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## Son bias





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## 1. Son bias and poverty dynamics

The Social Institutions and Gender Index (SIGI) Son Preference Sub-Index draws on Amartya Sen's 1990 work on 'missing women,' or the number of women who could have been expected had girls received equal health care, medicine and nutrition. Sen hypothesised that international distortions in sex ratios equate to as many as 100 million missing women and can be explained by female foeticide and 'gendercide' – the systematic and often lethal neglect of and underinvestment in girls and women. Klasen and Wink (2003) further developed this approach to estimate sex ratio<sup>1</sup> differences over time and space, and it is their methodology that underpins the country assessments in the SIGI rankings.

In this chapter, however, we conceptualise intra-household gender biases more broadly. We include differential investments in, and care and nurture of, boys and girls from conception, with implications across a spectrum of negative developmental outcomes, from mortality through to human capital development deficits, time poverty and psychosocial ill-being. To signal this broader understanding of unequal treatment between sons and daughters, we refer to the social institution as 'son bias.' It is important to note from the outset that imbalanced sex ratios tend to be limited to certain geographical regions (Asia and the Middle East and North Africa region). However, our argument is that general intra-household differentials between sons and daughters are more widespread and that there is good evidence on a number of indicators of this gender bias across regions.

The chapter begins by reviewing the factors that underpin son bias, and then turns to a discussion of the multidimensional impacts of such practices on girls' experiences of poverty and vulnerability. We recognise that son bias is not shaped by poverty alone, and indeed is found among upper wealth quintile groups in some countries and communities.<sup>2</sup> However, we focus our discussion here on linkages between poverty, vulnerability and son bias over the life-course and in intergenerational terms. The second half of the chapter focuses on promising initiatives aimed at challenging the norms and practices that underpin son bias.

## The patterning of son bias

The most typical manifestation of son preference is the relative neglect of daughters, although the most extreme form is female infanticide<sup>3</sup> – the intentional killing of baby girls. In many cases, however, female infanticide has been supplanted by sex identification testing and sex-selective abortion, shifting postnatal discrimination to prenatal discrimination (Klasen and Wink, 2003). A 2008 World Bank study drawing on Demographic and Health Survey (DHS) data estimated son preference based on the likelihood of families having another child if they have only daughters (Filmer *et al.*, 2008). It found that, in Europe and Central Asia, families are 9.4 percentage points more likely to have an additional child if they have only daughters. In South Asia, they are 7.8 percentage points more likely, in the Middle East and North Africa 5.8 percentage points more likely and in East Asia/Pacific 3.7 percentage points more likely. They found no evidence of son preference by this measure in sub-Saharan Africa (surveys did find a subjective preference for sons but this did not translate into demographic ratios) or Latin America (where there seems to be a preference expressed for daughters).

This is largely borne out by SIGI findings (with the exception of Europe and Central Asia), as Table 1 indicates. Latin America and the Caribbean, and sub-Saharan Africa have considerably smaller scores, indicating lower prevalence of son preference. These regional trends do, however, hide significantly higher ratios in a small subset of countries, especially India and China.<sup>4</sup> Presence of other siblings and sibling order also have a strong effect on measures taken to ensure that future children are girls. For example, in India the first child is much less likely to be aborted for being a girl than subsequent children (Jackson, 2010). Overall, neglect of girls is generally more severe for later-born girls and for girls with elder sisters, and this is particularly the case in rural areas (Klasen and Wink, 2003). In India, the sex ratio of second-born children has been estimated at 716 to 1,000 boys in the incidence of the first child being a girl, compared with an excess of girls – 1,140 girls to 1,000 boys – if the first-born is a boy and 910 girls to 1,000 boys for first born children (Sahni *et al.*, 2008).



**Table 1: SIGI son preference scores by geographical region**

	Overall average
Latin America and Caribbean	0.01
Europe and Central Asia	0.03
Sub-Saharan Africa	0.04
East Asia and Pacific	0.19
Middle East and North Africa	0.38

Source: <http://stats.oecd.org/Index.aspx?DatasetCode=GID2>

## 2. Accounting for son bias

A substantial body of evidence shows that son bias is shaped by a complex interplay of economic, socio-cultural and demographic factors. Adding to this complexity is the fact that intra-household attitudes and behaviours intersect with societal-level gender biases and in turn perpetuate both ‘private’ and ‘public’ sphere discriminatory norms and practices. In this section, we provide an overview of the key explanations for the survival and malleability of this social institution, and the ways in which these intersect with poverty dynamics.

### Economic factors

The Economist noted in its March 2010 Leader on the perils of son preference that gendercide affects rich and poor alike, but that there is a substantial body of evidence highlighting the economic rationale for son bias. Arguments centre around the economic contributions that sons are able to make over their lifetime to the family on the one hand, and the costs daughters exact on the other (see Box 9). Sons are expected to maintain financial and social ties to the household throughout their lives and, in developing country contexts, where social security systems are underdeveloped, many parents rely on their sons’ future earnings for their old-age security (Jayaraman *et al.*, 2009; Wang, 2005). Indeed, 51 percent of respondents in a fertility survey in Hubei province identified the primary motivation for a son as the desire for old-age support, with continuation of the family line a distant second (20 percent) (Ding and Zhang, 2009). Moreover, county-level pension programmes in rural China have been found to lower the sex ratio at birth by 9 percent (Ebenstein and Leung, 2010).<sup>5</sup> Patrilineal inheritance systems spanning a wide range of cultural and religious traditions (from Confucianism to Islam, from Hindu law to Kenyan inheritance customs) also mean that sons inherit property,<sup>6</sup> exacerbating discrimination against girls and women and motivating prioritised investments in boys (Jackson, 2010; Quisumbing, 2007) (see also Chapter 1 on Discriminatory Family Codes).

The economic ‘rationality’ of these practices is often reinforced by the fact that daughters are only transitory members of their natal families before their marriage, upon

which they move to and contribute to the families of parents-in-laws, typically becoming physically and psychologically isolated from their birth home (Chu *et al.*, 2006). Moreover, female employment is often undervalued, making men potentially more productive future ‘assets.’ This is especially the case in rural areas, if, as discussed in Chapter 3 on Limited Resource Rights and Entitlements, women are not involved in commercial agriculture and/or do not have property rights (Gupta and Dubey, 2006). In other contexts, however, parents may seek to mobilise resources from older unmarried daughters to improve the family budget in general and the educational outcomes of sons in particular. This can be paid work (often unskilled or semi-skilled factory work in urban areas) or household work, which frees parents up to work longer hours (Chu *et al.*, 2006).

In cultures which practise dowry payments, daughters are often also seen as an economic liability on account of the high cost of weddings, as highlighted by adverts for mobile abortion clinics in India which cry ‘Pay 50 rupees now to save 50,000 rupees later’ (Basu and Jong, 1999). Diamond-Smith *et al.* (2008) note that one-fifth of women surveyed identified dowry payments as the reason they did not want daughters. Rather than declining with the onset of modernity, these costs are escalating over time, and dowry payments may equate to as much as two-thirds of a household’s assets (Nolan, 2009) or several times more than total annual household income (Anderson, 2007). This owes in part to expectations that girls will be educated, with associated costs; the increasing demands that a consumer-oriented culture exerts; new economic trends, especially increasing international remittances, which are inflating dowry demands; as well as the potential opportunity for social mobility which marriage represents, especially for poor low-caste families (Diamond-Smith *et al.*, 2008; Pande and Astone, 2007). It is important to note that this is particularly burdensome in households where, because of parental desire for a son, there are multiple daughters, as parents continue to have children in an effort to have sons (Bélanger, 2010; Lundberg, 2005).

Finally, it is important to point out the linkages between female income and education (Fuse, 2008). Qian (2006) found that increasing female income, holding male income

### Box 9: Links between son bias and changing economic systems

Although son bias is often referred to as an ancient practice, it is also a dynamic one, often influenced by changing economic structures. Incidence of infanticide declined in Maoist China, except during for the famine period of 1959 to 1961, but is thought to have intensified under the economic reform policies of the 1980s. Decollectivisation restored the family as the locus of social and economic security for rural Chinese. It increased the value of male labour by designating the rural household as the basic unit of agricultural production, and this was also reflected in smaller land allocations to families with daughters during the 1980s land reforms.<sup>7</sup> At the same time, declining social support and services in rural areas have strengthened the need for sons to provide such support.

In India, some analysts argue that the lower prevalence of son bias in the rice-growing areas in the east and south compared with the predominantly wheat-growing areas of the west and north is related to the relative value of women's agricultural labour in these two cultivation systems: high in the former and low in the latter. Accordingly, as a result of the green revolution of the 1970s, which reduced dependence on female agricultural labour, women's economic value declined, arguably strengthening son bias proclivities.

Source: Chen and Summerfield (2007); Diamond-Smith *et al.* (2008); Li (2007); Pande and Astone (2007); Srinivasan (2005)

constant, improves survival rates for girls, whereas increasing male income, holding female income constant, worsens survival rates for girls. Increasing female income increases educational attainment of all children, whereas increasing male income decreases educational attainment for girls and has no effect on boys' educational attainment. However, this can change with birth order: Wang (2005) noted that the deficit in the number of girls born as second children was more than twice as high among educated as among illiterate mothers, and may indicate easier access to, and greater affordability of, prenatal ultrasound in educated individuals.

**Among women, even though there is recognition that daughters may provide greater affection and emotional support, the 'ability' to produce a son is a critical determinant of her status within the family.**

- Diamond-Smith *et al.* (2008)

### Social factors

As highlighted by the perpetuation of son bias practices in some immigrant communities in high-income Organisation for Economic Co-operation and Development (OECD) countries (e.g. Almond *et al.*, 2009),<sup>8</sup> intra-household gender discrimination is also strongly influenced by socio-cultural factors, especially in Asia and the Middle East and North Africa. Social prestige and the fear of social stigma are key reasons (see Box 10). Jin *et al.* (2007) noted that, in China, because the power structure of the community favours men, having a son in the family provides a sense of security and higher social status, whereas families without a son may be subject to community ridicule. Similarly, Gupta and Dubey (2006) noted that, in India, even though female offspring may

be just as capable of offering support, there may be stigma associated with receiving such support from daughters.

Sons also confer a sense of living up to culturally sanctioned gender expectations. A survey in Vietnam, for instance, found that, for some male respondents, having a son was associated with masculinity (being a 'real man') and with being blessed (UNFPA and ISDS, 2007). Among women, even though there is recognition that daughters may provide greater affection and emotional support, the 'ability' to produce a son is a critical determinant of her status within the family (Diamond-Smith *et al.*, 2008). Indeed, in many societies men and women who lack a male heir are often looked down on as 'failed reproducers' (Bélanger, 2010). Osaranen (2008) notes that, in Africa, sons are preferred in order to perpetuate the family name, with communities carrying out prayers for fecundity to wish young couples sons or 'sons and daughters, with sons taking precedence over daughters,' as a girl loses her identity with marriage. In Latin America, there appears to be less evidence of son preference, as reflected in demographic ratios. Some research suggests that mothers have a slight preference for daughters (Filmer *et al.*, 2008); other studies suggest mixed preferences between countries and children, depending on order and siblings (Cruces and Galiani, 2007). However, there has been little research on social factors behind the sex preferences for children in Latin America. In China, research indicates that the most serious perceived gender inequality for many women is that they anticipate they will be deeply discriminated against if they fail to have a son (Argnani *et al.*, 2004; Dubuc and Coleman, 2007; IRIN, 2005).

Son bias is also reinforced by religious and cultural traditions in a number of societies (see Box 11). Such beliefs can be deeply entrenched, as highlighted by anthropological evidence from Vietnam where the *Doi Moi* market-oriented reforms in the 1980s brought about a return of pre-socialist funeral and cult rituals that demand a male heir, thereby reinforcing the desire for sons (UNFPA and ISDS, 2007).

### Box 10: Traditional proverbs about son bias

'With one son you have a descendant, with 10 daughters you have nothing' (Vietnamese proverb)

'Raising a daughter is like watering your neighbour's garden' (Punjabi proverb)

'She is a true wife who has borne a son' (Indian scripture – Manu Smriti)

'The birth of a girl grant elsewhere, here grant a son' (Indian ancient text – Atharva Veda)

'The birth of a boy is welcomed with shouts of joys and firecrackers but when a girl is born the neighbours say nothing' (Chinese saying)

'When a son is born, Let him sleep on the bed, Clothe him with fine clothes, And give him jade to play [...] When a daughter is born, Let her sleep on the ground, Wrap her in common wrappings, And give broken tiles to play' (China Book of Songs, 1000-700 BC)

'Oh God I beg of you, I touch your feet time and again, Next birth don't give me a daughter, Give me Hell instead' (Uttar Pradesh folk song)

'*Abu-banat* [father of daughters]' (Arabic insult)

'May you die' (approximate translation for an 'endearment' in parts of Pakistan)

### Box 11: Religious underpinnings of son bias

According to Confucian belief, family lineage can be continued only through a male child. One of the three grave unfilial acts is to fail to have a son (UNFPA and ISDS, 2007). When a Hindu or Sikh parent dies, a son must carry out the last rites; if not, the very devout believe they will not reach heaven. And although girls have some importance in Hinduism – giving away a daughter in marriage (*kanyadaan*) is considered meritorious – sons are perceived to carry on family lineage in a way daughters cannot (Pande and Astone, 2007). In the case of Islam, although Ebenstein and Leung (2010) note that there is evidence in the theological literature of lower degrees of daughter aversion than in Hinduism, Muslim law does sanction inheritances for sons which are doubly as large as those of daughters (IRIN, 2005). In parts of Africa, sons are also preferred in order to perpetuate the family name and perform their parents' burial rites, whereas a girl loses her identity with marriage (Ebenstein and Leung, 2010).<sup>9</sup>

## 3. Impacts of son preference on poverty dynamics

Son preference can have a range of impacts on gendered poverty dynamics. The best-researched are those on mortality and sex ratios, but a number of other effects also shape the poverty and vulnerability trajectories of girls across their life-course, and potentially those of their offspring. These include nutrition and health status, educational status, time use, involvement in child labour and psychosocial well-being. We discuss each of these in turn below, drawing on a range of quantitative and qualitative evidence from global studies.

### Mortality and biased sex ratios

In a number of countries (largely in Asia and North Africa), girls face discrimination even before birth, evidenced by high rates of abortions and orphaned girls as a result of the preference to raise sons rather than daughters.<sup>10</sup> Since Sen's 100 million missing women estimate, other studies have found that this figure (calculated on the basis of the number of sex-specific abortions or foeticide combined with the number of female deaths owing to inadequate health provision as a result of sex discrimination) has increased in absolute terms, although it has remained the same as a proportion of the population, matching population growth between 1990 and 2000 (Klasen and Wink, 2003).<sup>11</sup> Increased mortality rates between 1990 and 2000 owing to sex-selective abortions and unequal access to health services were found to be more significant than mortality resulting from under-nutrition (*ibid*).<sup>12</sup> The resultant effects of increasing sex ratios (calculated as the number of males divided by the number of females in a given population)

Societal gender inequities also play an important role in perpetuating son bias. Osaranen (2008) notes that female foeticide is perceived by many women as a 'sober acknowledgement of the miseries they suffer in oppressive patriarchal societies' and can even be seen as a positive deed. 'It is better they die than live like me' or, as one reproductive health professional in India noted: 'You can't wish away centuries of thinking by saying boys and girls are equals ... It is better to get rid of an unwanted child than to make it suffer all its life.'

Demographic variables also shape son bias practices. Education appears to play an important role (Fuse, 2008). Mothers married to illiterate husbands are approximately 10 times more likely to prefer a son compared with those married to highly educated husbands; women's education and access to media at individual and village levels are strongly associated with weaker son preference (Pande and Astone, 2007). There is also some limited evidence that son bias is more prevalent in rural areas (except in Latin America). Pande and Astone (2007) argue that, in spatially disadvantaged locales, such as remote mountainous villages, there is likely to be a greater need for sons as a source of physical protection, given the likely absence of public authorities that can protect them from violent attackers.

**Table 2: SIGI son preference scores by country income level**

	Son preference (2009)
High-income countries	0.28
Upper-middle-income countries	0.10
Low-middle-income countries	0.14
Other low-income countries	0.13
Middle East and North Africa	0.38

Source: <http://genderindex.org>

have seen projections of 30 to 40 million more men than women in China alone by 2020 (The Economist, 2010). In India, 2001 Census data indicate a national sex ratio of 933 women per 1,000 men, which is even lower in some states, such as Rajasthan, where the ratio is 921 women to 1,000 men (ibid).

It is important to note that, despite substantial evidence that poverty increases the likelihood of sex-specific abortions and reduces provision of health care to young girls (see below), there is also evidence that son bias among higher-income families is prevalent in some contexts (Klasen and Wink, 2003). This is especially the case in China, India, Korea, Taiwan and Vietnam, where a combination of fertility control policies, the importance of securing a male heir for economic and cultural-religious reasons (see above) and the ability to access often expensive new reproductive technologies have fuelled highly unequal sex ratios (see Table 2).

### Health and nutritional biases

Although the figures for female infanticide are alarming, and are arguably especially linked to poverty (as better-off households are able to afford high-tech solutions), underinvestment in

girls' health and nutrition during childhood is also of critical concern, given potential life-course and intergenerational impacts. Pande (2003) argues that gender bias may be: 'The result of "active" bias (e.g. "intentional choice to provide health care to a sick boy but not to a sick girl"), "passive" neglect (e.g. "discovering that a girl is sick later than would be the case for a boy, simply because girls may be more neglected in day-to-day interactions than are boys") and "selective favouritism" ("choices made by resource constrained families that favour those children that the family can ill afford to lose").' See Box 12 on immunisation and gender bias.

Save the Children (2010), for example, argues that gender is an important dimension of child survival inequality in India. Whereas male neonatal mortality is higher than female neonatal mortality, reflecting physiological differences between the sexes, this trend is reversed for under-five mortality, reflecting differences in the care male and female children receive. Females have 36 percent higher mortality than males in the post-neonatal period, and 61 percent higher mortality than males at ages one to four (IIPS, 2007).<sup>13</sup> In the same vein, Arnold *et al.* (1998) found that son preference led to particularly high levels of discrimination against girls in

### Box 12: Immunisation and gender bias

Evidence of immunisation rates favouring sons or daughters within households varies. Socioeconomic status appears to play a key role in the decisions that households have to make. Poorer households appear to have to choose more frequently between children in terms of vaccinations. Although increased maternal education increases household investments in health, decisions still display gender preferences.

Regional differences exist in how sex differentials are manifested. South and Southeast Asia show a bias against girls' coverage, ranging from a 13.4 percent gap in India to 4.3 percent in Nepal. Pakistan has a 7.8 percent gap and Cambodia shows a 4.3 percent difference. However, coverage depends on household composition: girls with at least two older brothers and no sisters are as likely to be vaccinated as siblings. Girls who have at least two older sisters are 1.72 times less likely to be vaccinated compared with boys (Pande and Malhotra, 2006).

Sub-Saharan Africa shows variation between countries. In Gabon and the Gambia, there is also a bias against girls, with a gender gap of 7.2 percent and 6.7 percent, respectively. However, in Madagascar, Nigeria and Namibia, there is a bias against boys of 12 percent, 7.9 percent and 5.6 percent, respectively. It is suggested that this bias against boys owes to fears that vaccinations may reduce male fertility.

Source: Jones *et al.* (2008)





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India, Fatehgarh Sahib, Punjab. In a male dominated society, women and young girls are advised to stay indoors all the time.

medical treatment and in the quality of food consumed in a number of Indian states where son preference was prevalent.<sup>14</sup>

There also appears to be a gender gap in breastfeeding, as a result of parents' greater investment in sons. As breastfeeding reduces postnatal fertility, girls are weaned early so mothers can become pregnant in the hope of conceiving a son (Jayachandran and Kuziemko, 2010). This is especially the case for girls who do not have an older brother, putting them at greater risk of disease from reduced immunity from breast milk and greater exposure to dirty water or food (ibid).<sup>15</sup> Indeed, Fikree and Pasha (2004) argue that the effects of discriminatory social practices contribute to higher death rates of female infants, such that, in Pakistan and India, a girl has a 30 to 50 percent higher chance of dying than a boy between the ages of one and five.<sup>16</sup> And in China, Li and Lavelly (2003) found an even stronger association between attitudinal bias towards sons and sex-specific infant death, with female infants whose mothers reported it important to have a son almost twice as likely to die than their male counterparts (11.5 versus 6.1 percent). Female infants whose mothers expected a son to be a source of financial support also had a higher risk of death than male infants (9.1 versus 5.2 percent). This bias is often higher in resource-constrained households. Choe *et al.*

(1998) found that, in Egypt and Bangladesh, where parents were constrained by limited family resources, the preference for sons caused parents to allocate nutrition and health care preferentially to them.

### Reduced educational opportunities

Although there is broad recognition in development circles that girls' education provides a high return of investment for current and future generations (Quisumbing, 2007),<sup>17</sup> and is critical to poverty reduction (UNICEF, 2001), gender disparities in education persist, particularly in sub-Saharan Africa and South and West Asia.<sup>18</sup> Substantial progress has been made over the past two decades in gender parity in primary education, but 28 countries still have fewer than 90 girls in primary school per 100 boys, 18 of these in sub-Saharan Africa (UNESCO, 2010). The disparities are much higher again at the secondary school level (ibid). In other regions, although national-level gender disparities in education are much lower, gender gaps do persist among some vulnerable communities, for example among indigenous communities in Latin America. In Mexico, over 90 percent of all male and female children complete at least three years of secondary education but the



**Box 13: 'A girl never finishes her journey' – bias against daughters' education in rural Ethiopia**

The Young Lives project, an international longitudinal study on childhood poverty over the course of the Millennium Development Goals (MDGs), has found strong bias against girls' education in rural Ethiopia:

'We prefer to send boys to school. A girl never finishes her journey. She humiliates her parents. When you try to keep sending her to school, she does not progress beyond grade 7 or 8. She remains useless; she does not make plans for her future. Secondly, if she is weak at school, she gets close to boys and loses her virginity. She loses both her education and her virginity' (community leader, Ethiopia, in Tafere and Camfield, 2009).

'Education was also seen as risking girls' reproductive and economic future because if you keep a girl in school rejecting marriage; either she gets a boyfriend or gets too old so nobody will ask you to marry her. Then she remains idle at home and parents start cursing her as useless, leading to conflict [...] Parents prefer to marry her at earlier age when she is demanded by boys to clear her way by giving [her] some resources' (focus group, Ethiopia, in Tafere and Camfield, 2009).

'Many of the children who do daily labour discontinue their education [and] most of them are young girls. These girls are mainly from the poor families – they help their families by doing daily work. During the summer season [school vacation] most of the daily work is reduced because the irrigated lands are converted into cereal production, but the cash production will start again in the spring, which directly coincides with the time of education. As a result many of them are either absent [from school] or discontinue it. Sometimes the work may be heavy and becomes beyond the capacity of the girls to perform' (focus group, Ethiopia, in Tafere and Camfield, 2009).

rates are substantially lower among indigenous groups. For children aged 12 to 14, 84.5 percent of boys go to school versus 80.5 percent of girls; for the 15 to 19 age range, 41.3 percent of boys go to school versus 33.3 percent of girls (INEGI and INMUJERES, 2008).<sup>19</sup> Indigenous girls in Guatemala are the least likely of any group to be enrolled in school. At age seven, 54 percent of indigenous girls are in school, compared with 71 percent of indigenous boys and 75 percent of non-indigenous girls. By the age of 16, only 25 percent of indigenous girls are enrolled in school, compared with 45 percent of indigenous boys and around 50 percent of non-indigenous boys and girls (Hallman *et al.*, 2007).

Differential parental support for educating boys versus girls plays an important role in perpetuating this inequity. Analysts have identified a number of explanations for this, including expectations about labour market returns and remittances, marriage market dictates, concerns about controlling girls' reproductive health and preserving family honour, the probability of school success and continuation and intra-household resource constraints (see also Boxes 5 and 6). In the case of China, for instance, Wang (2005) argues that a combination of economic and socio-cultural factors is at play. In semi-rural and rural areas, where the One Child Policy allows for two children if the first born is a daughter, girls with brothers are often subject to the highest risks of dropping out of school because of limited family finances. This is exacerbated by an absence of retirement pensions, which means that parents perceive that better-educated sons are likely to get better jobs and to be able to provide greater financial support in their old age. This gender gap tends to be less pronounced in urban areas, where the One Child Policy is more firmly enforced, old-age pensions are more common and

education levels are higher, indicating that parents are less likely to discriminate against daughters.

Himaz (2009) argues that, in India, although attitudes towards girls' schooling are changing rapidly, the possibility for bias towards investing in boys' education needs to be considered at two levels: first, in the decision whether to enrol a child in school or not, and second, in education-related expenditure once the general commitment to school attendance has been made. Findings from a sample of almost 1,000 rural households in Andhra Pradesh state found that parents were more likely to invest in private school fees and extra tuition fees for their sons than for their daughters, although the outlay for uniforms, books and transport was equal. This suggests that, even if parents decide to support the education of male and female children, they tend to place greater importance on ensuring quality education for their sons.

**Time poverty**

Children's time use and the extent to which they can shape decisions about how their time is allocated between education, work and leisure have a significant impact on their material, relational and subjective well-being (Vogler *et al.*, 2009). Cross-country data are limited and uneven at best, but existing evidence suggests that time allocation patterns are highly gendered globally, especially in impoverished households (Blackden and Wodon, 2006). Although there are important context variations, overall research findings point to girls' greater involvement in domestic and care work activities and lower levels of participation in schooling and leisure. Boys are more likely to be engaged in paid market-based work, schooling and leisure, with significantly less time spent on

### Box 14: 'Fate favours me and plays big jokes on my sister'

'Three years ago, [my younger sister and I] went through the high school entrance examinations together. She had higher overall grades than mine and she could go to an outstanding high school. However [...] my family couldn't afford the high tuition fees for both of us at the same time. In our county, male preference is quite popular in parents' minds [...] and [parents] do not think investment in daughters' education will benefit them much. As a result, I was sent to one of the outstanding high schools and my sister was sent to an ordinary high school [...] When we applied to universities, I applied to Zhongshan University. Because my sister graduated from the ordinary high school, my parents told her to apply for a small local college called Train and Railroad College in order to save money for my education. On the announcement date, the news shocked administrators in the county examination centre: my sister's overall grades were the number one among all of the applicants in the entire county! However, when my sister learned about this she ran into the room and cried and cried, and after a while she became quiet and kept silent. Now I got the university acceptance letter and my sister hasn't [...] However, it is not her wish but my parents' idea. She is a very smart person, and in the past three years she studied just as much as me, but the results were very different. How can I face my sister without feeling guilty? Fate favours me and plays big jokes on my sister' (in Wang, 2005).

domestic chores (Delap, 2000; Hsin, 2005; Kabubo-Mariara and Mwabu, 2007). The International Labour Organization (ILO, 2009) estimates that, globally, 10 percent of girls aged 5 to 14 years old perform household chores for 28 hours a week or more, and that this is approximately double that of the proportion of boys expected to undertake the same amount of domestic work. Regional variations between the burdens of household chores are pronounced, however: the difference between girls and boys work is greatest in Africa, at 44 percent, followed by Latin America at 29 percent and lastly Asia and the Pacific at 8 percent (see also Box 15).

Domestic chores can have a considerable impact on the time girls have available to undertake other activities, such as school and after school studies. Girls who perform 28 hours or more a week of domestic chores attend school 25 percent less than girls who do fewer than 14 hours per week (ILO, 2009). However, the impact on girls is highly context specific and depends on cultural norms (Doane, 2007), particularly on age, household size and age structure (Ilahi, 2001), as well as on the type of shock (e.g. economic, health, energy) to which households and communities are vulnerable.

The main reason identified in the literature for this imbalance between sons and daughters is the 'mother substitute' role that girls often play.<sup>20</sup> On account of the unequal gendered distribution of labour within the household, when women take on paid employment outside the home in the absence of alternative affordable child care options,<sup>21</sup> or in times of household-level shock (e.g. loss of income or illness of a family member), daughters are often expected to shoulder additional traditional gender responsibilities, usually at the expense of their education.<sup>22</sup> This substitute effect is especially strong in poor households: there is a close association between households that rank as poor on a consumption metric and those where women have high work burdens (Ilahi, 2001).<sup>23</sup> Moreover, girls tend to serve as critical shock absorbers for poor households as they adjust to crisis and intensified

poverty. For example, in contexts of declining access to energy (for instance through deforestation or drought), girls, as women's main helpers in water and fuel collection, are often compelled to devote additional time to such domestic tasks (Nankhuni, 2004).

Sickness in families also sees a greater care burden placed on girls rather than boys in terms of taking responsibility for tending to other household members. The effect varies,

**Globally, 10 percent of girls aged 5 to 14 years old perform household chores for 28 hours a week or more, this is approximately double that of the proportion of boys expected to undertake the same amount of domestic work.**

- ILO (2009)

however, depending on whether the sick family member is a child or an adult. In the case of the former, Pitt *et al.* (1990) found sex-differentiated effects of infant sickness on intra-household time use in Indonesia. Teenage daughters were significantly more likely to increase participation in household care

activities, to decrease participation in market activities and to drop out of school in response to sibling illness, compared with their male counterparts. Ilahi (2001) and Guarcello *et al.* (2006) found similar disproportionate care burdens for daughters in Latin America and resulting negative effects on their level of schooling, although the effect was generally stronger in urban areas.

In the case of adult illness, Ilahi (1999) found that this did not affect child time use in urban areas, but in rural Peru, adult sickness had strong gender-differentiated effects. Here, girls tend to compensate for lost household income by increasing their participation in income-generating work, although there is no effect on the time use of boys. Similarly, Yamano and

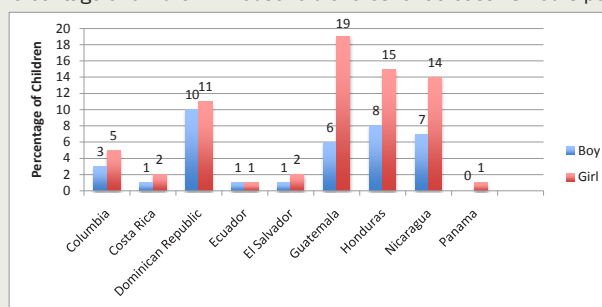
### Box 15: Existing evidence on gender differences in children's time use

Gender-disaggregated data on children's time use are still in a fledgling state globally. Based on fragmented evidence, however, a picture of girls' relative time poverty emerges. Evidence from Mexico, for instance, shows that girls spend 175 percent more time on household tasks than boys (Brunnich *et al.*, 2005). Similarly an Understanding Children's Work (UCW) study in 2006 found that, in El Salvador, three times as many girls as boys undertook 28 hours or more of household chores per week; in Costa Rica, Guatemala, Nicaragua and Panama, at least twice as many girls as boys did so. In the case of economic activities, more boys than girls were found to be engaged in such work, although the measure used was one hour of economic activity for every 14 hours of household chores, suggesting that economic activity in the region is considerably more valued than household labour.

In Africa, several studies have focused on the different opportunity costs of investing in girls and boys within households as an explanation for gender disparities and son preference. If opportunity costs are measured according to the lost labour to a household as a result of sending children to school, households often lose more by sending girls to school. In Tanzania, for example, the opportunity cost of sending 13- to 15-year-old girls to school is significantly higher than that of sending 13- to 15-year-old boys, for whom the cost is 25 hours of work per week compared with 37 hours per week for girls (World Bank, 1999). Further studies have confirmed that this effect is consistent across all ages (Mason and Khandher, in Ritchie *et al.*, 2004). In Uganda, girls work 21.6 hours per week compared with 18.8 hours per week for boys; in Guinea, rural girls work 22.9 hours compared with boys' 17.4 hours; and a cross-country study of Kenya and South Africa showed that girls spend more time on household work compared with boys, representing a greater opportunity cost to households if girls engage in non-domestic work activities (in Ritchie *et al.*, 2004).

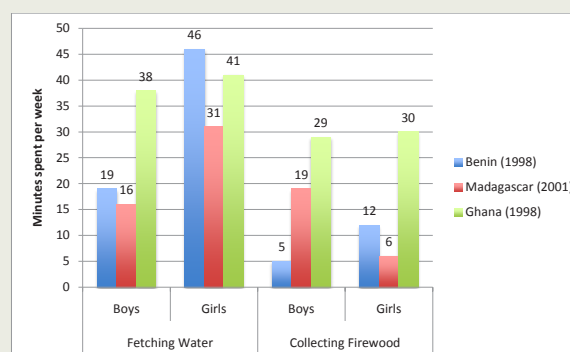
Pörtner (2009) shows that age and gender often intersect in important ways with regard to shaping time use. Older girls (14 to 16 years) in the Philippines have more demands on their time than boys and younger girls in terms of both housework and market activities.

Percentage of children in household chores for at least 28 hours per week, 7 to 14 years



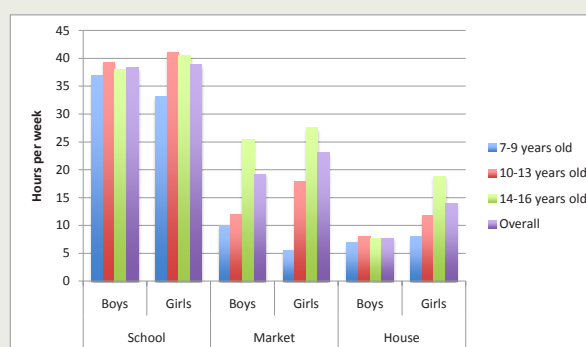
Source: UCW (2006)

Time spent per day collecting water and firewood in minutes, boys and girls aged 6 to 14 for Benin and Madagascar and 7 to 14 for Ghana



Source: Charmes (2006, in Blackden and Wodon, 2006)

Time use in hours per week of children in the Philippines, by age



Source: Pörtner (2009)



### Box 16: Daughters disproportionately shoulder the care of relatives living with HIV/AIDS

In his 2004 address on International Women's Day, Kofi Annan emphasised that: 'As AIDS forces girls to drop out of school, whether they are forced to take care of a sick relative, run the household, or help support the family, they fall deeper into poverty. Their own children in turn are less likely to attend school, and more likely to become infected' (in Plan International, 2009).

The Girls' Education Monitoring System found that children's participation in formal schooling was decreasing in African countries with the highest prevalence of HIV (11 percent or greater). Within these high prevalence countries, girls are most affected and in some cases their enrolment has decreased (Chesterfield *et al.*, 2001). In Swaziland, for instance, school enrolment is estimated to have fallen by 36 percent as a result of AIDS, with girls the most affected.<sup>24</sup> Similarly, in a study exploring the ways in which households cope with HIV/AIDS in South Africa, Steinberg *et al.* (2002) found that the majority of caregivers in the home were women or girls (68 percent) and that, of these, 7 percent were less than 18 years of age.

Jayne (2004, in Blackden and Wodon, 2006) found evidence of intergenerational impacts of adult illness, with particularly negative effects on girls, owing to their care-giving burdens. They estimated that the probability that girls from relatively poor households would attend school in the one- to two-year period before the death of an adult declined from 90 to 62 percent. These effects are particularly prevalent in high HIV/AIDS-incidence contexts (see Box 16).

### Involvement in child labour

Although it is generally assumed that boys are more likely to be engaged in child labour, according to the ILO (2009) 100 million girls between 5 and 17 years are involved in child labour worldwide. Girls account for 46 percent of all child workers, and 53 million are estimated to be in hazardous or worst forms of child labour. Moreover, child labour activities for girls, combined with household and domestic duties, mean that daughters are often expected to work many more hours per week than boys (see above). In many contexts, girls are often discriminated against, with parents valuing boys' schooling over that of girls, such that girls may have to work to supplement household income and school costs as well as undertake unpaid household chores, enduring a double burden of work. For instance, in Guatemala and Nicaragua, in poorer households older sisters are expected to work as domestic workers to support the family and the education of younger siblings (Dammert, 2010).

Gender discrimination against girls and parents' son preferences often represent a vicious circle of poverty for girls, who receive fewer years of schooling owing to an expectation that they will work (Budlender, 2008). Girls are often more susceptible to abuse in the workplace and are less able to defend their rights. In cases of bonded labour, girls can be particularly vulnerable to physical and sexual abuse (ILO, 2009). It is estimated that girls under 16 involved in providing domestic services away from their own households constitute the largest section of child labourers (Human Rights Watch, 2006). Working as domestic workers can leave girls particularly vulnerable, as in many developing countries there is inadequate protection and labour laws often do not apply. Given the nature of the work, they are often 'invisible,' and girls are thought to make up 80 to 90 percent of child domestic workers (Pflug, 2002). Households that allow their children to become domestic workers are often poor and of particular caste or socioeconomic status (*ibid*). In Asia, working as a domestic worker is often desired and preferred over agricultural work, but such work often renders girls and young women vulnerable to physical, emotional and sexual abuse (Human Rights Watch, 2006), with those who run away particularly vulnerable to commercial sexual exploitation (Pflug, 2002). Similarly, in sub-Saharan Africa girls from poor rural areas are often considered not worthy of education by their parents and are sent to live and work with families in urban areas (see Box 17).

Child domestic workers frequently find that even food is wielded as a tool of power by employers, with many girls going desperately hungry on a regular basis. Some girls reported being so hungry that they engaged in sex for money or stole money from their host families to buy food.

### Box 17: The invisibility of girl domestic workers in West Africa

Sending children to grow up with relatives – child fostering, or *confiage* – is a common social practice across Africa. Child domestic workers often work in the house of a relative, acquaintance or even stranger, where they have been sent by their parents at an age as young as five. If a host family treats a girl well, sends her to school and allows her to be in contact with her parents, she might have a better future than she will at home. Parents often send their children to the city because they think they will suffer less from hunger and the hard living conditions found in rural areas. However, many adults employing girl domestic workers violate their role as guardians or employers, and instead exploit and abuse them. It is difficult for the victims to seek redress, as abuse occurs in the home and is hidden from public scrutiny. Many child domestic workers are isolated in their employers' homes and are unable to access any information or assistance from outside.

Source: Human Rights Watch, 2006



© Sven Torfinn / Panos Pictures (2009)  
Bangladesh, Tangail. 10 year old Argina works as a house girl for a family in Tangail.

'I had no right to eat breakfast. Instead I had to prepare the sandwiches for the children at school. I so wanted to devour them. But I had no choice. My aunt beat me, with shoes or other things. Sometimes she beat me very early in the morning. Once I revolted against this all. I did not want to go sell things on the street. I had not even had breakfast yet. She forced me to go anyway. I cried [...] I was with a man, he did garbage disposal. He wanted sex but I refused. But I was too hungry, so in the end I gave in. I ate well that day. He gave me GNF500 or 1,000, I cannot remember. I was six or seven years old. I did not feel OK about it, I did it against my will' (in Human Rights Watch, 2006).

### Psychosocial impacts

The impacts of son bias on girls' psychosocial well-being are not well researched, but fragmented findings suggest that this is an area of concern, and one that requires further analytical attention. First, evidence from a range of contexts emphasises that daughters face a much higher degree of control over their behaviour than boys. In Confucian cultures in East Asia, whereas boys are perceived to have intrinsic worth from birth, girls are seen as 'blank slates,' with their value depending on socialisation and tight restrictions on their behaviour (Rydstrom, 2003). Similarly, Reynolds (1991, in Vogler *et al.*, 2009) notes that, in Zimbabwe, for instance, there is much greater control of girls' time use, especially after puberty, owing to concerns about controlling girls' reproductive behaviour. A Population Council study in Pakistan found

that parents not only allowed sons much greater mobility (see also Chapter 5 on Restricted Civil Liberties) but also accorded sons considerably greater decision-making freedom relating to work, education and marriage (Ul Haque, n.d.).

In order to escape strict parental control, adolescent girls in Latin America often opt for early marriage and/or pregnancy, not only as a result of a desire to engage in sexual relationships but also as a means to leave the family home and especially fathers' control (Pereznieto and Campos, 2010).

'I started to work because I did not want to stay at home as my father treated me badly [...] no, it is not that they treated me badly, it is just that I don't like to stay at home because he beats me, he tells me off, I can't even have a rest. He is a carpenter you see and he asks us to do all kinds of things, I have to help him with sanding [...] I don't even have the time to do my homework' (female child domestic worker, 14, Peru, in Vargas, 2010).

However, such 'choices' often result in reduced opportunities for future development. Teenage mothers are often compelled to leave school without completing a basic education and are forced to acquire new responsibilities with which they are unfamiliar.

'Well, I was studying, I finished second year of secondary and I gave birth just after I finished. After a few months I started third year but I was unable to finish because it was very difficult to leave the baby with someone all the time. Back then the Estancias programme hadn't yet started' (single adolescent mother, Mexico, in Pereznieto and Campos, 2010).



A second important psychosocial impact relates to girls' general relegation to domestic work responsibilities. This gendered division of labour in favour of sons not only has negative implications for daughters' human capital development and future income-generating potential (see above) but also, because of the too-often invisible and undervalued social construction of domestic work activities, may lead to girls' lower levels of self-esteem and confidence (see Box 18).

#### 4. Promising policy and programme initiatives

In order to tackle son bias and the negative impacts it has on girls and their vulnerability to development deficits and life-course poverty, a multipronged approach is required – one which addresses the complex mix of economic and socio-cultural factors underpinning intra-household gender discrimination. Initiatives designed to influence legal frameworks, attitudes and behaviour directly relating to son bias need to be complemented by efforts to enhance girls' human capital development opportunities, to prevent and protect girls from abuse and exploitation and to reduce girls' time poverty. In this section, we review promising policy and programme initiatives covering three of these four broad areas from a range of country contexts, in order to highlight initiatives that could contribute to altering norms and practices that perpetuate son bias and help stem life-course and intergenerational poverty transfers. Issues relating to prevention and protection of girls from abuse and exploitation are discussed in Chapter 4 on Physical Insecurity.

##### Directly targeting son bias

As discussed in the previous section, son bias is not only the product of cultural and religious traditions. It is also a rational response to pervasive societal gender discrimination and exclusion, on the one hand, and underinvestment in social protection systems, which often leaves families solely responsible for their life-course security, on the other. In order to challenge intra-household inequalities, an important starting point is to ensure that legal frameworks are in place to prohibit sex-selective abortion and female infanticide. Legislation banning sex-selective abortions has been introduced in a number of countries (India in 1983, South Korea in 1987,<sup>25</sup> China in 1989, Nepal in 2002), but legislation is often only weakly enforced (see Box 19).

Legal action by itself, however, is not enough to eliminate harmful traditional practices. To be effective, legislation needs to be part of a broader integrated public education campaign that involves opinion makers and cultural leaders. Several promising approaches have been undertaken in China and India. India's Save the Girl Campaign aims to lessen son preference by highlighting the achievements of young girls

#### Box 18: Links between the value of work and girls' self-esteem

Children negotiate personal freedom in a number of ways, including through work refusal. This can constitute a powerful statement, given that involvement in work activities is highly valued in many cultures (Vogler *et al.*, 2009). Nieuwenhuys (1994), in her study of children's daily activities and routines in a village in Kerala, India, emphasises that, for the poor, gender and age are crucial in the household's division of labour and are closely linked to the perceived value of a member's contribution. 'It is their being allotted tasks that are not valued in monetary terms that makes for children's work, and in particular girls', to be held in low esteem' (*ibid.*).

#### Box 19: The challenges of legal enforcement

In India, enforcement of legislation outlawing sex pre-selection technologies has proven challenging. In 1994, the Prenatal Diagnostics Techniques (Regulation and Prevention of Misuse) Act was passed, becoming operational in 1996. Although this ended advertising about pre-birth sex selection, the act was difficult to enforce, partly because of a lack of political will and limited engagement from the public and non-governmental organisations (NGOs) (UNFPA, 2004). However, in 2000 health activists filed public interest litigation on the non-enforcement of the act in the Supreme Court, which led to the government issuing directives and incorporating the act into various public health programmes to try and improve enforcement. In 2002, the bill was amended to expand the definition of 'prenatal diagnostic techniques' to include preconception techniques, as well as the imposition of a fine of up to \$2,000 and threat of the cancellation of licence for health care practitioners who divulged the sex of a foetus. By 2006, 300 doctors had been prosecuted in accordance with the law (Mudur, 2006); however, only 37 cases have been filed for communicating the sex of the foetus and 27 for advertising sex selection. The first conviction with a prison term was ordered on 28 March 2006, when a doctor and his assistant were sentenced to two years in prison and a Rs 5,000 fine in Palwal, Haryana. Until this, only one case had resulted in successful prosecution, but even that person received an insignificant punishment.<sup>26</sup> Similarly, a 2008 report demonstrated that practitioners who are willing to disclose the sex of a foetus are still easily found, with the practice justified as a 'social duty' which prevents the ill-treatment of unwanted daughters (ActionAid and IDRC, 2008).

in India. The campaign was launched in 2005 on International Women's Day and has involved a series of activities, including: working with *anganwadis* (public child care workers), women



### Save the Girl Campaign image



Source: [www.bellevision.com/index.php?action=topnews&type=129](http://www.bellevision.com/index.php?action=topnews&type=129)

and community and spiritual leaders to raise awareness that female foeticide is a crime; rallies focusing on the need to stop sex determination tests and discrimination against girls; and encouraging people to take oaths against female foeticide.

A similar multipronged initiative has been undertaken in China by the Care for Girls programme, which was undertaken in 24 counties on a pilot basis between 2003 and 2005. The programme sought to reduce the imbalanced sex ratio by: promoting government leadership and ownership of the programme at all levels; cracking down on the non-medical use of prenatal sex determination and sex-selective abortion; improving reproductive health services for women; supporting girl-only families by offering special benefits (including housing support for poor households, support for girls' education and pensions); launching public awareness campaigns; and strengthening data management and evaluation systems related to birth registration, abortion and infant and child mortality by sex. Significantly, the programme contributed to a reduction in the sex ratio at birth from 133.8 in 2003 to 119.6 in 2005, as a result of which it was extended nationally (Li, 2007).

In India, the United States Agency for International Development (USAID), in partnership with the International Foundation for Electoral Systems (IFES), works through integrated multiple interventions. These include legal aid, advocacy, public information, training and research, to support and build change through the Dignity for the Girl Child programme, which brings together local and international organisations. The programme has led workshops on the high sex ratio with community leaders, in order to raise awareness of the problem. In response to the training, one participant from the Sikh community began community groups, in which women discussed the issue of foeticide in their communities. This inspired mass weddings where couples took an oath against foeticide (IFES, 2007).

Harnessing the power of the media has been another effective approach. In India, for example, a government-NGO partnership involving Plan International, the Edward Green Charity (and later IFES and USAID) and the government of India developed and broadcast a soap opera series to highlight the problems of sex-selective abortion to the general public. The soap used a Bollywood-style approach to examine issues such as the law against prenatal tests, gender poverty, anti-dowry laws, violence against women and potential social problems stemming from a biased sex ratio. An audience assessment by the New Delhi-based Centre for Advocacy Research (CAR) found that the drama resonated strongly with young women (see Box 20) but that, to reach older women and men, a more interactive approach to the development of the storyline would be required, so that they did not feel alienated by the programme. Overall, however, CAR concluded that there was considerable scope for serials to tackle such issues and for producers to do so while seeking regular viewer feedback.<sup>27</sup>

Another important part of public education includes school curriculum reforms and especially the development of gender-sensitive materials. This entails, for example, the inclusion of examples and images that show women and girls in positive roles, apply role reversal, increase the portrayal of women in public spheres and men in the private domain and avoid stereotypical family scenes, occupations and activities. The United Nations Children's Fund (UNICEF, 2006) documents a range of positive examples from Brazil, the Maldives and Vietnam which show men actively involved in infant and child care, young children involved in non-stereotypical gender activities (e.g. boys in the kitchen, girls playing with

#### Box 20: The power of the media in reshaping gender-biased attitudes

A BBC news story noted the following viewer impressions of the soap opera on sex-selective abortion:

'I wish my mother-in-law could see this film. Anyway now I have got a little strength to protest if this happens to me' (Arundhuti, 25-year-old housewife with one son)

'We never thought that aborting female fetuses was a crime. I thought it was something very common [...] this film made me realise about the seriousness of killing female fetuses' (Neha Masti, 34-year-old housewife with two sons)

'Surprisingly, I did not know about the law at all. Being a husband, at times we don't understand our wives. This film made me understand never to force wives for such things. I need to discuss it with her' (Santosh Kumar Singh, 31-year-old father of a boy and girl)

Source: <http://news.bbc.co.uk/1/hi/health/4173597.stm>

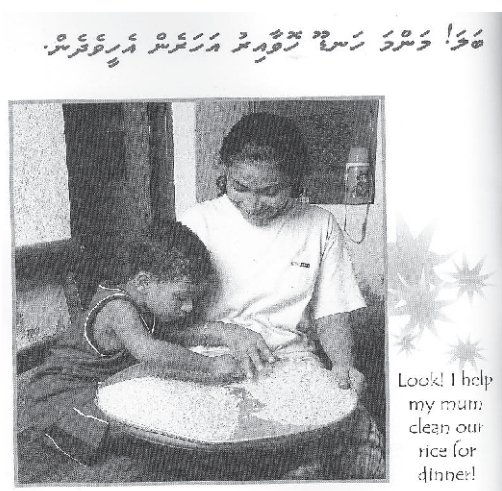
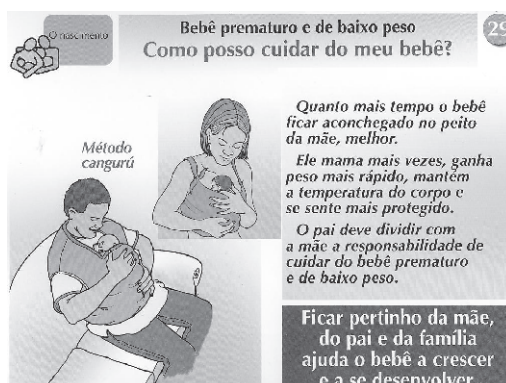
construction toys) and non sex-segregated family interactions in Vietnam (see the images below). The Beijing + 15<sup>28</sup> Regional Report for Asia and the Pacific<sup>29</sup> also noted good practices from Singapore, where public education work was being carried out in conjunction with the Association of Devoted and Active Family Men and the Centre for Fathering, and from Hong Kong, where the Education Bureau is embarking on an 'equal opportunities for all subjects' initiative, rejecting the practice of streaming girls and boys.

As discussed, traditional attitudes towards boys and girls account for only part of the entrenched nature of son bias. Taking action to address parental economic concerns is also vital. Part of parental reasoning against investing in a daughter's education is that male earning power is likely to be considerably higher. Even if a daughter does not marry early, and contributes to the household income while she is single, lower investments in girls' education, gender-segmented labour markets and wage differentials mean that on average she will probably be less well remunerated than her brothers

(Wang, 2005). Accordingly, promoting gender parity in schools and the enforcement of equal employment legislation are critical to tackle the broader structural discrimination that girls and women face outside the family, and in this way to enhance their intra-household status.

In many societies the elderly in poor communities are often especially vulnerable; in order to reduce their reliance on their children (typically sons) for old-age support, advocacy around strengthening public investment in social protection systems is another important longer-term strategy. Wenjuan and Dan (2008) argue that old-age pensions are affordable even in middle- and low-income countries (as evidenced by examples in Shaanxi province in China,<sup>30</sup> Lesotho, Mauritius and Nepal) and that they can play a critical role in reducing poverty and vulnerability at this stage in the lifecycle. Indeed, most older people live and share resources with children and, as such, pensions have a positive impact on child welfare as well, contributing to the interruption of the intergenerational cycle of poverty transmission. Pensions free up income to be spent

### Gender-sensitive school textbook images from Brazil, the Maldives and Vietnam



Source: UNICEF (2006)



on health, education and nutrition, often with particularly valuable impacts for girls. In South Africa, for instance, girls in pension-recipient households are on average 3 to 4 cm taller than girls in non-recipient households (Duflo, 2000, in Palacios and Sluchynsky, 2006).

### Improving girls' human capital development opportunities

In order to minimise the negative effects of son bias on girls' experiences of poverty and vulnerability, policy approaches which improve their human capital development opportunities are also essential. We consider three broad categories: reducing opportunity costs of girls' schooling; enhancing capacity building and training opportunities for adolescent girls; and social health protection. First, there is a growing range of promising policy initiatives that aim to reduce the opportunity costs poor families face in investing in girls' education. Glick (2008) argues that two types of policies could improve girls' educational access: 'those that are "gender neutral," that is, that do not specifically target female (or male) schooling returns or costs; and those that are gender-targeted, that is, that attempt to alter the costs or benefits of girls' schooling relative to boys.' In the first case, demand for girls' schooling is often more responsive than boys' to gender-neutral changes in school distance, price and quality, which can be explained

by perceptions about differential costs and returns of girls' and boys' schooling. Increasing the availability of local schooling to reduce distances travelled and demand-side interventions that subsidise households' schooling costs, such as cash transfer programmes and school feeding programmes, are other good examples (see Box 21).

In some contexts, however, where gender imbalances are significant and/or cultural barriers are strong, approaches which directly target girls' schooling can be more expedient. Glick (2008) notes robust evaluation evidence that households respond to incentives in the form of subsidies for enrolling girls (see also Chapter 1 on Discriminatory Family Codes). India's Balika Samridhi Yojana programme, which is designed to change attitudes towards the girl child at birth, improve enrolment and retention at school, raise the age of marriage and assist girls to undertake income-generating activities, is one such case. The government makes 'periodical deposits' of money for the first two girls in a family from birth until the age of 18, with payments conditional on school attendance and remaining unmarried. The scheme was redesigned in 1999 to 2000 to ensure that the dividend went directly to the girl child (Ramesh, 2008). Other promising initiatives on the supply side which are supported by randomised programme evaluation evidence include financial incentives to teachers and school managers to attract or retain female students (Glick, 2008). Informal assessments also suggest that the provision

#### Box 21: Strengthening demand for education

Cash for education approaches reduce the cost of sending children to school by providing additional income to the family and offsetting losses if school replaces paid work for a child. In the case of conditional cash transfers – those programmes that make participation dependent on compliance with the use of basic services for children – they may also increase the benefits of attending school and reduce health and nutrition constraints. The earliest and most famous cash transfer programme is Mexico's Oportunidades ('Opportunities'), initiated in 1995, which now reaches 25 million low-income Mexicans (World Bank, 2008). Oportunidades offers a higher monthly cash transfer to support girls' secondary education and has been shown to increase secondary school enrolments by 20 percent for girls and 10 percent for boys (Adelman *et al.*, 2008). In the case of Brazil's Bolsa Família ('Family Grant'), a similar initiative reaching 12.4 million households, aggregate school attendance by boys and girls has risen by 4.4 percentage points (*ibid.*). The largest gains have occurred in the historically disadvantaged northeast, where enrolments have risen by 11.7 percentage points. Importantly, children and especially girls aged 15 to 17 who are at greatest risk of dropping out are more likely to progress from one grade to the next. Bolsa Família increases the likelihood that a 15-year-old girl will remain in school by 19 percentage points.

School feeding programmes are another important demand-side approach: although there is insufficient evidence that they address malnutrition, they have the potential to improve school participation and learning outcomes through the consumption of nutritious food (Adelman *et al.*, 2008). In World Food Programme (WFP)-assisted schools, there is on average only a very small gender gap (78 percent boys' to 76 percent girls' net enrolment rate). In cases where there are significant gaps in access to and completion of basic education, WFP programmes include take home rations for girls which are conditional on their attendance rate. These can contribute to increasing enrolment rates: for example, in Pakistan the provision of take home rations to girls attending school for at least 20 days a month resulted in a 135 percent increase in enrolment between 1998 to 1999 and 2003 to 2004 (WFP, 2010). In Afghanistan, WFP helped to increase girls' enrolment and attendance rates by distributing a monthly ration of 3.7 litres of vegetable oil (an important component of the local diet) to girls, conditional on a minimum attendance of 22 days per month (*ibid.*). In India, which has a long history of school feeding programmes (since 1925), a 2001 Supreme Court ruling declared a constitutional right to food, and school feeding programmes now feed approximately 120 million girls each day (Winch, 2009). This has been found to be especially effective in improving school enrolment, especially among girls (WFP, 2010).



of separate school toilet facilities for girls and boys, flexible school schedules, the redesign of teacher training to change attitudes or behaviour towards female students and campaigns to promote girls' education can serve to reverse aspects of the school environment that effectively favour boys' learning, or can make schools more acceptable environments for daughters in the eyes of parents. However, more systematic evaluation work is required to understand the causal mechanisms at work (ibid).

A second important cluster of promising policy and programme approaches focuses on capacity strengthening and empowerment for adolescent girls. Such programmes aim to increase girls' capabilities so that their opportunities can be broadened, their self-esteem and social status enhanced and gender discriminatory attitudes undermined. Although the goal to lower son preference is not explicit, empowering adolescent girls and young women is important, given the generally positive relationship between female education and reduced son bias (see Box 22).

The *Abriendo Oportunidades* ('Opening up Opportunities') programme in Guatemala was launched in 2004 and is led by the Population Council. It targets poor Mayan girls in remote rural areas who suffer from chronic poverty, lack of schooling, high rates of early marriage and social isolation. The programme aims to increase Mayan girls' social support networks, to connect them with role models and mentors

and to build a base of life skills and professional experience using a model of mentoring and creating safe spaces. The programme reaches more than 40 communities and has worked with more than 3,000 girls aged between 8 and 18, and has proved a significant vehicle for change for both girls and their communities. Age-appropriate girls' clubs are led by a peer mentor who conducts workshops with mothers and daughters on topics like self-esteem, life skills and developing plans for the future. Situated close to their homes, the clubs offer: weekly sessions in life and leadership skills; sexual and reproductive health information; a space to voice ideas and aspirations; peers who become role models and friends whom girls can visit and have fun with; and stipends to help them learn money management. Girls who have participated in the project remain connected through a national network (the Indigenous Resource and Empowerment Network) and the organisation provides internship and employment opportunities.

Evaluation findings suggest that girls have become more confident about their skills and participate in public activities, with many aiming to continue school, delay marriage and lead a productive life. Girl club leaders in particular are changing community attitudes about gender restrictions. As one girl leader explained: 'After my personal and professional training, I began organising girls' clubs in my community to teach groups of girls the subjects I had learned, to share my experience with them, to motivate them to dream about what they would like to be, and to work hard in order to reach their goals' (Catino *et al.*, 2009). Many girls have been able to continue their schooling and find paying jobs in the private and public sectors or have been employed in the programme, which is now expanding to more communities.

A third key area involves the promotion of social health protection. It is increasingly recognised that costs are a critical barrier to the uptake of health services and that removing user fees can have a powerful effect on service usage (ILO, 2008). Given gendered barriers in accessing health services (discussed in the previous section), supporting health fee exemptions for

### Box 22: The multiplier effects of empowering adolescent girls

A number of innovative adolescent girl empowerment initiatives offer valuable models. The Better Life Options programme in India trains low-income married and unmarried adolescent girls aged 12 to 20 in literacy, vocational skills, health and reproductive care. A 1999 evaluation found that programme participants scored better on a wide range of indicators. On average, they married later, were more likely to use contraceptives, had better nutrition, received professional obstetric care and postnatal care, had an institutional delivery, had fewer children and fewer infant deaths, enjoyed increased control over resources and felt more confident speaking in front of elders (Boender *et al.*, 2004; CEDPA, 2001).

The Bangladesh Rural Advancement Committee (BRAC) Adolescent Education Centres in Bangladesh were created in 1993 to encourage adolescent girls to retain their maths and literacy skills, and later added a life skills training element where emerging adolescents leaders were trained to provide training to their peers. There is also training on business skills, which has doubled participating girls' involvement in income-generating activities, including microfinance groups (Plan International, 2009).

### Box 23: Engendering energy policy and investment priorities

A study in Mbale, eastern Uganda, and in Kasama, Zambia, highlights the time-saving effects of better infrastructure for girls and women. It estimated that, if woodlots are within 30 minutes of the homestead and if the water source is within 400 metres, Mbale women and girls will save more than 900 hours per year: around 240 hours in firewood collection and 660 hours in water collection. Similarly, in Kasama, Zambia, they would save 125 to 664 hours per year in water collection and 119 to 610 hours per year in firewood collection.

Source: Barwell (1996, in Blackden and Wodon, 2006)



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China, Guangxi province. Peasant girl carrying water for crops with her mother in Li River karst limestone landscape.

poor households and/or social health insurance constitutes an important first step in minimising hurdles that daughters face in securing equal health care (e.g. Sen and Ostlin, 2010; Walsh and Jones, 2009). Moreover, given emerging evidence that women often bear the brunt of the burden of coping with health shocks in the household (e.g. through the distress sale of female-owned assets to cover catastrophic health costs) (e.g. Baulch and Quisumbing, 2009), promoting more equitable social health protection for the poor and vulnerable is especially important. Although it is often argued that such schemes are beyond the realm of the possible for low-income countries, the example of Ghana's National Health Insurance Scheme, introduced five years ago and now covering around 60 percent of the population, highlights that, with strong political will, such a system is both affordable and feasible (Jones *et al.*, 2009).

### Reducing girls' time poverty

In order to reduce time poverty, which is a key manifestation of bias against daughters in the intra-household distribution of labour, resources and power, efforts to reduce girls' time

outlays in housework and care work roles are critical. In terms of the former, a growing number of initiatives seek to minimise the time girls spend on water and fuelwood collection, one of the most time-consuming activities that millions of girls undertake on a daily basis (see Box 23). These typically seek to integrate the development of time-saving infrastructure into the objectives of broader poverty reduction programmes (see also Chapter 1 on Discriminatory Family Codes). They may include the promotion of technologies such as energy-saving stoves to reduce the daily task of firewood collection; promotion of donkeys, especially for women and children, to ease the burden of transporting drinking water and other goods; introduction of water harvesting techniques and agricultural practices that are less labour intensive, such as lighter and better-quality hand tools; management of soil cover in order to suppress weeds; or introducing crops that are less labour intensive (Hartl, 2006). Ethiopia's Productive Safety Net Programme (PSNP), for instance, includes infrastructure to help reduce women and girls' time poverty (such as the construction of water and fuelwood collection points within the proximity of the community) in the definition of community



assets undertaken through its public works component (Jones *et al.*, 2010). Similarly, in Morocco, an International Fund for Agricultural Development (IFAD)-supported project has acted as a catalyst for women's and girls' integration into development activities by providing community investments in potable water networks and electricity, which have reduced female workloads, particularly in water fetching and manual labour. Moreover, the project has raised awareness of the role they play, on an equal basis with men and boys, in household and community development (Hartl, 2006).

The second critical approach to alleviating girls' time poverty concerns child care services. Much of the literature on early child development and crèche services focuses on the importance of such facilities to support women's involvement in paid work. There is surprisingly little attention paid to the potential role that these can have on reducing the time burden of sibling care. For example, as the 2007 Education For All (EFA) Global Monitoring Report notes: 'When young children attend ECCE [early childhood care and education] programmes, their older sisters or other female kin are relieved of care responsibilities, a common barrier to girls' enrolment in primary school' (UNESCO, 2007).

**Son bias often results in deficits in terms of girls' health and nutrition status, educational opportunities and attainment, time use, self-esteem and protection from exploitative and/or abusive forms of labour.**

Moreover, early child care and education services can help tackle gender discriminatory attitudes that perpetuate son bias, by providing 'an opportunity to reduce stereotypes about traditional gender roles and to foster gender equality at an age when young children are developing understandings of identity, empathy, tolerance and morality' (*ibid*).

A variety of promising approaches recognise the key linkages between girls' education and the provision of early childhood care. India is the front runner in this regard: not only are its ECCE programmes both widespread and longstanding, dating to the 1975 creation of the Integrated Child Development Services (ICDS) programme, but also, for more than two decades, national ECCE policy has specifically acknowledged the impact of ECCE on girls' primary education. In 1986, the National Policy on Education acknowledged that the universalisation of primary education would require the provision of day care centres in order to free girls from their child care duties. The District Primary Education Programme works closely with ICDS to ensure that primary school locations and schedules closely match those of ECCE centres. India also pioneered the mobile crèche movement. Mumbai Mobile Crèche has worked for over 30 years to free children

from the burden of looking after their younger siblings, enabling girls to stay in school.

Another NGO that recognises the ties between girls and their younger siblings is Room to Read. Serving nearly 10,000 girls in Southeast Asia and Africa, Room to Read offers a variety of support to keep girls in school. In addition to supplying course fees and female teachers, the programme offers flexible classes that allow girls to bring their younger siblings with them and to return home at lunch to cook for their family (Room to Read, 2009). The Millennium Challenge Corporation (MCC), also working in Africa, is following two paths for the provision of ECCE, both with the goal of relieving 'school-age girls of the burden of caring for very young children' (MCC, 2005). In Burkina Faso, the MCC is working to construct girl-friendly schools that jointly house day care centres; in Liberia, the grant will cover the construction of community-managed child care centres.

## 5. Lessons learnt and policy implications

Overall, this chapter has highlighted the importance of understanding the underlying economic and social factors that underpin intra-household gender biases and the gendered patterning of the impacts of differential treatment of sons and daughters and resulting linkages to poverty dynamics.

We recognise that son bias is not caused by poverty alone, although there is evidence that it is often intensified as a result of it. This is especially the case where income poverty intersects with low levels of education and literacy (among women as well as men) and in rural areas, where inheritance practices and agricultural labour demands play a particularly important role in shaping a preference for male offspring.

The impacts of son bias on girls and young women do have strong links with girls' experiences of poverty and vulnerability in childhood and adulthood, and often in intergenerational terms. Son bias often results in deficits in terms of girls' health and nutrition status, educational opportunities and attainment, time use, self-esteem and protection from exploitative and/or abusive forms of labour.

Perhaps not surprisingly, given the culturally specific patterning of social institutions, there are significant differences across regions. There is considerable evidence that son bias is especially severe and entrenched in parts of Asia and the Middle East and North Africa, as reflected in alarmingly high sex ratio imbalances. In this part of the world, son bias may entail female foeticide or significantly different investments in girls' health and nutrition, as reflected in gender-unequal child mortality rates as well as a range of other human capital and psychosocial deficits. In sub-Saharan African and Latin America, although demographic trends do not reflect any significant son preference, there is nevertheless ample evidence that daughters in impoverished and marginalised communities in particular suffer from unequal investments in



their education, higher levels of time poverty and heightened vulnerability to abusive forms of work. All of these can in turn contribute to negative psychosocial impacts in childhood, adolescence and beyond.

In order to address these discriminatory norms and practices, a multipronged approach supported by partners across a range of organisations at the international, national and sub-national levels is required, buttressed by strong political will. This should include:

- Harmonising legal provisions with international conventions and commitments and, most importantly, enforcing them, including through legal sensitisation and community outreach initiatives;
- Investing in public education efforts, including through curriculum reforms and innovative use of multimedia approaches, to mobilise support for investing in daughters;
- Incentivising and supporting families through a range of social protection interventions for education and health, including cash transfers, school feeding programmes, scholarship programmes for girls and social health insurance;

- Promoting empowerment programmes for marginalised adolescent girls, especially those that rely on role models and peer mentors, which can also have powerful multiplier effects;
- Investing in alternative energy sources and infrastructure at the community level so as to tackle girls' disproportionate time poverty;
- Ensuring the provision of affordable and accessible child care facilities to relieve girls of sibling care responsibilities; and
- In the longer term, enhancing girls' and women's use, ownership and control of assets and income will greatly strengthen their perceived value in the household and community and will contribute to reducing the preference for sons over daughters. The recommendations in Chapter 3 are thus especially relevant.

## Notes

- 1 This is calculated based on the number of males in the population divided by the number of females.
- 2 In some cases, poverty actually may protect some girls, especially in settings where they participate in subsistence agriculture and therefore are valued as producers (Pande and Astone, 2007). Wealth, on the other hand, poses a significant risk: imbalances in sex ratios are most acute among the higher classes in India. In the Punjab region, one of India's more economically advanced states, approximately one in five female fetuses is thought to be aborted following sex identification testing (IRIN, 2005).
- 3 Infanticide of either sex, whether for economic, social or other reasons, has been prevalent across cultures throughout history. Even in the 1990s, infants under one year of age in the UK were 'four times as likely to be victims of homicide as any other age group – almost all killed by their parents' (Marks and Kumar, 1993).
- 4 In the case of China in particular, sex ratio disparities may also be reflected in international adoption of girl babies, as well as the high number of 'orphaned girls' assigned to state institutions (IRIN, 2005).
- 5 Chen and Summerfield (2007) also note that, in 2004, the Chinese government initiated an old-age security project for those who complied with the birth control policy in selected rural areas in order to help address the sex ratio imbalance. In 2005, the Liaoning provincial government launched a pilot version whereby families who had either one child or two daughters were entitled to receive 600 yuan per year per person after they reached age 60.
- 6 El-Gilany and Shady (2007); Nasir and Kalla (2006); Kiriti and Tisdell (2005); Yueh (2006).
- 7 Although overt gender discrimination reduced in the late 1990s and early 2000s, Chinese women's rights have become less secure, particularly because, with the end of land reallocations, marriage has become a source of landlessness for women. In 1998, contracts were extended to 30 years, and redistributions could be made only when two-thirds of the villagers voted in their favour (Chen and Summerfield, 2007). These changes have particular implications for women in the lowest income group, who are typically heavily dependent on agriculture as their income source (Hare *et al.*, 2007).
- 8 Almond *et al.* (2009) considered 2001 and 2006 census data in Canada to analyse sex ratios among Asian immigrants. Higher sex ratios were found among first generation immigrants and stronger preferences for sons when all other children were girls. The authors found that Sikh families were more likely to use sex-selective abortion whereas Christian and Muslim families were more likely to keep having children until they had a son. Argnani *et al.* (2004) considered a group of Chinese immigrant women in Italy and found no particular sex ratio imbalance, but a preference for sons was expressed by survey participants owing to a desire to carry on the family name. However, abnormal variations in sex ratios were seen after the birth of the first child. Dubuc and Coleman (2007) considered sex ratios among Indian-born mothers in the UK. There has been a four-point increase in sex ratio among Indian-born mothers, which they argued is consistent with changes seen in India. Higher sex ratios are particularly evident later in the birth order and significant only above the third child.
- 9 Ebenstein and Leung (2010)'s conclusion that, although there is support for son preference in Islamic scriptures, there is a lower degree of daughter aversion, is also supported by quantitative analysis.
- 10 Plan International (2007) identifies Algeria, Bangladesh, Cameroon, Egypt, India, Jordan, Liberia, Libya, Madagascar, Morocco, Nepal, Pakistan, Senegal, Syria, Tunisia and Turkey as countries with a strong son bias, as well as Ecuador, Mexico, Peru and Uruguay in Latin America.
- 11 Trends over the same period highlight important regional differences, with sharp reductions in sex discrimination mortality in North Africa and South Asia. However, overall numbers have remained constant globally owing to a dramatic rise in mortality in China (Klasen and Wink, 2003).
- 12 Recent research shows that boys are 60 percent more likely to be born prematurely and have problems breathing, and face higher risks of birth injury, because of their larger body and head size. But although girls benefit from their physiology at birth, this inherent resilience quickly gets overshadowed by gender discrimination – and in many countries girls swiftly become much more vulnerable than boys (World Bank, 2004, in Plan International, 2009).

- 13 Examples of gender-differentiated treatment are as follows: among children under age five with symptoms of acute respiratory infection (ARI), treatment was sought from a health facility or provider for 72 percent of the boys but 66 percent of the girls. Among under fives with fever, treatment was sought from a health facility or provider for 73 percent of boys but 68 percent of girls. Boys are also (7 percent) more likely than girls to be taken to a health facility for treatment in case of diarrhoea. Among last-born children, boys are 11 percent more exclusively breastfed than girls (IIPS, 2007).
- 14 Patra (2008) notes that Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Punjab and Uttar Pradesh have the highest gender biases.
- 15 This has been shown to account for 11 percent of the mortality gender gap between babies aged 12 to 36 months, and could account for 14 percent of girl mortality between one and five (Jayachandran and Kuziemko, 2010).
- 16 Hazarika (2000) notes that, among young children in South Asia, sons have greater access to health care but are not better fed than daughters. This suggests that, rather than parental preference for boys (which would result in greater consumption among sons than daughters, which is not borne out by survey evidence), intra-household gender discrimination has its primary origins in higher returns to parents from investment in sons.
- 17 A robust body of evidence emphasises that girls' education promotes gender equality by minimising time use differences between boys and girls, and is positively associated with lower fertility, increased spacing between births, smaller likelihood of child marriage, improved productivity and lower levels of intergenerational transfer of poverty (e.g. Lloyd *et al.*, 2009).
- 18 In Afghanistan, there are 63 girls in school for every 100 boys (UNESCO, 2010).
- 19 In many households, men are still seen as the main breadwinners, so families perceive less value in investing in girls' education (Jusidman, 2004); some families prioritise boys' education, particularly when there are insufficient resources to finance education of both girls and boys; and some girls are not interested in continuing in school because they fail to see employment opportunities for themselves despite greater levels of education (Perezniato and Campos, 2010).
- 20 This substitute effect is further borne out by the fact that the presence of additional adult females in the household may alleviate the housework burden of children. Ilahi (2001) found that, for Peru, the presence of adult females in the household lowered the housework time of both boys and girls but had no effect on child economic activity. It also significantly affected the educational attainment of girls, with no effect on the attainment of boys (Guarcello *et al.*, 2006).
- 21 Research from Brazil (Deutsch, 1998) and Romania (Fong and Lokshin, 1999) found that presence of children aged 6 to 15 who can serve as substitute care providers had a negative effect on the decision to use outside child care (in Ilahi, 2001). In Kenya, a 10 percent increase in child care costs reduced older girls' school enrolment rate by 3 percent, while the effect was not significant for boys (Glinskaya *et al.*, 2000, in Ilahi, 2001).
- 22 Grootaert and Patrinos (1999); Guarcello *et al.* (2006); Ilahi (2001); Skoufias (1993).
- 23 Ilahi (2001) notes an opposing income effect – as a mother's income increases her demand for child schooling increases – and substitution effect – children have to step in for a mother's forgone housework – at play here. The substitution effect dominates at least up to a certain income threshold in developing countries.
- 24 [www.unfpa.org/hiv/women/report/endnotes.htm#c4h16](http://www.unfpa.org/hiv/women/report/endnotes.htm#c4h16).
- 25 In South Korea, legislation providing for the revoking of medical practitioners' licenses has helped reduce the country's sex ratio, which fell from 116.9 in 1990 to 110 in 2004 (Hesketh and Zhu, 2006).
- 26 <http://infochangeindia.org/2006031077/Women/Analysis/Challenges-in-implementing-the-ban-on-sex-selection.html>.
- 27 <http://news.bbc.co.uk/2/hi/health/4173597.stm>.
- 28 Note that Paragraph 83 of the Beijing Platform for Action calls for governments and education authorities to promote shared responsibilities between girls and boys vis-à-vis domestic work and family responsibilities.
- 29 [www.un.org/womenwatch/daw/beijing15/regional\\_review.html](http://www.un.org/womenwatch/daw/beijing15/regional_review.html).
- 30 Introduced in 2007, the New Rural Social Pension Insurance Programme provides pensions to people over 60 years on the condition that family members aged 18+ have subscribed and paid for the insurance. The aim is to reduce dependency on children for financial support in old age and the risk of conflict between family members because of the need to provide financial support. In 2007, coverage had already reached 61.3 percent of those eligible (Wenjuan and Dan, 2008).