, 1 state level and 2 national level; and 1 doctor). The share of opponents was more than double as high. Fifteen interview partners strongly opposed the practice, mainly coming from NGOs and IOs. Three politicians (2 national level, 1 state level) spoke out against pregnancy tracking, while 4 interview participants (including one policy maker) remained neutral. Among policy makers, noticeably more district authorities spoke in favor of pregnancy tracking than national authorities.

Supporters of pregnancy tracking argue it serves a dual purpose: a) the information can make crucial reproductive health services accessible to women, improving maternal and child mortality; and b) to prevent sex determination and sex selection. Opponents, on the other hand, stress legal, health, and gender equality concerns for why the practical implementation of pregnancy tracking would further victimize women. We give some examples of interviewees promoting and opposing pregnancy tracking for illustration purposes.

Supporters of pregnancy tracking frequently used terms such as “tracking,” “catching” or “monitoring” of females. Among them was a senior representative of the Ministry of Women and Child Development from the central government stating,

“You can catch hold of the mother from the 1st trimester itself. Then you start tracking the mother [...] till she delivers a baby and the baby becomes 6 months old [...]. The moment the pregnancy stops, people would like to know the reasons [...]. That is where you will catch the mother and the family [...] you are going to the grassroots, catching hold of every individual” (IN43, Joint Secretary, Ministry of Women and Child Development, 58, female, Delhi).

The notion of “catching hold” of women at grassroots levels was echoed by a district official in Haryana who wants to pressure expecting mothers, so they constantly feel like they are being “watched” by authorities:

“2-3 months [after conception] is when basically the [sex-selective] abortions or tests happen. It is very important that we catch hold of the culprits in this [period]”. “That mother will always feel that [...] somebody is watching me.” “The moment we get it [the information] in the database, it’s over! We catch hold of them” (IN35, Deputy Commissioner, 39, male, Gurugram).

The language used here casts women as potential criminals or culprits. “Who is the true culprit? The patient herself and her family!” (IN37). The idea of monitoring pregnancies has gained momentum with the 2015 suggestion by the Minister for Women and Child Development Maneka Gandhi to lift the existing ban on sex determination and make prenatal screening compulsory for all pregnant women in order to follow up on female births. The idea was met with large criticism among the opposition party and women’s rights activists (Pandey 2016), which was also reflected in the qualitative data collected.

The majority of academics, NGOs and IOs representatives interviewed opposed pregnancy tracking. One of the leading Indian activists fighting sex selection claimed there are no legal grounds for such action.

“The WCD minister [Maneka Gandhi], she is saying that the sex should be determined and it should be tracked to find out if the pregnancy is there. When you talk about abortion rights, this is the worst [...]. The law is very clear. The law says that you regulate medical technology. There is no point in tracking women” (IN38, anti-sex selection activist, 56, male, Delhi).

According to another interviewee, the founder of a Delhi-based women’s rights organization, monitoring pregnancies was like targeting, “the weakest link in the whole chain of female feticide and sex selection” (IN05). She refers here to the low status of Indian women in general and their subsequent vulnerability to the various social and legal pressures caused by anti-sex selection policies. Experts also raised doubts about (a) the overall feasibility (“You cannot track all pregnancies. It is practically impossible” IN09); (b) privacy rights (“You are intruding into privacy” IN05); and (c) the possible infringement of access to safe abortions (“When you talk about abortion rights, this is the worst” IN38). Opponents stressed that the practical implementation of pregnancy tracking leads to the further victimization of women who are already vulnerable (“Laws and policies should not end up penalizing the victims themselves” IN05).

Is there any policy or legal basis that supports pregnancy tracking? Yes and no. On the one hand, the Indian PC&PNDT Act specifically excludes women from punishment. According to PC&PNDT Act regulations (see 2.3.4.) women are presumed innocent, because it shall be assumed that they were “compelled” to undergo sex selection. Instead the legal framework makes the medical service providers that promote sex determination and sex-selective abortions culpable. Within this legal framework women who undergo those services are legally protected. Part of the rationale behind this provision is the fear that pressuring women will drive them away from institutional births and create a black market for abortions.

On the other hand, the same Ministry for Health and Family Welfare that oversees the implementation of the PC&PNDT Act also introduced the “Mother and Child Tracking System” in 2009. The MCTS seeks to ensure that all pregnant women have access to antenatal care, institutional delivery, postnatal care and immunization for their children. It is a web-based service that collects personal information on maternal and child health beneficiaries. It has been rolled out throughout India and runs in some states also under the name of “Pregnancy, Child

Tracking, and Health Services Management System.” The overall aim is to improve maternal and child health. However, according to a senior government official, a “hidden agenda” point of the current administration is to use the established infrastructure to check for sex-selective abortions:

“Now everywhere they are saying, ‘monitor women, monitor pregnancies.’ They are saying, we are killing two birds or three birds with one stone: monitoring pregnancies, [antenatal] check-ups. The child growth will be better, and women are better-off. Plus we ensure that the ladies have institutional delivery, get some money, and number three of our hidden agenda is also to check for sex-selective abortion” (IN29, Former Minister of Health and Family Welfare, 72 male, Delhi).

Openly the Ministry of Health and Family Welfare gives clear guidelines that pregnancy tracking is not desirable. According to a representative of the Ministry of Health and Family Welfare, “We have given clear messages that we are not interested in the tracking of pregnancies or tracking of MTPs [Medical Termination of Pregnancy Act], because the PNDT [Pre-Natal Diagnostic Techniques Act] doesn’t have anything to do with either the pregnancy or maternal health” (IN40). The central level government emphasizes in their instructions to state and district implementers that, “we don’t want that you are tracking. The tracking of pregnancy – in case you want to do it – will be only to track the clinics” (IN40). The same policy maker recognizes, however, that women are a “soft target” compared to “wealthy and influential doctors,” which according to the interviewee may explain why local authorities often “go after women instead of doctors” (IN40).

There were noticeable regional differences in the degree to which pregnancy tracking was conducted. A district official from Haryana reported on a recent effort where they “were tracking this lady for 10 days and we were also tracking the quack” (IN35). The official stressed they used executive orders to bypass existing legislation in order to track pregnancies. Meanwhile authorities from Maharashtra stated that, “In Maharashtra we don’t track any pregnancy and we are not supposed to track that. We only regulate the technology to prevent misuse” (IN10).

In the case of the Haryana District official there were real ramifications of his action for a woman undergoing an abortion. As he and his team intervened, “the women had already administered the tablet [to induce labor] and the fetus had come out” (IN35). He continued with, “the fetus is with us [...] the lady ran away. She was in a very bad situation. We sent the fetus

for examination, [the] quack went missing, and finally people are gathering from the village, and me and only three of my people were there. So this becomes a very tricky area” (IN35).

In this case, women’s reproductive rights and physical well-being were directly being jeopardized due to policy intervention. District officials were tracking a woman who was allegedly undergoing a sex-selective abortion. They were reportedly too understaffed and overwhelmed to deal with the situation, which therefore became a source of personal “embarrassment.” However, the physical and psychological effects of such an event on women during delivery are potentially horrendous. While this is just one incident where the woman’s health was put into jeopardy by tracking pregnancies, no representative data is available, which would allow assessing the representativeness of such efforts.

We have seen that pregnancy tracking is highly contested in India and that national policies are at times misinterpreted, misused or simply bypassed on local levels. Some believe that pregnancy tracking is an important means to promote maternal and child health, while keeping sex selection in check. Others claim that it harms women’s rights and well-being. Ultimately, while pregnancy tracking may be an effective way to improve health care and monitor the sex selection on the ground, it comes at a price. Under the wrong conditions, these kinds of programs can be used to compromise women’s rights and well-being and lead to the revictimization of a social group that already faces significant gender bias pressures. The Nawanshahr Model shows just how difficult it is to avoid using tracking information to infringe on women’s rights when the political pressure is high enough.

5.6.2. Excessive Fear of the Law? The Role of Political Masculinities

Implementers of the Nawanshahr Model reported that they faced significant “resistance,” “resentment,” “social pressure,” and that tackling sex selection in SBS Nagar was like “going against the society” (IN16, IN18, IN46). As a response to social resistance, the hard hand of the law was considered the sole remedy. State and district implementers justified their approach, claiming that in the absence of fear, people would go right back to practicing sex selection. Interviewees also reported that some officials went “explosive” (IN21) and that fear was spread to an extent of “terror” seeking to “create panic in the culprit’s minds” (IN16). Here we discuss whether excessive fear of the law is beneficial in the long run. Is sowing “terror” a fertile ground for lasting change?

On the one hand, people have to be aware of the presence and enforcement of a law. Only when punishment is immediate, severe and probable is a law likely to be obeyed (Schneider and Janning 2006). On the other hand, the ongoing generation of fear among civilians in the pursuit of political goals is questionable. It can infringe on personal rights and, in the case of sex selection, can have traumatic consequences on women and families who are accused of having aborted a female. In these kinds of environments it is easy for people to get targeted without having done anything, or for having had a miscarriage. Since spreading fear in the society does not address the underlying motives for sex selection, the moment the government eases up on enforcement there is a high probability that the practice will regain popularity (as can be seen after the tenure of DC Kumar, also see Figure 40). In democratic countries like India, local governments change often and active governments could find themselves in the position of Sisyphus, rolling the same enforcement rock uphill that previous officials let slide. As we have seen in earlier chapters, addressing solely the methods of sex selection, while leaving the motives unchallenged, is unlikely to produce long-term results.

The generation of fear in order to bring about change has yet another downside. What became strikingly obvious throughout many interviews conducted in India were the masculine attitudes of bureaucrats (males and female). In a separate article I highlight the role of political masculinities in India's fight against sex selection (Rahm forthcoming).

By political masculinities, I refer to both individual and institutionalized expressions of masculinity. On the one hand, political masculinities are the masculinist/gendered attitudes, practices and behaviors of individual agents in political power – who may be male or female. On the other hand, political masculinities are – on a more abstract level – representations of a patriarchal socio-political system.

Government officials tended to address sex selection through three dominant approaches. They seek to protect, track and emancipate females. While the rationale behind each approach is unique, they all stem from a highly patriarchal socio-political background and were expressed by men and women alike. The three schemas of political masculinities I was able to identify through the qualitative thematic analysis of 47 expert interviews portray women as being vulnerable (and in need of protection), culpable (and in need of being tracked), or disempowered (in need of emancipation). Ultimately, this type of discourse reinforces the patriarchal power structures of a dominant male (authority) vs. a subordinate female (constituent). Similar to what we have discussed earlier regarding India's colonial past, I argue that in modern times policymaking operates from within the same patriarchal structures. This often reproduces existing gender biases through discourse and concrete action instead of

overcoming them. For policies to contribute to long-term social transformations this power discourse would need to be changed (Sinha and Gasper 2010).

As we have seen in SBS Nagar, where a top-down power dynamic was instituted to enforce a dominant – submissive hierarchy that motivated compliance through fear of authority, an overly masculine approach to addressing sex selection can work, but it does not cure the underlying motive for sex selection, son preference. In the long-term, different solutions are required. In the short term, the spread of fear reinforces the existing power structures of male supremacy and female subordination, however, it leaves women vulnerable and at the bottom of the value chain. In these cases where women are already marginalized, the classically masculine approach of dominance, aggression and fear is unlikely to challenge the underlying root causes of sex selection. Instead of overcoming existing gender biases, such an approach creates an environment that further entrenches them.

5.6.3. Persistence of Sex Selection: Improved But Not Cured

As we have seen in the quantitative and qualitative data presented, sex selection persists in SBS Nagar. The situation has improved but the district and the state of Punjab are far from being “cured.” According to local implementers, quicker results can be obtained through more “aggressive” measures, but unless attitudes and behaviors towards women change, the problem of sex selection is likely to persist. Culturally, women are still seen as a liability because of high dowry payments and other traditional reasons. Sons are still required as landowners and status conduits. A local health worker from SBS Nagar reports:

“Nawanshahr district, our district is number one in sex ratio during the last two years. But I think all this impact is temporary. There is no permanent solution. If we campaign aggressively, we get quicker results. If we have a laid-back attitude, then again those things prevail. Sometimes, I feel unable to have permanent impact on the people. Basically the main reason behind these evils is the patriarchal attitude in our Punjabi society. In Punjab, basically women are marginalized. The problem is, I too belong to a Punjabi family and Punjabi people are very much attached to their land. They see a boy as their successor of their land and property. They are very attached to their landlord, and they have so much money. So they don’t want a girl. This is one major reason, and the second [reason] is a dowry system, which is very prevalent in Punjab. Marriages are an expensive affair in Punjab. People see girls as a liability. Under dowry system there is so much pressure on people that when a girl is born they see her as a liability. They

think we have to spend so much of [money]. Sometimes they spend earnings of their whole entire life on that girl. That is the second reason” (IN19, Child Development Project Officer, 32, female, Nawanshahr).

The interviewee points to improvements in the SRB, but she also expresses her doubts about the sustainability of policy efforts (“there is no permanent solution”). According to the interviewee, quicker results can be obtained with stronger law enforcement. However, the current approach does not sufficiently tackle patriarchal attitudes. Consequently, the marginalization of women persists for two main reasons illustrated in the quote above: (1) land, property and inheritance customs that traditionally favor sons over daughters; and (2) the pervasiveness of the dowry system making daughters a financial liability. The interviewee emphasized that the practice of sex selection is unlikely to disappear unless patriarchal structures in terms of unequal land ownership, inheritance, and dowry are tackled.

The same local health worker expressed her “frustration” because she has witnessed cases of sex-selective abortions in her immediate circle of friends and family and was unable to intervene. Despite improved labor opportunities for women and better educational attainments, young women still face pressure to obtain a son and sex selection continues to be practiced behind closed doors.

5.6.4. Moving Forward: Female and Financial Empowerment

The situation in SBS Nagar along with other parts of Punjab has improved, but sex ratios are still significantly skewed. What seems necessary in moving forward? Ostrom (2005) has identified some key criteria for how communities can overcome their collective action problems. In this case the collective action problem is sex selection resulting in skewed SRB. Ostrom’s criteria for successfully addressing these kinds of problems are that communities a) recognize the problem, b) have autonomy to solve their own problem, c) build community trust, d) have local leaders pressuring for or supporting local structures. The analysis above has shown that all four of the criteria expressed by Ostrom were to some degree present in the Nawanshahr Model.

Through awareness-raising and law enforcement, the community recognized that sex selection was a serious problem. NGOs had to certain degree of autonomy to come up with their own approaches on how to address the problem as long as they dealt with it as a crosscutting theme. While the DC Kumar reached out to people to engage them in a joint campaign, he did so rather

by generating fear and not trust. This lack of trust could have been improved by a less authoritarian approach, one that placed the rights and well-being women more in the center of attention. On the other hand, a trust-based approach cannot be built up overnight, and the results may have been less timely and less drastic had a more trust building approach been taken. Finally, what the Nawanshahr Model showed was that local leadership and dedication are a crucial element for change. It provides a good example of how a local leader supported local structures and pressured the society to make advances in a timely manner.

How could such an approach have been improved? Sex selection has reduced, but it has not disappeared. The answers on how to move forward lay within the community itself. A female local health worker pointed to essential aspects necessary for further progress in Nawanshahr:

- *Community participation in planning stages:* Policies are designed at higher levels and often do not meet ground realities. Community participation is needed during the policy-making process (“Policies are far, far away from the ground realities [...] There is a gap between policy and ground reality” IN19).
- *Financial autonomy:* Local health workers request greater financial autonomy to design interventions according to local needs. Funds are often given to organize workshops, seminars and give speeches, while locals request more practical interventions and training. (“We received so many grants but for useless things... Sometimes we get bound by rules and regulation” IN19).
- *Women empowerment:* Local health workers stress the importance of investing in women’s empowerment, not through “empty speeches,” but rather through concrete measures like vocational trainings (“We must spend money on empowering girls. I would organize some vocational training for girls” IN19).

According to the local expert, involving the community in the planning progress, granting financial autonomy and empowering women needs to go hand in hand with challenging the patriarchal family structure in the Punjabi context. Unless the pressure from land ownership, inheritance and dowry is eased, daughter discrimination is unlikely to disappear. However, as we have seen there are signs of change due to several decades of missing women. Strict marriage customs according to caste, class, ethnic and linguistic background are being relaxed (Larsen and Kaur 2013). The phenomenon of migrant bride influx has started to challenge and change cultural patterns. Families are beginning to recognize the value of daughters and more balanced sex ratios (Singh and Singh 2017).

5.7. Conclusion: Focus on *Methods*, at What Price?

As this chapter has shown, the problem of skewed sex ratios dates back to colonial times in India (John 2014), where it was largely driven by infanticide, differences in nutrition and health, and postnatal neglect, but since the introduction of ultrasound in the 1980s, prenatal sex selection has been on the rise (Attané and Véron 2005; Attané and Guilmoto 2007). India's policy approach to this problem has been principally through a strong legal ban on sex determination. Where other countries seek to address motives by increasing knowledge and awareness (e.g. Vietnam), the Indian policy approach seeks to address methods by punishing doctors who provide sex selection services.

Since the 1990s political efforts to combat GBSS have continuously increased in India. A comprehensive legal framework has emerged with the passing and the amendment of the PC-PNDT Act (Pre-Conception and Pre-Natal Diagnostic Techniques Act) in 1994 and 2003 respectively. The Act bans the use of all diagnostic techniques for the purpose of sex determination. Violations of the law are not restricted to sex determination, but also apply in the case of improper record keeping or non-registration of equipment. This has allowed the government to make the implementation of the law more stringent. Besides the ban on sex selection the government has introduced numerous awareness-raising campaigns and conditional cash transfer programs to enhance the value of girls. The current conservative government has further stepped up the battle on sex selection with the launch of the 2015 "Save the Girl Child, Educate the Girl Child" flagship program under Prime Minister Modi.

Despite these efforts, there is little conclusive evidence that policies have had a significant effect on sex imbalances. Sex ratios at birth and child sex ratios have continued to deteriorate and the problem has spread into formerly non-affected areas. Meanwhile, some Indian states have shown improvements in sex ratios. The argument has been made that policy efforts have been effective in those localities where policy was in place and aggressive political actors focused on the enforcement of the law.

We investigated one of these specific cases, the district of Shaheed Bhagat Singh Nagar in Punjab. The district became known for the "Nawanshahr Model," a rigorous government action to stop sex selection carried out between 2005-2007 by district authorities. The intervention was praised for its efficacy, yet to my knowledge there have been no formal evaluations on the "Nawanshahr Model" to date. We contribute to existing literature on policy efficacy in India (see 5.4.1.) by providing one of the first qualitative and quantitative assessments of this specific intervention.

The quantitative assessment showed that SRB improved throughout Punjab between 2001-2016, yet the improvement was greater in SBS Nagar in the 2005-2007 period. What distinguishes SBS Nagar from the rest of Punjab during that time frame was the Nawanshahr Model. The qualitative assessment provided reasons for SRB improvements given by local experts. Three interconnected reasons were identified: ‘fear of the law,’ strong leadership, and community mobilization. Other contributing factors for the improvement were district size, infrastructure, political focus and targeted action.

Pregnancy tracking and excessive fear of the law were discussed as side effects of the intervention. While there are some positive aspects to the strong hand of the law (e.g. political accountability) and the monitoring of women’s pregnancies (e.g. access to antenatal care, maternal and child health), they both can negatively affect women’s rights, as seen in this case. Furthermore, pregnancy tracking and excessive fear of the law are likely to reinforce masculine power structures, undermine women’s empowerment, and therefore hinder long-term change. Therefore an up-scaling of the intervention does not seem desirable.

As we have seen, while aggressive enforcement was successful, sex selection still persists in SBS Nagar. The policy intervention has improved the situation, but it has not challenged fundamental gender biases. Moving forward, existing patriarchal attitudes need to be addressed. The promotion of women empowerment through vocational trainings, involving communities in the planning stage of policy design and financial autonomy at district and sub-district level can help to produce interventions that are more target group specific, participatory and empowering.

In sum, India’s approach of going after the medical industry has its limitations, which cannot be better expressed than by the interviewees themselves. “When the technology did not exist, behavior of sex selection was happening through female infanticide, neglect, and higher mortality of girls” (IN27). The fact that discriminatory attitudes towards girls predated the introduction of modern reproductive technologies illustrates that the sex imbalances will not be effectively tackled by a methods-driven approach. A major question remains, “how does banning a technology eliminate sex-selective behavior when all of the prior conditions have not been addressed?” (IN27). In the words of a UNFPA representative, “The journey is still on!” (IN39).

6. Vietnam

The Socialist Republic of Vietnam is a newcomer in skewed sex ratios at birth. The country has a long history of son preference, but it was not until the turn of the 21st century that Vietnamese couples would act on it and actively influence the sex composition of their family. Several socio-political and economic transformations were key in driving this new trend, such as market reforms and shifting population policies. However, the country quickly recognized the problem by learning from the demographic and policy experiences of countries within the region. As a result, it has responded promptly by developing a strong top-down, multi-stakeholder policy approach against sex selection with the cooperation of IOs like UNFPA. In order to understand the influence of public policies on sex selection, we first review the background of son preference, fertility decline and access to technology, before examining the rise of sex imbalances. We then turn to policies and their impact on GBSS by assessing a regional pilot intervention, which has been recently scaled up to tackle sex selection throughout Vietnam.

6.1. Vietnamese Context

Vietnam is a coastal, tropical country situated on the South China Sea. It neighbors are China in the north, and Laos and Cambodia in the west.⁸⁸ Almost 900 kilometers of central highlands and narrow coastal plains separate Vietnam's two fertile Deltas, the Red River Delta in the north, and the Mekong River Delta in the south. The Northern Delta is the ancestral land of the Kinh people, where Indonesian, Thai and Southern Chinese met and mixed in the first millennium BCE. The Red River Delta was annexed by the Chinese Han Dynasty in 111 BCE and remained in Chinese hands for the next 1000 years (Banister 1985). The Chinese control over the northern part of Vietnam is an important factor in understanding the emergence of sex selection in the 21st century. One millennium of Chinese influence has left a deep imprint on the Vietnamese culture, values, laws, politics, and religious customs. In fact, sinicization (especially in the north) explains to a great extent Vietnam's Confucian heritage and its culturally rooted son preference. Confucian belief mixed with religious traditions and political ideologies of the 20th century. Although this has caused clashes in social and gender norms, son preference has endured to modern times.

⁸⁸ Note that China (unlike Laos and Cambodia) has a long history of sex imbalances favoring males.

6.1.1. The Endurance of Son Preference: From Confucianism to Communism

Confucianism entered Vietnam and spread during the millennium of Chinese domination, commonly known as *Bắc thuộc* periods (111 BCE to 939 CE). Initially, Confucian ideas were not imposed by Chinese rulers, but were simply practiced by the Chinese living in Vietnam. In fact, the matrilineal system indigenous to Vietnam persisted for centuries. However, over time China pushed for a policy of assimilation in Vietnam, and Confucianism increasingly governed the social, political and family relationships within the country (Nguyen 1998).

According to the Confucian ideology, family was seen as a microcosm of society. Men were regarded as the ‘king’ of the family. They could marry several women to make sure a son was born, who would inherit the family name and assets. Women were subject to male dominance throughout their lives: daughters had to pay respect to their fathers, like wives to their husbands, and widows to their sons. Since assets were transferred through the male line, having no son was regarded as a ‘sin.’ On the contrary, producing a son, especially as the first-born, guaranteed women a higher family status and social recognition (Santillán et al. 2002).

Interestingly, the Vietnamese accepted Confucian religious institutions and practices, yet opposed Chinese political occupation. According to Slote and De Vos (1998) this was a way of intensifying national identity. By the time Vietnam gained independence from the Chinese in the 10th century, Confucianism was well rooted in the society. Confucian scholars claimed dominance over religious influences such as Taoism or Buddhism (Nguyen 1998). From 1075 onwards Confucianism was politically institutionalized. Around this time an examination system was established, modeled after the Chinese imperial examinations, to promote the rigorous study of Confucian texts in order to qualify for public service.

Over the next centuries, Vietnam flourished and gradually expanded its territory from the heartland of the Red River Delta southward to conquer what is today Central and South Vietnam. These conquered territories were homeland to the Cham and Khmer people, each with remarkably different cultural fabrics.⁸⁹ Unlike the ethnic Kinh people in the north, who mostly follow a patrilineal system, southern Cham people are a matrilineal society, in which inheritance is passed through the mother. These differences in kinship structures have contributed to the existence of the rigid patrilineal North and the more nuanced, culturally mixed South (Guilmoto 2012c). Ultimately, these differences are also reflected in the regional

⁸⁹ Note that the Vietnamese government recognizes 54 Ethnic groups today, with the Viet (Kinh) being the largest group representing 86% of the total population.

diversity in gender preferences and sex imbalances with the north having a stronger bias towards sons than the south, as shown below (see 6.2.2.).

The Chinese regained dominance over Vietnam during the Ming Dynasty in the early 15th century and further strengthened Confucian doctrines. While there are many similarities between Vietnamese and Chinese family practices, there are also important differences. Vietnam unlike China has no history of infanticide or girl neglect. Historically, Vietnamese women held important social and economic roles. They were entitled to own property, even upon divorce. Patrilinearity was first introduced among the upper classes and then spread through the population in the late Nguyễn dynasty (1802-1945), when also women's rights linked to property and cohabitation were legally restricted (Haines 1984; Nguyen 1998).

Similar to the other countries in this investigation, Vietnam has had a long history of foreign occupation. Apart from the Chinese, the French colonized Vietnam as part of Indochina (1887-1954), and the Japanese occupied Vietnam during the Second World War. A resistance movement formed in the early 1940s around Ho Chi Minh, founder of the Communist Party, who proclaimed Vietnam's independence in 1945. Yet, it took another decade and the First Indochina War until the French were eventually expelled in 1954. With the Geneva Accords peace agreement in the same year, Vietnam (similar to Korea) was politically divided into two rival states. The Communist North was supported by the Soviet Union, while democratic South was supported by the United States. Unlike Korea, North and South were eventually reunited, but not until after two decades of war (Vietnam War, 1954-1975), which left millions killed and wounded and would affect the population for generations to come.⁹⁰

In 1976, Vietnam reunited under communist rule. The new society based on Marxist-Leninist ideas aimed for the abolition of social and economic hierarchies, including gender hierarchies. Ho Chi Minh proclaimed that a society could only be totally free when women are freed (Santillán et al. 2002). Confucianism was branded as a backward “feudal system of thought that was to be replaced by a revolutionary ideology” (Nguyen 1998, 100). Many Confucian scholars were sent to prison or internment camps. Legal and education reforms were made to uproot Confucian ideals. Nevertheless, many traditions and attitudes about gender roles prevailed, including son preference. Rydström (1998) describes the emerging hybrid form of Communist and Confucian tradition as a ‘moral syncretism.’ Women are urged to contribute to an

⁹⁰ Even 40 years later, still babies are born with genetic defects, caused by Agent Orange, a chemical that was sprayed on crops by U.S. Military to destroy cover of Vietnamese guerrilla fighters.

egalitarian society, while preserving family harmony and happiness often through the birth of a son. In brief, gender norms have become more egalitarian with Communism, yet family relations are still strongly influenced by Confucian values.

In order to modernize the economy, which had been weakened by the Vietnam War, the Communist Party launched a political and economic renewal (Do Moi) in 1986, similar to the reforms introduced in the Soviet Union at the time. Privatization and economic modernization were actively promoted, while keeping a strong grip on many other aspects of Vietnamese lives. The move towards a market economy has brought significant economic growth to the country and allowed for rapid gains in technology, health care and education throughout the 1990s and 2000s. Consequently, Vietnam became a member of the World Trade Organization in 2007 and joined the World Bank’s lower-middle income bracket in 2009. However, this economic transformation has entailed a partial withdrawal of the state from economic affairs of families. In the absence of a functioning social welfare system, this meant that families increasingly relied on their sons to provide for economic security in old age. Thus, the economic opening not only opened the door for prosperity, but also for a revival of family solidarity and traditional gender norms (Barbiéri and Bélanger 2009).

It is against this backdrop of a Confucian-based, Communist-ruled country undergoing economic opening, that the government has introduced various population policies to guide its people into the 21st century. In sum, the following diverse factors are recognized as key reasons for the persistence of son preference in Vietnam today (see Box 12).

Box 12: Reasons for Son Preference in Vietnam

<p>Cultural aspects:</p> <ul style="list-style-type: none">• Sons carry on the father’s name and continue the family lineage• Ancestor worship: particularly the eldest son commemorates the deceased <p>Socio-economic aspects:</p> <ul style="list-style-type: none">• Sons are expected to financially support and reside with parents in old age• Property and land are passed on through the male line <p>Family planning and community pressures:</p> <ul style="list-style-type: none">• Family planning policies require couples to have no more than 2 children• Community pressures in form of teasing or degrading remarks of sonless couples

Source: based on UNFPA Vietnam (2011)

6.1.2. Population Control and Fertility Decline

Like both India and South Korea, Vietnam's history of population policy has been dominated by efforts to lower fertility to encourage economic prosperity. As such, over the last 50 years Vietnam's fertility policies have evolved in the shadow of both Confucian and Communist gender ideas (Santillán et al. 2002; Gammeltoft 1999) putting more or less pressure on people to reduce their family size.⁹¹

In 1960, the Democratic Republic of Vietnam started its first population policy program. This program led to the 1961 launch of the Population and Birth Control Unit under the Ministry of Health in North Vietnam. In 1963, a two-to-three-child policy was introduced in the North to control the rapid increase of the largely rural and poor population. Early messages stressed the equal value of boys and girls, while at the same time reminding women of their familial duties. In 1970, during the Vietnam War, population work was transferred to the Committee for the Protection of Mothers and Children. After the reunification in 1975, a countrywide population policy was launched, but inadequate medical facilities impeded effective implementation and the TFR remained over 5 children per woman. In the 1980s, a centralized National Committee for Population and Family Planning was established and they encouraged couples to have no more than two children, delay childbirth and space their births. In the 1990s, the government further stepped up its fertility control efforts at the grassroots level. Financial or in-kind incentives were given to families who complied with the one-to-two-child policy. Families who didn't comply risked being fined.

These population policies, and socio-economic transformations discussed earlier, contributed to the wide acceptance of a small family norm in Vietnam. By the 2000s, TFR had successfully declined from 6.5 in 1965 to 2 children per women and stabilized just below replacement level thereafter. Meanwhile, the Vietnamese population grew from below 30 million in the 1950s to about 93 million in 2015 (UNDESA 2015).

In response to this lower fertility norm, fertility control policies were relaxed in 2003 to grant more freedom to Vietnamese couples linked to the number and spacing of birth. In line with the 1994 ICPD Programme of Action, the focus was shifted away from population control to population quality.⁹² Nevertheless, occasional political backpedaling kept putting the 1-2-

⁹¹ See Pham et al. (2013) for detailed accounts of 50 years of population policies in Vietnam.

⁹² Population quality has special connotations in the Vietnamese context as shown shortly.

Child Norm back on the political agenda to not endanger low fertility achievements (Pham et al. 2008). With a reduced number of children, the likelihood of having a desired son by natural means significantly decreased. This meant a growing number of Vietnamese couples were “squeezed” into looking for alternatives to ensure the birth of a son (Guilmoto 2012c). Increasingly, they turned to modern technologies to shape their family composition.

6.1.3. Access to Reproductive Technologies and Abortion Services

Vietnam is similar to the other countries of investigation in the sense that new technologies enabled sex selection to take place. Yet, the Vietnamese case is also unique in many ways, especially linked to (1) the widespread use and acceptance of abortions, (2) the commercialization of ultrasound, (3) the unique timing and (4) the political promotion of reproductive technologies.

(1) Abortions up to 22 weeks of gestation have been legal in Vietnam since the 1960s and they have been commonly practiced as a means of family planning. At times financial incentives were even offered for women to undergo abortions in order to limit the number of births (Hoang, Phan, and Huynh 2008). In 1989, the Law on the Protection of Public Health expanded availability by granting women legal access to abortion-on-demand (Article 44.1). The law also stressed the governments “duty to consolidate and expand the network of obstetric and neonatal health care to the grassroots level” (Article 44.2) (Harvard School of Public Health 2008). As a result abortions increased rapidly in the early 1990s (Goodkind 1994). In 1996, Vietnam recorded one of the highest abortion rates worldwide: 111 abortions per 1,000 women or an estimated total number of about 2 million abortions were performed in that year (Henshaw, Singh, and Haas 1999). With an average of 2.5 abortions per woman, Vietnamese women underwent more abortions in their lifetimes than they had children (Hoang, Phan, and Huynh 2008). Given the growing popularity of abortions, the transition to sex-selective abortions was not far off.

(2) After Vietnam’s economic opening, the country experienced a rapid influx of modern reproductive technologies. Access to high quality images and better diagnostics enabled couples to know the sex of the fetus starting at 13 weeks of pregnancy. A growing network of private health care providers also emerged, pushing for the “commercialization of childbearing” (Gammeltoft and Nguyen 2007, 165). Prenatal testing has become widely available at a low-cost throughout Vietnam and represents an important source of revenue for both public and

private health providers (Gammeltoft and Nguyen 2007). Prices per scan range between US\$ 2.50–3.50 and are affordable for most pregnant women, who no longer can blame fate for remaining sonless (Becquet 2015).

(3) The timing of the spread of reproductive technologies was late in Vietnam. Reproductive technologies flourished only after 2000. In contrast, these services had already been available for over a decade in South Korea and India and the argument can be made that, had they been available earlier, sex selection might have spread earlier. Guilmoto et al. (2009, 5) note that,

“Vietnam had almost all prior characteristics for an earlier rise in SRB – a patriarchal system and staunch son preference, demographic and economic change, strong family planning regulations and easy access to abortion – to which can be added a thriving private health sector since the late 1990s and a socially and culturally rather homogenous country in which the diffusion of innovation can proceed rapidly.”

Reproductive technologies and prenatal diagnostics appeared only in the late 1990s. In 1997, 71% of surveyed women had access to prenatal care from medically trained health workers. Five years later, in 2002, prenatal care coverage had increased to 86% (GSO 2003) and would rise further due to important political reforms.

(4) The availability of abortion and the routine use of ultrasound were politically promoted in all three major health reforms in the early 2000s:

- i. The National Population Strategy (2001-2010) promoted antenatal screening as a means of enhancing the “physical quality of the population” (Gammeltoft 2014, 52-53). This included screening for undesired traits and facilitating subsequent abortions in order to avoid fetal abnormalities. Quickly, people recognized that the same technology could be used to avoid other undesired “qualities” like the fetal sex (Bélangier et al. 2003).
- ii. In January 2002, the Vietnamese government launched a hospital autonomization policy, which encouraged public hospitals to become self-sufficient and mobilize private capital for financing modern equipment (Government of Vietnam 2002). Scholars noted that this policy shift led to “the rapid expansion of ‘patient-requested services’” (London 2013, 236), with ultrasound for sex determination being high in demand (Gammeltoft and Nguyen 2007).
- iii. Moreover, the Vietnamese Ministry of Health issued the National Standards and Guidelines for Reproductive Health Care Services in 2002. These guidelines were

drafted under the technical assistance of the UNFPA and were designed to improve safe abortion services in Vietnam (Bondurant, Henderson, and Nguyen 2003; Wolf et al. 2010). At this point two new abortion methods were introduced: Dilation and evacuation carried out at 13–18 weeks of pregnancy and medical abortion using mifepristone and misoprostone. Both methods proved much safer and more efficient than the old Kovac method (Tran 2011).

Together these major health reforms unintentionally created a better environment for accessing sex-selective services. The powerful combination of the factors laid out above made for a potent mix and resulted into a growing demand for sex selection (Becquet 2015). Conditions in Vietnam were poised for SRB to rise. The deep cultural motive of son preference remained strong. This motive was made more acute by the drop in fertility and the existing fertility control regulations. Fewer children meant less chance of having a son. Finally, economic prosperity had increased wealth and enabled a profit seeking medical services industry to provide affordable methods by which unwanted female births could be avoided. By the turn of the century, sex selection was on the Vietnamese horizon.

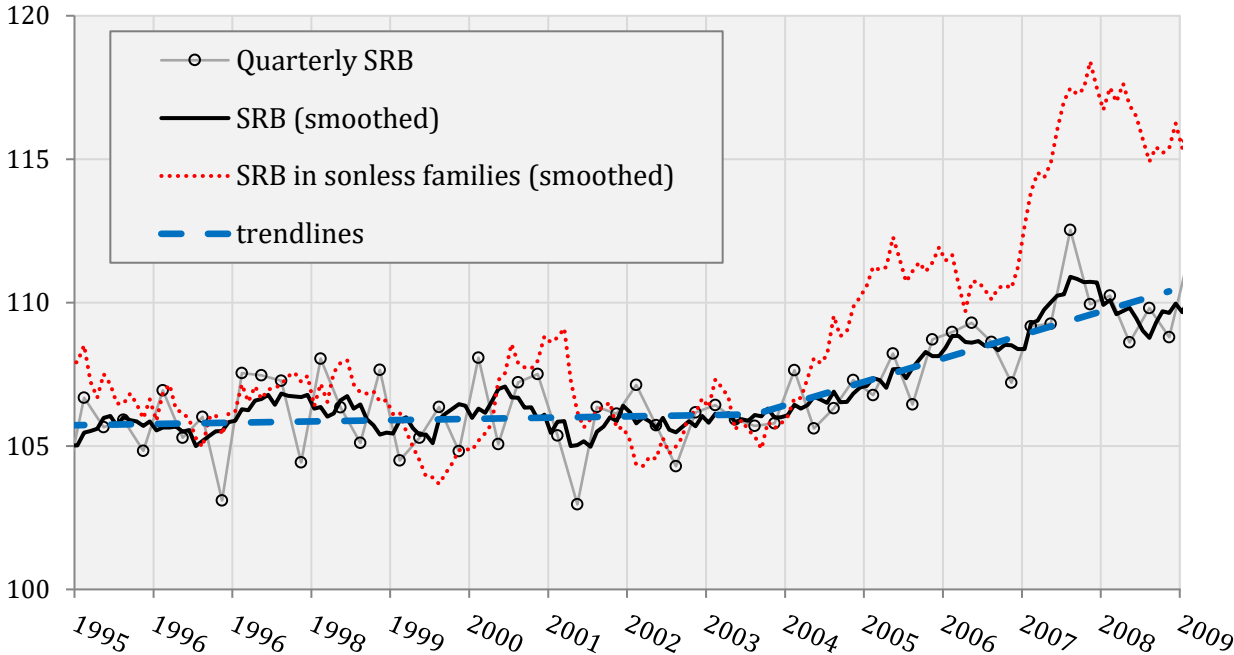
6.2. Rise of Sex Ratio at Birth

6.2.1. National Trends

Of the three countries investigated here, Vietnam has experienced the most recent rise in the sex ratio at birth. The number of male births per 100 female births has increased over the past two decades from 107.0 in 1999, to 110.5 in 2009, to 112.8 in 2015.⁹³ Until now it has been commonly assumed that the national onset of skewed SRB occurred in 2004-2005 (Guilmoto et al. 2009; GSO 2011). However, a breakpoint analysis of monthly and quarterly SRB data derived from the 2009 Census and the 2014 Inter-censal Survey allowed for an updated, more precise calculation (Guilmoto et al. 2018). According to this more detailed data, the national onset in SRB started in September of 2003. Before this point, SRB fluctuated around 106 with no distinct trend. After this point, SRB has increased by an average yearly rate of 0.8 male births per 100 female births (see Figure 43).

⁹³ Based on national Census and GSO data.

Figure 43: Sex Ratio at Birth by Month/Quarter Fitted Trends, Vietnam, 1995-2009

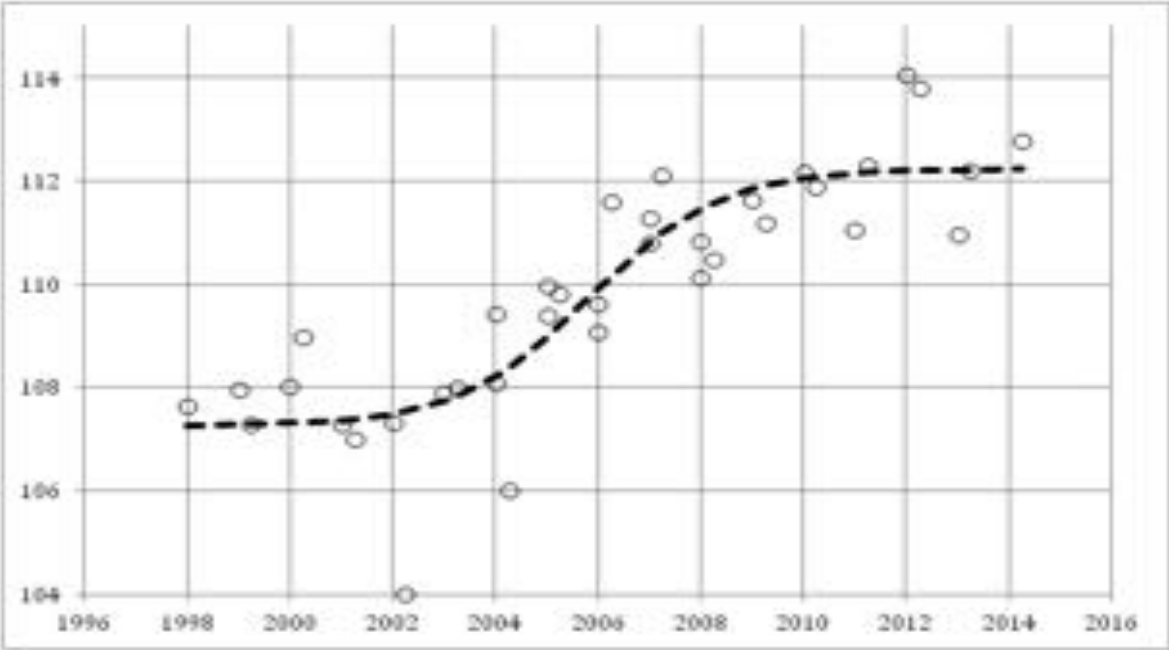


Source: Guilmoto et al. (2018) based on national statistics.

Figure 43 shows the SRB trends between 1995-2009 in Vietnam based on monthly and quarterly SRB data. Since monthly data is affected by larger fluctuations, the smoothed SRB trends are illustrated for all births (in black) and for the volatile category of sonless families (red dotted line). The aggregated trend line is shown in blue. As shown, SRB rose rapidly to levels above 110 within less than a decade. The rise has been even more drastic for sonless families climbing from normal levels (105.6) in 2003 to above 112 in 2005, and then rising again sharply in 2006 to above 118.

After 2010, SRB continued to increase, but at a slower pace. The sudden spike observed of 114 male per 100 female births in 2012 is likely to be correlated to the year of the Dragon, which is considered particularly auspicious for boys according to the Chinese calendar. This hypothesis is supported by evidence that Vietnamese parents have adjusted their reproductive behavior similarly in the past (GSO 2016). After 2013, there are signs that SRB has stabilized or plateaued at just above 112/100 (see trend line in Figure 44). It is too early to say whether the trend will continue, but there are signs of SRB relaxation in Vietnam.

Figure 44: Sex Ratio at Birth Trend, Vietnam, 1998-2014



Source: Becquet and Guilmoto (forthcoming) based on national statistics.

6.2.2. Regional Trends

There are significant regional variations in sex imbalances throughout Vietnam. These can be explained through differences in kinship structures and ethnic compositions, but also through variations in socio-economic levels. While SRB has continuously become more skewed since the 2000s throughout large parts of Vietnam, there are several regions (and ethnic groups) that have not recorded any significant rise in birth masculinity so far (Guilmoto 2012c).

For a first glance we turn to spatial variations according to Vietnam’s six macro-regions. These macro-regions are themselves rather large and heterogeneous, but provide a greater sample size than the subsequent provincial trend analysis. We show the SRB including confidence intervals per macro-region for the period between 2010 and 2014, which is more robust than annual figures. The data is based on the 2014 Inter-censal Survey.

As Table 20 shows, the Red River Delta has the highest SRB in the country, which stood at 117.4 in the 2010-2014 period, followed by the South East Region (111.8) and the North Central and Central Coast Region (111.0). An SRB close to 109 could be observed in the Mekong River Delta (108.9) and slightly higher in the Northern Midlands and Mountains (109.6). Meanwhile, the Central Highlands reported the lowest levels of 107.4.

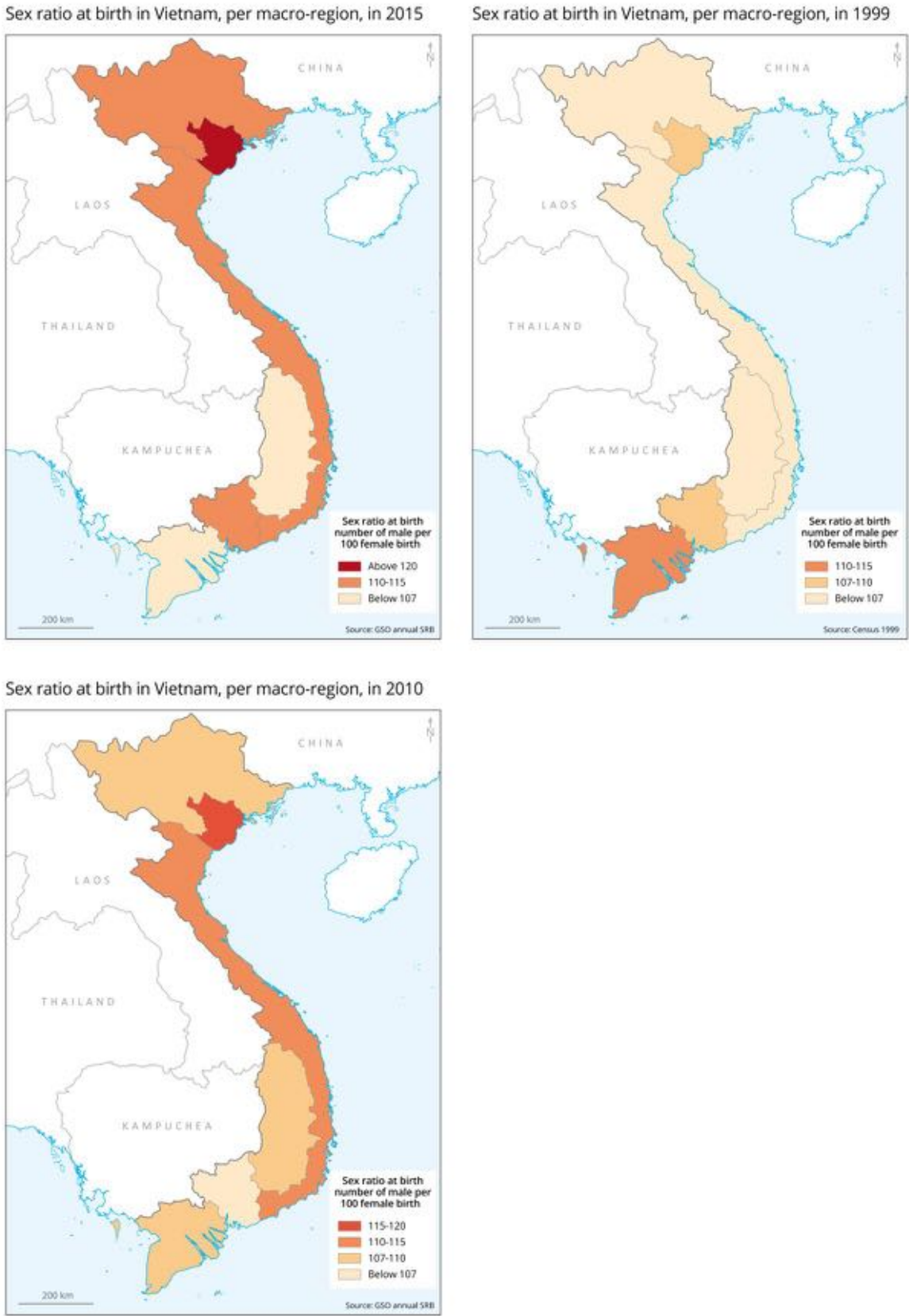
Table 20: SRB by Macro-region, Vietnam, 2010-2014

Macro-regions	SRB and Confidence Intervals (95%)	
	SRB	CI
Red River Delta	117.4	115.5-119.3
Northern Midlands and Mountains	109.6	107.9-111.4
North Central and Central Coast	111.0	109.4-112.7
Central Highlands	107.4	104.7-110.1
South East	111.8	109.3-114.3
Mekong River Delta	108.9	107.0-110.9

Source: Becquet and Guilmoto (forthcoming), 2014 Intercensal Survey.

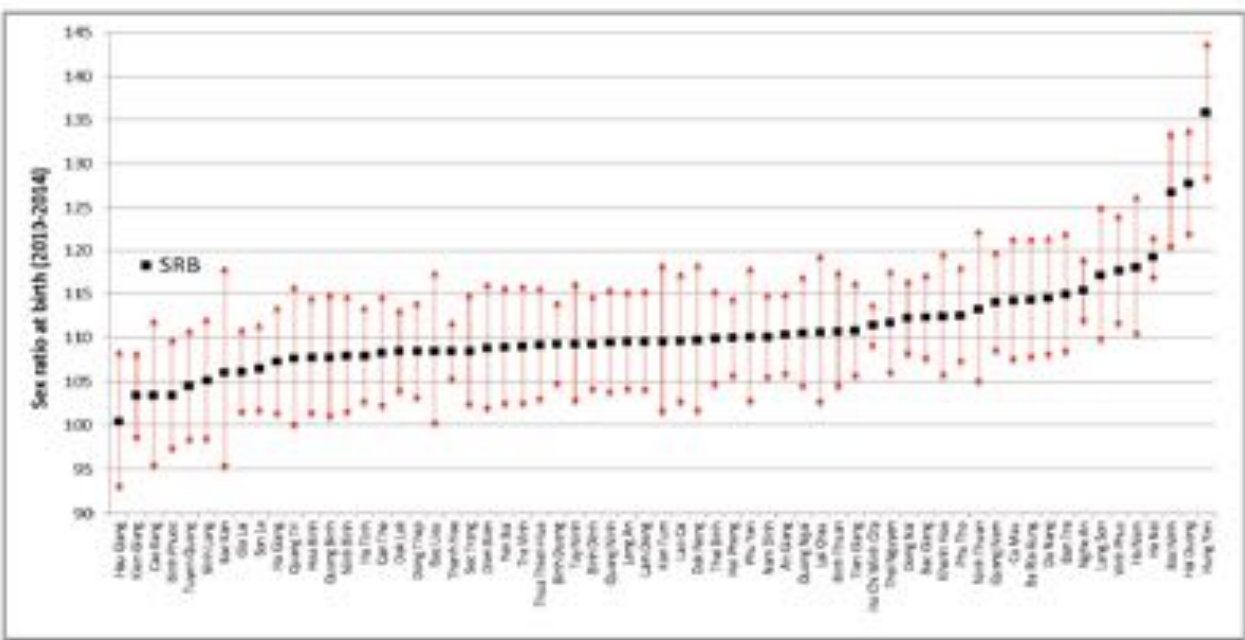
Let us take a further look at the regional maps. Figure 45 illustrates the SRB in Vietnam per macro-region for the years 1999, 2010 and 2015. As shown, skewed SRB first appeared in the Mekong River Delta in Southern Vietnam and then continuously spread to the North and the rest of the country. By 2015, SRB reached levels above 120 in the Red River Delta and above 110 in the North Central and Central Coast, the Northern Midlands and Mountains, and the South East. Only the Mekong River Delta, where the trend originally started, and the Central Highlands, where a greater share of ethnic minorities live, showed an SRB closer to normal levels in 2015. Yet, the maps have to be regarded with caution, since they are based on annual SRB figures, which tend to undergo large fluctuations. To give an example, 114.1 males per 100 females were recorded in the Mekong River Delta in 2014 and only 103.7 in the following year. More robust calculations are provided in Table 20. Nevertheless, we can conclude that SRB has increased over the past two decades but not homogeneously through all regions. The Southern parts and areas populated by minority groups tend to perform better, while the highest SRB rates are recorded in the North, especially in the Red River Delta.

Figure 45: Sex Ratio at Birth in Vietnam, per Macro-Region, 1999-2015



Source: maps are based on GSO data.

Figure 46: Estimated SRB by Province, Vietnam, 2010-2014

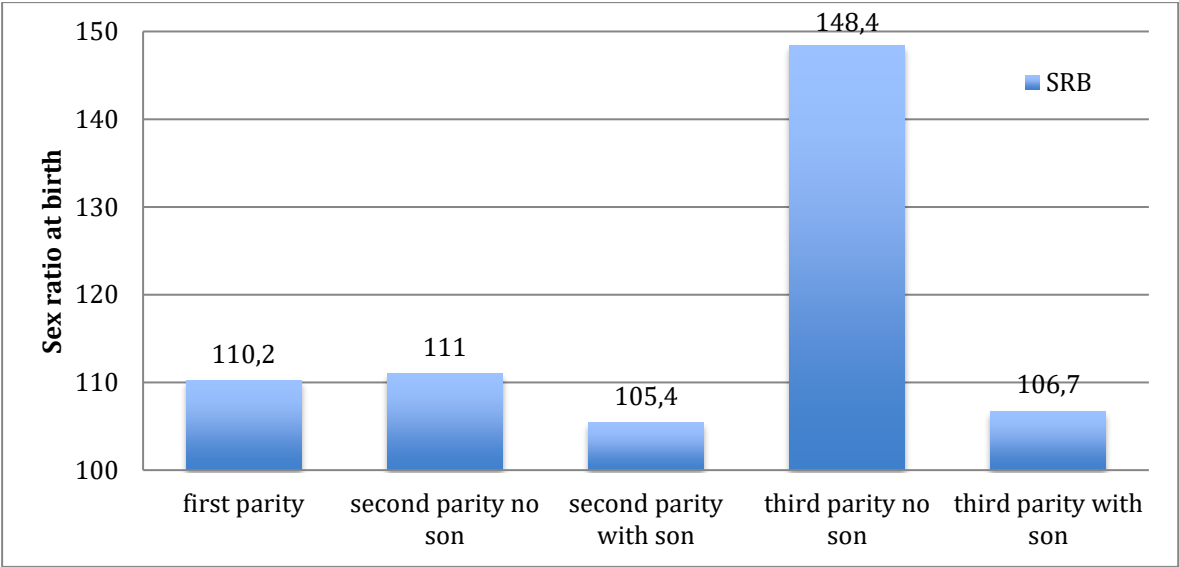


Source: GSO (2016, 29).

A closer geographical analysis across Vietnam’s 63 provinces provides further insights. Figure 46 illustrates SRB estimates by province and ranked by magnitude in 2010-2014. Even though these estimates are based on aggregated birth figures, the confidence intervals are at times very large because of the small number of births. Nevertheless, we get an idea of the regional spread in SRB. As we can see, 6 provinces have an SRB below 106 (located in the South and Central Highlands). Meanwhile, the majority of provinces (49 in total) range between 106 and 115. Eight provinces have an SRB above 115, three of which are even above 125. The three provinces with most skewed SRB – namely Hung Yen, Hai Duong, and Bac Ninh – are all situated in the heart of Red River Delta (GSO 2016, 29).

Furthermore, it is important to remember that the SRB changes with birth order. Interestingly, Vietnam’s SRB at first parity is already quite high with 110.2 in the 2010-2014 period (based on the 2014 Intercensal results). This suggests that couples prefer their first born to be a son. The SRB at second parity stood at 108.1 and increased sharply to 120.2 for third parity and higher in the 2010-2014 period. The discrimination against female fetuses is even more apparent when looking at SRB by birth order and according to the sex composition of prior siblings (see Figure 47).

Figure 47: Sex Ratio at Birth by Parity and Prior Siblings, Vietnam, 2010-2014



Source: Based on the 2014 Intercensal Population and Housing Survey

As shown in Figure 47, sex ratios at first birth and second birth in the absence of a son were quite similar (above 110). Sex ratios at second and third parity in the presence of a son were also similar (below 107), suggesting that there is no need to intervene when the desired son has already been born. The greatest degree of sex imbalance occurred among sonless families at third and higher birth orders. The Red River Delta contributes by far the greatest share of sex imbalance at third parity (not illustrated here, see Becquet 2015).

It is also important to remember that SRB rises with income and level of education. The richest and most educated families sex select the most. There are further variations linked to age and household structures, which we will not be able to discuss here, but can be found elsewhere (Becquet 2015). What makes the Vietnamese case unique is not only the relatively late and rapid rise in SRB compared to other Asian countries, but also the high-level of governmental commitment to tackling the issue. Now that we have reviewed the underlying conditions and the actual rise in SRB, we can start to understand Vietnam’s policy response to GBSS.

6.3. National Laws and Policies Related to Sex Selection

In the advent of skewed sex ratios at birth, Vietnam has introduced various laws, policies and programs to fight sex selection and ensure that women and children are free from discrimination. Vietnam’s commitment towards women and children is enshrined in the

Constitution. Article 63 of the 1992 Constitution emphasizes, “Any discrimination against women and violation of women’s dignity are strictly prohibited” (FAO 2018). Furthermore, Article 64 prohibits discrimination among children within the family. Beyond these constitutional obligations, Vietnam has been increasingly concerned with maintaining a balanced population and family structure. In light of the growing number of bachelors, sex imbalances have been regarded as a threat to national security and order. In this chapter we look in detail at the different policies and stakeholders at work.

6.3.1. Population Ordinance

Sex selection was first prohibited in the 2003 Population Ordinance. The Ordinance was issued by the Standing Committee of the National Assembly on January 9th of 2003 and came into effect on May 1st of 2003. It is to date the highest-ranking population legislation and addresses population size, structure, distribution, quality, and population work. The Population Ordinance will soon be replaced with the Population Law, which was in the drafting stage at the time of writing.⁹⁴

In drafting the Population Ordinance, the National Assembly anticipated the rise of birth masculinization. The Population Ordinance strictly prohibits “selecting the gender of unborn babies in any form” (Article 7.2). It urges the state to adopt policies “to ensure gender equilibrium according to natural reproduction law” (Article 14.1.) and “to eliminate all forms of gender discrimination, discriminatory treatment between boys and girls” (Article 24.1.). Interviewees named two reasons why sex selection was incorporated in the Ordinance, learning from abroad and recognizing risk factors (Socialist Republic of Vietnam 2003).

Learning from abroad was promoted through the participation in international conferences and field missions. The National Assembly Drafting Committee members formed part of international expert groups, such as the Asian Forum of Parliamentarians on Population and Development, which facilitated transnational learning. One of the members of the National Assembly’s Commission of Social Affairs, who was involved in the drafting of the Population Ordinance made the following statement:

“We had a lot of chances to attend international workshops and seminars. A lot of ideas came from outside. There was the experience from China and India. At that time, China

⁹⁴ A draft copy of the Population Law is available online (National Assembly of Vietnam 2017).

started to have a rising imbalance in sex ratio and so did India. I think it was 1999 and 2000, when I was visiting India, and they gave a lot of attention to sex ratio imbalance at birth. One study tour in China also raised that problem. And my committee started to think, ‘When China and India as big countries are facing this problem, why not Vietnam?’ The 1999 Population Census showed that 16 provinces, or 1/6 of the country, had a sex ratio at birth of 115/100. I have evidence for that. Here is one of the bulletins of my committee” (VN03).

The regional exchange of policy experiences, especially coming from China and India, allowed Vietnamese policy makers to recognize early warning signs at home. These were linked to culturally rooted son preference, fertility decline and the first reports of skewed sex ratios in parts of the country.

The 1999 Census results caused concern among some Vietnamese scholars. Prof. Nguyen Dinh Cu, a population expert, stated in an interview that he was one of the first scholars to warn authorities about the issue when writing an article for Communist Party Magazine in 2000. He later formed part of the Drafting Committee of the Population Ordinance as an external advisor (VN02). Apart from policy makers and researchers, UNFPA Vietnam and international policy advisors also encouraged prohibiting sex selection in the Population Ordinance, as a UNFPA official revealed in an interview (VN08).

Besides the prohibition of sex selection, additional features of the Population Ordinance are worthwhile mentioning here. These relate to (1) the concept of population ‘quality,’ (2) increased decision-making powers of individuals, and (3) the international involvement in population matters. First, the Ordinance places great emphasis on raising the population quality in ‘physical, intellectual and spiritual’ terms (Article 20). In that regard, there has been an indirect promotion of prenatal screening and abortion services to avoid fetal impairments (Gammeltoft 2007). As discussed earlier, the same procedure that served to detect and avoid fetal abnormalities could then be used for gender-biased sex selection. Secondly, the Ordinance recognized for the first time the fundamental reproductive liberties of Vietnamese people. Article 10 gives couples the right to freely decide the timing, spacing and number of births. This was a novelty because prior focus had been placed on restricting the number of births with the 1-2-Child family norm. Thirdly, provisions were made to have IOs participate in the research, formulation and implementation of population programs. International cooperation in the field of population matters is explicitly promoted in the Population Ordinance. Thanks to

Article 30 of the Ordinance, research cooperation on sex imbalances and access to SRB data have greatly increased (see Box 13).

Box 13: Article 30 of the Population Ordinance on International Cooperation

1. The State shall adopt policies and measures to expand international cooperation in the population field with other countries and international organizations on the basis of equality, respect for independence, sovereignty, mutual benefit and compliance with the law of each country and with international practices.
2. The scope of international cooperation covers:
 - a. Formulating and implementing programs and projects in the population field;
 - b. Participating in international organizations, signing or acceding to international agreements in the population field;
 - c. Research into, application of sciences and transfer of modern technologies in the population field;
 - d. Training, fostering, exchanging information and experiences in the population field;
3. The State shall encourage overseas Vietnamese, foreign organizations and individuals to participate in population activities.
4. International organizations and foreign associations engaged in the population work shall be allowed to operate in the territory of Vietnam according to the laws of Vietnam.

Source: Population Ordinance 2003, Article 30.

In September of 2003, Government Decree No. 104/2003/ND-CP was issued, which contained detailed instructions about implementing the Population Ordinance. Article 10 of this decree strictly prohibits any act of prenatal sex selection, including: (1) propagating and disseminating methods of sex selection or sex determination through any media outlet; (2) determining the fetal sex by any methods including pulse feeling, ultrasound, blood, genetic, amniotic fluid, and cell tests; and (3) removing the fetus for sex-selective reasons by methods of abortion, drugs or other measures.

These 2003 legal restrictions on sex selection, sex determination and its advertisement all target the methods of sex selection. Since 2003, many other policy efforts targeting the motives of sex selection and promoting gender equality in Vietnam have been introduced.

6.3.2. Law on Gender Equality

The National Assembly adopted the Law on Gender Equality on November 29th of 2006. The law provides for gender equality in all fields of social and family life. It seeks to eliminate gender discrimination and ensure compliance with international treaties. Interestingly, in case of any discrepancies between international and national law, Article 3 specifies that international law shall be applied. Several other articles of the law are of interest for this investigation. Firstly, Article 10 prohibits gender discrimination in all forms. Secondly, Article 18 provides for gender equality within the family, stating that both husband and wife have equal rights and duties in controlling common assets, and that boys and girls are provided with equal resources and opportunities. Thirdly, Article 40.7.b emphasizes that “choosing [the] gender for the fetus under all forms or inciting and forcing other people to abort because of the fetus’s gender” is a violation of the law (National Assembly of Vietnam 2006).

The Law on Gender Equality has been internationally celebrated as a legal milestone for the advancement of women’s rights in Vietnam (UN 2007). Several Government Decrees have followed with detailed instructions about its implementation. These include:

- Decree No. 70/2008/ND-CP dated June 4, 2008, on details for law enforcement;
- Decree No. 48/2009/ND-CP dated May 19, 2009, on measures to assure gender equality;
- Decree No. 55/2009/ND-CP dated June 10, 2009, on sanctions for violations of the law.

The coexistence of several laws, policies and decrees that refer to sex selection has had a blurring effect, especially linked to identifying the correct penalties for sex selection offenses (see Box 14).

Box 14: Government Sanctions for Sex-Selective Abortions

Different decrees have introduced sanctions for violations of the legislation on sex selection and sex determination. These sanctions overlap and partly contradict each other.

Government Decree No. 114/2006/ND-CP dated October 3, 2006, gives detailed provisions on sanctions. People forcing a woman to undergo sex-selective abortion risk fines between 7 US\$ 300-660. Moreover, doctors who practice sex selection risk the removal of their medical licenses for up to 6 months (Article 9).

Government Decree No. 55/2009/ND-CP dated June 10, 2009, provides for the same violation (i.e. inciting another person to abort a fetus because of its sex) much smaller fines of US\$ 130-220.

Government Decree No. 176/2013/ND-CP dated November 2013 issues fines for sex-selective abortions that reach up to US\$ 880 and up to 12 months of medical licenses removal.

On the basis of the legal texts, it is unclear, whether these sanctions exist in parallel or whether new sanctions replace the older ones.

Source: Government Decrees No. 114/2006/ND-CP, 55/2009/ND-CP and 176/2013/ND-CP

6.3.3. Law on Marriage and Family

Gender equality was further strengthened with the Law on Marriage and Family introduced in June of 2014. The law addresses sex selection both directly and indirectly. On the one hand, it directly prohibits assisted reproductive technology for commercial purpose, commercial surrogacy and prenatal sex selection (Article 5). On the other hand, it gives couples the right to decide freely where to reside (Article 20). This is important, because earlier legal codes stressed Vietnam's patrilocal customs, which traditionally created the need for a son, who would then reside with his parents in old age. Through the new law, couples were free to choose where to reside and were also able to migrate. With the Law on Marriage and Family an important pillar for son preference was legally uprooted. Referring back to the conceptual framework of this thesis, we can say that the Law on Marriage and Family and the Law on Gender Equality address both the motives and the methods of sex selection.

6.3.4. Civil Code Provisions

Family practices are also regulated in Vietnam's Civil Code. Article 27 of the Civil Code allows parents to choose the family name of either father or mother for their children. Furthermore, the Civil Code states that all individuals have the right to make a will for the purpose of passing their property to others after their deaths. Traditionally, inheritance is passed down the male line. However, in the absence of a will, the Civil Code provides for an equal distribution among the next generation of kin. To sum up, legally many provisions are in place to grant women equal rights linked to lineage, inheritance, and residence. Also sex selection and determination are prohibited in various forms on various legal documents.

6.3.5. National Strategies on Population, Reproductive Health and Gender Equality

Apart from the legal framework laid out above, several National Strategies were introduced for the 2011-2020 period with concrete targets to reduce SRB in Vietnam:

- The National Strategy on Population and Reproductive Health (2011-2020) aims to reduce the rate of SRB increase, especially in highly affected provinces and cities. The target is for SRB to remain below 113/100 by 2015 and below 115/100 by 2020 and for it to reach normal levels of 105-106 male per 100 female births by 2025 (Objective 4).
- The National Strategy on Gender Equality (2011-2020) confirms the same targets.
- The overall reduction of SRB is also listed in Vietnam's Sustainable Development Strategy (2011-2020) and in the 5-year socio-economic development plan (2016-2020).

These concrete targets directly address the magnitude of sex selection as they represent government-enforced targets for SRB improvement.

As we have seen, broad anti-sex selection policy efforts focusing on all three dimensions of the 3-M-Model (motives, methods, magnitudes) have been taken since 2003. Table 21 gives a summary of the laws, policies and strategies discussed here. Besides these major national policies, SRB has been officially incorporated as a demographic indicator in many other province-level policies over the years. According to one government official, "Up to now, there is no separate policy for SRB only. SRB is often one part of the overall policy" (VN33).

Table 21: Summary of Laws, Policies and Plans on Sex Selection, Vietnam, 2003-2017

Date	Legal document	Relation to sex selection
May 2003	Population Ordinance	Article 7 prohibits of any form of sex selection.
Sep 2003	Government Decree No. 104/2003/ND-CP on the implementation of the Population Ordinance	Article 10 prohibits sex-selective abortions, sex determination and its advertisement.
Oct 2006	Government Decree No. 114/2006/ND-CP on Administrative Sanctions and Child Population	Article 9 fines sex selection with up to 15 million dong; 6 months of license removal.
Nov. 2006	Law on Gender Equality	Article 40 regulates that sex selection violates the Law on Gender Equality.
Aug 2008	Government Decree No. 23/2008/CC-TTg by Prime Minister	Strengthens inspection and supervision of ultrasound activities for sex determination; Strict punishment for breaches of the law.
Apr 2009	Conclusion No. 44-KL/TW of Politburo	Mandate to continue 1-2 child policy; address the underlying causes of SRB imbalances.
June 2009	Government Decree No. 55/2009/ND-CP on Gender Equality	Article 9 provides sanctions for sex selection with fines 3-5 million dong.
Dec. 2010	Decision No. 2351/QD-TTg approving the National Strategy on Gender Equality(2011-2020).	Target: SRB will not exceed 113/100 by 2015 and 115/100 by 2020.
Nov. 2011	Decision No. 2013/QD-TTg on Population and Reproductive Health Strategy (2011-2020).	Target: Normalize SRB in Vietnam to 105-106 male per 100 female births by 2025.
Apr 2012	Decision No. 432/QD-TTg on Vietnam's Sustainable Development Strategy (2011-2020).	Includes goal to reduce and monitor SRB as an indicator of sustainable development.
Nov. 2013	Government Decree No. 176/2013/ND-CP on penalties for administrative violations against medical laws.	Article 84 fines acts of abortion on the basis of sex selection with up to 20 million dong and up to 12 months of license removal.
June 2014	Law on Marriage and Family	Article 5.2. prohibits the use of ARTs for prenatal sex selection.
Mar 2016	Decision No. 468/QD-TTg approving the Scheme on Controlling the Imbalanced SRB (2016-2025).	Target: Reduce annual SRB growth rate to under 0.46%. Normalize SRB by 2025.
Apr 2016	Decision No. 1472/QD-BYT and 3382/QD-BYT on Imbalanced Sex Ratio at Birth Control Scheme.	Issued by the Ministry of Health to guide the implementation of the scheme.
July 2017	Population Law waits to be passed.	Article 23 of the Draft Law seeks to adjust SRB through direct & indirect means (socio-economic development, gender equality).

6.3.6. Awareness-raising Campaigns

Another key pillar in Vietnam's fight against sex selection has been awareness-raising and campaigning against the issue. These programs focus on changing behavior through communication. They started after the release of the 2009 census results and picked up in frequency and scale after 2012. The portfolio is large and includes press conferences, TV spots and talk shows, marches, theater plays, sketches, dance and art performances, cycling events, sensitization workshops with service providers and public discussions, among others. National campaigns target citizens of all ages and backgrounds. Meanwhile, regional campaigns target the areas that are most affected by sex imbalances. The event calendar of the national and regional 2014 Campaign "Join hands to address the Sex Ratio at Birth Imbalance" is listed as an illustration in Appendix 4.

A common theme in these campaigns is, as the title of this 2014 campaign suggests, to "join hands" to address sex imbalances collectively. This focus on individual action for the collective good is in tune with communist ideals and efforts have been taken to ensure the messaging is coherent and coordinated throughout the nation. Numerous interdepartmental agreements have been signed in recent years to enhance the 'convergence' of sex selective messaging (similar to India). For example, party leadership and relevant ministries have worked together extensively to spread the message, "Say no to sex selection for the future of Vietnam" (title of another 2014 campaign). This slogan is an appeal to individuals to act for the collective good and is indicative of Vietnamese awareness-raising efforts.

Apart from this overall 'one for all' messaging, campaigns frequently have the following features. First, they showcase successful women and underline women's contributions to society (in present and past times). Second, campaigns showcase fathers of daughters as 'happy' and 'complete' family men. Third, the demographic consequences in terms of the future lack of brides are emphasized. Fourth, the illegality of sex selection is focused on. These findings are based on field notes and personal participation in various governmental awareness-raising campaigns.

It is noticeable that campaigns against sex imbalances in Vietnam are often framed in the larger context of preventing violence, promoting equality and ultimately improving the lives of citizens. One explanation for this tendency to focus on improving the lives of citizens lies in the involvement of IOs. For international stakeholders, sex selection is a symptom of a deeper-

seated problem of gender inequality, as the following quote by Mr. Arthur Erken, former UNFPA Representative in Vietnam, illustrates.

“The heart of the SRB imbalance issue is not sex selection, but inequality and different gender values [...]. Therefore, the solution is not to focus on the phenomena, but to address the broader context of socio-economic development and the promotion and protection of human rights to dismantle gender inequality” (UNFPA 2014b, 1).

This conviction is not only reflected in Vietnam’s policy landscape, but also in its campaigning. The government’s awareness-raising campaigns are often designed and implemented with the technical and financial assistance of UNFPA. This tightly knit collaboration is enshrined in the Government of Vietnam - United Nations One Plan (2012-2016).

International cooperation also goes beyond UNFPA. Since 2016, new international players have entered the arena, including the European Union. The European Union is currently financing the Imbalanced Sex Ratio at Birth Control Scheme (2016-2025) in Vietnam.⁹⁵ The goal of this nationwide project is to normalize SRB by 2025. The project is implemented between 2016 and 2020 in all 63 provinces (some of which have SRBs within the normal range) with a budget of VND 100 million (US\$ 4,400) per province. All activities launched under the Control Scheme must be in line with prior Party and State policies on sex selection. The request of the Prime Minister is to focus on awareness-raising, behavior change communication and legal dissemination (Decision No. 468/QĐ-TTg).

Under this new financial umbrella, UNFPA provides technical assistance and the Ministry of Health is the main implementing agency. In May 2017, the European Union Health Facility, in cooperation with General Office for Population Family Planning and Ministry of Health, organized workshops in Vinh Phuc and Quang Nam Province to review the first year of implementation of the scheme. According to a press release,

“Over one year of project implementation, more than 14 thousand conferences have been organized with over 538 thousand participants. More than 40 provinces and cities have approved the project implementation plan, of which 38 provinces and cities with

⁹⁵ As a side note, the EU also launched together with UNFPA the 2016 Global Program for the Prevention of Son Preference, with Vietnam being one of the main target countries. Moreover, the EU has allocated €100 million as a conditional grant to the Government of Vietnam for a three year period (2015-2018). A portion of this money goes to the Ministry of Health to increase the quality of health services and subsidize health insurance premiums for the poor (EPOS Health Management 2016).

Provincial People’s Council [are] putting the targets to control the SRB imbalance in the socio-economic development plan” (EU Health Facility 2017).

The quote shows how efforts to address sex imbalances have been scaled up, expanding to over two thirds of the country’s provinces. Such workshops also give room for international policy advice as the following quote from the same press release illustrates. “At the workshop, experts from the European Union Health Facility also shared their experiences and proposed practical solutions, aiming to develop and increase efficiency of SRB imbalance project [...] in the near future” (EU Health Facility 2017).

We have seen that there are numerous ways that international knowledge transfer, policy advice and cooperation can be actively promoted. Since Article 30 of the Population Ordinance, international collaboration on tackling sex imbalances has increased substantially (see UNFPA Vietnam 2014a). With Vietnam’s authorization, IOs have taken an active role in shaping the policy landscape on sex selection. The question then becomes, to what effect? Now that we have reviewed the national policies we turn to analyzing their influences on sex ratios at birth.

6.4. Impact of Public Policy on Sex Ratios at Birth

6.4.1. Did the Population Ordinance Trigger the Rise in SRB?

Learning from abroad and the recognition of national risk factors convinced authorities that it was just a matter of time before sex imbalances would appear in Vietnam. They were right. The Population Ordinance issued in January 2003, and effective as of May 2003, expressly prohibits sex selection. Starting September 2003, nine months after the issuing of the new legislation, the SRB started to rise on a national level. A second spike in sex imbalances (and sex-selective behavior) occurred after November 2006. Again, this timing directly coincides with the rolling out of two major anti-sex selection policies. The first was the Government Decree No. 114/2006/ND-CP issued in October 2006, which implemented detailed sanctions against prenatal sex selection. The second was the Law on Gender Equality issued in November 2006, which identifies sex selection as a gender equity violation (see Figure 48).

Figure 48: Sex Ratio of Monthly Birth Cohorts, Fitted Trends, Vietnam, 1995-2009



Source: Guilmoto et al. (2018). Policies added.

In Figure 48 we revisit the same SRB trend observed earlier, but we have added the policies that were introduced in 2003 and 2006. As shown, the policy response to sex selection directly coincides with the actual onset (and further rise) of SRB imbalances in Vietnam. The policy designed to combat sex selection actually appears to have triggered the phenomenon. This suggests a perverse effect of the sex-selection ban on sex-selective behavior. How can this be understood?

In a joint paper we discuss potential trigger events that could have initiated the onset in birth masculinity (Guilmoto et al. 2018). After looking at all possible correlations and excluding other potential trigger events like economic shifts and other policy-related changes, our paper concluded that the Population Ordinance was, for many reasons, the most likely ‘trigger’ for the rise in SRB. First, it is noteworthy to stress that we refer to a trigger event and not a cause, the difference being that the system has to be poised prior to the trigger event. As we have seen, by the turn of the century the preconditions for sex selection were in place, e.g. low fertility, access to technology, son preference. The highly publicized Population Ordinance seemed to have marked a “critical juncture” (Mahoney 2000), which set into motion a sudden change in people’s reproductive choices. As a consequence, sex ratios at birth began to rise.

Second, the Population Ordinance was the highest-level legislative document on population at the time and it also officially recognized reproductive freedoms, by granting couples the right to decide freely about the number of children, birth timing and spacing (Article 10). The Ordinance was intended to enable more liberal reproductive rights. Some couples have misused these freedoms by opting for illegal sex selection.

Third, other health reforms played a key role in priming the conditions for sex selection. As discussed above, major health reforms were introduced in the early 2000s with the National Population Strategy, the 2002 Hospital Autonomization, and the National Standards and Guidelines for Reproductive Health Care Services. These reforms created an improved environment for accessing sex-selective services. Yet, due to their diffuse and disparate implementations they are unlikely to have triggered the onset (Guilmoto et al. 2018). In the joint paper we also review the trajectory of other countries, namely Georgia and Albania, where we also find evidence that political shocks and legislative changes give impulses for drastic demographic changes, such as birth masculinization. Considering these other examples, it is less puzzling to think of the Population Ordinance as a triggering event.

Fourth, this theory is further bolstered by the fact that SRB spikes again in late 2006 when a new round of major anti-sex selection policies are introduced. These major pieces of legislation have publicized the fact that sex selection was a) a common medical option that would b) not be available in the future. It is well known in both economics and politics that the restriction of desirable services can cause the request for those services to spike.⁹⁶ The Vietnamese government employs a vast number of people. We can assume that the news about novel policies spread quickly through the Party's communication channels and reach especially higher socio-economic cadres, who are most likely to sex select. Thus, even in the absence of ultimate proof, the reasons laid out above and the unique timing suggests that anti-sex selection policies have had a perverse effect on sex-selective behavior.

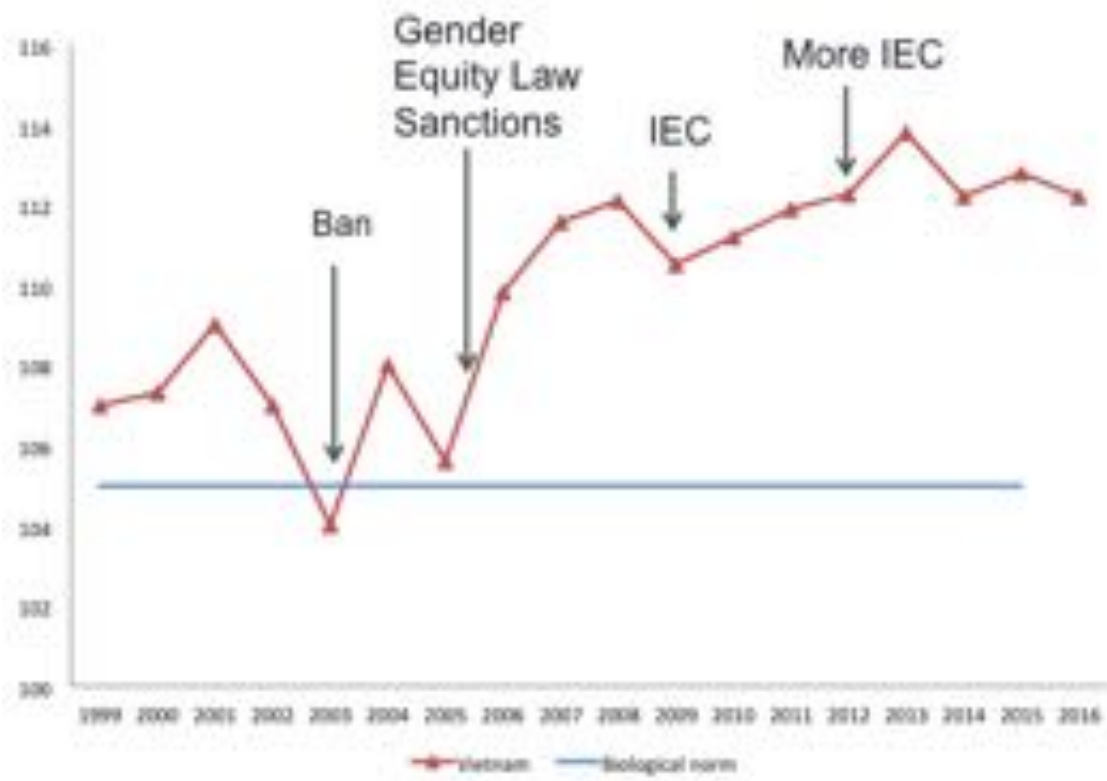
6.4.2. Have Recent Interventions Prevented A Further Worsening?

If we now map SRB and policy trends more fully, the following picture emerges (see Figure 49 based on official GSO figures). The SRB started to rise when the Population Ordinance was issued and continued to rise with the Law on Gender Equality and sanctions on sex selection

⁹⁶ See e.g. drug prohibition in Newman (2002).

introduced in 2006. After 2009 numerous province-level programs improving information and education were introduced, and by 2012 all high SRB (>115) provinces had been targeted. In 2016, the Imbalanced Sex Ratio at Birth Control Scheme was approved by the Prime Minister. It seeks to slow down the rise in SRB and bring national levels back to normalcy by 2025. Vietnam is also part of a global program to prevent son preference and gender-biased sex selection. We can see that in line with increased awareness-raising and multi-stakeholder cooperation in recent years, SRB has stabilized. This raises the question, is the plateauing of the SRB a result of increased policy intervention? In order to assess the influence of policies on SRB more fully we turn to the regional case study of Hai Duong Province, which has become the focus of government intervention after 2012.

Figure 49: SRB-Policy Mapping, Vietnam, 1999-2016



Source: GSO (2016). Policies added.

6.5. Regional Case Study: Hai Duong Province, Red River Delta

Hai Duong Province presents us with the unique opportunity to study how IOs inform local interventions and set up of a monitoring and evaluation frameworks that allow us to assess the effectiveness of interventions against sex selection more fully.

Hai Duong province is located in the densely populated Northern part of Vietnam, the Red River Delta. It has a population of close to 1.8 million, the vast majority being Kinh (99.6%). Hai Duong is one of the most industrialized provinces and, compared to other Vietnamese regions, relatively wealthy. The annual GDP per capita in 2016 reached 31 million VND (US\$ 1,360) per person. 64% of the population have completed the 9th grade and the TFR stood at 1.99 children per woman in 2009 (DEPOCEN 2016).

Prior research has shown how deeply gender-biased fertility behavior is towards sons in Hai Duong (Guilmoto 2012c; Becquet 2015; Duong 2015). Women are much more likely to continue reproducing in the absence of a son. At least they have to demonstrate that they tried to conceive a male heir. Like elsewhere in Vietnam, son preference is linked to male lineage, patrilocality and ancestor worship. According to an interviewee, “the custom is embedded really deeply in people’s minds in Hai Duong. Even up to now, families with good economic conditions still want to have a son” (VN31).

This strong son preference has translated into a skewed SRB over the past two decades in Hai Duong (see Box 15). However, little attention was given to birth masculinization at first, as the government’s focus was still on lowering fertility to replacement level.⁹⁷ It was not until the 2009 Census results, which pointed to a SRB above 120/100 (the second worst in the country), that political pressure to address sex imbalances increased.

Box 15: SRB in Hai Duong Province and Red River Delta

There is a scarcity of sex ratio at birth data before 2003 due to a lack of published birth records in Vietnam (UNFPA Vietnam 2009). Different agencies collect sex ratio records at the province level and there are notable inconsistencies across data sources, which pose challenges for an accurate assessment (Mekong Economics Ltd 2013). Local authorities also have vested

⁹⁷ Personal interview with the Director of the Hai Duong Department of Population and Family Planning. Even today couples in Hai Duong are encouraged to have no more than two children.

interests in improving sex ratios at birth. The SRB reports for Hai Duong especially in recent years should therefore be regarded with caution.

Table 22 shows the sex ratio at birth of Hai Duong and the Red River Delta from 2007 to 2016 based on province-level reports provided by the Hai Duong Bureau of Population and Family Planning. Over the past decade SRB has been significantly skewed towards males reaching levels above 120 in Hai Duong and the Red River Delta. The data suggest a slight decline in the SRB in Hai Duong in recent years, while sex imbalances in the Red River Delta have largely fluctuated around 120 male births per 100 females over the past 5 years.

Table 22: SRB in Hai Duong Province and the Red River Delta, 2007-2015

Year	Hai Duong	Red River Delta
2007	120,0	110,8
2008	123,6	119,0
2009	120,2	115,3
2010	120,8	116,2
2011	121,3	122,4
2012	121,4	120,9
2013	118,9	124,6
2014	118,3	118,3
2015	117,0	120,7

Source: Hai Duong Bureau of Population and Family Planning as cited in (DEPOCEN 2016).

The quality of Hai Duong figures requires caution due to the small number of births (approx. 42,000 in 2009), random annual fluctuations and a large confidence interval (120 in 2009; CI: 113 – 127). However, as shown in Table 22, SRB in Hai Duong has been significantly above the biological norm of 105 for the last decade indicating the severe extent of prenatal gender discrimination.

6.5.1. Background, Stakeholders and Intervention

Between 2012 and 2016, UNFPA provided technical and financial support to address the imbalanced SRB in Hai Duong and measure the effectiveness of interventions. However, it is important to note that even prior to 2012, intervention campaigns against sex selection had been carried out in this province. What follows is a brief chronology of policies before and after the 2012 intervention and an overview of the stakeholders tackling GBSS in Hai Duong.

In 2008, the Hai Duong People's Committee approved the Health Sector Development Planning (2008-2015) and the 2020 Vision for the Health Sector. Both documents contained one indicator on reducing SRB (VN33). In 2009, the Department of Health launched an initial UNFPA-funded project titled "Addressing Imbalanced SRB in Hai Duong, 2009-2010." At this point annual inspections of clinics were introduced, but "no violation has been detected during those inspection missions" (VN29). From 2009 onwards, all private clinics had to submit a note committing them to abstain from sex selection (ibid). The first awareness-raising campaigns and training for journalists, judiciary, and health officers were conducted in this period. However, the limited availability of human and financial resources posed constraints to these early interventions. In sum, Hai Duong's population had already been exposed to some campaigns against sex selection prior to 2012. Early action was relatively weak and focused on the sex selection ban, but without any real law enforcement.

After 2012, governmental efforts were further stepped up. In June 2012, the Hai Duong People's Committee approved the Provincial Action Plan for Population and Reproductive Health with the target to reduce SRB to 117 by 2015. This Action Plan was designed under national and international guidelines. Under the One Plan (2012-2016) UNPFA and other development partners committed themselves to provide technical and financial assistance to the Government of Vietnam to strengthen capacities at national and local level (DEPOCEN 2016). Hai Duong was selected for the pilot intervention titled "Prevention of Domestic Violence, Addressing Imbalanced Sex Ratio at Birth and Promotion of Care for the Elderly 2012-2016." As the title suggests, the project included three components: sex imbalances, domestic violence and elderly care. The overall aim was to address these different, but interrelated, issues through one project and to enhance multi-stakeholder action.

Although financial technical support was provided by UNFPA, three province-level departments played a central role in the intervention, each being responsible for one project component: the Department of Culture, Sport and Tourism (DOCST) oversaw the domestic violence prevention; the Department of Labor, War Invalids and Social Affairs (DOLISA) implemented the elderly health care campaign; and the Department of Population and Family Planning (DOPFP) was responsible for the SRB component. Each department had to submit a detailed action plan to the overall Management Board for review and authorization in terms of activities, content and budget allocated. As one local official stressed, "by the state regulation, Hai Duong is in charge of managing SRB interventions, [...] the overall implementation plan was designed by UNFPA" (VN31).

Various project partners launched campaigns in the post-2012 period with a focus on raising awareness among the general public, party members and religious communities (*“Among the mentioned solutions, the one on communication and education to change behavior is the most important one”* (VN29). To give some examples of such campaigns: the Hai Duong Provincial Fatherland Front Committee implemented the “Buddhist families remedy gender imbalance at birth” project in Hai Duong City and Cam Giang District between 2012 and 2015 working with Buddhist monks to raise awareness on family planning and gender equality policies. Also party members became more involved in the issue at this point. In July 2014, Hai Duong Communist Party issued Decree Nr. 38 with instructions for strengthening the Party’s involvement in addressing the imbalanced sex ratio at birth (VN29). In October 2014, at the time of field research, several communication events took place in Hai Duong during a 2-month campaign “Join hands to address the Sex Ratio at Birth imbalance.”

Similar events followed in October 2015 with the campaign “Stop gender discrimination, stop gender-biased sex selection” organized in Hai Duong Province by GOPFP and UNFPA. That was also when the Hai Duong City Center for Population and Family Planning implemented the first ‘girl support’ pilot model in three junior high schools. Furthermore, the local officials encouraged households to sign voluntary agreements to not engage in sex selection. By January 2016, over 1000 households had signed commitments “to develop equal, progressive, and happy families” (Hai Duong News 2016).

The Hai Duong pilot intervention “Prevention of Domestic Violence, Addressing Imbalanced Sex Ratio at Birth and Promotion of Care for the Elderly 2012-2016” ended in 2016. In July 2016, the endline survey was conducted and the project evaluation was released. According to one key informant interviewed in 2014, “The outcome of this project will be the basis for future scale up and the evidence for the policy advocacy” (VN35). Another key informant noted that activities will be sustained: “Even when the UNFPA project ends, all activities will have to remain as they are, the core activities will belong to the Department of Health” (VN31). In 2017, at the time of writing, the project waits for authorization to be replicated in all provinces.

As we have seen multiple stakeholders from international to local levels have come together in Hai Duong to inform interventions against sex selection based on international experiences and lessons-learned. The uniqueness of this intervention is that IOs are directly involved at local levels to shape and inform policies. Box 16 lists the stakeholders engaged in addressing SRB in Hai Duong.

Box 16: Multi-Sectoral Coordination in Addressing SRB in Hai Duong

1. Hai Duong Department of Health (DoH)
2. Hai Duong Department for Population and Family Planning (DOPFP, under the DoH)
3. Hai Duong Provincial People's Committee Office (PPC)
4. Hai Duong Department of Culture, Sports and Tourism (DoCST)
5. Hai Duong Department of Labor, War Invalids and Social Affairs (DOLISA)
6. Hai Duong Department of Information and Communications
7. Hai Duong Department of Education and Training
8. Hai Duong Fatherland Front Committee
9. Women's Union
10. Famer's Union
11. Youth Union
12. Village leaders
13. UNFPA – coordinating role

In sum, policy interventions in Hai Duong started in 2008/2009 and were intensified in 2012 with the “Prevention of Domestic Violence, Addressing Imbalanced Sex Ratio at Birth and Promotion of Care for the Elderly 2012-2016,” which ended in 2016. We will now turn to the baseline and endline surveys to provide more details on the intervention and its impact.

6.5.2. *Quantitative Assessment: Baseline and Endline Survey Results*

Within the scope of the UNFPA funded intervention in Hai Duong, a baseline survey and an endline survey were conducted. The aim was to provide data for a rigorous pre- and post examination and to become one of the first regions to formally assess the impact of an anti-sex-selection intervention. Here we take a closer look at these surveys.

6.5.2.1. *Baseline Survey (BLS)*

UNFPA contracted Mekong Economics to conduct the baseline survey between November 2012 and March 2013. The project locations were Hai Duong as intervention area and Ha Nam as control area. The selection criteria for the control area were (a) relative proximity, (b) similar demographics and socio-economic development, and (c) a SRB of higher than 104-106/100.

Ha Nam is about half the size of Hai Duong in terms of population and area size. In broad terms, people in Ha Nam have a higher annual income than in Hai Duong, and they sex select less compared to their northeastern neighbors. Related indicators for both provinces are shown in Table 23. Figure 50 shows the survey locations within the Red River Delta.

Table 23: Indicator Hai Duong and Ha Nam

Indicator	Hai Duong	Ha Nam
Total area (km2)	1656	862
Population (million)	1.77	0.80
GDP (million VND)	55009.5	33978.3
Average income (million)	31	42.33
SRB (2009 Census)	120.3	110.5

Source: based on DEPOCEN (2016).

Figure 50: Map of Hai Duong and Ha Nam



Source: based on VAAS (n.a.).

The baseline formed part of the UNFPA commitment to support the Vietnamese government in tackling sex selection and assessing the project and its cost effectiveness. The main objectives of the baseline survey were (1) to capture gender roles and cultural perceptions driving sex imbalances, (2) review the level of awareness about SRB consequences and interventions, and (3) provide recommendations for intervention strategies. The deliverables of the contract with Mekong Economics included the final baseline survey report together with handing over all related data files in digital and hard copies at the end of the survey.

The research methodology was based on both quantitative and qualitative methods. Mekong Economics calculated a required sample size of 384 participants to stay within a confidence interval level of 95% and an expected error margin of 5%. The final sample size in the BLS was set to 400 participants per region comprised of men and women between 18-40 years. One urban and one rural district were selected in the two survey localities based on the judgment of GOPFP officers. A questionnaire was developed to include the following parts (the full questionnaire can be found in the Appendix 5):

- Section A: Respondent Information (Q1-Q11)
- Section B: Household Information (Q12-Q21)
- Section C. Knowledge, Attitude and Practice about SRB
 - C.1 Gender perception (Q22-Q31)
 - C.2 General questions of child preference (Q32-Q37)
 - C.3 Economic need for sons (Q38-Q43)
 - C.4 Cultural factors (Q44-Q51)
 - C.5 Normative aspects (Q52-56)
 - C.6 Awareness of SRB imbalance and its consequences (Q57-Q66)

Besides this quantitative survey of 800 households in Hai Duong and Ha Nam, 20 in-depth interviews and 6 focus group discussions were conducted in Hai Duong only. The quantitative part was analyzed through a cross-sectional study via SPSS software and a content-based analysis was applied for the qualitative data. We will not go into detail on the respondents' characteristics here. What is important is that the intervention and control area showed comparable demographic characteristics in terms of age, level of education, socio-economic status, and ethnic/religious background.

6.5.2.2. *Endline Survey (ELS)*

In 2016, a different company named Development and Policies Research Center (DEPOCEN) was hired to conduct the endline surveys for all project components, i.e. SRB, domestic violence, and elderly care.⁹⁸ The endline survey was conducted in July 2016 in Hai Duong and Ha Nam. The survey on SRB imbalances took place one week after the final evaluation of the domestic violence component. The endline survey gives no information about the characteristics of the interview participants. It only states that (unlike the qualitative survey) the participants of the quantitative survey differed from those interviewed for the domestic violence component. According to DEPOCEN, “To ensure the uniformity and comparability of the information and results with the baseline study, the objectives of the end-line survey were similar to the baseline survey.” The evaluators also stressed that “The sample sizes and locations of respondents of the end-line study were the same as the baseline surveys” and that “DEPOCEN used an approach that was applied in the baseline evaluation for the end-line study, with appropriate adjustments to capture all of the project and stakeholders’ activities” (DEPOCEN 2016, 4–5). We will revisit these points after having seen the evaluation results.

6.5.2.3. *Results of Project Evaluation*

We now turn to the results of the project evaluation. Table 24 presents the available survey results in percentages for Hai Duong as intervention area, and Ha Nam as control area in 2013 (ex-ante) and 2016 (ex-post), and the difference between the endline and baseline in the intervention area ($EL_i - BL_i$) and the control area ($EL_c - BL_c$). The categories are linked to gender perceptions (C1), child preferences (C2), economic need for sons (C3), normative aspects (C5), and awareness about SRB imbalances and its consequences (C6).⁹⁹

⁹⁸ Note that Mekong Economics was hired to conduct only the baseline study for the SRB component.

⁹⁹ Responses on cultural factors (C4) are only available for either the BLS or the ELS, but not both.

Table 24: Comparison of Baseline and Endline Survey in Hai Duong and Ha Nam

Section C. Knowledge, Attitude and Practice about SRB		Hai Duong			Ha Nam		
		B Li 2013 in%	E Li 2016 in%	EL S i - B L S i in%	B L c 2013 in%	E L c 2016 in%	E L c - B L c in%
C.1 Gender perception							
Q25	The man is responsible for the sex of the child (not woman).	44	35,7	-8,3	53,2	38,1	-15,1
Q27	Among many roles, a woman's most important role is to give birth to a son for her husband's family.	29,2	28,3	-0,9	33,3	26,4	-6,9
C.2 General questions of child preference							
Q32	It is important to have a son because of the economic reasons (labor, old age)	33,7	29,3	-4,4	43,6	34	-9,6
Q33	It is important to have a son because of social pressure and prejudice (being teased)	21,50	20,4	-1,1	20,6	17,6	-3
Q34	It is important to have a son because of cultural, religious reasons (lineage, worship)	51,6	38,9	-12,7	55,2	40,7	-14,5
Q35	It is important for you to have at least one girl among your children.	54,8	48,6	-6,2	65	46,4	-18,6
Q36	It is important for you to have at least one boy among your children.*	57,8	46,2	-11,6	68,2	48,6	-19,6
C.3 Economic need for sons							
Q38	It is better for a couple to have at least one son to take care of them when they are old/sick	76,8	65,2	-11,6	81	71,2	-9,8
C.5 Normative aspects							
Q52	Suppose a man doesn't have a son, will you consider him an incomplete father? A: "Yes"	5,8	2	-3,8	6	5,6	-0,4
Q53	Suppose a man doesn't have a son, will you look down on him? A: "Yes"	2,5	0,3	-2,2	0,8	0,7	-0,1
Q54	Share of respondents who consider a couple with only daughters unfortunate.	31,5	16,2	-15,3	31,5	24,2	-7,3
C.6 Awareness of SRB imbalance and consequences							
Q61	What is the legal status is of sex-selective abortion? A: "It is not legal"	68,8	86,3	17,5	69,2	86,8	17,6
Q62	Do you know that there is sex ratio at birth imbalance in Vietnam, esp. in rural area?	85,5	88,6	3,1	86	85,3	-0,7
Q63	If yes, from which channel?						
	1. Word of mouth	15,2	49,5	34,3	16,3	35,2	18,9
	2. Village's loudspeaker	22,7	70,3	47,6	12,9	39,3	26,4
	3. Billboard, propaganda	2,8	33,3	30,5	1,9	9,7	7,8
	4. Leaflet	0,7	18,8	18,1	0	4,1	4,1
	5. Meetings	2,3	37,3	35	2,9	17,9	15
	6. Newspaper, radio, television	42,9	86,5	43,6	46,4	86,9	40,5
	7. Health officer approach	10,2	41,6	31,4	12,9	25,2	12,3
	8. Internet	n.a.	58,7	n.a.	n.a.	45,2	n.a.
Q65	Do you think having too many boys will cause bad consequences for society in the future?	84,8	90,1	5,3	86,5	84,8	-1,7
Q66	If yes, what are the consequences?						
	1. Reduce family income	6,2	48,5	42,3	9,3	47,4	38,1
	2. Increase social problems	48,9	74,3	25,4	48,4	86,2	37,8
	3. Affect relationship of couple	8,9	55	46,1	5,6	38,4	32,8

Source: Mekong Economics Ltd (2013); DEPOCEN (2016). No statistical significance tests due to absence of the raw data. Only data included available for both BLS and ELS. *Mismatch across and within reports. Data is based on the baseline survey and Table 23 in the endline survey.

To interpret these results we highlight the important findings in the following analyses:

Results on gender perceptions (C1):

- (Q25): Participants were asked about who determines the sex of the fetus, mothers or fathers. Overall fewer people knew that the male sperm determines the sex of the fetus after the intervention period. While the decline was less pronounced in the intervention area, overall slightly more respondents knew that men determine the fetal sex in Ha Nam than in Hai Duong.
- (Q27): Participants were asked about whether it was a woman's duty to have a son. Slightly fewer people affirmed that, "Among the many roles a woman's most important role is to give birth to a son for her husband's family." This decline was more pronounced in the control area than in the intervention area. Yet, still close to 30% of people in Hai Duong agreed that it is important for women to produce a son.

Results on child preferences (C2):

- (Q32-34): Participants were asked about economic, social, and cultural reasons for why it is important to have a son. We can see improvements in both locations, yet the control area performed better than the intervention area. The most noticeable decline was in the cultural/religious need for a son. 14,5% fewer people in Ha Nam declared that it is important to have a son to carry on the family line and do ancestral worship than compared to 12,7% in Hai Duong.
- (Q35-36): Participants were asked about the importance of having at least one girl/ at least one boy. Overall, there was a decline in stated gender preferences (for both boys and girls), but this decline was more pronounced in the control area than in the intervention area.

Results on economic need for sons (C3):

- (Q38): Participants were asked if they relied on sons when old or sick and fewer people said they did. The decline was slightly more pronounced in the intervention area than in the control area. Still 65,2% of the respondents in Hai Duong considered that it is better to have a son for old-age support (compared to 71,2% in Ha Nam).

Results on normative aspects (C5):

- (Q52-54): Participants were asked if they regarded sonless families as unfortunate, and fewer did in 2016 compared to 2013. The decline was more pronounced in the intervention

area (-15,3%) than the control area (-7,3%). Slightly fewer people in Hai Duong “looked down” on sonless men, or regard sonless men as “incomplete,” while no change occurred in the control area.

Results on awareness about SRB imbalances and its consequences (C6):

- (Q61): Respondents were asked, “What is the legal status of sex-selective abortion?” The share of respondents stating “it is not legal” increased noticeably between 2013 and 2016 and to the same degree in both Hai Duong and Ha Nam (17,5% vs. 17,6%) indicating a positive trend in the awareness of the illegality of sex selection. However, the change took place in both the intervention and control area. Furthermore, the survey question was rephrased between the two surveys.¹⁰⁰
- (Q62-63): The most noticeable differences between the intervention area and the control area before and after the intervention are linked to awareness-raising and the channels over which SRB information was being spread. In 2016, the intervention area performed significantly better than the control area in almost all domains (e.g. word to mouth propaganda, village loudspeakers, billboards, leaflets, meetings, and approaches by health officers). Just the exposure to the newspaper, radio and television has increased to a similar degree in both Hai Duong and Ha Nam. These findings suggest that people in Hai Duong were more exposed to a variety of channels (including the internet) through which they received information on SRB. However, people showed a high level of awareness about SRB imbalances already prior to the intervention (close to 86% in both Hai Duong and Ha Nam in 2013). This level increased only slightly in the intervention area, while Ha Nam witnessed a minor decrease in 2016.
- (Q65-66): Finally, over 80% of respondents expressed concerns about the negative consequences of sex imbalances for the society in the future. This share increased in the intervention area (by 5,3%), while it slightly decreased in the control area (by 1,7%). Especially social problems (linked to gambling and drug abuse) were regarded as negative consequences in Hai Duong and Ha Nam. They were stated more often than financial and marital concerns. In the BLS, 35% of respondents in Hai Duong and Ha Nam stated that it

¹⁰⁰ Unlike in the ELS, respondents were given the option “It depends on the situation” in the BLS, which 18,5% of respondents in Hai Duong and 14,2% of respondents in Ha Nam chose.

would be “hard for men to get married.” Despite this considerable share, the ELS does not report on the share of participants who regard marriage squeeze as a problem.

New questions added:

The endline survey added new questions on “behaviors leading to SRB imbalances,” which were not part of the baseline survey. The results are as follows:

- Less than 20% of participants report that they have a third child (13.9% in Hai Duong and 19.5% in Ha Nam). It can be assumed that sonless couples are more likely to break with the 2-Child Norm in order to conceive a son as the third child.
- 16% of respondents in Hai Duong and Ha Nam stated that they had “searched for information on how to conceive a son,” while 70% stated that they knew “other residents [having] searched for information on how to conceive a son” in Hai Duong (and 74% in Ha Nam). Quite intuitively respondents felt more at ease reporting about others in their community to be “searching for information on how to conceive a son” than sharing their personal experiences in this regard, especially given the illegality of acquiring information on sex selection and sex determination in Vietnam.
- In Hai Duong, 41.5% felt that sex-selective abortions were common 5 years ago, and 47.3% reported that the same was common today. In Ha Nam, only 25.7% of respondents considered sex-selective abortions to be common 5 years prior, vs. 44.3% today. This may suggest that according to peoples’ perception, sex selection is more frequent in Ha Nam today than it was 5 years ago, while not much has changed in Hai Duong during this period.¹⁰¹
- Lastly, 42.9% of respondents in Hai Duong and 48.9% in Ha Nam report histories of miscarriage, stillbirth and abortion in their families.

Results of SRB trends:

Lastly, the endline evaluation presented SRB figures and concluded that, “The greatest and most significant result of the project was the declining trend of Sex Ratio at Birth in recent years” (DEPOCEN 2016, 76). It based its assessment on the data illustrated in Table 25.

¹⁰¹ Note this type of question provokes perception biases, when being asked how a situation was in the past compared to now.

In relation to these figures, the endline study further concluded: “The Sex Ratio at Birth in Ha Nam reduced in 2013 but tended to increase again in 2014 and 2015. Meanwhile, Hai Duong’s SRB tended to decrease steadily. It can be seen that this was the result of the communication and capacity-building activities as well as active involvement of local authorities and the participation of other stakeholders in Hai Duong during this period” (DEPOCEN 2016, 66).

Table 25: SRB in Hai Duong and Ha Nam, 2011-2015

	2011	2012	2013	2014	2015 (prel.)
Hai Duong	121.3	121.4	118.9	118.3	117
Ha Nam	111	111	109	111.7	112.5

Source: Bureau of Population and Family Planning in Hai Duong and Ha Nam. (DEPOCEN 2016, 76). Note: In the absence of birth figures the confidence interval cannot be determined.

Obviously, the general sentiment in these findings is that policy interventions over that period had a positive impact on lowering SRB. We found multiple reasons to doubt this conclusion. We will now critically assess the reliability of the findings.

6.5.2.4. Critical Assessment and Inconsistencies of the Survey Results

The conclusion that SRB improved in Hai Duong thanks to capacity building and communication efforts seems inadequate. In fact, we cannot draw any definite conclusions from these recent SRB trends for the same reasons discussed earlier, namely the small number of births, the random annual fluctuations, the relatively short test period and the discrepancy between different data sources. For example, the estimated SRB between 2010 and 2014 based on 4-year aggregated figures showed a significantly higher SRB for Ha Nam (118; CI: 110 – 127) and Hai Duong (128; CI: 121– 134) than illustrated in Table 26 (see also 6.2.2.). Thus, the conclusion that communication, capacity-building activities and local participation were responsible in driving an overall trend seems far-fetched. More robust data and a more fine-grained analysis would be needed to assess (a) whether we indeed witness a decline in SRB in Hai Duong, and (b) whether interventions are a driving factor.

Furthermore, the intervention area did not perform better than the control area with the exception of the diversity in communication channels used. Indeed, there are large inconsistencies between the baseline survey and the endline survey which severely undermine the quality and rigor of the assessment. The present findings are based on the careful assessment

of the BLS and ELS final reports (made available as Word and PDF documents in English). Access to the original data set was not given. On the basis of the official final reports the following problems were identified:

Methodological differences: Despite earlier mentioned affirmations to ensure the consistency and comparability in their evaluative methods (see subsection 6.5.2.2. above), significant differences could be identified between the research methodologies used in the BLS and ELS. In fact, 15% fewer people were surveyed in the ELS (681 instead of the initial 800 participants). According to the logic that determined the sample size at the beginning of the study, staying within the 95% CI was no longer possible, because the sample size of the ELS is too small. Also, the number of in-depth interviews (IDIs) and focus group discussions (FGDs) do not line up with the methodology used in the BLS. Table 26 shows the methodological differences used in the two surveys.

Table 26: Research Methodologies Used in the Baseline and Endline Survey

Imbalances Sex Ratio at Birth Survey				
Baseline	Hai Duong	Jan 2013	Quantitative	400
			Qualitative	6 FGDs; 20 IDIs
	Ha Nam	Jan 2013	Quantitative	400
			Qualitative	-
Endline	Hai Duong	July 2016	Quantitative	340
			Qualitative	11 FGDs; 7IDIs
	Ha Nam	July 2016	Quantitative	341
			Qualitative	1 FGD; 8 IDIs

Source: Based on BLS and ELS reports (Mekong Economics Ltd 2013; DEPOCEN 2016).

Problems related to the control area: The control area was not recommended due to its socio-demographic differences with the intervention area. In August 2012, after the official project approval by the Prime Minister’s Office, international consultants from CEPED were invited to travel to Hanoi and Hai Duong to consult on the interventions’ baseline survey. The subsequent final report of the UNFPA consultant recommended a difference-in-difference approach for the impact assessment. It emphasized that such an approach would only be possible if the following criteria were met (Guilmoto 2012d).

- The intervention is strictly limited to the intervention areas (e.g. no spillover effects)
- The intervention and control area have similar structural trends
- Data for the pre- and post-intervention measurements (or surveys) is available.
- Adequate estimation instruments are in place in both areas to measure the outcome.

Furthermore, the final report recommended Nam Dinh Province as the control area, because of the similar social, occupational and demographic characteristics, and a comparable population size. A further advantage mentioned was that the two provinces (Hai Duong and Nam Dinh) are not directly neighboring provinces, which limits possible spillover effects. Ha Nam was not seen as an ideal control area, because it did not compare well with the intervention area in terms of sex imbalances and other socio-demographic factors (Guilmoto 2012d). After these international consultations, the baseline survey was conducted in early 2013 with Hai Duong as intervention area and, contrary to recommendations, with Ha Nam as control area.

More importantly, however, the control area itself became an intervention area before the official (Hai Duong) intervention started, as the following quote from the endline survey illustrates: “Ha Nam [control area] implemented a similar project at 2011-2015 as directed by the PPC [Provincial People’s Committee Office]. The project had intervened in 116 communes/wards of the province on the theme of Imbalanced Sex Ratio at Birth; however, because of limited funds, the project did not achieve significant results” (DEPOCEN 2016, 55). This defeats the purpose of having a control area in the first place.

Access to raw survey data: There was also a problem with the data transfer between baseline and endline evaluators. The endline assessment did not gain access to the raw data of the baseline survey. As the endline report stated, “The lack of baseline data set for review, therefore caused for low reliability” (ibid, 7). This is despite the fact that the contract with Mekong Economics included handing over all related data files of the baseline survey. Due to this shortage, we could not compare the raw data obtained from the two surveys, which would have provided for a more robust assessment.

Data quality concerns: The quality of the data was also a problem. First of all, the endline study discredits the quality of the baseline survey. “[I]f the baseline results were actually as good as what reported, it should be questioned why the UNFPA and the local authorities need to have more interventions. From those reasons, it is believed that the baseline data was unreliable” (ibid, 7). Secondly, a close analysis of the endline report reveals some errors. The endline report

comes to some inconsistent conclusions because the results were not lined up properly with the baseline data (see e.g. Mekong Economics Ltd 2013, 72; DEPOCEN 2016, 66).

Formal comparison between BLS and ELS: Additionally, the ELS did not conduct a formal comparison between both surveys. According to the evaluators, the endline evaluators made use of the baseline findings only “for analysis in some appropriate cases” (ibid, 7). A formal comparison is further hindered by the fact that corresponding baseline and endline results are only available for 30% of the questions (i.e. 20 out of 66). Also, four of twenty are linked to the domestic violence component and do not reveal information on sex selection, leaving just 16 questions for analysis. In addition, new questions were introduced in the endline that were not part of the baseline. These new questions try to assess: (a) personal sex selection practices (which people are likely to misreport given the illegality of sex selection in Vietnam), and (b) ex-post the situation ex-ante. For example, people were asked about the “commonness of abortions for sex selection purpose 5 years ago” and the “commonness of abortions for sex selection purpose at present” (DEPOCEN 2016, 55). Possible answers were ‘rare,’ ‘common’ and ‘very common.’ These new questions easily lead to reporting and perception biases.

Besides, several questions in the endline survey were rephrased from the baseline survey. It is unclear whether this is due to inconsistencies in the survey design or due to translation issues into English. In sum, each of the points listed above presents a major impediment for a proper quantitative assessment. In sum, it becomes very difficult to draw meaningful conclusions from the project evaluation, other than the need for better assessment and reporting.

6.5.2.5. *Summary of the Quantitative Assessment*

The aim of the baseline and endline survey was to capture knowledge, attitudes and practices (KAP) of sex imbalances at birth in Hai Duong before and after the intervention in order to allow for a difference-in-difference comparison. The exercise fell short of expectations. Given the lack of raw data and the problems listed above, we cannot make claims about the statistical significance of the findings. Information was available from less than 30% of the questions and due to the problems laid out, the results cannot be regarded as statistically significant. This survey was overshadowed by errors linked to low sample sizes, missing data, misreporting, and inaccessible raw data. These shortcomings could have been prevented.

That the control area was actually treated, even before the intervention started, raises one of the more serious questions. Project implementers could have chosen a different control area to begin with as suggested by international consultants. However, by 2012 all provinces with an SRB of over 115 had been treated, which shows the unique dedications of Vietnamese

authorities to tackle sex selection. For that matter, identifying an appropriate control area under such conditions was difficult to begin with.

In sum, we can attest to poor results with a low reliability. Even if the results were reliable, they do not show that the intervention area performed much better than the control area. Only with regard to the diversity of channels through which messages on SRB have been spread, we can detect noticeable differences between Hai Duong and Ha Nam. Because the intervention was regarded as one of the first comprehensive formal impact assessments, policy makers, IOs, and scholars have been eagerly awaiting the results. After four years, the results are inconclusive and we still lack accurate data collection, monitoring and evaluation.

6.5.3. Qualitative Assessment: Voices of Local Implementers and Doctors

To supplement the quantitative findings, qualitative data was collected in Hai Duong and Hanoi around the mid-term of the project (October–November 2014). We draw here from these 36 semi-structured in-depth interviews with project implementers, government officials, UNFPA staff, and doctors. We place special focus on the Hai Duong sample (10 interviews). Furthermore, we include findings from field visits to hospitals and informal conversations with participants during and after awareness-raising campaigns. The chapter examines the initial project outcomes, the role of law enforcement, messaging in awareness campaigns, and training with medical practitioners. We also discuss the role of ownership when global agents operate on local grounds and conclude with the main findings.

6.5.3.1. First Positive Signs But No Strong Signal

At the time of research, interview participants stated that it was too early to make any claims about policy efficacy since the most recent intervention project had just been introduced in the 2012-2013 period. Yet, government officials often pointed to some positive signs. These included: (1) a slight decline in SRB, (2) enhanced coordination among stakeholders, (3) integrated and systematic approach to address sex selection and its root causes, (4) increased awareness among the general population, and (5) capacity building for the medial sector. The following quotes illustrate these points:

(1) Local implementers commented positively on the improvement in SRB. While some interviewees gave the intervention credit for the decline, e.g. “An obvious outcome of the project is that the imbalanced SRB is going downward, though slightly” (VN35), other interviewees were more cautious in not making any judgments about the sustainability of this

trend: “The imbalance of SRB has shown some downward trends, but for the short term we cannot tell that it’s a sustainable trend” (VN31). Some international staff involved in the design and implementation of the intervention claimed SRB had reached its peak and would eventually have to decline: “Hai Duong is properly going down [in SRB] because they have reached that extreme point” (VN07).

(2) Interviewees also talked positively about the enhanced commitment and coordination among stakeholders. The Hai Duong director of DOPFP stated, “Our first solution is to strengthen the involvement of leading agencies, including DoH, DoCST, Committee Propaganda Department, Fatherland Front Committee, Provincial People Committee, Women Union, Youth Union, etc. in addressing this issue” (VN29). In setting up a multi-stakeholder collaboration, UNFPA wanted to make more use of existing synergies (e.g. the Ministry of Health brings in health expertise, MOLISA gender expertise, etc.). UNFPA hoped that such collaboration would not only save resources, but also ensure a gender-sensitive response to sex imbalances (VN08). Local stakeholders emphasized that, “each [project] component is carried out by a separate department. There is no overlapping between the components” (VN33). That means each department is responsible for a specific share of the overall project, yet communication events are frequently carried out jointly.

(3) Respondents appreciated the systematic approach that was chosen to address sex selection and related concerns such as gender violence and elderly support. “The project is effective in such a way that it has contributed to change the approach, or the way how we address the three issues in Hai Duong.” The respondent continues by stating, “Never before have we seen the issues of sex imbalances, domestic violence prevention and elderly health care been addressed as seriously and as systematically” (VN35). Local officials stressed that such an integrated approach was necessary in order to tackle the problem more holistically and reduce the perceived need for sons from multiple angles.

(4) According to local implementers, “This project also contributes to raise the awareness of people on the seriousness of SRB issue” (VN35). Marriage squeeze was mentioned as a concern (similarly to the findings of the baseline survey). Respondents talked either about their personal fear that their sons may not be able to find a bride (VN33), or reported about conversations with acquaintances. “A friend working in the business sector expressed his concern that due to the disproportionate lack of women, millions Vietnamese men will be wifeless and his son might be one among those” (VN35). According to a UNFPA official, awareness has increased due to IEC campaigns. “I do think, public policy or public awareness has played some roles; at least it helps people [to] think a little bit about it” (VN07).

(5) Furthermore, capacity building for medical practitioners has improved according to a local implementer, “Another [project] outcome is that now we have an effective mechanism and a network of trained collaborators on this issue. Before the project, our staff in the medical sector had limited understanding on sex imbalances and its consequences. Now they are equipped with basic knowledge on the issue to facilitate the organizing of campaigns or consult stakeholders in a more convincing way” (VN31). We will further discuss the role of medical trainings below.

In conclusion, it is overall too early to say whether the intervention “Prevention of Domestic Violence, Addressing Imbalanced Sex Ratio at Birth and Promotion of Care for the Elderly 2012-2016” has had an impact on sex-selective-behavior in Hai Duong. Many stakeholders involved in the impact evaluation discussed above, though there had been slight improvements. Others thought there were some positive signs linked to the enhanced cooperation and awareness of stakeholders. Our analysis indicates that the impact has been low. Contrary to the Indian case study, there has been no heavy hand of the law in Hai Duong.

6.5.3.2. *Lack of Law Enforcement 296ft he Anti-Sex-Selection Ban*

There was an overall consensus among the interviewees about the difficulties of law enforcement, the need to change mindsets, and the conviction that changing mindsets would take time. The same points were repeated back-to-back by numerous stakeholders – almost like a local mantra. The following quotes illustrate that. We start out with a member of the Hai Duong People’s Committee (VN33):

(1) Difficulties in law enforcement:

“Regarding the control of ultrasound check-ups or the medical services, we have the law already but it is extremely difficult to supervise the implementation of the law. For example, who will take care of the inspection? Who will monitor the implementation of these laws? It is quite difficult to control the implementation of the law, because it is not easy to go to the clinic to catch the right moment of telling the couple about the sex of the baby” (VN33).

(2) Need for change in cultural norms:

“Once again, in order to address these problems, it very much depends on the attempts taken to change the cultural norms or the perception of the people about their son preference” (ibid).

(3) Changing mindsets takes time:

“The intervention cannot create a very quick or very fast impact on addressing this issue because we have to change the culture and the traditional norms. Everybody understands [that] it takes a long time with huge energies and [it is] time consuming to change the perception or the traditional norms of the people” (ibid).

The director of the Office for Population and Family Planning of Hai Duong Province reaffirms that the long-term strategy needs to focus on the demand side, meaning the underlying motives of sex selection, which would then naturally suppress the need for a supply side. Up to now, law enforcement of the legal ban has been negligible as the following excerpt shows:

I: Can you tell me about the law enforcement of the sex selection ban in Hai Duong?

P: No one has ever been sanctioned in both financial terms and license terms.

I: Why is that?

P: That is simply due to inspection work.

I: What are the challenges?

P: I think that the toughest challenge comes from people’s perception. So the situation here is like a demand-supply equation, and the solutions should address the demand side. Then the work on the supply side would become easier. At the moment, the law only prohibits abortion for sex selection. But when people come to the clinics for abortion, they only mention other reasons, like financial difficulties, or they just have enough children rather than the reason of sex selection.

I: Do you have any suggestions for policy adjustments to address these challenges?

P: I think that we should first identify the underlying causes and then develop proper solutions to each cause. Just one remark is that it will take time to address this issue.”

Director of the Hai Duong Office for Population and Family Planning (VN29).

The quote above shows that when government officials are asked why inspections are difficult, they escape the question by immediately changing the subject to the need for changing mindsets. Later in the conversation with the DOPFP official I tried to understand better, what the obstacles were in conducting clinic inspections, but again it was stressed that, “the biggest challenge is the changing the perception of local people, especially inhabitants within the Red River Delta, as their perception has been strongly affected by Confucianism for thousand years and that can’t be changed overnight” (VN29).

The same three points laid out above (law enforcement, tackling mindsets, and time) were also reoccurring themes in conversations with UNFPA staff. Interestingly, UNFPA Vietnam does not support the Vietnamese government in enforcing the sex-selection ban (unlike in India), but stresses the promotion of gender equity:

“We try to address gender inequality, gender discrimination and law enforcement in terms of promoting gender equality rather than support for banning ultrasound or gender-biased sex selection, which is very hard to do. You can never identify anything because people don’t tell you [that they sex select]” (VN08).

On the subject of time and mindset change, the same UNFPA respondent stated, “I don’t think the culture can be changed overnight. We need time” (VN08). Moreover, some doctors expressed similar notions that regulating technology is “not highly feasible” and that “we have to address the root cause” (VN28).

Overall, the interview excerpts show that governmental focus is placed on a strategy to address the demand of sex selection over the long-term. Government officials stressed that abortions are being requested for reasons other than sex selection, and that it would be therefore difficult for inspection workers to expose wrongdoers.

Interestingly, several interviews with doctors in Hai Duong and field research conducted in hospitals and clinics in Hanoi – within 75 km or 1,5 h car ride from Hai Duong – revealed that it was in fact very easy to find out who offers sex-selective services. Locals on the street, nurses, as well as doctors in public hospitals in Hanoi all referred openly to private clinics, where one could, “get sex-selective abortions for sure” (VN09). When approaching private clinics and asking about the availability of sex-selective abortions, my Vietnamese research assistant (age 22) and I was told that normal prices would range around US\$ 4 for ultrasound and around US\$ 35 for an abortion, but that we would qualify for discounted student rates and a ‘packaged deal’ (sex determination plus abortion) for below US\$ 25. One clinic also offered blood/DNA testing in combination with sex-selective abortions, yet at high prices.¹⁰²

Doctors also mentioned popular online forums (e.g. webtretho.com), which women consult asking for “prestige places” to obtain an abortion or openly trade names of doctors willing to reveal the sex of the fetus (VN9). This is despite the fact that the advertisement of sex selection is illegal in Vietnam. Hai Duong doctors confirmed the easy access to sex determination and

¹⁰² US\$ 880 at 9 weeks of gestation with blood samples being sent to the U.S. Local tests are available for roughly one quarter of the price, when done after 14-15 weeks.

sex selection. I interviewed one doctor, who works in both private and public facilities. When asked how many women he had told the sex of the fetus, he replied, “In the public hospital none; in the private clinic all” (VN25).

Findings from the 1/4/2015 Time-Point Population Change and Family Planning Survey confirm that the great majority pregnant women know the sex of the child sometime between 15 and 28 weeks of pregnancy (74.3%). The rate of women who already knew the sex of the fetus before 15 weeks was 43.5%, the highest in the Red River Delta (GSO 2016). As these findings suggest, the government turns a blind eye on law enforcement and that there are no negative ramifications for doctors or patients seeking sex-selective services.

In conclusion, despite multiple laws, policies and programs that ban sex selection, sex determination and its advertisement, there is an almost complete lack of law enforcement. Instead government officials focus on information and education campaigns. If we see an improvement in SRB in Hai Duong in the near future, it will not be due to law enforcement, but due to campaigning on the issue.

6.5.3.3. *Awareness Campaigns: Community Mobilization or State Propaganda?*

Numerous stakeholders have been mobilized from various segments to come together and “join hands” to address sex selection. The campaign slogan can be understood quite literally at times. The photos of the 2015 campaign against sex selection show waving students and senior government officials interlacing their hands with UNFPA staff to jointly spread the message “stop gender discrimination, stop gender-biased sex selection.” Note that they all wear the same light-green t-shirts and join/raise hands (see Figure 51).

Figure 51: Images of the 2015 Campaign Against Gender-Biased Sex Selection



Source: GOPFP (2015)

These campaign images symbolize unity. But are we seeing community mobilization or state propaganda? The director of the DOPFP Hai Duong talks mostly of the latter:

“Besides general propaganda on mass media like television, radio and newspaper channels, we also made specific campaigns to reach out to target groups like the youth, those who are in marital age or reproductive age. We even go to companies and industrial zones to make propaganda, or do events like the one that you’ve been to” (VN29).

The interviewee makes reference to an UNFPA organized cultural show, which took place in a Hai Duong stadium with approximately 1000 participants. After having participated in the event, I exchanged thoughts about the evening with another local official. The Women’s Union Officer stated, “People feel less excited about the former event; they feel passive about receiving information, unlike when they proactively look for information themselves” (VN34).

Informal conversations with participants after the cultural show confirmed this impression that people lacked active participation. But more than that, they also lacked a practical outlook. One male participant in his late 20s told me that he had been well aware of the problem before. He stated that he himself had three older sisters and that his mother kept reproducing until he was born. Eventually he would also be expected to have a son to continue the family line. The young man felt the campaign was more “government propaganda” and offered, “little practical guidance on how to solve the situation.” At the end of the day, he noted, Vietnamese families were still “hungry for boys.”

Interestingly, an UNFPA representative also commented on the same shortcoming of the campaign. “I don’t see we put enough alternatives in place for people to make different decisions” (VN07). He noted that the current messaging focused on enhancing awareness of the future consequences, but did not provide practical solutions for people to break the cycle. However, other UNFPA campaigns in Vietnam have stressed some of these solutions, e.g. how girls can also worship ancestors and contribute to their maternal families.

Moreover, informants stated that due to budget constraints, campaigns often do not reach local levels. “In national and provincial levels, there are many policies on gender equality but process to translating policies into realistic plans at grassroots level is not done or slow” (VN28). Often when campaigns reach local levels, they are only a “wind blowing” (one-time event) and therefore have little impact:

“For instance, for the campaign of promoting gender equality, the commune will do it when having budget and stop it when having no budget, so that it is not integrated in

daily issues of the community... It needs to be repeated regularly, it can't be a wind blowing, which has little impact, while there are large problems with people's perception. As such, an on-off event can't be effective" (VN28).

In sum, the Vietnamese government has shown strong top-down efforts to tackle sex selection, but there is little grassroots participation. Some campaigns do not reach local levels or are not carried out on a regular basis. In the absence of alternative strategies, Vietnamese couples have not lost their 'hunger' for sons.

6.5.3.4. *What the State Wants: Two Kids, Happy Families and No Sex Selection*

The messages that are being delivered through awareness-raising campaigns by GOPFP and other stakeholders often circle around the following three themes or population objectives: (a) do not sex select; (b) stick to two children; (c) produce happy and harmonious families.

These three objectives stand in direct conflict with each other. In order to obtain happy families, women face great pressures to conceive a son. Having two children – in the absence of technological interference – means that 25% of the couples will remain sonless. The drive for family 'harmony' is especially strong in families, where the husband is the first-born or only son. Even in the absence of direct pressure, women may prefer to give birth to a son because this contributes to a better family atmosphere. Excerpts from an interview with a Women's Union Officer of Hai Duong illustrate the tension between these different population objectives (see Box17).

The interviewee states that the "Women Union has many communications and awareness-raising activities to help women to comply with population policies" (VN34). The first policy she refers to is the 2-Child Policy. The respondent explains that communications target sonless women in particular, because these women are more inclined to sex select at third parity ("The family with two daughters has the tendency to make the third child to be a son. Most of the families with a third child turn to sex selection, especially in my women's union at the grassroots level"). In order to counter this tendency, the Women's Union cooperates with the Population and Family Planning Office to, "organize integrated communication campaigns and encourage women to use safe contraception." It remains unclear how the use of contraception assists women in diminishing the pressure to conceive a son (see Box 17).

Box 17: Interview Excerpts with Officer of the Hai Duong Women's Union

P: The duty of Provincial Women's Union (WU) is representing Vietnamese women. The Socio-Cultural Division has the mandate of strengthening women's role in the family, including population and family planning policies. WU has many communications and awareness-raising activities to help women to comply with population policies. ... For example, the WU works to encourage people to follow the two-child policy. That's why WU includes the criteria of no more than 2 children in their club model, because the family with two daughters has the tendency to make the third child to be a son. Most of the families with a third child turn to sex selection, especially in my women's union at the grassroots level...

I: What is your division's involvement in addressing SRB?

P: My Division focuses mainly on communication activities for women ... because it is difficult to approach men and our members are all women. So awareness-raising activities are for women to increase their understanding about policies and regulations on reproduction. Next, we provide women with knowledge regarding health and reproductive health because actually women themselves also select the sex of the baby. If the first child is a daughter, for the second child, they will try to select the sex of the baby. They are afraid of violating the population policy, because if the second child is a girl [too], they will have to continue [giving birth to a third child]. Probably they turn to abortion... to make a son as the second child. The abortion enormously affects women's health. We cooperate with the Population Office [DOPFP] at community-level to organize integrated communication campaigns and encourage women to use safe contraception.

I: Does the WU give direct consultation to couples in communities?

P: We approach couples at the community level, who we know have two daughters already. Firstly, we advise them to join clubs such as the club for couples with single-sex children [e.g. only daughters]. Secondly, we advise them to sign a commitment to having no third child. In addition, the Central Women's Union launched the campaign for "Five No's and Three Cleans"

I: What are the "Five No's, and Three Cleans?"

P: The Five No's are No violence, No poverty, No children violating the law or dropping out of school, No third child, No children with malnutrition. Maybe I did not put these Five No's in the correct order. The Three Cleans are: Clean house, Clean kitchen including toilet facilities

because people in the countryside underestimate hygienic toilet facilities, which can affect their health; [and] Clean community's environment by actively keeping the environment clean.

I: You mentioned earlier the WU's goal was to contribute to "happy families." What are the characteristics of a happy family?

P: Building a happy family is instructed by the central level. To achieve this goal, we continuously encourage families to have knowledge of how to better build their families, raising awareness on different topics such as legal documents, Anti-Domestic Violence Law, and the Law on Gender Equality. The target is to help couples towards building happy families.

The interviewee later reports about a specific case of sex-selective abortion in Hai Duong, that occurred in one of the target districts of the UNPFA project: *"A woman, 16 weeks pregnant, she went to have an abortion in a private clinic. I asked her why she decided to abort the 16-week-old fetus all on her own in this clinic. She replied, this is the third child and the ultrasound check showed it was a girl again. At the beginning, she decided to keep the baby. After thinking twice, she changed her mind because under any circumstances, she would have to make a son. If she keeps this baby, she will have to make the fourth child and with the small salary, she can't afford to raise four children. Her final decision was to abort this third child. Social pressure and her husband's family have pushed this lady to abort her child despite of late term of pregnancy."* The interviewee added that the woman's husband was the only son of his family, which meant the wife had *"to continue attempts to have a son by all means."*

The interviewee also gave a personal reflection on the issue as a mother of a 9-year-old boy and a one-year-old girl: *"When I was pregnant for the first time, the early ultrasound check showed a girl. My husband said, 'that's fine.' When the fetus was 6 months, the ultrasound check showed a boy. Obviously my husband and his family expressed their happiness, which made me feel like they had tried to hide their preference before. Now, it was a chance for them to disclose it. Therefore, I thought if I had two daughters, probably I would have felt pressure. Because of my job, my family does not force me, but I think the atmosphere of the family will not be as comfortable as when having a son. That's my honest sharing."*

Source: Interview with the Head of the Social-Family Division of the Hai Duong Women's Union (VN34)

Other messages of the Women's Union further blur the picture. They include the central level "Five No's and Three Cleans" Campaign. According to this campaign, Vietnamese women are expected to ensure the absence of violence, malnutrition, poverty, a third child, and school dropouts occurring in their families, while making sure that the house, kitchen and toilet, and the environment stay clean. The Women Union's mandate is to "strengthen women's role in the family." Their messages go out to women, because of their female membership basis and "because it is difficult to approach men" (VN34). Overall, these messages reinforce traditional gender roles, where exclusively women are in charge of house maintenance, childcare and alimentation. In many ways, they directly undermine gender equality efforts.

As the extracts show, "Building a happy family is instructed by the central level" and so is having no more than two children without sex selecting. The inherent tension of these competing population policies is placed predominantly on women. As shown in Box 17, Vietnamese women get regular instructions on how to run their family, what not to do and where to clean. The messages seem oversimplified and outdated appeals to what is expected of a 'good mother.' Under these tensions, women are likely to opt for sex selection because they can at least make their family 'happy' (by delivering a son) and the state 'happy' (by having two children only).

In summary, women in Hai Duong are encouraged through political campaigns to have no more than two children, refrain from sex selection, and produce happy families. These competing messages place the burden to comply with population policies predominantly on women. We can conclude that married women in Hai Duong, who have remained sonless, are torn between conforming to the various state and family needs. Besides, central governmental messages like the "Five No's and Three Cleans" Campaign tend to reinforce traditional gender roles, by making mainly women responsible for attending to family needs.

6.5.3.5. *'Doctors for Daughters': Medical Voices on Policy and Profit Margins*

At the time of research, I was in the unique position to interview medical practitioners during a UNFPA training course in Hai Duong and Ninh Binh. At the time medical training materials titled 'Doctors for Daughters' were transferred from UNFPA India to UNFPA Vietnam. I was able to interview doctors during and after the workshop. The workshop was designed to (a) adapt Indian training material to the Vietnamese context and (b) sensitize doctors on the issue.

During the workshop, doctors shared their mixed reactions to it. One doctor thought the course was unrealistic and a "waste of time" because he did not acquire new knowledge. Another thought it was "very interesting." It introduced him to the situation of imbalanced SRB in

Vietnam, the legal framework regulating this issue and the sanctions for violation of the law. A third participant commented positively about the “openness” of the workshop, in which “people like me [can] contribute their ideas, opinions and experiences back to the material writers, so the materials can be designed on these contributions from us” (VN27). This is a positive sign linked to translating policy interventions to local contexts.

Three major themes emerged from the interviews with medical staff: (1) the high profit margins and ethical considerations of doctors offering sex selection in Hai Duong; (2) the high visibility of sex imbalances; and (3) that sex determination was a ‘human’ right.

(1) Sex selection in Hai Duong: profit vs. consciousness

Interview partners stressed the point that there are no financial incentives for doctors working in public hospitals to engage in sex selection because they don’t get extra benefits. For private clinics, on the contrary, sex selection is lucrative. Private doctors offer multiple services in relation to sex determination and make large gains by providing sex selection.

Doctors in public hospitals earn on average VND 4 million per month (US\$ 175) according to interviewees. Private practitioners can make between US\$ 450-900 per month depending on the workload. When owning the private clinic monthly income can go up to US\$ 2,200 per month. Since earnings in the private sector are so much greater, many public doctors work in private facilities on the side. One doctor who soon wants to open a private clinic reported that people who open their own clinics have to find a way to pay off the investment capital. He noted that for them, sex selection is a lucrative business.

Doctors also reported that there is high “competition among the different clinics, so all the clinics are striving to show excellent services by telling the sex of baby”(VN32). If one clinic does not offer the service, patients go to a different one and the doctor loses their business. Doctors also reported that there is a tension between the economic gains of providing various services linked to sex determination (egg testing, timing of conception, changing the PH value in the vagina, etc.) and their conscience, when they suspect that revealing the sex of a fetus may contribute to an abortion. According to one doctor, economic interests can, however, overrule ethical concerns:

“You don’t tell patients [the sex] then they don’t pay you. They pay you for egg quality testing. You do it, then you get paid for it. You don’t do it, you get nothing [...]. The issue here is professional ethics, but sometimes professional ethics can’t be separated from material and economic factors” (VN25).

Other doctors expressed greater “psychological” concerns. “For a healthy fetus of 12-13 weeks, s/he has some organs of a human body. If I do an abortion in this case, I will feel uncomfortable psychologically. I imagine it is like killing a person, not because of any professional reason” (VN25). The same doctor has turned down requests to perform sex-selective abortions on the basis of his moral conscience (rather than legal understanding), but he is also aware that other doctors in private clinics practice it, as prices increase with the weeks of gestation. “The high price [for sex-selective abortion] is because of the psychological factor. Doctors hesitate to do this abortion” (ibid).

Policy makers try to appeal to doctors’ consciences. According to local officials “winning doctors’ hearts” was a more promising approach than convicting them for their wrongdoing:

“The most important point that I want to make clear is that we need to change the behavior and perception of the doctors. We have to encourage the doctors that what they are doing is not moral. We are trying to create a momentum for the doctors to not do these things. We have a low conviction rate, but the conviction is not very important because the doctor ... will say, ‘OK, I will try to avoid the conviction anyway.’ It is not very difficult to go around the law. So [altering] the conviction rate is not a useful way to ban the doctor from telling the sex of the baby. A more important solution is that, giving the doctor the encouragement and touching their hearts that what they are doing now is not good for society. The role of the doctors should be strengthened. So they will be aware of the important role they, as doctors, play in the whole effort of addressing SRB” (VN32).

Interestingly, and unlike India, for Vietnamese authorities “the conviction [of doctors] is not very important.” The idea is rather to convince doctors of their wrongdoing. The quote above reflects the point that the governmental focus is not placed on law enforcement, but on changing attitudes and behaviors. Here it is on changing the behaviors of doctors rather than patients. It remains to be seen whether doctors will stop sex selecting, when profit margins are at risk and the competition in providing “excellent services” is high. Without major efforts to crack down illegal services, the supply side is likely to keep flourishing.

(2) High visibility of sex imbalances:

Doctors report that there is great visibility and awareness of the problem, reflected in the high share of boys over girls in Hai Duong. Excess male births are visible in Hai Duong’s delivery rooms. According to one doctor, “In our daily routine, we work with a lot of women delivering birth, but among 10 cases there is only 1-2 girls. We see that and we talk about that” (VN26).

Another doctor confirmed that “the sex ratio imbalance at birth is very clear and visible in my department, when we welcome the newborn children and in the kindergarten” (VN27).

This visibility of sex imbalances has started to cause concerns among the medical profession and management: “Recently, when the issue of SRB in Hai Duong has become more visible and serious, the leaders of our center, meaning our board of directors are very determined in guiding and informing about the seriousness of the problem” (VN32). As a result, the increased concern of some service providers is slowly translating into better guidelines and training courses for doctors.

(3) Right to know the sex of the child:

Two doctors expressed that knowing the sex of the fetus was a “basic” or even “human” right. “Knowing the sex of the [coming] baby is the human right and a natural right of any woman or any couple” (VN32). Therefore, policies should not forbid the doctor from revealing the sex. The argument presented here, of whether or not prenatal sex determination can be regarded as a basic human right, even in the presence of discriminatory practices against a particular sex, was discussed in detail (see 2.3.). We concluded that it is a basic desire to be curious about the fetal sex and prepare for the arrival of the child. However, sex determination should not be regarded as a ‘human right’ in the presence of structural sex discrimination.

Doctors also reported that the medical industry was wrongly blamed and that the onus should be on the patients requesting the service: “Nowadays, everybody blames the health sector for causing SRB, but the root cause is not from the health reason or the health service provider. The reason is the wrong perception of the people” (VN27). This doctor refers to the need to change the “perception of the people” instead of “blaming” the medical industry. This sounds like the state officials in the quotes presented previously, expressing a similar need to change the cultural norms and perceptions of people (VN33).

In this section, we reviewed three dominant themes put forward by doctors in Hai Duong. These were (1) the high profit margins for doctors and ethical considerations in providing late term abortions; (2) the high visibility of sex imbalances; and (3) the treatment of sex determination as a basic ‘right.’

Overall, the qualitative assessment attests that the campaign has shown limited results in tackling sex selection in Hai Duong. While the interviews show some positive signs linked to increased awareness and stakeholder cooperation, the practice of sex selection is still widespread. The legal ban on sex selection is not being enforced properly, and it is not the

intention of the government to enforce it. With regard to awareness-raising, we could see that the idea has been to spread unity, but the propaganda has lacked practical solutions for couples who would “say no to sex selection, for the sake of Vietnam.” Moreover, competing population objectives increase the pressure on women to conform to state and family goals. Lastly, we have seen that profit margins are high enough to overrule any ethical considerations involved in conducting late-term abortions. It is easy to escape the ‘soft touch’ of authorities who try to change medical conduct by persuasion rather than punishment.

6.6. Discussion on Ownership: Global Efforts on Local Grounds

The UNFPA funded policy intervention aimed at improving sex imbalances in Hai Duong and at assessing the policy impact to draw lessons for the later replication at a national level. However, can we really talk of a “result-driven management” (VN35)? In light of the complications and mistakes linked to the baseline and endline survey, this seems hardly justified. Here we try here to look behind the scenes and gain a better understanding of the implications when global agents act on local grounds.

According to local Hai Duong based officers, IOs play a strategic role in shaping Vietnam’s anti-sex selection policies at multiple levels. For example, a representative of the Hai Duong People’s Committee pointed out different direct and indirect ways in which UNFPA influences policy design from central to local levels: “The direct involvement of international organizations to Hai Duong is through the [UNFPA] project that I am a part of [...]. The indirect way is that the international organizations support the central level to make the policies at the central level and, of course, it will directly involve the province level or district level, even the grassroots level” (VN33).

According to the interviewee, many policies and campaigns carry an UNFPA ‘stamp’ either through direct intervention or indirect policy advice. In Vietnam, the UNFPA seems to have had an unusually active hand in shaping the policy-related messages. At times the discourse delivered by national and local authorities seems ‘dictated.’ Often this was because UNFPA members had given similar speeches beforehand. One UNFPA official told me during field research that he was very busy because he had to prepare two speeches for ministers to be held the next day. Considering this, it does not come as a surprise that we witness rather homogenous messages being promulgated.

At a superficial glance, it may seem that Vietnam and Hai Duong have become a ‘testing ground’ of IOs, where international best practices have been identified and lessons learned applied. At a deeper level, motivations may be more diverse. UNFPA sees its role as a “catalyzer” in the prevention of sex selection. The national government has been involved in all planning stages of the Hai Duong intervention, in order to ensure that the project was supported by the central government and could be scaled up later on.

“During the development of any communication in Hai Duong, we always have the involvement and guidance from the central level. This is our purpose. Because later on we want to adopt the piloted model in Hai Duong for national application. Without the participation of central government, it will never become policy. So if you see all the events in Hai Duong, you will see the participation of central officers” (VN08).

For UNFPA, it is clear that “without the participation of central government” there would be no national policy. The same respondent provides further insights on the motivations behind UNFPA’s efforts: “Initially, we selected at least two provinces. However, due to limited resources, only one was selected. Otherwise we would not have money to spread the model. Our contribution is not money for project implementation, but mainly [providing] a catalyst to ensure the technical input from UNFPA can be well taken by the government” (VN8).

At first a larger project was envisioned. But given financial constraints and the determination to replicate the model, the focus was placed on Hai Duong only. In fact, the project was designed to produce, “cost-effective intervention models for replication across the province and for setting an example for other provinces in the country to follow” (UNFPA Representative O’Brien, 27.08.2012)¹⁰³. In other words, from the start that the project was designed to be expanded throughout the country – disregarding any survey results.

Interestingly, the central government chose Hai Duong as the intervention area, and not UNFPA. “We [UNFPA] always consulted with [the] government and they recommended us to choose Hai Duong” (VN8). Hai Duong leaders have yet a different take and consider that it was their own “diplomatic dialogue and negotiation skills” that were key in “attract[ing] funding

¹⁰³ The same statement was repeated by Ms. Ritsu Nacken, UNFPA Deputy Representative in Vietnam in September 2014 during an event titled *Forum on Sharing experience of replication of Inter-generational Self Help Club (ISHC) model* at the Center for Women Development in Hanoi (Nacken 2014).

resource from donors to help address the issue” (VN31). These excerpts interestingly show that stakeholders at different levels claim ownership of the intervention.

There is great eagerness to address sex selection in Vietnam, and many stakeholders are engaged, from international to local levels. While the Hai Duong intervention was mostly a top-down approach with little consultation coming from the grassroots level, we can, however, see that local authorities also show concern about the issue and seek funding (VN31). To some minor degree Vietnam’s unions (Farmer Union, Women’s Union, Youth Union, etc.) also have local authority to shape interventions on the ground, but their agenda is often influenced by the central level (VN33, VN34).

The role of IOs in informing national and local policies is complex. There is a long history behind UN agencies aiming to “translate international law into local justice” (Merry 2006). This process is not simply a top-down legal “transplant,” but also involves bottom-up cultural “translation” (ibid). The global-local nexus is therefore neither straightforward nor can stakeholders choose between globalization and localization. Instead, there is room for negotiations and adaptation processes (Ling 1999). We have seen this for example when global training materials like ‘Doctors for Daughter’ were introduced to Vietnam and adapted in local training workshops. It is this adaptation process that creates policy variations, as local knowledge is collected to inform local interventions. More efforts seem needed to actively engage local levels in discussions on gender norms, and find alternatives that allow people to live happy (family) lives irrespective of the birth of a son.

6.7. Conclusion: Focus on *Motives* Against a Powerful Medical Lobby

In this chapter we have reviewed the history of son preference and its endurance from the Confucian past to the Communist present. We have described how population policies have placed pressure on Vietnamese couples to have fewer children. With access to reproductive technologies emerging after the Doi Moi reformation sex-selective abortions gained increased popularity. Subsequently, we observed the distinct rise in birth masculinization at national and regional levels drawing from official GSO data. Vietnam responded promptly to the situation having learned from abroad by outlawing sex selection in 2003 with the Population Ordinance. However, their policy response had an unexpected, perverse, effect. Given the timeliness of the

policy roll out, it has been suggested that the Population Ordinance triggered the onset of sex imbalances in Vietnam.

In more recent years, efforts to address sex selection have been continuously stepped up through various legal and policy changes, awareness-raising campaigns and advocacy. With the help of UNFPA, a specific intervention was rolled out in Hai Doung Province to tackle sex selection and measure policy efficacy. We described the stakeholders and the intervention that took place in Hai Duong and presented the results of their quantitative assessment. These results show a marginal policy impact in terms of awareness-raising, but they are overshadowed by methodological problems linked to the baseline and endline surveys.

In the qualitative assessment we discussed the lack of law enforcement of the sex selection ban. Policy priority is placed instead on awareness-raising campaigns to change the perception of people, even though policy makers acknowledge that this will take time. We also highlighted how the problem of resolving conflicting policy messages falls predominantly on women. Furthermore, we gave voice to doctors who are increasingly being persuaded by government officials. Given the large profit margins that doctors working in the private sector can obtain and the level of the impunity for sex selection offenses, we concluded that medical conduct is unlikely to change soon. We ended this chapter with a discussion on the role of IOs operating on local grounds and showed that there is some room for local policy adaptation, even though more consultations with local stakeholders seem desirable.

Important progress has been made over the past decades to close the gender gap in Vietnam, especially in terms of economic participation and women's educational attainments (Bélanger et al. 2012). Nevertheless, skewed sex ratio at birth presents a major setback to these gender equality achievements. With the help of international agencies, in particular UNFPA, Vietnam has tackled sex selection by stressing the importance of behavior change communication. While it may be too early to say whether the observed plateauing of the national SRB is sustained or can be linked to policy intervention, the policies have had some positive impact on raising awareness and bringing stakeholders together on the issue. Vietnam's long-term strategy of changing mindsets is likely to show fruits eventually as people increasingly recognize that girls are equal to boys. In the meantime, the argument can be made that there is a need for more rigorous law enforcement, reporting, monitoring and evaluation.

7. Cross-Country Comparison: Policies, Patterns and Processes

This thesis compares three socio-politically distinct countries that have been confronted with the same problem: gender-biased sex selection. We have seen that South Korea, India and Vietnam share a long history of son preference (Croll 2000; Den Boer and Hudson 2017) that was made acute by declining fertility levels and more or less rigorously enforced anti-natalist population policies (May 2012; Connelly 2008; Robinson and Ross 2007). Reproductive technologies spread at different times throughout the three countries enabling couples to turn to prenatal sex selection (Gupta 2000). As a result of these well-known drivers (Guilmoto 2009), the sex ratios at birth started to increase at a national level first in South Korea, then in India and later in Vietnam. South Korea and Vietnam show similarities in the tempo and intensity of their sex ratio trajectory¹⁰⁴, unlike India, where the SRB has risen at a slower tempo due to large regional differences and a much more heterogeneous population structure.

While South Korea was the first country to adopt corrective measures and to overcome its long-lasting son preference, India and Vietnam are still concerned with the growing demographic masculinization of their populations. Both countries have increasingly turned to South Korea for policy inspiration and have adopted similar policies, yet with different priorities and degrees of success. This chapter compares similarities and differences in the political agendas by drawing from policy files and the qualitative and quantitative analysis presented in the three case studies (Chapters 4, 5 and 6). It is structured as follows. First, we compare the public policies linked to their policy intentions, instruments and impacts in order to answer the research question of this thesis which was: What are the intentions, instruments and impacts of public policies against sex selection in the three countries? Second, we turn to patterns of policy convergence and divergence among the countries of investigation to further explain and contrast similarities and differences. Lastly, we assess the underlying processes of policy and knowledge transfer and their limitations.

¹⁰⁴ This is reflected in a rapid rise in SRB, which starts from an already skewed level of 107 and extends over a decade until SRB reaching a plateau around 112-113. This rise occurred in the 1980s in South Korea and two decades later in Vietnam (see also Den Boer and Hudson 2017).

7.1. Public Policies Against GBSS in South Korea, India and Vietnam

All three countries have recognized sex selection as a policy problem and have introduced diverse policies and interventions to counter demographic masculinization. While policy intentions varied across countries, the respective governments have responded to sex selection with similar policy instruments, in diverse ways, with equally unsatisfying impacts.

7.1.1. Intentions: Fetal Rights, Women's Rights and a Balanced Population Structure

Policy intentions varied significantly across countries. By policy intentions we mean the reasons or justifications given to intervene against GBSS (see 2.3.). According to Schneider (2015, 224), “These [intentions] may be straightforward or deceptive, logically consistent or inconsistent, and based on a wide range of different values ranging from justice-oriented rationales to economic, scientific or religious.” We may get an idea of revealed policy intentions by interpreting the purpose of laws, legal frameworks, and interventions, or by analyzing the policy discourse at large. Yet, the underlying policy intentions, or ‘hidden agendas’ (IN29), are more difficult to reconstruct unless policy makers point out their existence. Taking this into consideration, we now turn to the diverse policy intentions in Korea, India and Vietnam.

The Korean Constitutional Court (unlike in India or Vietnam) recognizes fetal rights and considers life to start at the moment of conception (see 4.1.3.). South Korea’s anti-sex selection agenda was openly intertwined with a pro-life agenda. Nevertheless, the political will to enforce the legal bans on sex determination and abortion was weak. Both agendas were largely ignored in favor of strong policy intentions to meet socio-economic goals by lowering fertility. As a KIHASA representative noted, “Allowing abortion and sex selection was an easy way to reduce fertility” (SK11). Between 1996 and 2002, when fertility had already declined below replacement level, more policy focus was placed on tackling sex-selective abortions through IEC and research. Nevertheless, abortions have been widely available despite their illegality (Wolman 2010). In general, the openly stated policy intentions were to prevent induced abortions in order to protect unborn life (see 4.3.4.), but it appears as if the Korean government was more concerned with (lowering and later raising) fertility levels than with preventing sex-selective abortions.

In contrast, India stresses a “women’s perspective,” where women are recognized as a disadvantaged group that requires special programs and treatment (Booth and Bennett 2002, as cited in Joachim and Schneiker 2012, 537). This is reflected in (a) the vast number of schemes and programs directed at women and children, (b) the names of many campaigns (e.g. Save the Girl Child), and (c) the legal provision within the PC&PNDT Act that states that women shall be excluded from punishment as it shall be assumed that they were pressured to sex select against their will (see 5.3.3.). The Indian government made explicit that the PC&PNDT Act should not interfere with women’s rights and access to safe abortions. However, according to government officials one “hidden agenda” point has been to bypass such provisions and control (“track,” “catch,” “monitor”) women.¹⁰⁵ Even though the government’s revealed policy intentions are to protect women’s rights (not fetal rights), campaigns have been overshadowed by mixed messages where policy makers commonly refer to prenatal sex selection as “feticide,” thus indirectly giving personhood to the fetus (like South Korea) and working at cross purposes with its stated pro-abortion stance. India’s policy intentions are based on a rights-based approach designed to put women first, but the campaigns have been often contradictory or counterproductive.

While South Korea openly stressed fetal rights and India women’s rights, Vietnam follows a third path. Vietnamese authorities view sex selection much more as a demographic problem than the authorities in the other two countries. This became noticeable through (a) the interviews with policy makers who were well informed about SRB trends and challenges, (b) the unique willingness of government authorities to cooperate with international experts on demographic data analysis, and (c) names of many campaigns (“join hands against sex imbalances,” not sex selection or son preference).¹⁰⁶

In short, Vietnam’s stated policy intentions are to ‘harmonize’ population structures and avoid demographic imbalances that may cause social instability (“Say no to sex selection for the

¹⁰⁵ This language was used among 55% of the Indian interview partners (26 out of 47 people). Especially policy makers (10 out of 17) and male interviewees (13 out of 20) referred to state authorities monitoring/tracking/catching women. See also 5.6.1.

¹⁰⁶ More critical observers stated during field research that Vietnam’s eagerness to address sex selection as a novel population problem was also due to administrative reasons. The governmental body in charge of population matters (GOPFP) had met their principle mandate (to lowering fertility to replacement level) early. It was suggested that the institutional structure would risk becoming obsolete in the absence of a new population mandate (e.g. addressing sex imbalances).

future of Vietnam”). Policies aim more towards ensuring a balanced share of men and women as a social public good than they aim at protecting individual fetal or women’s rights.

As this cross-country analysis of policy intentions shows, sex selection is seen as a policy problem for diverse reasons that are closely aligned to each country’s own unique socio-political status quo. Each government perceives or interprets the problem in a unique way. Interestingly, despite diverse policy intentions the three countries have introduced similar instruments to tackle sex selection.

7.1.2. Instruments: Legal Bans, IEC, Gender Equity, Incentives and Research

Overall, the three countries have introduced a similar set of policy instruments against sex selection. Common instruments include legal bans, awareness-raising campaigns, gender equity laws, incentives schemes, advocacy and research. We review them one by one.

All three countries have issued legal bans prohibiting couples and the medical community from determining or selecting the sex of the fetus. Violations are punished with fines, license removal or imprisonment. South Korea prohibited sex determination in 1987, followed by India in 1994 and Vietnam in 2003. All three countries also stepped up their efforts against sex selection by introducing higher penalties for law breaching behavior. South Korea strengthened its Medical Service Act in 1994 to alter penalties for doctors, India amended the PC&PNDT Act in 2003 and Vietnam introduced various laws and policies that outlaw sex selection after 2003. Yet, there are different degrees of what is being banned. South Korea issued triple legal bans on abortion, sex determination and preconception sex selection, which are – contrary to common belief – still in place today. In contrast, India and Vietnam have outlawed sex selection and sex determination, while abortions have remained legal up to 20 and 22 weeks respectively.

Apart from legal bans, governments have turned to awareness-raising, information education and communication (IEC) campaigns and advocacy. These campaigns are designed to challenge the underlying motives, highlight the illegality of sex-selective methods or warn the population about the magnitudes of sex selection. They come under different labels according to national and local contexts but they share the common aim to improve SRB and the status of girls. South Korea focused more on messages of “loving” one’s daughter, while India exhorted the country to “save the girl child” and Vietnamese campaigns focused on “joining hands to address the SRB imbalance.” Some campaigns have also transmitted confused and contradictory messages (“Where would you be if your mother had not been born?” in India) or

portrayed traditional gender stereotypes (e.g. the “Five No’s, and Three Cleans” Campaign in Vietnam).¹⁰⁷ Increasingly, social media outlets and video clips are being used to raise awareness (e.g. “Selfie with a daughter” in India).

Gender-equity laws have also played a role in governmental efforts against sex selection. All three governments issued or revised laws to strengthen the role of women in society and to eliminate gender discrimination on the books. In 2005, South Korea abolished the Family Head System, removing a long-lasting pillar of patriarchal family arrangements. In the same year, India strengthened women’s equal access to inheritance with the Hindu Succession Act. Vietnam issued the Gender Equity Law in 2006, stressing gender equality and prohibiting any discrimination on the basis of sex. These are examples of a larger set of legislative changes that do not directly tackle sex selection, but contribute to an environment that discourages any type of gender discrimination, including sex selection.

The three governments have also strengthened their data collection and monitoring of SRB trends, with support from IOs, national statistical offices and research centers. This has allowed them to track changes and improve their research capacity on sex selection. In Korea, the Culture and Sexuality Research Center opened in 1996 to research sex selection and provide policy advice. In the other two countries, UNFPA has been involved in enhancing the knowledge base on sex selection and sensitizing (governmental) stakeholders in regards to sex imbalances. A growing number of country reports illustrate this trend.

Conditional cash transfers (CCTs) and entitlements for families with daughters are the exception to the common set of policy instruments as they have been implemented mainly in India. Some incentive programs for families with girls were also carried out in Vietnam on a regional level (Hai Duong), and were under discussion for national rollout at the time of field research. The relevance and appropriateness of such schemes seem greater in countries like India, where infanticide and daughter neglect occur, than in Vietnam, where girls, once born, receive similar treatment in terms of nutrition, health and access to education as boys. We did not find any records of incentive schemes in Korea.

A summary of these policy instruments is given in Table 27. This brief review shows that South Korea, India and Vietnam have implemented similar policy instruments to target demographic masculinization, with the exceptions of abortion legislations and CCTs.

¹⁰⁷ Scholars have also pointed to confusing and contradictory gender equality messages in social and economic reforms in South Korea (see Peng 2011).

Table 27: Policies Related to Sex Selection and Abortion in India, Vietnam, South Korea

	India	Vietnam	South Korea
Legal Bans on Sex Determination and Selection	Pre-Conception and Pre-Natal Diagnostic Techniques (Prohibition of Sex Selection) Act (2003) bans sex determination and sex selection.	Various national laws, ordinances and government decrees include a ban on sex selection and sex determination, including the Law on Marriage and Family (2014), the Gender Equity Law (2006), and the Population Ordinance (2003).	Korea's Medical Service Act (2009) bans sex determination before 32 weeks of gestation, the Bioethics and Safety Act (2008) bans preconception sex selection.
Abortion Legislation	Medical Termination of Pregnancy Act (1972, amended 2003) legalizes abortion on demand up to 20 weeks.	Abortions up to 22 weeks of gestation have been legal in Vietnam since the 1960s. Law on the Protection of Public Health (1989) grants access to abortion-on-demand.	Abortions are illegal under the Korean Criminal Code (1953, amended 1995), with some exceptions regulated in the Maternal and Child Care Act (1973).
National IEC Campaigns	Save the Girl Child Campaign (since 2008); Save the Girl Child, Educate the Girl Child Campaign (since 2015).	Join hands to address the Sex Ratio at Birth Imbalance; Say no to sex selection for the future of Vietnam (both 2014).	Festival to Promote Love of Daughters to Restore Natural Sex Ratio (1997), Anti-Sex Selection/Pro-life Campaigns (1996-2003).
Gender Equity Laws	Equal Remuneration Act (1976), National Policy for the Empowerment of Women (2001), Hindu Succession Amendment Act (2005).	Law on Gender Equality (2006). Law on Family and Marriage (2012). Civil Code revisions. National strategies linked to gender equality and reproductive health.	Korea revised laws / introduced legislative changes (since 1980s). Abolishment of the Family Head System (2005).
Data collection and research	Cooperation with national and international stakeholders to improve SRB and child sex ratio data collection, since 1990s.	Cooperation with national and international stakeholders to improve SRB data collection (since 2006/2007), M&E of policy interventions (since 2012).	Creation of the Korean Culture and Sexuality Research Center (1996) to inform policies against sex selection.
Incentives	Various national and regional financial incentive schemes for the girl child and families with daughters.	Regional incentive schemes for families with daughters in Hai Duong, under discussion at national level.	No records of incentive schemes found.

Source: own presentation

7.1.3. Impact: Limited, Unintended, and Perverse Policy Effects

In the three countries of investigation, anti-sex selection policies have had low impacts. In many cases they have also produced unintended and perverse effects. South Korea is the only one of the three countries where the SRB returned to normalcy. However, we have shown that this trend was largely driven by changes unrelated to policy interventions against sex selection. As such, improved SRB is closely linked to the social and familial changes wrought by the larger transformative forces of industrialization, urbanization and increased education of women. In our analysis, we could disprove popular claims that attest the rigorous law enforcement of the sex determination ban (Kim 2004), by assessing conviction rates and by giving voice to medical personnel, who were directly engaged in sex selection throughout the 1990s. These voices stated that sex selection was a flourishing “business” – controlled by a medical cartel that set the prices for illegal abortion and sex selection services. The SRB declined because the demand for such services reduced, and not because law enforcement of the sex determination and abortion bans. Most notably, Korean awareness-raising and major legal milestones towards gender equity were only introduced after the SRB had significantly dropped. This led us to conclude that the Korean anti-sex selection policies had a minimal effect on SRB renormalization.

India is the only country where we were able to document a case of SRB improvement due to policy intervention. Dedicated district authorities successfully mobilized local stakeholders to jointly raise awareness about the illegality of sex selection. The result of awareness-raising, community mobilization and the strong political will to implement the PC&PNDT Act has been that sex ratio at birth improved. The positive SRB result of the Nawanshahr model was realized through exceptional leadership, yet it also generated the unintended side effects of violating the reproductive and privacy rights of women. The former makes the model largely non-replicable and the latter makes it largely non-desirable. On a national level, it is difficult to assess policy efficacy, due to the poor quality of SRB data and the vast regional differences linked to gender preferences, sex-selective practices and policy landscapes.

Prior research (Nandi and Deolalikar 2013) has shown that the PC&PNDT Act prevented a further worsening using Maharashtra as a natural experiment. This research was built on the assumptions that the legislation was implemented (a) prior to the 2003 amendment, and (b) uniformly throughout the country. Yet, the experts we interviewed did not confirm these assumptions.

Furthermore, we identified mixed and overly masculine messages in the political campaigning against sex selection. In fact, the majority of interviewees framed India's policy interventions in terms of male authorities seeking to protect, track or emancipate females. This led us to conclude that the Indian anti-sex selection policies have had several unintended side effects by either infringing on women's reproductive rights or reproducing gender biases and unequal power structures.

Vietnam is the only one of the three countries, where SRB has increased in lockstep with the policy interventions themselves. Vietnam's experience stands out due to their unique high-level dedication to tackle the issue early on, which was not the case in South Korea or India¹⁰⁸. The eagerness of the Vietnamese authorities to address sex selection is reflected in their large body of laws, ordinances, government decrees, and decisions on the matter. However, we can also detect the perverse effects of these policies on SRB.

The 2003 Population Ordinance, which had a provision to prevent sex selection, seems to have triggered the onset of birth masculinization at a national level. Further policy efforts against sex selection (2006 Gender Equity Law, 2006 penalties against sex selection) line up with the further deterioration of sex ratios, attesting to a strong negative correlation between policies against sex selection and the worsening of the situation (see 6.4.1.). This led us to conclude that Vietnam's anti-sex selection policies potentially triggered the onset in birth masculinization (Guilmoto et al. 2018). While Vietnam has made many efforts to curb sex imbalances, it is too early to assess whether the plateauing trend in recent years is due to policy interventions.

Overall, anti-sex selection policies in the three countries of investigation have contributed to greater awareness in the respective societies, but they have had hardly any positive measurable impacts on sex ratios at birth. Comparing the evidence from these three very different cases, we can attest to the limited efficacy of public policies in correcting skewed SRB. In all three countries public policies did not lead to the normalization of sex ratios as the detailed country analysis has shown. In South Korea, we could not find evidence that anti-sex selection policies led to the SRB decline and in the other two countries, SRBs continue to be skewed towards males, despite many years, and in India's case decades, of policy interventions.

¹⁰⁸ It took India much longer to recognize the seriousness of the issue and mobilize forces against it. The current administration under Prime Minister Modi has shown this high-level dedication with his flagship BBBP scheme.

These findings challenge existing literature in different ways. Den Boer and Hudson (2017, 23) have suggested that an effective “attack” on patrilineal family structures in law and practice made the difference in curbing sex imbalances in South Korea. Certainly, son preference has declined in Korea, but the changes to the Family-Head-System, pension schemes and wider gender equity policies were only introduced after the major drop in SRB.

Guo et al. (2016) noted that Indian policies failed to correct sex imbalances. However, as we have shown, there is positive impact on SRB in some regions, even if these interventions were based on highly masculinized strategies and fell short of tackling the underlying root causes.

Apart from the Hanoi School of Public Health (2012) and the work of the Institute for Population and Social Studies (Nguyen Dinh et al. 2013), not many impact assessments have been carried out in Vietnam due to its recent onset. That is why many scholars have awaited the results of the baseline and endline survey of the Hai Duong policy intervention with great anticipation (Mekong Economics Ltd 2013; DEPOCEN 2016). Vietnamese policy makers have shown a unique eagerness to correct sex imbalances and learn from policy experiences made elsewhere, yet there are not many “best practices” to be shared.

7.2. Patterns of Policy Convergence and Divergence

This lack of policy efficacy has largely gone unnoticed in international circles. In fact, it appears that despite inefficacy, the same public policies against sex selection have been frequently promoted and implemented elsewhere. The concept of policy convergence provides a useful framework to compare the patterns of policy-making across countries (Schmitt 2015). On a macro-level, the global development agenda, along with various international framework agreements and collaborations, have contributed to the growing convergence of anti-sex selection policies. At the same time, at the micro-level, a process of divergence has taken place as similar policy instruments are being introduced to new operative contexts. It is within this complex tension of converging and diverging dynamics that sex selection policies are operating transnationally.¹⁰⁹

¹⁰⁹ See also the related literature on international norm diffusion (Keck and Sikkink 1998; Risse et al. 1999; Prantl and Nakano 2011).

7.2.1. International Harmonization via the Global Development Agenda

Over the years a common policy ‘toolbox’ has been developed and promoted transnationally for how to address sex selection. The potential reasons for this policy convergence can be stated as follows. Early policy responses were largely due to independent problem solving led by South Korea, India and China. By the 1990s, a platform for transnational communication had been created by IOs and experts, which has been principally informed by the UN’s global population and development agenda. Since the 2000s, the UN has provided financial and technical assistance for country representatives to regularly come together to exchange policy experiences on sex selection and sex imbalances. This has allowed countries like Vietnam to draw lessons from abroad and engage in transnational problem solving. The result of this international communication and harmonization has been the convergence of instruments to prevent sex selection.

One of the interesting aspects of ‘international harmonization’ is that it usually involves compliance with international or supranational law (Holzinger and Knill 2005). In the case of sex selection, there is no international law that applies. However, the prevention of GBSS is manifested in several non-binding consensus documents. Thus, their implementation strongly relies on the willingness of nation states to comply with these norms (Kostenzer 2016).

Table 28 gives an overview of almost 40 years of international framework agreements that speak out against gender-based discrimination and condemn implicitly or explicitly the practice of GBSS. As mentioned in the country analyses, the 1994 ICPD Programme of Action is of particular importance. It introduced a major shift in population policies away from quantity issues like slowing population growth to quality issues like enhancing reproductive rights and the lives of individuals. It was also the first international document to mention the harmful practice of sex selection, suggest solutions and call for action among UN member states. The fact that the first UNFPA symposium on sex selection was postponed to await the results of the ICPD highlights its importance (KIHASA and UNFPA 1996).

This table shows that, despite the lack of international policy enforcement mechanisms, the global agenda has been increasing its top-down pressure to encourage equality and prevent gender discrimination before birth. One of the results of these commitments is that more and more governments are harmonizing their domestic policies with international standards, which partly explains the growing convergence we observe.

Table 28: International Agreements on Women’s and Children’s Rights

Year	Agreement	Content
1979	UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)	“Elimination of prejudices and [...] practices [...] based on the idea of the inferiority or the superiority of either of the sexes” (Article 5.a)
1990	UN Convention on the Rights of the Child (CRC)	Protection against all forms of discrimination including the sex of the child (Article 2)
1994	International Conference on Population and Development (ICPD), Cairo	First reference to abortion of female fetuses and harmful practices including prenatal sex selection (Paragraphs 4.15 and 4.16)
1995	4th UN World Conference on Women, Beijing Declaration and Platform for Action	Prenatal sex selection recognized as violence against women (Paragraphs 115 and 116)
2000	Millennium Development Goals (MDGs)	Promotion of gender equality and the role of women (Target 3). Reducing child mortality (Target 4).
2011	Interagency statement by OHCHR, UNFPA, UNICEF, UN Women and WHO	Prevention of gender-biased sex selection and policy recommendations
2013	Conclusions of the 57 th Session of the UN Commission on the Status of Women	First reference to ‘femicide’ leading to Resolution 68/191 against gender-related killings of women and girls, adopted by the General Assembly.
2015	Sustainable Development Goals (SDGs)	Ending of discrimination against all women and girls (5.1). Eliminating harmful practices (5.3)
2017	Global Programme to Prevent Son Preference and Gender-Biased Sex Selection	First global program to strengthen national policies and increase inter-regional dialogue against son preference and GBSS in Asia and the Caucasus.

Source: Rahm (2017).

Several policy experts in all three countries stressed the role of international harmonization through framework agreements. For example, a Vietnamese policy maker stressed that,

“Vietnam respects all the commitments to meet the International Convention, which Vietnam already ratified, [which are] the CEDAW and the Cairo Action Plan” (VN02). In a similar tone a senior Indian government official noted, “All the countries are now basing their health policies, especially the family planning and population policies, [...] on the [ICPD] Cairo Convention, 1994. India is a signatory to that convention and under that, the reproductive rights of women are protected” (IN21). Also Korean experts emphasized the importance of

international guidance. For example, a retired KIHASA representative stated that, “International support is very important. In line with the ICPD agenda, we [the Korean government] abolished the population control policy” (SK01).

Furthermore, the interviewed government officials stressed that international lessons drawing was a common practice in India, South Korea and Vietnam. For example, a former Indian Minister of Health and Family Welfare reported that, “the analysis of SRB data and of what had happened over the years in India and other countries [...] helped the Government to go for [...] the 1994 PNMT Act” (IN29). Similarly, a South Korean government official stated that, while joining the ICPD, he explicitly requested policy advice from the ICPD Secretary General Dr. Nafis Sadik on how to reform population policies in Korea. Sadik personally traveled to Korea to inform policy response on population welfare (PPFK 1996). According to the same informant, after an internal revision process these consultations led the Korean government to “abolished population control policy in line with the ICPD agenda” (SK01). In Vietnam, a representative from the National Assembly’s Committee for Social Affairs noted that “a lot of ideas came from outside” (VN19) and a GOPFP officer confirmed, “We try our best to draw from experiences in order to deal more effectively with SRB imbalance in the country” (VN16). Sex imbalances in Vietnam emerged over two decades later than South Korea and India. By that time, Vietnamese policy makers were already sensitized to the issue and could swiftly issue legislation to outlaw sex selection. International lessons drawing, facilitated by IOs, was key for Vietnamese authorities as the following quote by a senior GOPFP officer illustrates.

“As for the role of international agencies, we will request international agencies to share international experiences in addressing SRB [...]. The international agencies also provide Vietnam with warnings and recommendations on the targeted areas in order to fix the problem. The Government may also request the international agencies for supporting funds to contribute to addressing this issue where possible, but the main focus is [sharing] learning experiences” (VN04).

Among IOs, the UNFPA is at the forefront in facilitating these “learning experiences” by collecting international best practices, conducting research, and informing policy response. According to a UNFPA Vietnam official, “we already did a review on lessons learned and good practices from other countries to see whether they would be applicable for Vietnam or not. But we didn’t find any good practices to address the SRB issue. We know that India and China have also provided incentives for families having only daughters, but so far no evidence has shown the positive effects [on SRB]” (VN08).

The international community has engaged in transnational communication through various channels (e.g. technical and financial assistance, regional networks, expert meetings, consultancies, policy briefs, and publications) to share policy experiences and promote similar instruments since 1994. Their recirculating messages were derived from the global population and development agenda. This trend has contributed to international harmonization and the growing convergence of anti-sex selection policies.

7.2.2. Diverse Strategies: Focus on Motives, Methods, or Magnitudes

Due to international harmonization and lessons drawing, the three countries adopted similar policies. However, interestingly, South Korea, India and Vietnam have emphasized certain instruments over others. Being at different stages in their SRB transition has contributed to the fact that the three countries have followed unique context-dependent strategies in addressing sex selection and sex imbalances.

The three governments have introduced similar policy instruments in unique ways depending on their unique position in their sex ratio transition. Since SRB has normalized in Korea, the government is no longer concerned with sex selection, but rather deals with the long-term consequences. Meanwhile, India responded to sex selection early on by outlawing the practice. In contrast, Vietnam has learned from the experiences made elsewhere and has stressed the need to raise awareness in the society to change the mindset of people. We shall visit these distinct focal areas one by one starting with Vietnam.¹¹⁰

The Socialist Republic of Vietnam, as a “newcomer” in skewed sex ratios at birth, has focused on addressing the motives behind sex selection and raising awareness in order to tackle sex selection at its root. It has developed a strong top-down, multi-stakeholder policy approach towards sex selection since 2003. The policy approach was developed with the help of UNFPA and incorporates many of the international and academic community’s ‘lessons learned’ based on developing a humane and sustainable change in sex-selective behavior through education and awareness-raising over the long-term. The goal is to address the reasons behind sex

¹¹⁰ It is important to note that all three countries have addressed sex selection from various angles including supply-side and demand-side measures, or as proposed here, measures targeting the *motives*, *methods* and *magnitudes* of sex selection. Yet, they have prioritized certain instruments over others.

selection by promoting gender equality, while turning a blind eye on the enforcement of the legal ban.

The Republic of India, in contrast, has had a skewed SRB for decades and has focused much more on restricting access to sex-selective methods. India's response to sex selection is principally through a strong legal ban on sex determination, the PC&PNDT Act. Having gone through multiple stages of legal revisions and political activism showing limited improvements, the Indian government now recognizes that sex selection may not be effectively tackled by a simple supply-side approach. As one Indian government official put it, "the problem is that we have never acknowledged in the past 25 years that technology is going to outpace any legal intervention" (IN27). Indian policy makers have broadened their approach to awareness-raising campaigns and multi-stakeholder interventions targeting the most affected regions. In sum, the government has chosen to maintain its course of 'attacking' sex selection methods, but it has also branched out to addressing the underlying motives and long-term consequences linked to marriage squeeze.

Lastly, the Republic of Korea has moved its emphasis to addressing the magnitudes of sex selection, since the phenomenon is no longer practiced in Korea. Back in the late 1990s, the government approached sex selection from various angles by introducing awareness-raising campaigns, legal bans and gender equity laws (see above). Nowadays, the government is more concerned with low fertility and international marriage migration, which can be considered partly a result of more than two decades of missing women. The Korean government has thus been eager to addressing the long-term consequences of sex selection by regulating the influx of international brides and promoting larger families through a pro-natalist population policy, while the practice itself is seen as a problem of the past.

The major reason why the three countries have focused on diverse strategies in tackling sex selection is related to the unique timing in their SRB transition, (policy) history, path dependency and because of lessons drawn from the policy experiences made elsewhere. Contrasting the cases of India and Vietnam is of particular interest, since both countries are still confronted with sex imbalances, but they have prioritized opposite paths in countering sex selection.

7.2.3. Soft State, Hard Hand – Hard State, Soft Hand

India uses a “hard hand” by investing heavily in the enforcement of the PC&PNDT Act and the punishment of doctors. Numerous Indian officials have stressed the need to spread “fear of the law” to raise awareness through rigorous law enforcement. In locations where SRB improved implementers reported that, “It was the fear of law which ultimately forced people to change their attitude” (IN16). Especially in Punjab, where sex ratios are strongly skewed towards males, interviewees reported that some officials went “explosive” (IN21) and that fear was spread to an extent of “terror” seeking to “create panic in the culprit’s minds” (IN16). According to the interviewees the “hard hand” was necessary to bring about change. The government has invested heavily into sting operations, monetary incentives to reveal sex selection offenders and the rigorous enforcement of the sex selection ban – even though there are large disparities in their implementation. Despite this, India has been often portrayed as a “soft state” and has a long history of local resistance to centralized control (Myrdal 1970).

This approach stands in sharp contrast to the “hard state” of communist Vietnam that has chosen to use a “soft hand” through awareness-raising to change the mindsets of people. The Vietnamese government aims to address GBSS rather by promoting gender equity than by banning sex selection. Especially in Hai Duong, where sex ratios are strongly skewed towards males, interviewees reported that changing the mindset was much more pertinent than the law enforcement of the legal ban. For example, a representative of the Hai Duong People’s Committee stated, “In order to address these problems, it very much depends on the attempts taken to change the cultural norms or the perception of the people about their son preference” (VN33). A senior representative of the Hai Duong Office for Population and Family Planning confirmed that, “No one has ever been sanctioned in both financial terms and license terms” and that “the toughest challenge comes from people’s perception [...] and it will take time to address this issue” (VN29).

It is noticeable that the two countries have opposed stands on the feasibility and implementation of their legal bans. India’s approach follows a short-term strategy of being vigilant for any incident of sex selection. For example, a former Indian Minister of Health and Family Welfare stated, “Now everywhere they are saying, ‘monitor women, monitor pregnancies’” (IN29). Meanwhile, the Vietnamese authorities do not believe that such an attempt is feasible, even though their population is much smaller and less diverse than India’s: “It is quite difficult to control the implementation of the law, because it is not easy to go to the clinic to catch the right

moment of telling the couple about the sex of the baby” (VN33). Instead, Vietnam’s approach aims at changing son preferring attitudes in the long-term.

While Vietnam showcases a carefully crafted intervention that seeks to protect rights and tackle sex selection holistically, India showcases a politically much more aggressive approach, which partly risks to infringe women’s reproductive and privacy rights at local levels. Interestingly, both countries seem to both have adopted instruments at cross-purposes to their styles of governance. In each case they seem to have chosen policy approaches that conflict with the strengths and weaknesses inherent in their governance styles. Vietnam – due to its political system – could much more easily make use of a strong top-down control than a country so vastly diverse as democratic India. Thus, we must look beyond the unique socio-cultural and political county features. In order to explain the differences and similarities of policies against sex selection, policy transfer and its limitations must not be ignored.

7.3. Processes of Policy and Knowledge Transfer

In order to better understand the underlying processes that can lead to similarities and differences in policy landscapes across nations, we need to explore the role of policy and knowledge transfer and its limitations. The transfer of knowledge is much more frequent than the transfer of policies and programs. Often the transfer processes include a certain distortion of the original messages, as the transferred content gets “translated” to fit the novel context at the recipient end (Stone 2012). Drawing from the qualitative interviews and existing literature, we can easily detect this tendency to translate policy to fit unique situations. We first turn to the frequently promoted emulation of the Korean case, and then present concrete examples of policy transfer between India and Vietnam. We close with the opportunities and shortcomings of policy and knowledge transfer.

7.3.1. Emulation of the Korean ‘Success Model’

Since Korea is one of the first countries, where sex ratios at birth returned to normalcy, the emulation of the Korean model has been frequently promoted. Literature that portrays South Korea as a (policy) “success story” (WHO 2011) in curbing SRB has been reproduced without being put into question. For example, Conly (2016, 201) called Korea “a modern success story in terms of sex ratios at birth” and Konner (2015, n.a.) affirms, “The biggest success story is South Korea, which has left the ranks of skewed sex-ratio countries, after being worst. South

Korea officials enforced severe penalties for physicians offering sex selection, and they campaigned to change patriarchal attitudes and give women well-paying jobs.” As a consequence, a common narrative has evolved that SRB declined, because the Korean government introduced early and effective policy measures (see Box 18).

Box 18: The Story Behind the Story: Evolution of Korea’s ‘Success Story’

The Korean example has been frequently portrayed as a “success story” by scholars and international agencies (WHO 2011; Konner 2015; Conly 2016; Yoo et al. 2017). The narrative can be traced back to the following source:

“The major reasons of the [SRB] decline can be stated as follows:

- 1) Strong government interventions. Korean law prohibits testing to identify the sex of a fetus. Strong policy measures to prevent prenatal sex screening and sex-selective abortion have been implemented through medical guidelines, norms and codes. Harsh penalties and regulations have been imposed for violations since 1992. Some of the doctors who conducted illegal sex-selective abortions were stripped off their medical licenses and prosecuted for their acts.
- 2) Massive media campaigns. The media campaigns, widely conducted from the beginning of 1991, were successful in encouraging couples to change their attitudes towards sex-selective abortion in a short period of time.
- 3) Long-term policies. They were aimed at reducing sex discrimination against women. Strong efforts have been made to bring about changes in gender role norms, values, and attitudes as well as to improve the status of women through effective programs of education and employment” (Kim 2004, 870-871).

According to this senior Korean demographer the major reasons for the SRB decline were the combination of “strong government interventions” to ban sex determination, “massive media campaigns” to change peoples’ attitudes, and “long-term policies” to improve women’s status “through effective [educational and employment] programs.” In this short excerpt, government interventions are frequently described with adjectives such as ‘strong,’ ‘harsh,’ ‘successful’ and ‘effective.’ The author uses hyperbole as a rhetorical device in order to exaggerate the impact of policy interventions. We underlined related sections in the text.

This narrative was repeated to a lesser degree by another demographer, who stated in an UNFPA report that,

“South Korea’s success probably illustrates the fact that reduction in discrimination against girls is neither spontaneous nor the product of a single strategy. The government not only banned sex-determination test in 1987 (and reinforced the law in 1994), but it also launched important mass-media campaigns starting in 1991. During the same period, deep changes, following 20 years of exceptional economic growth, were affecting Korean society and contributing to increasing women’s autonomy” (Guilmoto 2007, 12).

The narrative was further reproduced in the widely circulated interregional statement on Preventing GBSS under the headline “The Republic of Korea – a success story” (WHO 2011, 8). The World Health Organization cited Kim (2004) as its main source, when stating,

“Several laws – such as allowing women’s rights and responsibilities within their birth family even after marriage, and recognizing women-headed households – were seen to be beneficial, as was a Love Your Daughter media campaign. In addition, the highly organized and controlled health system in the Republic of Korea was able to regulate sex determination tests more effectively than is the case in China or India (Kim 2004)” (WHO 2011, 8).

This WHO reference has further accelerated the spread of South Korea as a policy “success” model. Numerous scholars, media outlets and policy makers have reproduced this narrative thereafter (Agnihotri 2015; Konner 2015; Conly 2016; Yoo et al. 2017). As it turns out, the ‘story behind the story’ has been more successful than the Korean model itself.

Source: based on literature review, emphasis added.

Our analysis shows that anti-sex selection policies are wrongly attributed to the SRB’s normalization in South Korea. Korean authorities show little interest to revisit the case and assess the impact of past policies on past problems (see 4.6.2.), even in the face of significant and growing international interest to learn from the Korean model (European Union 2015). This lack of verification, or verifiability, and the lack of precise details about concrete Korean interventions have created ‘mutations’ in the Korean “success story.” As the consequence, the Korean emulation has been suggested to fit many contexts. For the sake of political capital or bargaining power, policy-makers have used the Korean emulation to promote their opposing policy agendas.

In India, for example, the South Korean case has most often been used to promote the rigorous enforcement of the PC&PNDT Act. The narrative has been that the Korean sex determination ban was rigorously enforced and for the Indian ban to be equally effective, it would also need

to focus on rigorous law enforcement of the PC&PNDT Act (Government of India 2018). One Indian policy-maker suggested the emulation of South Korea's experience to "put doctors behind bars [...] and send a very strong message to the medical profession" (IN06). However, against this common belief, South Korea never strongly enforced its sex determination ban (see 4.4.). Other senior Indian policy-makers have emphasized that only supply-side measures will not cure India's sex selection problem and instead have spoken out for the emulation of the Korean experience to 'learn from the demand side' (Agnihotri 2015). Again, assuming that 'demand-side' policies against sex selection were effective in curbing sex imbalances in South Korea is misleading. Korea introduced awareness-raising campaigns and related policy changes (e.g. abolishment of the family head system) largely after the SRB declined (see 4.4.2).

Policy emulation can thus be used not to actually emulate what has been carried out elsewhere or what has been effective or not, but simply as a discursive technique to gain political or public support for certain agendas. We can see that the Korean model has indeed served multiple policy agendas within India, but its popularity extends much beyond India.

Vietnamese authorities also expressed interest in learning from the Koreans. According to a senior Vietnamese government official from the General Office for Population and Family Planning (GOPFP), IOs often provide information about international policies experiences that may serve as a role model for lessons drawing and emulation as the following quote shows,

"We will request international agencies to share international experiences in addressing SRB, especially from South Korea, which is a success case. Taking a specific example, the National Assembly invited population experts from South Korea to come here to share the experience and solutions that have been applied in order to address this issue" (VN04).

Drawing lessons and adopting the Korean model has been frequently discussed not only in India and Vietnam, but also in other countries such as Albania or China (UNFPA Albania 2012; Chung and Das Gupta 2007). One Korean scholar reported that Chinese colleagues would often approach him wanting to know what 'clues' they were missing: "We tried to do everything you did, but it doesn't work here in China compared to South Korea" (SK02). The same interviewee indicated that he would respond to similar inquiries from other nationalities with, "You have a very wrong assumption [...]. It's not that difficult to get the list of [our] action programs, but if you apply those same policies to your people in your country, it's not guaranteed that you will have the same effect" (SK02). The interviewee pointed to the limitations of policy transfer and

emulation by stressing that policies cannot be expected to show similar effects in diverse settings, while neglecting policy inefficacy in its original context.

One specific Korean campaign, the “Love Your Daughter” campaign, received particular attention and calls for emulation. As we have seen, this campaign goes back to the “Festival to Promote Love of Daughters to Restore Natural Sex Ratio,” which involved only 150 people in celebration of the 45th anniversary of the Planned Parenthood Federation Korea. The event took place in 1997 and was repeated 1998 (with the same number of people). By 1997, however, the SRB trend had already drastically declined. Much of Korea’s anti-sex selection policies came too late to have had an impact on the SRB. Moreover, several official awareness-raising campaigns in South Korea involved a pro-life / anti-abortion messages¹¹¹, which is being ignored when speaking out for the emulation of the Korean case. Nevertheless, international agencies and policy makers frequently hold on to this narrative, in need of showcasing “best practices” or promoting their diverse policy agendas.

7.3.2. Cases of Policy Transfer and Translation between India and Vietnam

While the emulation of the Korean model has remained largely on a discursive level to promote certain policy stands over others, we can also detect concrete cases of policy transfer across countries. During field research the author came across training models and policy interventions being exchanged between India and Vietnam.

One example of such transfer processes is the “Doctor for Daughters” Campaign that was carried out by UNFPA in collaboration with the Indian government to sensitize the medical community about GBSS. This campaign has been translated to Vietnamese with the help of UNFPA. The Indian content has been adapted (or “redesigned”) to fit the Vietnamese context through consultation rounds with Vietnamese stakeholders. According to a Vietnamese GOPFP officer, “we are redesigning the books [named] ‘Doctor for Daughters’ of India and we [will] soon hold a training course for health workers and doctors on that” (VN16). He continues with,

¹¹¹ For example, a 1997 poster campaign stated, “I want to be born with the blessing of mama and papa. I am frightened of abortion for being a girl. Please protect my life” (PPFK 1998, 15). A 1998 slogan read, “Life is [...] born not by selection but by love” (PPFK 1999, 19) and a 1999 campaign emphasized, “I don’t want to be written off! Induced abortion is really an action to write off a life” showing both a girl and a boy that are crossed out (PPFK 2000, 18). See 4.3.4.

“UNFPA introduced that book to us. It was successful in India and it was specifically designed for the health worker.” (VN16).

During field research in Vietnam, the author participated in the “training course for health workers and doctors” mentioned above. The reactions of Vietnamese doctors towards the training were very mixed, ranging from very positive to very negative impressions. During field research in India, the author did not come across any evidence that the original “Doctors for Daughters” campaign had shown particular success. The transfer of training materials is indeed nothing new. Informants from the Planned Population Federation of Korea (PPFK) reported that UNFPA transferred a South Korean training course on lowering fertility to developing nations between 1987 and 1997 (SK16).

Another example can be found in the “Join hands to address the Sex Ratio at Birth imbalance” which was rolled out in Vietnam in October 2014 and included nationwide communication activities. The Vietnamese government and UNFPA jointly organized this first national campaign to raise awareness about sex imbalances in Vietnam. The closing ceremony of the campaign ended with a bike rally of several hundred participants through Hanoi and was spearheaded by senior GOPFP officers and UNFPA staff.

After having participated in this particular event in Vietnam in October 2014, the author continued field research in India, where a very similar campaign with a very similar slogan was carried out 4 months later. The NGO Breakthrough in cooperation with the Ministry of Women and Child Development and UNFPA jointly launched the awareness-raising campaign “Men and Women Bikers Join Hands to Raise Awareness about gender-biased sex selection” in Haryana in February 2015. Unlike in Vietnam where the campaign was spearheaded by male government authorities on bicycles, Indian participants used motorbikes and were led by an “iconic female biker” (Breakthrough 2017, see pictures below).

It is a natural tendency to get inspiration from elsewhere. Lessons-drawing is explicitly promoted by UNFPA and we can find traces that similar campaigns are carried out in different countries with their support. These campaigns are adapted to local realities with the help of local stakeholders in charge of their implementation. While the process is the same, the stakeholders are different. In India, UNFPA cooperates with an extended network of NGOs. Due to the political conditions and the absence of NGOs, this is not possible in Vietnam. Instead UNFPA Vietnam cooperates with different Vietnamese Unions (such as the Women’s Union, Farmer Union, etc.) and the Vietnamese government as its main ally.

Figure 52: ‘Joining Hands on Bikes’ to Raise Awareness against GBSS



Sources: 2014 Bike Rally to “Join hands to address the Sex Ratio at Birth imbalance,” Vietnam (left) and 2015 “Men and Women Bikers Join Hands to Raise Awareness on GBSS,” Haryana, India (right) (Breakthrough 2017; UNFPA Vietnam 2014b).

Above we gave two examples of how policy interventions and campaigns are translated cross-nationally with support of UNFPA. What is interesting about these two examples is that India exports its “methods-based” approach to Vietnam (e.g. training materials for doctors to enhance law enforcement of the legal ban on sex selection), and Vietnam its “motives-based” approach to India (e.g. awareness-raising campaign to change mindsets). While the UN’s mandate is to assist the governments in their respective strategies, the UNFPA explicitly supports policy convergence by promoting policy transfer transnationally. Given the fact that India and Vietnam are following opposing strategies on how to address sex selection (India going after methods and Vietnam going after motives), the process of borrowing policies from each other contributes to patterns of ‘convergence in divergence’¹¹².

7.3.3. Opportunities and Shortcomings of Policy Transfer

We have shown that there is a tendency to promote and transfer anti-sex selection policies despite policy inefficacy in the original context and different strategies on how to address sex selection. Overall, this trend provokes reflections on policy transfer and its limitations. Certainly, it is a welcoming trend that laws, policies and interventions are implemented to promote gender equality and counter gender discrimination. Governments are complying with international human rights, norms and standards (Keck and Sikkink 1998; Joachim 2007). The

¹¹² The concept of convergence in divergence is used in Information and Communication Theory to describe how systems become similar to varying degrees (Miike 2007).

global shift towards equal family laws, equal inheritance rights, financial schemes for girls, awareness-raising campaigns and the clear mandate of the government that sex selection is undesirable, these are all signs of this positive trend. The policy ‘toolbox’ we described above is a reflection of available policy instruments at hand. Nevertheless, we have seen that there is the danger of reproducing and transferring policies without being certain of their impact or transferability. An overview about the advantages and disadvantages of policy transfer is given in Table 29.

Table 29: Advantages and Disadvantages of Transnational Policy Transfer

Advantages	Disadvantages
<ul style="list-style-type: none"> • Exchange of knowledge and experiences • Cost efficiency • Policy leverage (quicker introduction and adaptation thanks to international lessons learned) • International / regional collaborations with inherent peace building function • Dialogue/diplomacy/joint problem-solving 	<ul style="list-style-type: none"> • Standardized policy recommendations without local adaptation • Search for “quick fix” not “best fit” • Preconceived conception of the problem • Country specific root causes (and potential solutions) are neglected • Local stakeholders are not adequately engaged in policy design • Uncertainty about policy efficacy and transferability

On the one hand, there is an added value when knowledge on policy experiences is being shared cross-nationally. First, policy transfer can enhance cost efficacy by reducing spending on policy design, testing, monitoring and evaluation before national rollout. It can also help stakeholders to quickly recognize sex selection as a policy problem and respond to it as we have seen in the case of Vietnam. Regional and international collaborations also strengthen diplomacy and dialogue between countries and serve as peace-building strategies. It allows countries to come together to jointly solve increasingly transnational policy problems.

On the other hand, policy transfer has its limitations. One major criticism regarding this approach is that standardized policy recommendations run the danger of ignoring local realities and thus lack local acceptance and impact. As McGinnis and Aligica (2015, p. 94) point out, “a common source of policy failure lies in efforts to formulate and implement general solutions in total ignorance of the local conditions.” Transferred policies run the inherent risk of being ‘quick fixes’ rather than ‘best fits.’ They also involve preconceived conceptions of the policy

problem itself and how it should be effectively addressed, without analyzing country-specific root causes and potential solutions. Furthermore, national and local stakeholders can feel overruled by international experts explaining local problems and solutions. There is also the danger that local stakeholders are inadequately engaged in the policy design process and ultimately end up resisting policy. Besides, policy transfer is used as a discursive element to suit diverse political agendas, which purposely or not ignores uncomfortable details (e.g. the lack of policy efficacy, pro-life messages) as we have seen in the emulation of the Korean case. The most convincing argument, however, against policy transfer here is the lack of evidence that policy interventions against sex selection are actually effective. Countries may be better-off with innovation by choosing a less beaten path. It may be that the systematic adaptation of policies developed on national grounds and within the same cultural contexts will provide a better chance of addressing sex selection than the wholesale adoption of foreign policies. In short, international policy transfer seems only justified if there is evidence not only that the respective policy was effective in its original domain of application but also that it is likely to be effective when translated to foreign domains. Transferring policies without proof of efficacy is unlikely to lead to ‘better,’ much less “best” practices. As a result, instead of drawing lessons from elsewhere, concerned countries should not be afraid to innovate.

7.4. Conclusion: Policy Convergence or Divergence in Disguise?

This chapter provided a cross-country comparison of the policy response to sex selection. This comparison revealed that each country followed diverse policy intentions ranging from protecting fetal rights in Korea, to women’s rights in India, to a balanced population structure in Vietnam. The comparison also revealed that South Korea, India and Vietnam all responded with similar policy instruments. These instruments including legal bans, awareness-raising, gender equity laws, research and incentives are typically implemented in concert over extended periods. The cross-country analysis also revealed that all of the policies, deployed for whatever intent and through whatever instruments, fell short on impact. In general, they did not deliver what they were designed to do: to improve sex selection. Although SRB normalized in South Korea, this was not due to policy changes. Neither India nor Vietnam has been able to reverse their sex selection trends to date.

Despite policy inefficacy in curbing SRB, IOs and epistemic communities have frequently promoted the same policy ‘toolbox’ via the global development agenda to international harmonize policy interventions across vastly different terrains. We have observed that policy

transfer has created a level playing field towards policy convergence. However, we also noted that there is room for policy translation, adaptation and different focal areas in how the three countries aim to deal with sex selection and its consequences. While all three countries have tackled sex selection from diverse angles, they have prioritized certain areas over others in the 3-M-Model. South Korea has focused on the magnitudes, India on methods and Vietnam on motives. The specific weighting of the combination of instruments implemented reflected the different SRB transitional stages the countries were in.

The large literature on policy convergence and policy transfer (Dolowitz and Marsh 2000; Holzinger and Knill 2005; Kwon 2009; Stone 2012) allows us to better understand policy patterns (e.g. the growing convergence of anti-sex selection policies over time) and possible underlying policy processes (e.g. the role of policy transfer and diffusion) (Schmitt 2015).

However, scholars have also criticized these concepts. For example, Wong (2017, 1) has asked, “Are Policy Diffusion, Policy Learning and Policy Transfer Real?” He argues in his working paper for the concept of “agencification,” according to which sovereign states have their own agendas, mandates, paths dependencies, socio-cultural, economic and political backgrounds that shape their respective policies, irrespective of where they come from or why and how they have previously been implemented. According to Wong (2017, 1), “many practices of public policy and management are only converging at a minimum level and the key elements and effects are often pointing to the exact opposite direction of divergence which is a manifestation of the contextual factors in a local context.”

We can observe a similar scenario with anti-sex selection policies. Policy instruments are converging due to global processes linked to international harmonization, policy and knowledge transfer, but the degrees to which different instruments are implemented and prioritized all diverge. We have seen that South Korea, India and Vietnam have introduced similar policies in response to their growing levels of demographic masculinization. More importantly, however, we could show the great differences in their governmental strategies to carry out these interventions, which are due to diverse contextual factors including the unique timing of their sex ratio transition, (policy) history, and path dependency.

While South Korea was the first country to overcome its skewed SRB, the government is still concerned with the long-term consequences of the phenomenon. In contrast, India and Vietnam still face sex imbalances. Both countries have tried to emulate the Korean experience by adopting similar policies, yet with different priorities. Thus, despite a common policy ‘toolbox,’ Vietnam, India and South Korea have followed diverse strategies through tackling the motives,

methods or magnitudes of sex selection. Especially India and Vietnam have followed opposite directions, but increasingly borrow and translate policy ideas from each other, which again contributes to convergence in divergence.

At a first glance, we see a global trend towards policy convergence. At a deeper level, the actual policy intentions and implementation strategies vary significantly across countries due to diverse contextual factors and priority lines. With this research we hope to contribute to a better understanding of the tensions between cross-country policy convergence and divergence in addressing sex selection.

8. General Conclusion: Limited Evidence that Policies Normalize SRB

This thesis assessed the influence of public policies on gender-biased sex selection in selected Asian countries. South Korea, India and Vietnam were chosen in a Most Different Systems Design. The focus was placed on regional case studies (Daegu, South Korea; Punjab, India; Hai Duong, Vietnam), where similar policies have been implemented to address severely skewed sex ratios at birth. Combining semi-structured expert interviews with policy experts and quantitative data on sex ratio trends, we assessed the effectiveness of regional and national policy interventions. We found that anti-sex selection policies had limited impact on normalizing sex imbalances at birth in the three countries.

In South Korea, anti-sex selection policies did not reduce sex imbalances. Contrary to common belief, the sex determination ban was never strongly enforced and it did not change the behavior of medical practitioners engaged in sex selection. Policies also did not change the behaviors of sex selecting families because awareness-raising campaigns and broader gender equity laws were largely issued after the major decline in SRB. Policy interventions in South Korea came “too little, too late” to have had an impact on SRB. This was especially visible in the regional case study of Daegu. The quantitative analysis shows that SRB started to decrease one decade before (minor) interventions were carried out. The qualitative assessment revealed that medical professionals were engaged in cartel building and price fixing of sex-selective services. Their lucrative “business” declined after the mid 1990s because of reduced demand for sex selection.

In India, anti-sex selection policies showed evidence of reducing sex imbalances at the local level due to strong leadership and bottom-up action. The quantitative analysis shows that the Nawanshahr Model had a significant positive impact on SRB in SBS Nagar, compared to surrounding districts and the state of Punjab at large. The qualitative assessment showed that the combined forces of ‘fear of the law,’ political leadership and community mobilization changed sex-selective practices in this district. However, the intervention also produced negative unintended side effects through pregnancy tracking and is therefore largely non-replicable. At a national level, policy impact is inconclusive due to data constraints and the countries heterogeneity. While SRB is improving in some heavily treated regions, it is deteriorating in other parts of India. My research also finds that state action against sex selection frequently follows the logic of protecting, tracking and emancipating females – analogous to

the roles of a family patriarch towards his kin – and thus reproduces gender biases and undermines policy efforts against sex selection.

In Vietnam, anti-sex selection policies are likely to have triggered the onset of sex imbalances at a national level. Additionally, anti-sex selection policies also coincide with the further deterioration of sex imbalances. This points to the perverse effects of the sex selection ban on sex-selective practices. At a regional level, UNFPA informed policy interventions were implemented after 2012, following a top-down, long-term strategy of changing mindsets. The quantitative assessment of the Hai Duong intervention produced neither reliable nor convincing results that these efforts have been effective in changing attitudes and behavior of people in the intervention area compared to the control area. The qualitative assessment showed that the regional policy intervention was reproduced and scaled up at national level with the support of UNFPA, despite its inconclusive policy impact.

In sum, we can attest to limited evidence that sex selection policies correct demographic masculinization in the three countries. The major findings of this thesis in regards to policy intentions, instruments and impacts are summarized in Table 30.

Table 30: Summary of Research Findings

	South Korea	India	Vietnam
<i>Policy Intentions</i>	Fetal rights, individual rights	Women’s rights as a group	Balanced population structure
<i>Policy Instruments</i>	Ban, IEC, Equity laws → Focus <i>Magnitudes</i>	Ban, IEC, Equity laws, CCTs → Focus <i>Methods</i>	Ban, IEC, Equity laws → Focus <i>Motives</i>
<i>Policy Impacts</i>	Ban did not change medical behavior. Reduced demand for sex selection. Gov. concerned with alleviating long-term consequences of sex imbalances.	SRB improvement in some areas due to strong <i>bottom-up</i> and short-term action with unintended side effects on privacy and reproductive rights.	Ban possibly triggered SRB onset. <i>Top-down</i> action with long-term strategy. Too early to measure impact.

8.1. Revisiting the Research Hypotheses

This dissertation was guided by the following two hypotheses: (1) public policies show limited efficacy in restoring sex ratios at birth, and (2) policy instruments and ‘best practices’ are being transferred from one country to another with the help of IOs and epistemic communities without strong evidence of their effectiveness.

We were able to support these two hypotheses with our analysis. Regarding (1), we have shown that public policies had limited efficacy in reducing SRB in the three countries of investigation. In the only case, where we could detect positive policy impact on SRB, the intervention was largely non-replicable due to irreproducible conditions and negative side effects (e.g. India). Regarding (2), we have shown that the same policy instruments are promoted and transferred transnationally with the help of UNFPA and a research community that has been reproducing the same policy prescriptions for over two decades. The South Korean case stands out because it has been frequently promoted and used to inform diverse transnational policy agendas, while neglecting the limited efficacy and anti-abortion agenda of the Korean model. Furthermore, we presented concrete examples of how policies and interventions have been transferred and translated between India and Vietnam.

We have also shown that international stakeholders influence anti-sex selection policies at different stages of the policy cycle: from agenda setting, to policy design and formulation, to implementation and evaluation. On the one hand, international collaboration to tackle sex selection has facilitated transnational policy and knowledge transfer, where training modules, intervention packages and advocacy strategies are shared between the countries. This atmosphere has contributed to a growing trend of policy convergence. On the other hand, local complexities force policies to diverge. Governments interpret these policies to fit their own policy intentions and implementation strategies. In order to conceptualize the diverse levels of context and influence, we were in need of a strong conceptual framework to guide this analysis. We now revisit the conceptual framework we introduced at the beginning, and point to the implications of our findings for IOs and future research.

8.2. Revisiting the Conceptual Framework

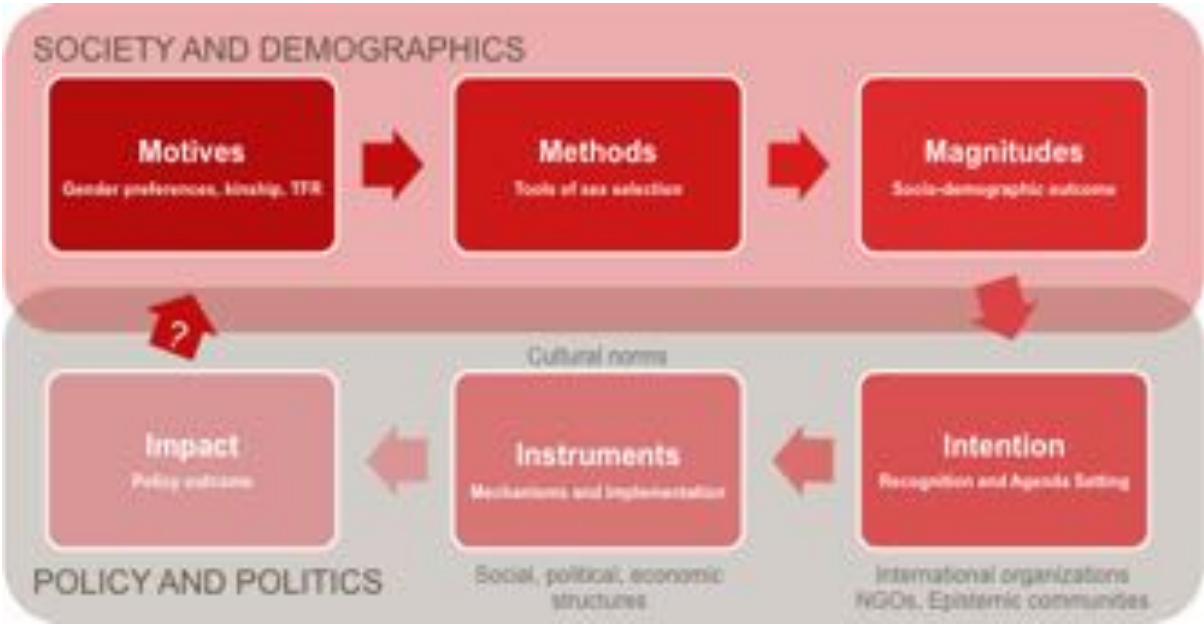
Sex selection does not exist in a vacuum but must be seen in a broader context of gender discrimination. Governments need to tackle gender discrimination as a whole and strengthen women's rights in all spheres of society to counteract the problem in the long-term. In the words of an Indian scholar:

“The belief that any particular policy can cause a shift in outcomes, which are so complex and so deeply behavioral and societal, needs us to really push [for] a very strong theoretical framework on why that policy can create that effect [...]. When you look at the cause or effect of one on the other, you might be picking up a lot of environmental effect, which you are not able to control for” (IN27).

We have therefore built this research on a strong conceptual framework that has allowed us to concisely represent a complex system and has guided us through the entire thesis. Now that all pieces are on the table, we apply our results to this conceptual framework as promised in the Introduction.

Sex selection is a socio-demographic phenomenon that emerges in societies, where family systems are built on common motives that lead couples to choose sons over daughters (e.g. son preference, patrilocal/patrilineal kinship systems, low fertility). Couples also need to be given access to the methods that allow them to sex select (e.g. ultrasound used for sex determination followed by sex-selective abortions). As new methods emerge, these can influence people's desire or motives. For example, for most people killing a female infant would not be an option. However, they may feel different about aborting or undergoing preconception IVF treatment in order to obtain a child of a particular sex. With each earlier stage of selection, the ethical or moral barriers decrease. If the practice is then done on a large scale, the magnitude of sex selection begins to affect the socio-demographic composition of the concerned country and becomes visible in skewed sex ratios at birth. I call this the 3-M-Model, referring to why, how and to what extent couple's sex select (see Figure 53).

Figure 53: Conceptualizing the Intersection of Sex Selection and Public Policies



Once policy makers recognize the magnitude of sex selection (or any of the 3-M’s) as a problem, policies are often initiated to restore a natural balance. IOs and epistemic communities contribute to this early stage of problem recognition and agenda setting through research and advocacy (Stone 2004). The intention behind public policies, meaning the reasons why sex selection ought to be addressed, differ from one country to another, as policy makers interpret or define the nature of the problem in district ways and give priority to certain issues over others.

After the agenda-setting stage, policy instruments are formulated and selected. Which policies are ultimately being adopted depends on various factors, including windows of opportunity but also path dependencies that inform future policy options. Common instruments against sex selection include (a) gender equity laws, (b) adjustment in fertility control policies, (c) information and education campaigns (IEC), (d) bans on sex selection or sex determination for doctors or patients, (e) government incentives or (f) specific targets to balance SRB at a given locality. These policies target different aspects of sex selection: (a-c) are linked to motives, (d) to methods, and (e-f) to the magnitudes of sex selection. Policies are influenced by the unique cultural, socio-economic, political and legal contexts they are deployed in. Their outcomes (impact) need to be tested against the changes in the extent of the practice. In a sense, the 3-I’s (intentions, instruments, impact) in the policy sphere mirror the 3-M’s in the socio-demographic sphere and can be reduced to why, how and to what extent policies address sex selection.

This conceptual framework thus forms a bridge between socio-demographic factors of sex selection on the one side, and policy and politics on the other. It condenses many different aspects of the policy cycle – from agenda setting to formulation to decision-making to implementation and evaluation – into three compact categories. Certainly, the framework is a simplification because social and political systems are never static. They are highly dynamic, interconnected systems that do not exist in a vacuum.

As such, different feedback loops and diffusion trajectories are at play. For one, there are feedback loops and co-dependencies within and across both spheres that are not illustrated by the red arrows in Figure 53. To give some examples: Methods can feedback into motives. The introduction of technology can create new, previously impossible, desires to influence reproductive outcomes. One example is the introduction of in-vitro fertilization, which has given well-off people the option to sex select even before conception. Likewise, instruments can feedback into policy intentions. “Sometimes problems achieve agenda standing when they are defined as well suited for the application of a policy approach already well established and widely supported. In this sense, it is said, solutions give rise to problems, as well as the other way around” (Rocheftort and Donnelly 2015, 192).¹¹³ To give yet another example of feedback loops, policy impact ideally leads not only to the desired changes in the socio-demographic sphere, but also feeds back into policy making through learning from policy successes and failures (McConnell 2010). As such, the forward arrows in the conceptual framework are simplified to reflect the general direction of causality, not its many nuances.

Regarding diffusion trajectories, sex selection first appears among pioneers, the elite and wealthy, who are the first to be exposed to new technology and information. Doctors and politicians are usually part of that elitist group. Some scholars have suggested that policy makers may witness sex selection in their own families and therefore may be hesitant to recognize the practice as a problem.¹¹⁴ Over time more people imitate and engage in the same behavior until the market is saturated (see Rogers 2003). Sex selection becomes less desirable as the negative social consequences of sex imbalances begin to offset the individual gains that were initially achieved by sex selecting. We can mirror the same idea on the policy side. Policy

¹¹³ One example how “solutions give rise to problems” can be seen in the Population Ordinance triggering the SRB onset in Vietnam.

¹¹⁴ Guilmo, personal conversation, 13.04.2017. Prior research indicates that certain groups (e.g. educated, wealthy, doctors, etc.) show on average higher sex ratios at birth than the overall population (see e.g. Patel et al. 2013).

pioneers take the lead by introducing new policies to tackle a new problem, and other countries follow suit until the trend eventually decreases.¹¹⁵ If policy pioneers overemphasize initial success, this can lead to the transfer of policies despite lacking evidence of their efficacy. These findings have important implications for IOs and future research.

8.3. Implications for International Organizations

The WHO expressed in its first interagency statement on GBSS that, “Governments have [...] already taken action in a number of ways, with varying degrees of success, and there are lessons that can be learned from this” (WHO 2011, v). International agencies and experts have been engaged in this type of lesson drawing since sex selection was first identified as a problem. As a result, knowledge and policies have been transferred and translated from one setting to another. We can identify two major trends over the past years:

1. Cross-national policy and knowledge transfer across the countries of study (South Korea, India, and Vietnam) and beyond (e.g. China, Armenia, Nepal, etc.).
2. National policy and knowledge transfer within countries from regions, where policies were tested, to other regions (e.g. within India and Vietnam).

Both trends are supported by IOs, especially UNFPA and more recently the European Union. The first trend is promoted under the notion of “South-South Learning” while the second trend is used to pilot policy interventions for later national roll out.

It is a natural tendency to look to other countries and regions and make use of policy experiences found elsewhere. While it is in the interest of IOs to promote cost-effective interventions that can be easily up-scaled and reproduced, policy makers also use “lessons learned” for strategic reasons such as bargaining power. This has created a tendency of promoting “best practices,” even in cases where none can be verified.

Certainly, IOs rely on cooperation with sovereign governments. It would be unproductive to shame countries by repeatedly pointing to “worst” or “undesired practices,” especially when genuine efforts are being made to correct the situation. The idea is rather to rephrase the question: Instead of asking, “what worked” our findings point to an equally important question

¹¹⁵ In fact, the same “S-shaped curve” proposed by Rogers to explain the diffusion of innovations has been used in political science to explain the diffusion of policies (see e.g. Weyland 2006, 18).

of what hasn't worked, and why. Hindering factors can vary drastically according to country specificities. In India, the analysis suggests that 'unscrupulous' doctors are only part of a larger problem that hinges on deeply rooted cultural and political masculinities that hinder change. In Vietnam, the analysis points to weak grassroots participation and lacking political will to hold doctors accountable. In South Korea, the analysis suggests that policy was largely incidental to the larger societal changes that ultimately improved SRB.

A careful analysis of country specific features seems necessary for providing a 'best fit' instead of promoting 'best practices,' which may or may not have been effective and may or may not be transferable. This becomes especially important in current times. The international community has recently launched the first "Global Programme to Prevent Son Preference and the Undervaluing of Girls." The program is currently carried out in six Asian countries between 2017 and 2019 by UNFPA, with funding from the European Union. The program's goal is to increase the existing knowledge base on son preference and sex selection, to strengthen national and regional capacities for policy implementation and monitoring, and to create an inter-regional hub for South-South collaboration and cross-national knowledge and policy transfer. The South-South component is of particular interest since it seeks to draw lessons and inform stakeholders about promising interventions by learning particularly from the Indian, Chinese and South Korean policy interventions.

In short, the overall objective is to improve and disseminate evidence-based policy making on sex selection. This global program is carried out in Armenia, Azerbaijan, Bangladesh, Georgia, Nepal, and Vietnam. What is striking about the country selection is that among these countries some have:

- Only recently recognized GBSS and are in the agenda-setting stage (e.g. Azerbaijan),
- Newly introduced policies and are in the policy implementation stage (e.g. Armenia),
- Extensively addressed GBSS and are in the policy evaluation stage (e.g. Vietnam),
- Witnessed unintended side effects of sex selection and abortion policies on SRB (e.g. Nepal and Vietnam),
- Overcome sex selection in the absence of policy interventions (e.g. Georgia),
- Not experienced any tangible sex imbalances at birth (e.g. Bangladesh).

The question that emerges from these observations is how to accommodate for these diverse realities. The differences that lay between these countries clearly transcend cultural, socio-political, economic disparities. They are not only at different stages of their sex ratio transitions,

but also at different stages in their policy cycles. The considerable task lies in how to bring these realities under a single operative umbrella. The inter-regional hub challenged with this particular task is located in Turkey, a country with no record of sex imbalances. Taking these diverse sociocultural, demographic and political backgrounds into consideration will be crucial to facilitate cross-country collaborations and the program's implementation.

In the light of these developments, what are the implications for IOs? First, there is “no one-size fits all” solution. It is important to recognize the different stages, policy intentions and constraints of the target countries. A careful needs assessment with country officials seems necessary to identify the strategic intervention areas. This assessment should include a detailed socio-demographic, policy and stakeholder analysis in order to offer tailored, not generalized policy advice. It is essential to identify and recognize the diverse country-specific needs and challenges instead of trying to make or treat all partner countries the same.

Secondly, it is recommended to mobilize national stockholders to tackle sex selection as much as possible and where necessary. For example, policy interventions do not seem necessary in the Georgian case. The SRB declined in Georgia without policy interventions and historically, sex imbalances are unlikely to reoccur. Since Georgia forms part of the Global Programme, it would be interesting to involve local/national experts to assess why sex imbalances appeared and disappeared almost ‘silently’ in the country. Furthermore, as of now there is no prevalence of prenatal sex selection in Bangladesh. Instead of promoting anti-sex selection policies in the absence of sex selection, it might be worthwhile to target gender inequalities in more general terms and explore why Bangladesh appears immune to sex imbalances at birth despite a culture of son preference and fertility decline (see Kabeer et al. 2014).

Thirdly, it is important to note that improved sex ratios at birth do not automatically imply the absence of son preference, nor a better position for women in society (see e.g. Yoo et al. 2017). Likewise, improved SRB levels do not automatically imply that existing policies were effective. As this investigation has shown, the conditions behind, and reasons for, the rise and fall of sex imbalances are complex and cannot straightforwardly be assigned to policy interventions. The sex ratio transition may turn out to be facilitated by normative changes unrelated to policy interventions against sex selection. Changes in social norms tend to spread quicker in small homogenous countries like South Korea or Georgia than in large heterogeneous countries like India. The recognition of scale, diversity and capacity of the country and its government is therefore crucial.

Fourthly, policy failure can be an important learning tool (McConnell 2010). Up to now prior policy instruments and interventions have produced unimpressive results. The current call for international collaboration can be used to explore new paths and identify new strategies to counter sex imbalances and sex selection instead of promoting the old strategies that have proven to be ineffective. IOs are in the powerful position to initiate such innovation and provide an environment where an evidence base (as marginal it may be) can be used to improve future policies. This has also important implications for research.

8.4. Implications for Future Research

This has been an ambitious research study because it aimed at identifying the influence of public policies on SRB in three very diverse settings. Further studies are desirable to complement our findings.

First of all, we can anticipate that with son preference persisting and sex determination becoming accessible at earlier stages, sex selection is likely to continue. The problem will become increasingly difficult to monitor given the spread of technological innovations through globalized markets. As of now, selective abortions of female fetuses have caused an irreversible demographic imbalance in large parts of Asia and Eastern Europe. Once fertility declines and access to reproductive technologies spreads, parts of Africa are likely to follow.¹¹⁶ Thus, the close monitoring of the international SRB trends, medical markets and policy changes will be indispensable.

Secondly, future research should examine the influence of economic vulnerabilities and social security schemes on family and fertility decisions, the hypothesis being that citizens who receive social security by their governments no longer (need to) rely on their (male) children for protection in old age. Similarly, it would be interesting to explore the coping mechanisms of sonless families in high SRB regions. How (well) do these sonless families manage, despite social and financial pressure to obtain a son? Overall, we still lack a clear understanding of how changes in social welfare and inheritance influence family decisions in choosing sons over daughters.

¹¹⁶ Skewed child sex ratios were already reported in countries such as Nigeria with an estimated number of 2 million missing women (Bongaarts and Guilmoto 2015).

Thirdly, we are in need of more rigorous impact assessments to evaluate policies and identify their strengths and weaknesses. We also need to look beyond existing interventions. Future research should explore the impact of female education gains and education policies on sex imbalances. We know that more educated people sex select first, but greater levels of education (like in the case of South Korea) may also contribute to changes in gender relations and possibly to the renormalization of skewed SRB. Thus, the linkages between GBSS, skewed sex ratios and education need to be further studied.

Furthermore, policy transfer linked to GBSS is an under-researched area of study. We still know very little about how, when and why policies are transferred or translated from one setting to another. A more in-depth study on policy and knowledge transfer around anti-sex selection policies should also highlight how the concept may apply to other countries that have recently come under the umbrella of IOs, such as Armenia, Azerbaijan, Bangladesh, Nepal, or Pakistan.

Lastly, we believe that the research framework employed here provides useful parameters for further scholarly inquiry. We applied the 3-M-Model to fertility decline in the introduction and to sex selection throughout the entire thesis. The model has also been used to contrast GBSS to other harmful practices such as female genital cutting (see Rahm and Kostenzer 2018). The 3-M-Model can help to assess further socio-demographic, gender, and health-related topics, thus making it a valuable model to better understand and address global public health issues in the 21st century.

However, the ultimate goal of policy analysts is to look beyond the mechanics of intentions, instruments, and impact and pay attention to the larger scale of political and ideological processes behind policy-making. Who wins and who loses thanks to policy interventions? What are the messages and how do they transform over time? Are policies designed based on social constructions and assumptions that reproduce the same (patriarchal) patterns rather than overcoming them? A full array of questions regarding anti-sex selection policies remains to be addressed by future policy analysts.

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Appendix 1: Detailed List of Interview Partners by Country, Location, Respondent's Type, Profession, Sex, Age and Date of Interview

List of Interview Partners South Korea

ID	Location	Type	Profession	Sex	Age	Date
SK01	Seoul	National Gov.	Former Senior Research Fellow at KIHASA and Governmental Advisor	M	75	26.02.15
SK02	Seoul	Research	Professor of Sociology, Hanyang University	M	63	27.02.15
SK03	Seoul	Individual	Pregnant women / Indian patient at Motae Clinic	F	n.a.	04.03.15
SK04	Seoul	Medical	Doctor at Motae Obstetrics & Gynecology (private clinic)	M	45	04.03.15
SK05	Cheongju	Research	Professor of Public Health at Jungwon University	F	42	06.03.15
SK06	Seoul	National Gov.	Former Director of Family Health Division of MoHW	M	78	09.03.15
SK07	Seoul	Medical	ObGyn at Seoul National University, Department of Preventive Medicine	F	35	10.03.15
SK08	Busan	Individual	School teacher, member of Labor Party	F	25	11.03.15
SK09	Seoul	Medical	Medical Doctor, ObGyn, practicing since 90s	F	58	12.03.15
SK10	Seoul	National Gov.	Senior Research Fellow, Korea Institute for Health and Social Affairs (KIHASA)	F	58	13.03.15
SK11	Seoul	National Gov.	Research Fellow, Korea Institute for Health and Social Affairs (KIHASA)	M	n.a.	13.03.15
SK12	Seoul	National Gov.	Senior Research Fellow, Korea Institute for Health and Social Affairs (KIHASA)	M	n.a.	13.03.15
SK13	Seoul	State Gov.	Representative of Feminist Branch, Arbeit Union, Korean Labor Party	M	23	13.03.15
SK14	Seoul	NGO	Representative of the Women Migrants Human Rights Center of Korea	F	67	16.03.15
SK15	Seoul	NGO	Director of Planned Paternthood Federation Korea (PPFK)	M	57	18.03.15
SK16	Seoul	NGO	Research Fellow at Planned Paternthood Federation Korea (PPFK)	F	35	18.03.15
SK17	Daegu	Individual	Teacher in Highschool	F	27	19.03.15
SK18	Daegu	Individual	Teacher in Elementary School	F	26	19.03.15
SK19	Daegu	Medical	Nurse at Women's Medi Park practicing since 90s	F	58	20.03.15
SK20	Daegu	Medical	Head of Private Woman Clinic	M	n.a.	20.03.15
SK21	Daegu	Medical	Medical Doctor, ObGyn	F	38	20.03.15
SK22	Daegu	Medical	Former Director of Women's Hospital	M	79	21.03.15
SK23	Daegu	Individual	Owner of Youth Hostel	M	35	24.03.15
SK24	Daegu	Individual	Staff member in Youth Hostel	M	35	24.03.15
SK25	Busan	NGO	Senior Representative of Korean Population and Health Association (PPFK)	M	59	27.03.15

SK26	Busan	Research	Professor of Sociology at Dong-A University	F	41	27.03.15
SK27	Busan	State Gov.	Senior Representative of Government Family Planning Unit of Busan	M	45	27.03.15
SK28	Busan	Media	Writer of the "Grand Narrative" (Feminist Magazine)	M	39	28.03.15
SK29	Busan	Medical	Doctor at Good Moonhwa Hospital	M	38	28.03.15
SK30	Seoul	Intern. Orga.	Executive Member of IPPF	F	62	02.04.15
SK31	Daegu	Medical	Chief Director of Women's Hospital	M	52	03.04.15
SK32	Seoul	Research	Professor at Seoul National University	M	42	06.04.15
SK33	Seoul	Research	Family Policy Research Center, Korean Women Development Institute (KWDI)	F	n.a.	09.04.15
SK34	Seoul	Research	Professor at Law School at Seoul National University	F	55	13.04.15

List of Interview Partners India

ID	Location	Type	Profession	Sex	Age	Date
IN01	Delhi	Research	Professor at IIT Delhi (Committee Member for Followup on PC&PNDT Act)	F	56	29.12.14
IN02	Delhi	Research	Senior Fellow at the Centre for Women's Development Studies (CWDS)	F	58	30.12.14
IN03	Delhi	Research	Professor in Political Science, University of Delhi and Activist	F	47	30.12.14
IN04	Delhi	NGO	Development Professional and Senior Representative of Girls Count	M	38	01.01.15
IN05	Delhi	NGO	Senior Representative of the Centre for Social Research	F	63	01.01.15
IN06	Delhi	Medical	Medical Doctor, ObGyn, fetal medicine specialist	M	56	02.01.15
IN07	Delhi	National Gov.	Senior Government Official, former Minister of Women and Child Development	M	60	03.01.15
IN08	Delhi	Research	Professor at JNU, Centre of Social Medicine and Community Health	M	60	05.01.15
IN09	Mumbai	Research	Professor at the International Institute for Population Sciences	M	51	06.01.15
IN10	Pune	State Gov.	PC&PNDT Act Consultant for the State Family Welfare Bureau	M	33	09.01.15
IN11	Pune	State Gov.	Asst. Director of Health Services & State Nodal Officer-PC&PNDT	M	57	09.01.15
IN12	Pune	NGO	Activist, Lawyer, Member of National Inspection and Monitoring Committee	F	47	09.01.15
IN13	Mumbai	Research	Professor at SNDT Women's University in Mumbai	F	60	11.01.15
IN14	Mumbai	NGO	Senior Representative of Population First	F	54	12.01.15
IN15	Chandigarh	Research	Professor at Centre for Research in Rural and Industrial Development	M	53	14.01.15
IN16	Chandigarh	State Gov.	Civil Servant, former Implementor of Nawanshahr Model in SBS Nagar, Punjab	M	39	14.01.15
IN17	Chandigarh	State Gov.	Civil Servant, former PC&PNDT Implementor in Fatehgarh Sahib, Punjab	F	41	14.01.15

IN18	Nawanshahr	NGO	Senior Representative of Upkar Coordination	M	59	15.01.15
IN19	Nawanshahr	State Gov.	Child Development Project Officer	F	32	15.01.15
IN20	Chandigarh	Research	Professor of Sociology, Panjab University	F	53	16.01.15
IN21	Chandigarh	State Gov.	Former PC&PNDT State Nodal Officer	M	63	16.01.15
IN22	Chandigarh	State Gov.	Former implementor of the PC&PNDT Act	F	57	16.01.15
IN23	Patiala	Medical	Doctor and Activist from Patiala	F	50	17.01.15
IN24	Chandigarh	NGO	Representative of Voluntary Health Association Punjab	M	65	17.01.15
IN25	Delhi	Intern. Orga.	Representative of UNFPA India	F	35	01.12.13
IN26	Delhi	Intern. Orga.	Representative of UNFPA India	F	55	19.01.15
IN27	Delhi	Intern. Orga.	Representative of International Center for Research on Women	F	49	20.01.15
IN28	Delhi	Intern. Orga.	Representative of Population Council	F	61	02.02.15
IN29	Delhi	National Gov.	Former Secretary of the Ministry of Health and Family Welfare	M	72	06.02.15
IN30	Delhi	State Gov.	State Appropriate Authority on PC&PNDT Act	F	47	06.02.15
IN31	Delhi	Research	Professor in Social Sciences at JNU	M	64	09.02.15
IN32	Delhi	Medical	Doctor, Head of Anesthetics at All India Institute of Medical Sciences (AIIMS)	F	n.a.	11.02.15
IN33	Delhi	State Gov.	Registrar at the Delhi Medical Council	M	n.a.	11.02.15
IN34	Delhi	State Gov.	Officer Assistant at the Delhi Medical Council	M	n.a.	11.02.15
IN35	Gurgaon	State Gov.	Deputy Commissioner	M	38	11.02.15
IN36	Gurgaon	State Gov.	Additional Deputy Commissioner	M	n.a.	11.02.15
IN37	Delhi	Medical	Medical Doctor, ObGyn at All India Institute of Medical Sciences (AIIMS)	F	48	12.02.15
IN38	Delhi	NGO	Researcher, activist and member of India's Campaign Against Sex Selection	M	56	12.02.15
IN39	Mumbai	Intern. Orga.	Representative of UNFPA India	F	42	12.02.15
IN40	Delhi	National Gov.	Representative of the Ministry of Health and Family Welfare	F	37	13.02.15
IN41	Delhi	Medical	Head of Private Clinic	F	50	14.02.15
IN42	Delhi	NGO	Lawyer specializing in women's rights	F	61	16.02.15
IN43	Delhi	National Gov.	Joint Secretary of the Ministry of Women and Child Development	F	58	17.02.15
IN44	Delhi	NGO	Representative of Sama – Resource Group for Women and Health	F	43	17.02.15
IN45	Delhi	Intern. Orga.	Programme Officer at UN WOMEN	F	53	10.07.15
IN46	Delhi	National Gov.	Former Deputy Commissioner of Nawanshahr, currently in national Gov.	M	45	11.07.15
IN47	Delhi	NGO	Researcher at Centre for Social Research, Women's Rights Activist	F	44	11.07.15

List of Interview Partners Vietnam

ID	City	Type	Profession	Sex	Age	Date
VN01	Hanoi	Intern. Orga.	Former UNFPA Assistant Representative	F	62	09.10.14
VN02	Hanoi	Research	Former Director of IPSS, Government Consultant	M	63	14.10.14
VN03	Hanoi	National Gov.	Member of National Assembly's Commission of Social Affairs	M	40	17.10.14
VN04	Hanoi	National Gov.	Senior Representative of GOPFP	M	57	17.10.14
VN05	Hanoi	Medical	Doctor at National Obstetrics Hospital	F	n.a.	19.10.14
VN06	Copenhagen	Research	Professor of Anthropology and Vietnam Studies, University of Copenhagen	F	49	20.10.14
VN07	Hanoi	Intern. Orga.	Senior Representative of UNFPA Vietnam	M	49	20.10.14
VN08	Hanoi	Intern. Orga.	Gender specialist at UNFPA Vietnam	F	45	20.10.14
VN09	Hanoi	Medical	Doctor at National Obstetrics Hospital	M	n.a.	22.10.14
VN10	Hanoi	State Gov.	Head of Planning and Finance, Hanoi Population and Family Planning	F	32	22.10.14
VN11	Hanoi	State Gov.	Head of Communication and Education, Hanoi Population and Family Planning	F	35	22.10.14
VN12	Hanoi	State Gov.	Senior Representative of Hanoi Population and Family Planning	M	50	22.10.14
VN13	Hanoi	Research	Demographer at Vietnam Academy of Social Sciences	M	50	23.10.14
VN14	Hanoi	Research	Co-Director of the Institute for Social Development Studies	F	54	23.10.14
VN15	Hanoi	Research	Medical Anthropologist at Vietnam Academy of Social Sciences	F	42	23.10.14
VN16	Hanoi	National Gov.	Senior Representative of GOPFP	M	51	24.10.14
VN17	Hanoi	National Gov.	Senior Representative, Population Structure and Quality Department, GOPFP	M	50	24.10.14
VN18	Hanoi	Research	Director of Institute for Population and Social Studies	F	40	05.11.14
VN19	Hanoi	National Gov.	Senior Representative of Department of Social Affairs, National Assembly	M	41	06.11.14
VN20	Hanoi	Research	Vice Director of the Institute of Sociology, VASS	M	58	10.11.14
VN21	Hanoi	Patient	Patient undergoing medical abortion in Hanoi	F	27	11.11.14
VN22	Hanoi	National Gov.	Former Director of Centre for Research, Information and Documentation, GOPFP	M	61	12.11.14
VN23	Hanoi	National Gov.	Director of Department of Maternal and Child Health of Ministry of Health	F	54	12.11.14
VN24	Hanoi	Research	Researcher in Health Assessments and Computer Assisted Health	M	39	12.11.14
VN25	Ninh Binh	Medical	Doctor at Cam Giang General Hospital	M	32	13.11.14
VN26	Ninh Binh	Medical	Doctor for Obstetrics, Hai Duong General Hospital	M	29	13.11.14
VN27	Ninh Binh	Medical	Director of private clinic and doctor at public hospital	M	58	13.11.14

VN28	Ninh Binh	State Gov.	Head of Disease Control Department	M	53	13.11.14
VN29	Ninh Binh	State Gov.	Leader of Hai Duong Provincial Office for Population and Family Planning	M	54	13.11.14
VN30	Hanoi	Research	Public Health Professional at Hanoi School for Public Health	F	33	24.11.14
VN31	Hai Duong	State Gov.	Deputy Director of Provincial Department of Health Hai Duong	M	57	25.11.14
VN32	Hai Duong	Medical	Vice Director of the Reproductive Health Center, Hai Duong	M	49	25.11.14
VN33	Hai Duong	State Gov.	Member of People Committee for Province Hai Duong	M	49	25.11.14
VN34	Hai Duong	State Gov.	Head of Social-Family Division, Women's Union, Hai Duong	F	33	25.11.14
VN35	Hai Duong	Intern. Orga.	UNFPA Project Coordinator and Focal Point	M	30	25.11.14
VN36	Hanoi	Research	Professor and Vice Director of IPSS	M	37	26.11.14

Appendix 2: PPFK History of Posters and Slogans, South Korea, 1960-2010

PPFK History by Posters and Slogans

During the 1960s

- Let's Have A Reasonable Number of Children and Then Bring Them Up Well.
- Don't Suffer from Too Many Children and Bring Up Fewer Children Well.
- Too Many Children Make Every Parents Bigger.
- 2.3.35. Campaign (Let's Have 3 Children With 3 Years of Birth Spacing and Then Stop Before the Age of 35.)

During the 1970s

- Daughter or Son, Stop at Two and Bring Them Up Well.
- Let's Be Proud Parents by Practicing Contraception by Ourselves.
- Family Planning Practiced One Day Earlier, A Richer Life 10 Years Earlier.

During the 1980s

- Healthy Mother with Fewer Children, Healthy Baby Well Grown Up.
- A Daughter Well Grown Up Surprises Ten Sons.
- The First Promise of Newly Married Couples is to Practice Family Planning With Smile.

During the 1990s

- Parents' Generation Favours Sons? Our Generation Lives Without Spouse.
- Have One Child with Love and Bring Him/Her Up Healthy with True Heart.
- Don't Judge Children Born in Love with the Mind of Son-or-Daughter.
- A Precious Life Born not by Selection but with Love.
- Healthy Association With the Other Sex - Beautiful Dream of Youth.

During the 2000s

- Papa! I Don't Like to Be Your Only One Child, Mama! I Do Want to Have Younger Brother(s) or Sister(s).
- Many Candles Are Brighter than One Candle.
- Marriage and Childbirth They Are the Best Presents Given to Human Beings.
- The Best Inheritance to Be Left to the Children is Their Brothers and Sisters.
- Mother's Milk is a Promise for Next Healthy Generation.

During the Year of 2006

- Mamma, Papa! Words to Give Happiness Whenever Hearing Them.
- Marriage is the Beginning of Happiness, Childbirth is the Beginning of Hope.
- Many Childbirths with Much Hope, Childcare Thereof with Much Happiness.
- Society Where Children are Happy is the Country Full of Hopes.
- Have the Pleasure of Childbirth through the Treatment of Infertility!

From 2007 to present

- Sound of Babies' Laugh, Sound of Korea's Hope.
- Babies Are Our Future.
- The Best Present to Children is Younger Brother(s)/Sister(s).
- Every Family Has Two-or-Three Children, Ha-ha Ho-ho Korea Full of Hopes.
- Induced Abortion, It's the Disappearance of Another Future.

Source: PPFK (2010)

Appendix 3: SRB in India and Major States Based on Census, SRS, CRS, and NFHS

India and Major States	Census		National Family Health Survey		Sample Registration System				Civil Registration System					Level of Civil Registration of Births %				
	2001	2011	2005-06	2015-16	2010-12	2012-13	2012-14	2013-15	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
India	110,5	111,2	109,4	108,8	110,1	110,0	110,4	111,1	110,0	110,1	111,4	112,7	113,5	83,6	84,4	85,6	88,8	88,3
Andhra Pradesh	105,2	108,2	114,2	109,4	109,4	109,2	108,8	108,9	101,7	101,5	104,8	104,7	103,0	79,8	74,8	98,5	100	98,4
Assam	105,5	107,5	96,8	107,6	108,5	108,7	108,9	111,1	108,7	114,7	110,0	110,9	113,0	85,8	87,6	97,7	100	100
Bihar	109,1	112,1	112,0	107,1	110,0	109,8	110,3	109,2	na	na	108,2	115,2	114,9	59,8	74,7	57,4	64,2	64,8
Chhattisgarh	107,8	105,5	102,9	102,4	102,1	103,1	102,8	104,1	109,3	111,7	108,1	107,1	106,6	55,1	74,2	87,8	100	100
Delhi	117,4	115,1	119,0	122,4	113,1	112,7	114,2	115,1	112,0	112,9	111,7	111,6	111,4	100	100	100	100	100
Gujarat	119,9	115,2	110,4	110,3	110,0	109,8	110,3	117,1	111,0	110,9	111,0	112,9	na	100	100	100	95	98,7
Haryana	127,2	121,4	131,2	119,6	116,7	115,7	115,5	120,3	120,0	120,2	119,0	118,6	117,5	100	100	100	100	100
Himachal Pradesh	118,3	105,5	109,5	106,8	106,5	106,0	106,6	108,2	108,9	109,2	110,4	111,6	110,7	100	100	100	93,1	100
Jammu and Kashmir	105,2	129,2	110,9	108,5	111,7	110,9	111,2	111,2	109,5	na	108,3	109,4	109,6	69,9	69,8	71,8	75,5	76,3
Jharkhand	110,3	110,7	91,7	108,8	108,9	109,5	108,8	110,9	na	118,1	113,0	112,9	113,8	60,7	61,9	77,7	82	88,3
Karnataka	106,8	108,5	108,5	109,9	105,3	104,4	105,3	106,5	101,7	103,0	106,0	108,0	112,0	98,9	100	96	97,8	94,9
Kerala	103,2	102,4	108,1	95,5	103,5	103,5	102,7	103,4	106,5	104,7	106,2	105,5	105,5	100	100	100	100	98,1
Madhya Pradesh	110,7	110,1	104,2	107,9	108,6	108,7	107,9	108,8	111,5	109,6	110,6	110,1	110,6	86,5	87,2	84,1	82,6	77,3
Maharashtra	114,0	116,0	115,3	108,2	111,6	110,9	111,6	113,9	116,1	111,9	111,0	109,8	113,3	100	100	100	100	100
Odisha	107,8	109,9	103,8	107,2	105,5	104,6	104,9	105,3	110,9	111,6	112,9	113,6	115,5	95,6	96,4	93,9	98,5	96,1
Punjab	127,1	118,6	136,2	116,3	115,9	115,3	114,9	112,5	117,4	118,5	114,2	113,6	112,2	100	100	100	100	99,2
Rajasthan	115,7	111,2	118,1	112,7	112,0	112,0	112,0	116,1	109,8	116,1	116,4	125,2	125,9	96,7	98	98,4	98,2	98,7
Tamil Nadu	107,0	107,1	111,6	104,8	107,8	107,9	108,6	109,8	110,5	110,6	117,2	119,9	122,2	100	100	100	100	100
Uttar Pradesh	111,0	112,4	108,5	110,7	114,4	113,9	115,1	116,1	na	107,5	113,3	113,5	114,0	64,9	57,5	68,6	68,3	67,4
West Bengal	102,6	106,7	102,5	104,2	105,9	106,0	105,0	105,2	108,2	108,0	109,5	111,5	108,8	100	100	92,8	92,5	92,8

Note: SRS and CRS refer to SRB, while NFHS refers to SRB for children born in the last five years, The Census data refers to ages 0-1 combined, The Indian data on females per 1000 males was converted to males per 100 female births, Sources: Office of the Registrar General & Census Commissioner, 2017.

Appendix 4: Event Calendar “Join hands to address the Sex Ratio at Birth Imbalance,” September-October 2014, Vietnam

STT No.	Sự kiện Event	Đơn vị thực hiện National implementing partner	Cơ quan Chính phủ phối hợp National coordinating partner	Cơ quan LHQ phối hợp UN agency	Thời gian (DD/MM)	Địa điểm Venue
1.	Họp báo khởi động chiến dịch <i>Press conference</i>	Tổng cục DS-KHHGD- Bộ Y tế <i>GOPFP-MOH</i>	Bộ LĐTBXH; TƯ Hội ND; TƯ Hội LHPN; <i>MOLISA, VFU, VWU</i>	UNFPA	23/9	Khách sạn Melia, 44B Lý Thường Kiệt, Hà Nội <i>Melia hotel, 44B Ly Thuong Kiet, Hanoi</i>
2.	Phát sóng TV spots về MCBGTKS trên VTV1 <i>TV spots on SRB imbalance on VTV1</i>	Tổng cục DS-KHHGD- Bộ Y tế <i>GOPFP-MOH</i>		UNFPA	22/9 – 15/10	Toàn quốc <i>Nationwide</i>
3.	Hội thảo tuyên truyền vận động với người cung cấp dịch vụ về chủ đề MCBGTKS <i>Sensitization workshop with service providers on SRB</i>	Chi cục DS-KHHGD tỉnh Hải Dương <i>DOPFP of Hai Duong</i>	Tổng cục DS-KHHGD- Bộ Y tế <i>GOPFP-MOH</i>	UNFPA	19/9	Thành phố Hải Dương <i>Hai Duong city</i>
4.	Mít tinh diễu hành và giao lưu nghệ thuật về chủ đề Giải quyết MCBGTKS <i>Meeting, march & arts performance on addressing SRB imbalance</i>	TƯ Hội LHPN <i>VWU</i>	TƯ Hội ND <i>VFU</i>	UNFPA	24/9	Thành phố Bắc Ninh <i>Bac Ninh City</i>
5.	Chương trình Chuyện đương thời: Tiếng khóc không chào đời trên VTV1 <i>National TV program 'Live stories' with the topic 'Unborn cry' on VTV1</i>	VTV1		UNFPA	26/9 (22:30); 28/9 (11:00); 30/9 (8:00)	Toàn quốc <i>Nationwide</i>
6.	Mít tinh diễu hành truyền tải thông điệp về Giải quyết MCBGTKS <i>Meeting & march on addressing SRB imbalance</i>	TƯ Hội ND <i>VFU</i>	TƯ Hội LHPN <i>VWU</i>	UNFPA	28/9	Quảng trường Công viên Thống Nhất, phố Trần Nhân Tông (đối diện hồ Thuyền Quang), Hai Bà Trung, HN <i>Thong Nhat park, Tran Nhan Tong Str. (opposite Thuyen Quang lake), Hai Ba Trung,</i>

7.	Tọa đàm và biểu diễn nghệ thuật về chủ đề Giải quyết MCBGTKS <i>Talk show & arts performance on SRB imbalance</i>	Chi cục DS – KHHGD tỉnh Hải Dương <i>DOPFP of Hai Duong</i>		UNFPA	3/10	Thành phố Hải Dương <i>Hai Duong city</i>
8.	Mít tinh diễu hành truyền tải thông điệp về Giải quyết MCBGTKS <i>Meeting & march on addressing SRB imbalance</i>	Hội ND tỉnh Hải Dương <i>Hai Duong FU</i>	Hội LHPN tỉnh Hải Dương <i>Hai Duong WU</i>	UNFPA	4/10	Huyện Kinh Môn- Hải Dương <i>Kinh Mon District, Hai Duong province</i>
9.	Hội thảo ký kết công bố chương trình phối hợp “Thúc đẩy bình đẳng giới để giải quyết MCBGTKS” <i>Dissemination workshop on the joint program between MOLISA & MOH on 'Promoting gender equality to address SRB imbalance'</i>	Bộ LĐTĐBXH <i>MOLISA</i>	Tổng cục DS-KHHGD- Bộ Y tế <i>GOPFP-MOH</i>	UNFPA	9/10	Hà Nội
10.	Mít tinh diễu hành truyền tải thông điệp về Giải quyết MCBGTKS <i>Meeting & march on addressing SRB imbalance</i>	Hội LHPN tỉnh Hải Dương <i>Hai Duong WU</i>	Hội ND tỉnh Hải Dương <i>Hai Duong FU</i>	UNFPA	9/10	Huyện Thanh Miện - Hải Dương <i>Thanh Mien District, Hai Duong province</i>
11.	Tập huấn cho người cung cấp dịch vụ <i>Training for service providers</i>	Chi cục DS-KHHGD tỉnh Hải Dương <i>DOPFP of Hai Duong</i>	Tổng cục DS-KHHGD- Bộ Y tế <i>GOPFP-MOH</i>	UNFPA	12-14/10	Thành phố Hải Dương <i>Hai Duong city</i>
12.	Giới thiệu bài hát “Tự sự bé yêu” và thảo luận về chủ đề Giải quyết MCBGTKS <i>Launch of SRB song 'Story of a girl' and public discussion around SRB imbalance topic</i>	UNFPA			Từ (From) 23/9	Facebook
13.	Ngày hội truyền thông về MCBGTKS <i>Communication festival on SRB (Closing ceremony of the campaign)</i>	Tổng cục DS-KHHGD- Bộ Y tế <i>GOPFP- MOH</i>	Bộ LĐTĐBXH; TƯ Hội ND; TƯ Hội LHPN; <i>MOLISA, VFU, VWU,</i>	UNFPA	18/10	Vườn hoa Lý Thái Tổ, Hà Nội <i>Ly Thai To square, Hanoi</i>

Appendix 5: UNFPA Baseline Survey 2013

UNFPA Baseline survey on imbalanced Sex Ratio at Birth (SRB) - Vietnam 2013

Survey staff	Name	Code	Dd/mm/yy
Interviewer	_____	---	___/___/___
Supervisor	_____	---	___/___/___
Data editor	_____	---	___/___/___
Data entry	_____	---	___/___/___

Location information:		Code
Province Name:	_____	---
City/District Name:	_____	---
Ward/Commune Name:	_____	-----
Address:	_____	
Telephone/Other contact information:	_____	

Introduction

Hello! My name is _____, I am from Mekong Economics. Commissioned by the United Nations Population Fund (UNFPA) and the Government of Vietnam (GoV), we are conducting a survey on son preference, sex selection at birth and imbalanced sex ratio at birth (SRB) issue in your community. We will interview married female and male at the age from 18 to 40 in both urban and rural areas, according to random calculation you are chosen to be invited in our survey. This interview will take about 30 minutes. I assure you that your answer will be strictly confidential and used only for research purpose. Your answer will allow us to suggest the intervention with activities involved male in the community. Do you agree to participate in the survey?

If you don't mind, I would like to start by asking you a little about yourself.

Section A: Respondent Information

Q1.	Name of interviewee:	_____
Q2.	What is your gender? <i>(Interviewer marks without asking)</i>	1. Male 2. Female
Q3.	How old are you this year? (as of January 2013)	1. Between 18-19 2. Between 20-24 3. Between 25-29 4. Between 30-34 5. Between 35-40
Q4.	In which year you were born?	_____
Q5.	What is the highest level of education that you achieved?	1. Not complete Grade 1/unable to read, write 2. Primary 3. Secondary 4. High School 5. Vocational training 6. Junior college 7. College 8. University 9. Post-graduate 10. Other (specific) _____ 11. Refuse/No answer
Q6.	Your order among your siblings in the family?	1. The first child 2. After the first child 3. The only child 4. Other (specific) _____
Q7.	Your spouse's order among the siblings in the family?	1. The first child 2. After the first child 3. The only child 4. Other (specific) _____
Q8.	What is your ethnicity?	1. Kinh 2. Hoa

		3. Other (specify) _____
Q9.	What is your religion?	1. No Religion 2. Christian 3. Buddhism 4. Refuse/No answer 5. Other (Specify) _____
Q10.	What is your main occupation?	1. Farmer 2. Student 3. Teacher 4. Health officer 5. Military/Police 6. Public sector's officer 7. Enterprise's officer 8. Casual worker 9. Self-employed 10. Handcraft 11. Retired 12. Housewife/ Househusband 13. Others (Specific) _____
Q11.	According to local government's ranking, what is your family socio-economic situation?	1. Poor 2. Medium 3. Good 4. No ranking

Section B: Household Information

Q12.	Who do you live with in your household?	1. One generation 2. Two generations 3. Three generations 4. Extended family 5. Other (specific) _____
Q13.	Where do your parents live?	1. Same village/group

		<ul style="list-style-type: none"> 2. Same commune/ward 3. Same district/city 4. Same province 5. Different province
Q14.	Where do your parents-in-law live?	<ul style="list-style-type: none"> 1. Same village/group 2. Same commune/ward 3. Same district/city 4. Same province 5. Different province
Q15.	Who makes the most of the income in the house?	<ul style="list-style-type: none"> 1. Just myself 2. Just my spouse 3. Myself and my spouse 4. My parents 5. My parents-in-law 6. My children 7. Other (specific) _____
Q16.	Do you have children?	<ul style="list-style-type: none"> 1. Yes (Go to Q.17) <ul style="list-style-type: none"> 1.1. Male 1.1.1. How many: _____ 1.2. Female 1.2.1. How many: _____ 2. No (Go to Q. 21) 3. Pregnant (wife) (Go to Q.21)
Q17.	Your first child:	<ul style="list-style-type: none"> 1. Age: _____ 2. Gender: 2.1. Male 2.2. Female
Q18.	Your second child:	<ul style="list-style-type: none"> 1. Age: _____ 2. Gender: 2.1. Male 2.3. Female
Q19.	Your third child:	<ul style="list-style-type: none"> 1. Age: _____ 2. Gender: 2.1. Male 2.3. Female
Q20.	Your fourth child:	<ul style="list-style-type: none"> 1. Age: _____ 2. Gender: 2.1. Male 2.3. Female

Q21.	Who makes decisions regarding family planning (<i>e.g: when to have baby, how many children...</i>)?	1. Just myself 2. Just my spouse 3. Myself and my spouse 4. My parents 5. My parents in law 6. Myself, my spouse and parents 7. Others (specific) _____
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Section C. Knowledge, Attitude and Practice about SRB

Now we will ask you about your knowledge, attitude about gender equity, son preference, and sex ratio at birth imbalance situation. There is no right or wrong answer, we care about your opinion. Please state (1) totally agrees, (2) agree, (3) disagree and (4) totally disagree with the following statement. **Interviewers read the statements out loud.**

C.1 Gender perception						
		Strongly Agree	Agree	Disagree	Strongly Disagree	Others
Q22.	It is important for men and women in your community to have equal opportunities for employment and income.					
Q23.	Men should be invested for higher education.					
Q24.	Women should be invested for higher education.					
Q25.	The man is responsible for the sex of the child (not woman).					
Q26.	Fathering a son shows he is a complete man.					

Q27.	Among many roles, a woman's most important role is to give birth to a son for her husband's family.					
Q28.	Do you agree with husband's violence on wife?					
Q29.	Do you agree with wife's violence on husband?					
Q30.	Do you agree with parents' violence on sons only?					
Q31.	Do you agree with parents' violence on daughters only?					

C.2 General questions of child preference						
	<i>Continue using the same measurement of attitude to ask other questions regarding son preference.</i>	Strongly Agree	Agree	Disagree	Strongly Disagree	Others
Q32.	It is important to have a son because of the economic reasons (<i>labor need, taking care when old/sick</i>)					
Q33.	It is important to have a son because of social pressure and prejudice (<i>being looked down on by relatives or peers, being teased during clan parties</i>).					
Q34.	It is important to have a son because of cultural, religious reasons (<i>carry on the family line, ancestral worship</i>).					
Q35.	It is important for you to have at least one girl among your children.					

Q36.	It is important for you to have at least one boy among your children.					
Q37.	Among the reasons of having at least one son, which is the most important?	1. Economic reason 2. Social pressure and prejudice reason 3. Cultural reason 4. Other (specific) _____				

C.3 Economic need for sons						
	<i>How do you agree/disagree with these statements?</i>	Strongly Agree	Agree	Disagree	Strongly Disagree	
Q38.	It is better for a couple to have at least one son to take care of them when they are old/sick					
Q39.	A daughter cannot help you enough when you are old/sick.					
Q40.	It is important to have at least one son for labor need (<i>farming work, heavy work at home, main income contribution...</i>)					
Q41.	A male child can contribute more to your current income than having a female child.					
Q42.	Having a daughter is a financial burden.					
Q43.	Having a son is a financial burden.					

C.4 Cultural factors						
	<i>How do you agree/disagree with these statements?</i>	Strongly Agree	Agree	Disagree	Strongly Disagree	

					Disagree	
Q44.	It is better to have a son to take care of tombstone and funeral arrangements.					
Q45.	It is alright if daughter takes care of tombstone and funeral arrangements					
Q46.	It is better to have a one son for carrying on the family line and ancestral worship					
Q47.	It is alright if daughter takes care of carry-on the family line and ancestral worship it is alright if you have only daughters.					
Q48.	Living in a family with many generations will increase pressure of having at least one son.					
Q49.	Who should be entitled to property inheritance in case parents pass away?	<ol style="list-style-type: none"> 1. All to the (first) son 2. Mostly to the (first) son 3. Shared among sons 4. Shared among sons and daughter equally 5. Shared among children, but sons get the most 6. Shared among daughters 7. Mostly to the (first) daughter 8. All to the (first) daughter 9. Other (specific) _____ 				
Q50.	Have you parents ever asserted pressure on you to have at least one son?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Don't know 4. Refuse/No answer 				
Q51.	Have your relatives/clans ever asserted pressure on you to have at least one son?	<ol style="list-style-type: none"> 1. Yes 				

		2. No
		3. Don't know
		4. Refuse/No answer

C.5 Normative aspects

Q52.	Suppose a man doesn't have a son, will you consider him an incomplete father?	1. Yes 2. No 3. Don't know 4. Refuse/No answer
Q53.	Suppose a man doesn't have a son, will you look down on him?	1. Yes 2. No 3. Don't know 4. Refuse/No answer
Q54.	Do you consider a couple with only daughters unfortunate?	1. Yes 2. No 3. Don't know 4. Refuse/No answer
Q55.	If a wife/partner doesn't give birth to a son, do you think it is the good reason for the husband to leave her or divorce her?	1. Yes (it is a good reason) 2. No (it is not) 3. Don't know 4. Refuse/No answer 5. Other (specific) _____
Q56.	If a wife/partner doesn't give birth to a son, do you think it is the good reason for the family to exert the pressure on the husband to leave her or divorce her?	1. Yes (it is a good reason) 2. No (it is not) 3. Don't know 4. Refuse/No answer 5. Other (specific) _____

C.6 Awareness of SRB imbalance and perception of the SRB imbalance consequences

Q57.	In your community, do majority of parents typically prefer their baby to be a boy or a girl?	1. Strong preference for boy 2. Preference for boy 3. No preference 4. Preference for girl 5. Strong preference for girl 6. Don't care/don't know
Q58.	According to the family planning policy, each family should have one or two kids, assuming you already had one daughter as first child, when having second child, would you ever think or decide to abort if you know the fetus is female?	1. Yes 2. No 3. I don't know 4. Refuse/No answer
Q59.	Should doctors be allowed to give information about the sex of the fetus?	1. Yes 2. No 3. Don't know 4. Refuse/No answer
Q60.	Have you ever known of any woman who terminates their pregnancy because the fetus is female?	1. Yes 2. No 3. Don't know 4. Refuse/No answer
Q61.	What is the legal status is of sex-selective abortion?	1. It is legal 2. It is not legal 3. It depends on the situation 4. Other (specify) ____ 5. Don't know
Q62.	Do you know that there is sex ratio at birth imbalance in Vietnam, especially in rural area?	1. Yes (Go to Q63) 2. No (Go to Q64) 3. Refuse/No answer (Go to Q64)
Q63.	If yes, from which channel? <i>(Please choose the most three common channels to you)</i>	1. Words of mouth 2. Village's loudspeaker 3. Billboard, propaganda 4. Leaflet

		<ol style="list-style-type: none"> 5. Meetings 6. Newspaper, radio, television 7. Health officer approach 8. Other (specific) _____
Q64.	Have you ever been approached by health officer to popularize the knowledge about reproductive health and sex ratio at birth?	<ol style="list-style-type: none"> 1. Yes 2. No 3. Don't know 4. Refuse/No answer
Q65.	Do you think having too many boys will cause bad consequences for society in the future?	<ol style="list-style-type: none"> 1. Yes (Go to Q66) 2. No (Stop the interview) 3. I don't know (Stop the interview) 4. Refuse/No answer (Stop the interview)
Q66.	If yes, what are the consequences? <i>(Please choose maximum two options)</i>	<ol style="list-style-type: none"> 1. Reduce family income 2. Increase social problems (gambling, drug, ...) 3. Affect relationship of couple 4. Hard for men to get married 5. Other (specific) _____

The interview ends here, thank you for spending your time and sharing information. Your answers together answers from 800 respondents will help us in understanding the situation and cause of son preference and SRB imbalance in Vietnam. This information will be very useful for the national socio-economic development in the future. Thank you and goodbye!

Résumé/Zusammenfassung/Summary

GIRLS WANTED: L'influence de la politique publique sur la sélection sexuelle en Corée du Sud, en Inde et au Vietnam

Plus de 130 millions de femmes sont portées disparues dans le monde pour cause de sélection en fonction du genre. La plupart d'entre elles ont été avortées de manière sélective, ont été l'objet de négligence fatale durant l'enfance ou ont été tuées après la naissance parce qu'elles étaient des femmes. La sélection sexuelle—pratiquée avant tout en Asie, dans le Caucase et en Europe de l'Est—à suscité de vives inquiétudes globalement en raison de ses implications en matière de droits humains, de santé et de conséquences démographiques. Depuis les années 1980, plusieurs pays asiatiques ont adopté des politiques pour contrer cette forme de discrimination. Bien que les politiques publiques soient souvent promues comme une solution, on sait peu de choses sur ces politiques et leur influence sur les déséquilibres de sexe à la naissance. De plus, seules quelques études relient ces politiques aux tendances des rapports de masculinité.

Compte tenu de l'hétérogénéité des pays affectés par la sélection sexuelle, cette recherche vise à comprendre le déroulement des politiques publiques en divers contextes socioculturels. Quels sont les intentions, les instruments et les impacts des politiques publiques contre la sélection sexuelle dans différents pays asiatiques ? L'Inde, le Vietnam et la Corée du Sud ont été choisis dans le cadre du *Most Different Systems Design* pour représenter la diversité des pays dans leur réponse à la masculinisation démographique. La comparaison de politiques similaires en différents pays fournit une expérience naturelle pour évaluer leur influence sur la sélection prénatale du sexe. Nous présentons de nouvelles recherches empiriques, menées en Corée du Sud, en Inde et au Vietnam entre 2014 et 2015 et basées sur des entretiens d'experts, ainsi que des analyses statistiques pour comparer les zones avant et après l'intervention politique.

Cette thèse montre que les trois pays partagent des instruments politiques similaires, notamment des interdictions légales, des campagnes de sensibilisation, des plaidoyers, des incitations et des lois sur l'égalité des sexes pour renforcer le rôle des femmes dans la société. Cependant, les intentions politiques variaient d'un pays à l'autre : renforcer les droits des femmes en Inde, promouvoir une structure de population équilibrée au Vietnam, protéger les droits du fœtus en Corée du Sud. En termes d'impact, les politiques eurent une efficacité limitée. En Corée du Sud, les changements sociaux et familiaux plutôt que les politiques expliquent le déclin de la sélection du sexe. En Inde, les interventions politiques ont montré un impact positif de la réduction des déséquilibres sexuels à l'échelle locale en raison d'un leadership fort et d'un effet *bottom-up*, mais avec des effets indésirables. Au Vietnam, l'interdiction légale de la sélection du sexe a probablement déclenché le début de la masculinisation à la naissance. Les autorités vietnamiennes ont opté pour une stratégie *top-down* et à long terme. Les interventions régionales ont été intensifiées malgré l'absence de preuves de l'efficacité des politiques.

La collaboration internationale pour lutter contre la sélection du sexe a facilité le transfert de politiques et de connaissances transnationales, où les enseignements tirés des expériences sont partagés entre les pays. Cette atmosphère a contribué à une convergence croissante des politiques. Néanmoins, les gouvernements interprètent ces politiques en fonction de leurs propres intentions et stratégies de mise en œuvre. Nos résultats apportent ainsi une contribution à un domaine peu étudié. Bien plus, ils permettent une meilleure compréhension de l'interaction complexe entre dynamiques locale et mondiale dans la lutte contre la sélection sexuelle. Le cadre théorique élaboré pour conceptualiser les différents niveaux d'influence peut également servir à évaluer d'autres questions de santé publique et de genre au 21^e siècle.

GIRLS WANTED: Der Einfluss öffentlicher Politik auf Geschlechterselektion in Südkorea, Indien und Vietnam

Weltweit fehlen über 130 Millionen Frauen aufgrund von Geschlechterselektion. Die meisten dieser Frauen wurden selektiv abgetrieben, tödlich vernachlässigt oder nach der Geburt getötet, weil sie weiblich waren. Die vorwiegend in Asien, im Kaukasus und in Osteuropa praktizierte Geschlechterselektion hat aufgrund der einhergehenden Menschenrechts-, Gesundheits- und demografischen Implikationen weltweit große Besorgnis hervorgerufen. Seit den 1980ern haben mehrere asiatische Länder Politiken eingeführt, um dieser Form der Geschlechterdiskriminierung entgegenzuwirken. Obwohl öffentliche Politiken oft als Lösung propagiert werden, ist wenig über sie und deren Einfluss auf das vorgeburtliche Geschlechterverhältnis bekannt. Zudem liefern nur wenige Studien eine vergleichende Analyse von demographischen Trends und politischen Interventionen.

Angesichts der Heterogenität der Länder, die von Geschlechtsselektion betroffen sind, untersuchen wir, wie sich öffentliche Politiken in verschiedenen soziokulturellen Kontexten entfalten. Was sind die Absichten, Instrumente und Auswirkungen öffentlicher Maßnahmen gegen Geschlechtsselektion in ausgewählten Ländern Asiens? Indien, Vietnam und Südkorea wurden in einem “Most Different Systems Design” ausgewählt, um die unterschiedlichsten Länder zu repräsentieren, die versucht haben, der wachsende Vermännlichung ihrer Bevölkerung Herr zu werden. Der Vergleich ähnlicher Instrumente in verschiedenen Ländern bietet ein natürliches Experiment um den politischen Einfluss auf Geschlechtsselektion zu untersuchen. Wir präsentieren neue empirische Studien, die zwischen 2014 und 2015 in Südkorea, Indien und Vietnam durchgeführt wurden, basierend auf qualitativen Experteninterviews sowie statistischer Analyse von Prä- und Post-Interventionen.

Diese Arbeit zeigt auf, dass die drei Länder ähnliche politische Instrumente eingeführt haben, wie gesetzliche Verbote, Sensibilisierungskampagnen, Anreize und Gleichstellungsgesetze, um die Rolle von Frauen in der Gesellschaft zu stärken. Die politischen Absichten waren jedoch von Land zu Land unterschiedlich, und variierten von der Stärkung der Frauenrechte in Indien über die Förderung einer ausgewogenen Bevölkerungsstruktur in Vietnam bis hin zum Schutz fetaler Rechte in Südkorea. Was die politischen Auswirkungen anbelangt, so waren die durchgeführten Maßnahmen nur begrenzt wirksam. In Südkorea erklären soziale und familiäre Veränderungen und nicht politische Maßnahmen den Rückgang der Geschlechterselektion. In Indien zeigten politische Interventionen positive Auswirkungen auf das Geschlechterverhältnis auf lokaler Ebene aufgrund von ehrgeizigem, *bottom-up* Engagement, das jedoch mit unbeabsichtigten Nebenwirkungen einherging. In Vietnam scheint das gesetzliche Verbot den Beginn der Maskulinisierung der Geburten ausgelöst zu haben. Die vietnamesischen Behörden haben sich für eine langfristige, *top-down* gerichtete Strategie entschieden. Regionale Interventionen werden ausgeweitet, obwohl deren Wirksamkeit noch nicht bewiesen ist.

Die internationale Zusammenarbeit zur Bekämpfung von Geschlechterselektion hat den transnationalen Politik- und Wissenstransfer erleichtert. Gewonnenen Erfahrungen werden zwischen den Ländern ausgetauscht. Diese Atmosphäre hat zu einem zunehmenden Trend politischer Konvergenz beigetragen. Dennoch interpretieren die Regierungen diese Politiken in unterschiedlicher Weise, sodass sie ihren eigenen politischen Absichten und Umsetzungsstrategien entsprechen. Diese Ergebnisse tragen nicht nur zu einem wenig erforschten Politikfeld bei, sondern ermöglichen auch ein besseres Verständnis des komplexen Zusammenspiels zwischen lokaler und globaler Dynamiken im Kampf gegen Geschlechtsselektion. Der theoretische Rahmen, der entwickelt wurde, um diese verschiedenen Einflussebenen zu konzeptualisieren, kann auch dazu dienen, andere globale Gesundheits- und Geschlechterfragen im 21. Jahrhundert zu analysieren.

GIRLS WANTED: The influence of public policy on sex selection in South Korea, India and Vietnam

Worldwide over 130 million women are missing due to gender-biased sex selection. Most of these “missing females” were selectively aborted, fatally neglected or killed after birth because they were female. Sex selection—predominantly practiced in Asia, Caucasus and Eastern Europe—has caused wide concern among government, non-government and international stakeholders because of the human rights, health, and demographic implications associated with the practice. Since the late 1980s, several Asian countries have introduced laws, policies and programs to counter this fundamental form of gender discrimination. Although public policies are often promoted as a solution to sex selection, little is known about these policies and their influence on skewed sex ratio at birth. Moreover, only a few studies provide a comparative analysis of sex ratio trends and policy interventions.

Given the heterogeneity of countries affected by sex selection, this research seeks to understand how public policies unfold in diverse socio-cultural contexts. What are the intentions, instruments and impacts of public policies against sex selection in selected Asian countries? India, Vietnam and South Korea were chosen in a *Most Different Systems Design* to represent largely diverse countries that have tried to address the growing demographic masculinization of their population. Comparing similar policies in different countries offers a natural experiment for assessing their influence on prenatal sex selection. We present new empirical research, carried out in South Korea, India and Vietnam between 2014 and 2015, based on qualitative expert interviews with governmental, non-governmental, international and medical personnel, as well as statistical analysis comparing pre- and post-intervention areas.

This thesis finds that the three countries share similar policy instruments including legal bans on sex selection and determination, awareness-raising campaigns, advocacy, incentives and gender equity laws to strengthen the role of women in society. However, policy intentions varied across countries from strengthening women’s rights in India, to promoting a balanced population structure in Vietnam, to protecting fetal rights in South Korea. Regarding the policy impact, anti-sex selection policies have had limited efficacy in curbing sex imbalances. In South Korea, social and family changes rather than policy interventions explain the decline of sex selection. In India, policy efforts showed a positive impact of reducing sex imbalances at the local level due to strong leadership and bottom-up action, which yet came with unintended side effects of infringing reproductive and privacy rights. In Vietnam, the legal ban on sex selection is likely to have triggered the onset of birth masculinization. Vietnamese authorities have opted for a top-down, long-term strategy of changing mindsets. Regional interventions are scaled up despite inconclusive evidence of policy efficacy.

International collaboration to tackle sex selection has facilitated transnational policy and knowledge transfer, where lessons learned are shared between the countries. This atmosphere has contributed to a growing trend of policy convergence. Nevertheless, governments interpret these policies to fit their own policy intentions and implementation strategies. Our findings thus not only contribute to an under-researched field of public policies against sex selection, but also allow for a better understanding of the complex interplay between local and global dynamics in anti-sex selection efforts. The theoretical framework developed to conceptualize the diverse levels of influence can also serve to assess other global public health and gender issues of the 21st century.