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How Does Son Preference Affect Populations in Asia?

SIDNEY B. WESTLEY AND MINJA KIM CHOE

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S U M M A R Y The preference for sons has deep social, economic, and cultural roots in many East and South Asian societies. Historically, son preference has resulted in unusually high death rates for female infants and girls. Over the past 30 years, the introduction of prenatal screening technologies combined with widespread access to abortion has made possible the selective abortion of female fetuses. Resulting gender imbalances have led to concerns that a shortage of women will make it difficult for men to find wives. The Chinese, Indian, and South Korean governments have responded by making prenatal screening for sex identification illegal. China and India have also launched campaigns to improve attitudes toward girl children, and both countries offer small allowances to some parents of girls. Experience in South Korea indicates that sex-selective abortion peaks and then declines with social and economic modernization. Population projections and survey data suggest that falling fertility and women's reluctance to marry have a much larger effect than sex-selective abortion on the availability of women in the marriage market.

Introduction

In China, the peasants have a saying: “The birth of a boy is welcomed with shouts of joy and firecrackers, but when a girl is born, the neighbors say nothing.”¹ In India, until recently, billboard messages promised: “Invest Rs. [rupees] 500 now, save 50,000 later,” encouraging prospective parents to abort female fetuses in order to avoid future dowry expenses.²

The preference for sons reflected in these quotes has deep social and cultural roots in some East and South Asian societies. Male children carry on the family name, inherit the family property, and play a special role in family traditions. In Hindu families, a son lights the funeral pyre when his parents die. In countries with a strong Confucian influence, such as China and the Republic of Korea (South Korea), family rituals must be led by the eldest son of the most recent male ancestor. If no sons are born, the family dies.

Powerful economic factors also support son preference. In many Asian societies, married sons are expected to live with aging parents and provide financial support. By contrast, when a woman marries, she joins her husband’s household and does not normally contribute to the support of her own parents. Her marriage itself may impose a financial burden—through expectations of a large celebration, as in South Korea, or expensive dowry payments, as in India.

In South Korea until very recently, family law reinforced Confucian traditions of son preference.³ The Korean Civil Code of 1958 stipulated, among other things, that families must be headed by eldest sons, that inheritance is exclusively through the male line, that women are transferred to their husbands’ family register upon marriage, and that children belong to the family of the father. Not until 2005 did the Supreme Court abolish the legal basis for male dominance over South Korean families. In China and India, by contrast, governments in the modern era have consistently promoted gender equality, although with varying levels of forcefulness.

In its most extreme manifestation, son preference can affect how many boys and girls survive into adulthood and even how many boys and girls are born.

In most human populations, women give birth to slightly more boys than girls. The result is an average ratio of 104 to 106 males for every 100 females born. Within each age group, slightly more men die than women, so that at some point in adulthood the number of men and women becomes roughly balanced. If son preference alters these general features of human biology—so that many more boys are born than girls and more boys than girls survive to adulthood—the result will be an unusually large proportion of men in an adult population.

This paper summarizes birth and death rates for boys and girls, explores some of the social consequences of unbalanced sex ratios, and describes recent policy responses of Asian governments. The focus is on three Asian populations that have shown strong evidence of gender imbalance in their birth rates—South Korea, China, and the north Indian state of Punjab.

High Death Rates for Girls

Nobel Prize-winning economist Amartya Sen was one of the first to call attention to Asia’s “missing women.” Using population data from the mid-1980s, he estimated that India and China alone had “lost” more than 80 million women and girls due to unusually high female mortality.⁴

Around the world, death rates between birth and age five are higher for boys than for girls. But the balance is reversed in four Asian countries—China, India, Nepal, and Pakistan.⁵ In the early 1960s, girls in South Korea also had higher death rates than boys,⁶ but today under-five mortality is the same for both sexes.

Unusually high death rates for girls probably result primarily from favoritism toward boys in food allocation, prevention of diseases and accidents, and treatment of illness.⁷ The highest death rates tend to be for girls with older sisters. Findings from Punjab provide a striking example. Among children surviving until their first birthday, death rates from ages one to four were higher for girls than for boys in every type of family,⁸ but they were especially high for girls with older sisters (fig. 1). In a society that

Son preference can affect how many boys and girls survive into adulthood and even how many are born

prefers sons, the youngest daughter in a family of girls is at a particularly severe disadvantage.

The Advent of Sex-Selective Abortion

During the past 30 years, some societies in Asia began to show an unprecedented preponderance of male births. In South Korea, China, Hong Kong, Taiwan, Singapore, and some of the northern and western states of India, the introduction of technologies to determine the sex of unborn fetuses combined with the widespread availability of abortion made it possible for couples who wanted a son to selectively abort female fetuses.

Fetal screening technologies were introduced in several Asian countries during the 1970s. Three methods are currently available: ultrasound, amniocentesis, and chorionic villi sampling. Ultrasound is the safest, least expensive, and most widely used, but the test is not accurate until the second trimester of pregnancy, resulting in late abortions with some increased risk to the mother.

Ultrasound equipment was first mass-produced in South Korea in the mid-1980s and is now available in clinics and hospitals throughout the country. China

began manufacturing ultrasound machines in 1979. Twenty years later, the largest ultrasound manufacturer in the country had the capacity to produce 5,000 machines a year.⁹ Today, nearly every county and township hospital and family planning service center in China is equipped with modern ultrasound facilities, operated by skilled technicians, and ultrasound is also available in many private clinics. In India, ultrasound equipment is also widely accessible in hospitals and private clinics, and in some rural areas prenatal sex identification using ultrasound has even been offered illegally in traveling vans.

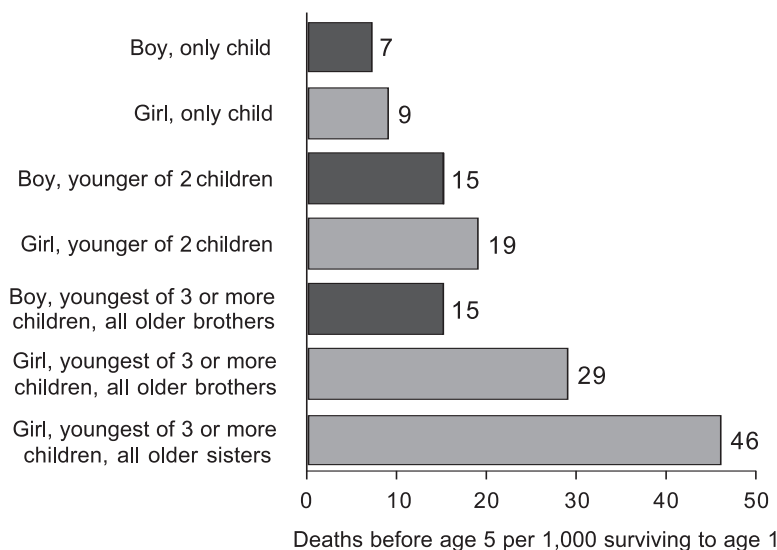
This technology has become available in societies where abortion is legal and widely practiced. In South Korea, the Maternal and Child Health Act of 1973 legalized induced abortion, but only under quite restrictive conditions.¹⁰ Nonetheless, abortion is one of the most common methods of fertility control, used as a backup method in case of contraceptive failure. The proportion of pregnancies terminated by induced abortion reached a peak in 1979, at 43 abortions for every 100 known pregnancies.

Induced abortion has been legal in China since August 1953 when the central government issued the Regulation on Contraception and Induced Abortion to secure the rights of women in healthcare and working conditions.¹¹ Abortion ratios started to climb in the 1970s, reaching a peak of 41 abortions for every 100 known pregnancies in 1983.¹²

In India, abortion has been legal since the 1971 passage of the Medical Termination of Pregnancy Act. Revised in 1975, the Act allows abortion for five reasons, including contraceptive failure—in effect, legalizing abortion on demand. Reported legal abortion rates are very low, however. One estimate for 2000 gives a ratio of 3 abortions for every 100 pregnancies.¹³ Yet, given India's large population, the absolute number of abortions is substantial. In their work on the Indian national health survey, Robert D. Retherford and T.K. Roy estimated that 5 to 6 million pregnancies are aborted every year.¹⁴

Although fetal screening for sex identification is illegal in all three countries, it appears to have been heavily used in South Korea in the past and is still heavily used in China and some of the northern and

Fig. 1. Death rates at ages 1 to 4 years for youngest children in family, Punjab State, India, 1982-83 to 1992-93



Source: Fred Arnold, Minja Kim Choe, and T.K. Roy, "Son Preference, the Family-Building Process and Child Mortality in India," *Population Studies* 52 (1998): 301-315.

The indirect evidence for fetal screening is the unnatural preponderance of male births

western states of India. It is difficult to obtain direct evidence of a practice that is illegal, but in South Korea, a conservative estimate suggested that more than 35,000 fetuses were screened for sex identification in 1990.¹⁵ Comparing sex ratios at birth for women who did or did not receive ultrasound or amniocentesis during pregnancy, demographers Fred Arnold, Sunita Kishor, and T.K. Roy estimate conservatively that about 106,000 female fetuses are screened and aborted in India every year.¹⁶ The indirect, but compelling, evidence for fetal sex screening in all three countries, however, is the unnatural preponderance of male births.

Distortions in Male and Female Births

In South Korea and China, the number of boys born compared with the number of girls—the sex ratio at birth—began to rise abruptly in the 1980s (table 1). In South Korea, the sex ratio at birth peaked at 116 in 1990 and has since declined. In China, the sex ratio at birth reached 124 in 1995 and may now be stabilizing

or coming down slightly. Between 1984 and 1998, the sex ratio at birth in Punjab was 116.¹⁷

The evidence for sex-selective abortion is particularly striking when sex ratios at birth are broken down by birth order. In 1990, the sex ratio for third and subsequent children in South Korea was 192, indicating that nearly two boys were born at this birth order for every girl. In China, the sex ratio for third and subsequent children reached 159 in 2000.

Between 1984 and 1998 in Punjab, the sex ratio at birth for second children was 101 if the first child was a son and 139 if the first child was a daughter.¹⁸ For third children in families that already had two daughters, the sex ratio at birth was 172. Interestingly, in families that already had two sons and no daughters, the sex ratio for third children was 90, indicating some sex-selective abortion of male fetuses.

Even in societies that strongly prefer sons, women still want daughters. In India, women interviewed during 1998–99 ideally wanted two or three children. Eighty-five percent wanted at least one son, but 80 percent wanted at least one daughter.¹⁹ The ideal

Table 1. Reported sex ratios at birth by birth order, South Korea and China, 1982–2000

Year	Country	All Births	1st Born	2nd Born	3rd Born and Above
1985	S. Korea	109	106	108	134
	China	111	106	116	—
1990	S. Korea	116	108	117	192
	China	111	105	121	127
1995	S. Korea	113	106	112	180
	China	124	109	160	140
2000	S. Korea	110	106	107	144
	China	120	107	152	159
2005	S. Korea	108	105	106	128
	China	121	108	143	153

Sources: For South Korea, KOSIS (Korean Statistical Information Service), <http://www.kosis.kr/index.html> [in Korean] (accessed July 5, 2007). For China, data for 1985 from State Statistical Bureau, People's Republic of China, *Statistical Yearbook of China 1985* (Oxford: Oxford University Press, 1985); data for 1990 from National Population Census Office under the State Council and Department of Population Statistics, National Bureau of Statistics of China, *Tabulation of the 1990 Population Census of the People's Republic of China* [in Chinese] (Beijing: China Statistical Publishing House, 1993); data for 1995 from Department of Population, Social, Science, and Technology Statistics, National Bureau of Statistics of China, *Women and Men in China* [in Chinese] (Beijing: China Statistics Press, 2004); data for 2000 from Population Census Office under the State Council and Department of Population, Social, Science, and Technology Statistics, National Bureau of Statistics of China, *Tabulation on the 2000 Population Census of the People's Republic of China* [in Chinese] (Beijing: China Statistics Press, 2002); and data for 2005 from One-Percent Population Sample Survey Office under the State Council and Department of Population and Employment Statistics, National Bureau of Statistics of China, *Tabulation of the 2005 National One-Percent Population Sample Survey* [in Chinese] (Beijing: China Statistics Press, 2007).

Note: Sex ratio at birth is defined as the number of boys born for every 100 girls.

family for many Indian women would be one or two boys and one girl.

Today in South Korea, there is evidence that sex-selective abortion is dying out. The sex ratio at birth is returning to normal levels, and women's attitudes appear to be changing. In 1985, 48 percent of South Korean women felt that they "must have a son"; by 2003, the proportion had dropped to 17 percent.²⁰ A comparison of survey results from 1991 and 2003 found a steep drop in the proportion of women expressing strong son preference in every age group, every area of residence, and every income and education level, indicating that this change in attitude is sweeping through the entire South Korean population. At the same time, the sex ratio at birth has been coming down (table 1), and the abortion ratio has also declined—to 24 abortions for every 100 known pregnancies in 2003, the same as the 2002 estimate for the United States.²¹ Although the trend started slightly later, abortion ratios have declined steadily in China, dropping from 41 abortions per 100 known pregnancies in 1983 to 27 in 2001.²²

In Punjab, by contrast, women's stated preference for sons has been coming down, but sex ratios at birth have been going up.²³ It is not unusual for these two phenomena to move in opposite directions, as fewer women feel strongly that they must have a son while, at the same time, more women gain access to sex-selection technology. Eventually, as attitudes change, the sex ratio at birth should also start to go down.

Son Preference and Fertility

Preference for a particular family configuration, which is most often a preference for sons, can have a strong effect on fertility. This is because couples who have all the sons they want will use contraception to prevent additional pregnancies, while couples who are hoping for a son will keep on having children.

When women in Punjab were surveyed in the early 1990s, just over one-fourth (29 percent) of those with two sons and one daughter went on to have another child. But women with three daughters were strongly motivated to keep trying for a son: Nearly three-fourths (74 percent) of this group went on to have a fourth

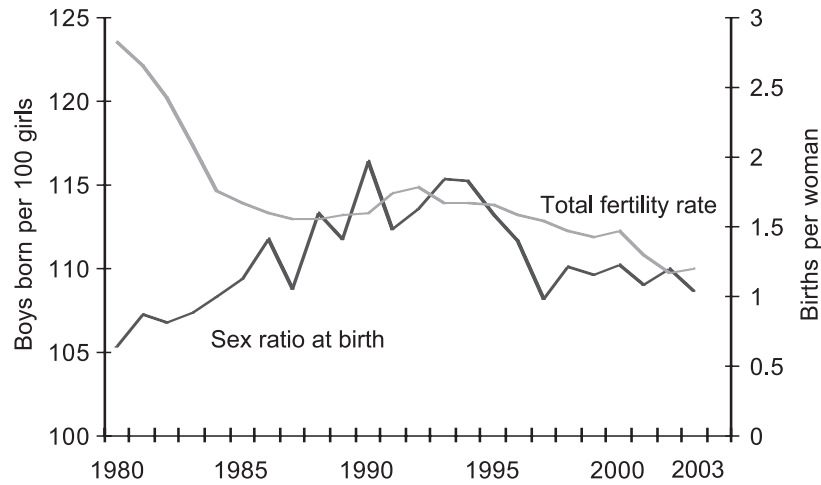
child.²⁴ Similarly, findings from the 1980s showed that women in South Korea and in rural Liaoning, China, were three or four times more likely to have a third child if their first two children were daughters than if they had at least one son.²⁵ In South Korea at that time, women ideally wanted two sons for every daughter, just as in Punjab 20 years later. In India as a whole, demographers estimate that gender preference has the effect of raising fertility by an estimated 8 percent.²⁶ Thus, an effort to reduce the preference for sons could make a substantial contribution to reducing population growth.

Apart from raising general fertility levels, the link between son preference and fertility means that girls are more likely than boys to live in large families with many siblings. In the early 1990s, South Korean families with one child were more than twice as likely to have a boy as a girl (sex ratio 210), while families with five children had more than twice as many girls as boys (sex ratio 49).²⁷ Where food, healthcare, and education are scarce, resources will be spread more thinly in large families with girls than in small families with boys. A village study in rural Vietnam found that virtually all families with four or more children had only daughters. Most of these large families were living in extreme poverty.²⁸

If son preference plays a role in maintaining high fertility, then sex-selective abortion should contribute to fertility decline. Yet in South Korea, fertility was already declining steeply before sex-selective abortion became widely available (fig. 2), and demographic modeling suggests that sex-selective abortion has had only a moderate effect on fertility reduction.²⁹ In India, fertility is much lower in the southern states of Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu, where there is little evidence of sex-selective abortion, than in the northern and western states of Haryana, Punjab, and Gujarat, where sex-selective abortion appears much more prevalent.³⁰

In a society with a strong preference for sons, couples who plan to have three children may want two sons and one daughter. But as fertility goes down, more couples may plan to have two children, and they are likely to want one of each gender. Similarly, couples who only have one child, as in China, are

By 2003, fewer women were expressing strong son preference in every age group, every area of residence, and every income and education level

Fig. 2. Trends in sex ratio at birth and total fertility rate, South Korea, 1980–2003

Source: KOSIS, Statistical Surveys, <http://www.nso.go.kr/eng2006/emain/index.html> (accessed August 28, 2007).

likely to want a son, but if they have two children they may want a son and a daughter. Thus, if fertility levels converge toward the two-child family norm, the result may be a sex ratio at birth within the normal range.

Son Preference and the Marriage Market

One concern frequently voiced about son preference and the practice of sex-selective abortion is that there will be more men than women in future adult populations. In most Asian societies, the dramatic preponderance of boys among youngest children in large families does not have a major impact on the sex ratio of the overall population because such large families are rare. High sex ratios for first and second births, however, may eventually affect a population's overall sex distribution.

Some observers have speculated that societies with large numbers of single young men will suffer higher crime rates and more internal unrest and violence than societies in which nearly all men “settle down” with a wife and children.³¹ Similar speculation has focused on populations that experience a “youth bulge,” an unusually large proportion of young adults.

A close look at social and demographic trends in China, India, and South Korea suggests that two other factors play a much more important role in the marriage market than sex-selective abortion—rapid

fertility decline and the changing attitude of women toward marriage.

Rapid fertility decline. In a society with high fertility and high mortality, the population age structure resembles a pyramid, with the youngest age group at the bottom and the oldest at the top (fig. 3a). Many children are born, giving the pyramid a wide base. People die at all ages, so that each age group is smaller than the group just younger. The result is a steadily shrinking population up to a narrow tip (the oldest age group) at the top.

By contrast, in a society where fertility is declining steeply or is already below replacement level (generally defined as an average of 2.1 children per woman), the “population pyramid” no longer looks like a pyramid (figs. 3b and 3c). Rather, each succeeding group of children born tends to be smaller than the group preceding it. Twenty to thirty years later, there will be fewer potential marriage partners—both men and women—at younger ages. As a result Asian men who wish to marry younger women (and most do) will find themselves in a “marriage squeeze.”

Rapid fertility decline is contributing to an unbalanced marriage market in South Korea and China. In 1990, there were 127 South Korean boys ages 5–9 years for every 100 girls ages 0–4.³² This group of girls was the first to be affected by sex-selective

Asian men who wish to marry younger women will find themselves in a ‘marriage squeeze’

Fig. 3a, b, and c. Age and sex structure of the national population of India, South Korea, and China, 2005

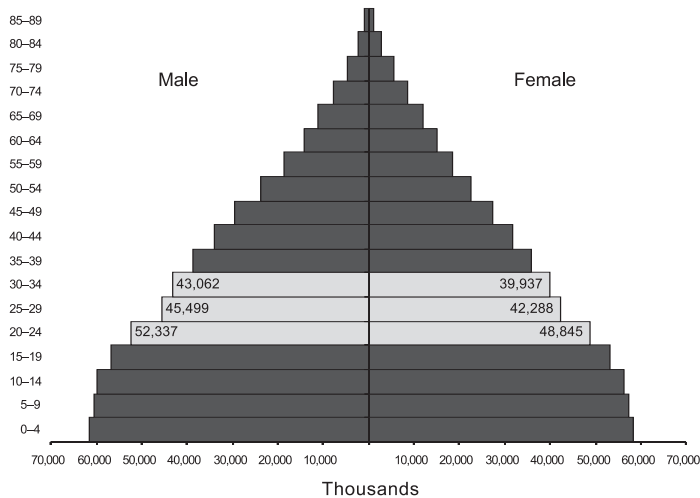


Fig. 3a. Age and sex structure of the national population of India

The pyramid shape of India's national population structure (fig. 3a) results from relatively high fertility and high mortality, with each five-year age group smaller than the one just younger, which is below. In this situation, older men should find plenty of younger women to marry. India's pyramid is less sloping for the three youngest age groups, indicating that fertility levels are coming down. South Korea's national population structure (fig. 3b) is typical of a society in which fertility has been below replacement level for some time. Most of the younger age groups are smaller than the group above. Thus older men will find fewer potential brides in the next younger age group. China's population structure (fig. 3c) is more complicated. The 45–49-year-old age group is unusually small because this group was born during the famine years of 1959–61. After the famine, fertility went up, so the next younger age groups are considerably larger. Twenty years later, this dip followed by a rise in population numbers is “echoed” as these smaller and then larger age groups had children. The small age groups at the bottom of the pyramid reflect a steady fertility decline since the early 1990s. In China, as in South Korea, a man looking for a younger wife will have relatively few women to choose from.

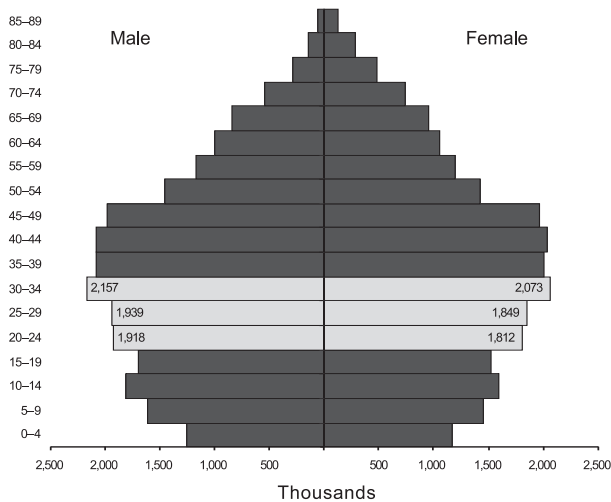


Fig. 3b. Age and sex structure of the national population of South Korea

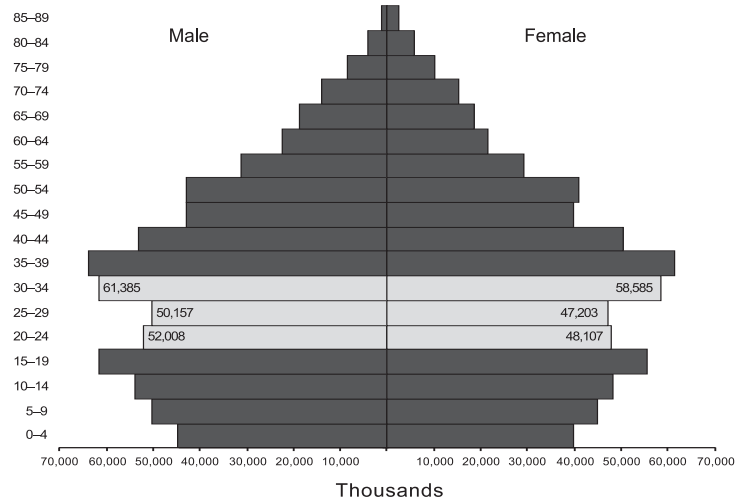


Fig. 3c. Age and sex structure of the national population of China

Women increasingly enjoy a single lifestyle without pressure to marry

abortion. But even if sex ratios at birth had been normal (i.e., if all the “missing girls” were restored), there would be 122 boys in the older age group for every 100 girls in the younger group, simply because of fertility decline. Selective abortion contributed only 4 percent to a potential “marriage squeeze.”

By 2020, if a Chinese man in his late 20s is looking for a bride in her early 20s, he will be facing odds of 119 men for every 100 women. In South Korea, the odds will be even worse—at 123 men ages 25–29 for every 100 women ages 20–24. In India, the odds will be much better (at 104 men in their late 20s for every 100 women in their early 20s) because fertility was not dropping as rapidly in the 1990s. If aggregate numbers are the only thing that matters in a marriage market, then the solution for Asia’s bachelors is simple: Marry an older woman. In China in 2020, for example, there will be only 97 men in their late 20s for every 100 women in their early 30s.

Women’s marriage preferences. Even in societies with a relatively high percentage of women, men will have difficulty finding a bride if women choose not to marry. And if there is an expectation that a husband will have more wealth and education than his wife, then wealthy, highly educated women and poor, less-educated men will both have trouble finding spouses.³³

This appears to be happening in Japan, a country with no history of excessive female mortality or sex-selective abortion. In 2000, 8 percent of Japanese men and 9 percent of Japanese women with a university education had never married by age 50.³⁴ By contrast, among Japanese with junior-high-school or less education, 21 percent of men had not married by age 50, compared with 6 percent of women.

Although marriage rates are much higher in South Korea and China, a similar pattern has emerged. In 2000, among South Korean university graduates, 4 percent of women had not married by age 50, compared with 1 percent of men.³⁵ Among South Koreans with a junior-high-school or less education, 3 percent of men had not married by age 50, compared with 1 percent of women. Among Chinese university graduates, 1.2 percent of women had not married by age 50, compared with 0.4 percent of men. By contrast,

among Chinese with less than a junior-high-school education, 6.8 percent of men had not married by age 50 compared with only 0.1 percent of women.

Apart from a relative shortage of “appropriate” spouses, highly educated women have reasons to be skeptical about marriage. If they are forced to quit their jobs—which are likely to be relatively high paying—when they marry or have children, they will lose much of the investment they made in all those years of schooling, even if they eventually return to the labor force. Thus, single women who work and earn their own income may not have a strong financial incentive to marry.

Along with financial disincentives, several changes in social attitudes have made women more reluctant to marry. In Japan and South Korea, women increasingly enjoy a single lifestyle without pressure to marry. Many live with their parents and make little contribution to household expenses, leaving them with considerable disposable income. At the same time, premarital sex has become widespread. And women with married friends cannot help but notice that Japanese and South Korean men typically provide very little help with childrearing or household chores.

Policy Response

At best, researchers can only speculate what an imbalanced sex ratio will mean for the economic, social, and political situation in South Korea, China, and the northern and western states of India. These societies will have a preponderance of males in the young-adult age group, at least for a while, but this will be within populations increasingly dominated by the middle-aged and the elderly.

South Korean demographers Chai Bin Park and Nam Hoon Cho point out some effects of sex-selective abortion that might be considered positive.³⁶ One is a reduction in the number of unwanted children. If families want boys so badly that they impoverish themselves by having large families or let girls die through neglect or mistreatment, then perhaps it is better for them to have boys. And if the “marriage squeeze” forces men to marry older women, there

should be fewer single—possibly lonely—people in old age. In India, a shortage of women could reduce the demand for dowries.³⁷

Looking at swings in China's marriage market due to changing birth and death rates before, during, and after the 1959–61 famine, economist Maria Porter identifies some positive outcomes from periods when women were relatively scarce. She finds that women who married at a time when women were scarce tended to make “better matches” and to have more influence within the family. Further, Porter finds that children in such families were better nourished than children born to couples who married at a time when women were more abundant.³⁸

Regardless of long-term trends, the combination of strong son preference with modern technology poses a social, economic, and ethical dilemma for policymakers. In South Korea, the use of fetal-screening technologies for sex identification was outlawed in 1987. In 1990, the Korean Ministry of Health and Social Affairs increased the penalties for doctors convicted of performing the tests and suspended the medical licenses of eight physicians, an action that was widely reported in the media. In 1994, the medical code was further strengthened: Physicians who perform such tests may now be imprisoned for up to one year, may be fined up to \$12,000, and may lose their medical licenses.

In May 1989, the Chinese Ministry of Health issued “An Urgent Notice on Strictly Forbidding the Use of Medical Technology to Perform Prenatal Sex Determination,” which reemphasized previous regulations. In January 2007, the Chinese government announced a crackdown on providers who perform abortions for non-medical reasons, as well as increased protections for baby girls. A statement issued jointly by the ruling Communist Party and the State Council said that people who “conduct illegal gender testing of fetuses and sex-selective abortions should face serious punishment,” along with anyone who kills, abandons, or injures a baby girl.³⁹

In 1983, the Indian government banned sex screening in government hospitals, and in 1994 the Indian Parliament passed the Prenatal Diagnostic Techniques Regulations and Prevention of Misuse Act, banning

all fetal screening except to detect genetic abnormalities in the case of high-risk pregnancies. The Indian law requires the registration of all ultrasound machines and bans doctors from revealing the sex of the fetus to expectant parents. In March 2006, a doctor received a three-year prison sentence for telling an undercover investigator that her fetus was female and hinting that she could have an abortion.⁴⁰

These stipulations are difficult to enforce, however, and the laws in these countries do not appear to have had much effect on the practice of sex-selective abortion. Some observers believe that harsh regulations have only made sex-determination procedures more clandestine and more expensive.

Many argue that the stress needs to be on addressing the attitudes of male dominance and son preference that underlie excessive female mortality and sex-selective abortion. Demographer and China specialist Judith Banister has pointed out: “In trying to counteract discrimination against female fetuses and children, [we must] emphasize not only the future dearth of available wives, but also the negative impacts of sex-selective abortion, female infanticide, and selective neglect of girls on today's women and girls.”⁴¹

The problem is that son preference is both deeply rooted in tradition and supported by many aspects of modernization. As journalist Carla Power has observed, “For many activists, India's female feticide problem is entwined with the consumer society the country has become over the past 15 years. If one can order a BMW, goes the mindset, one can order a boy.”⁴²

Both the Chinese and Indian governments are working to change this attitude. In China, the government conducts media campaigns emphasizing the value of daughters. A national program provides educational, medical, and employment benefits to families with one or two daughters and no sons.⁴³ And in an effort to counter the requirement for sons to provide old-age support, the Chinese government recently began paying a small allowance to rural parents age 60 and older who have no living children, only one child, or two daughters.⁴⁴

In 2003, the Indian government launched a program to help homeless women support their

The combination of strong son preference with modern technology poses a social, economic, and ethical dilemma for policymakers

newborn babies with cash allowances that are twice as high for girls as for boys.⁴⁵ And recently, the Directorate of Family Welfare in Delhi launched a public-information campaign encouraging families to value daughters, with slogans such as: “Indira Gandhi and Mother Teresa: Your daughter can be one of them.”

Such programs differ sharply from South Korea’s slow, reluctant shift from policies that actively supported male dominance. Even today, the South Korean government does not provide financial incentives or

conduct media campaigns to strengthen the position of women and girls.

This contrast suggests that China and India may achieve more balanced birth rates and better survival statistics for girls well before they reach the high level of economic development that South Korea currently enjoys. If their policies are successful, Asia’s two most populous countries may be able to improve the lives of millions of women and girls and limit the extent of gender imbalance in their populations.

Notes

¹ Isabelle Attané, “Gender Discriminations at Early Stages of Life in China: Evidence from 1990 and 2000 Population Censuses,” in *Gender Discrimination Among Young Children in Asia*, eds. Isabelle Attané and Jacques Véron (Pondicherry, India: French Institute of Pondicherry, 2005).

² Robert D. Retherford and Tarun K. Roy, “Effects of Family Composition on Sex-Selective Abortion in Punjab, India,” *Genus* 60, nos. 3–4 (2004): 71–97.

³ Woojin Chung and Monica Das Gupta, “Why is Son Preference Declining in South Korea? The Role of Development and Public Policy and the Implications for China and India” (Paper presented at the annual meeting of the Population Association of America, New York, March 29–31, 2007).

⁴ Amartya Sen, “The Many Faces of Gender Inequality,” *The New Republic*, September 17, 2001, 35–40.

⁵ United Nations Population Division, World Population Prospects: The 2006 Revision, Population Database, <http://esa.un.org/unpp/index.asp?panel=2> (China, India, Nepal, and Pakistan; accessed March 20, 2007).

⁶ Minja Kim Choe, “Sex Differentials in Infant and Child Mortality in Korea,” *Social Biology* 34, nos. 1–4 (1987): 12–25.

⁷ Arvind Pandey, Minja Kim Choe, Norman Y. Luther, Damodar Sahu, and Jagdish Chand, “Infant and Child Mortality in India,” *National Family Health Survey Subject Reports*, no. 11 (Mumbai: International Institute for Population Sciences; Honolulu: East-West Center, 1998).

⁸ Fred Arnold, Minja Kim Choe, and T.K. Roy, “Son Preference, the Family-Building Process and Child Mortality in India,” *Population Studies* 52 (1998): 301–315.

⁹ Chu Junhong, “Prenatal Sex Determination and Sex-Selective Abortion in Rural Central China,” *Population and Development Review* 27, no. 2 (2001): 259–81.

¹⁰ Minja Kim Choe and Seung-Kwon Kim, “Pregnancy Wastage among Married Women in South Korea,” *Asian Population Studies* 3, no. 1 (March 2007): 37–55.

¹¹ Chui Fengyuan, “Population Policy of China,” in *Symposium of Chinese Population Science* [in Chinese] (Beijing: China Academic Press, 1981).

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About the Authors

Sidney B. Westley (B.A. Smith College) is a Communications Specialist with the Research Program at the East-West Center. Ms. Westley has worked as a writer, editor, and communications director for international research organizations in Ethiopia, Kenya, and the United States. She has taught courses in science writing for researchers and in science reporting for journalists.

She can be reached at:

Email: WestleyS@EastWestCenter.org

Minja Kim Choe (Ph.D. University of Hawai'i, Manoa) is a Senior Fellow in Population and Health Studies at the East-West Center. Dr. Choe's research focuses on South Korea, Japan, other Asian countries, and the United States. Her interests include family and gender issues, health behavior of adolescents and young adults, fertility and reproductive health, child survival, and statistical analysis of demographic processes.

She can be reached at:

Email: ChoeM@EastWestCenter.org