Gender Discrimination

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Missing women

- Amartya Sen (Nobel Prize recipient): There are 100 million missing women

- What is a "missing woman"?

- Ratio: #females/#males (1986)

- Europe: 1.05; Sub-Saharan Africa (SSA): 1.022 North Africa: 0.96; South East Asia: 1;

- China: 0.94; Bangladesh: 0.94; India: 0.93; Pakistan: 0.91

What is a missing woman?

- A missing woman is a woman who should be alive and is not.

- Number of missing women=Current population* Female/male ratio in SSA-Current number of women

- Number of missing women in 1986 (millions):

  - South East Asia: 2

  - China: 44

  - Bangladesh: 3.7

  - India: 37

  - Pakistan: 5.2

Is development the answer?

- No trend in sex ratios in India.

- Perverse trend in China

- Negative correlation with the level of development within country

Ratio of under-five boys and girls in 2005
## (Source: Dasgupta (2009) for the next three)

South-Eastern Asia	**104.1**
Malaysia	105.7
Singapore	107.3
Brunei Darussalam	106.6
Eastern Asia	**120.6**
China	122.4
Republic of Korea	108.1
Dem. People's Republic of Korea	105.2
South-Central Asia	**107.3**
Afghanistan	105.9
India	108.6
Nepal	105.3

Map 1

Child Sex Ratios (m/f) in Provinces of China and States of India, 2000–01

Legend:
- 1.20 or above
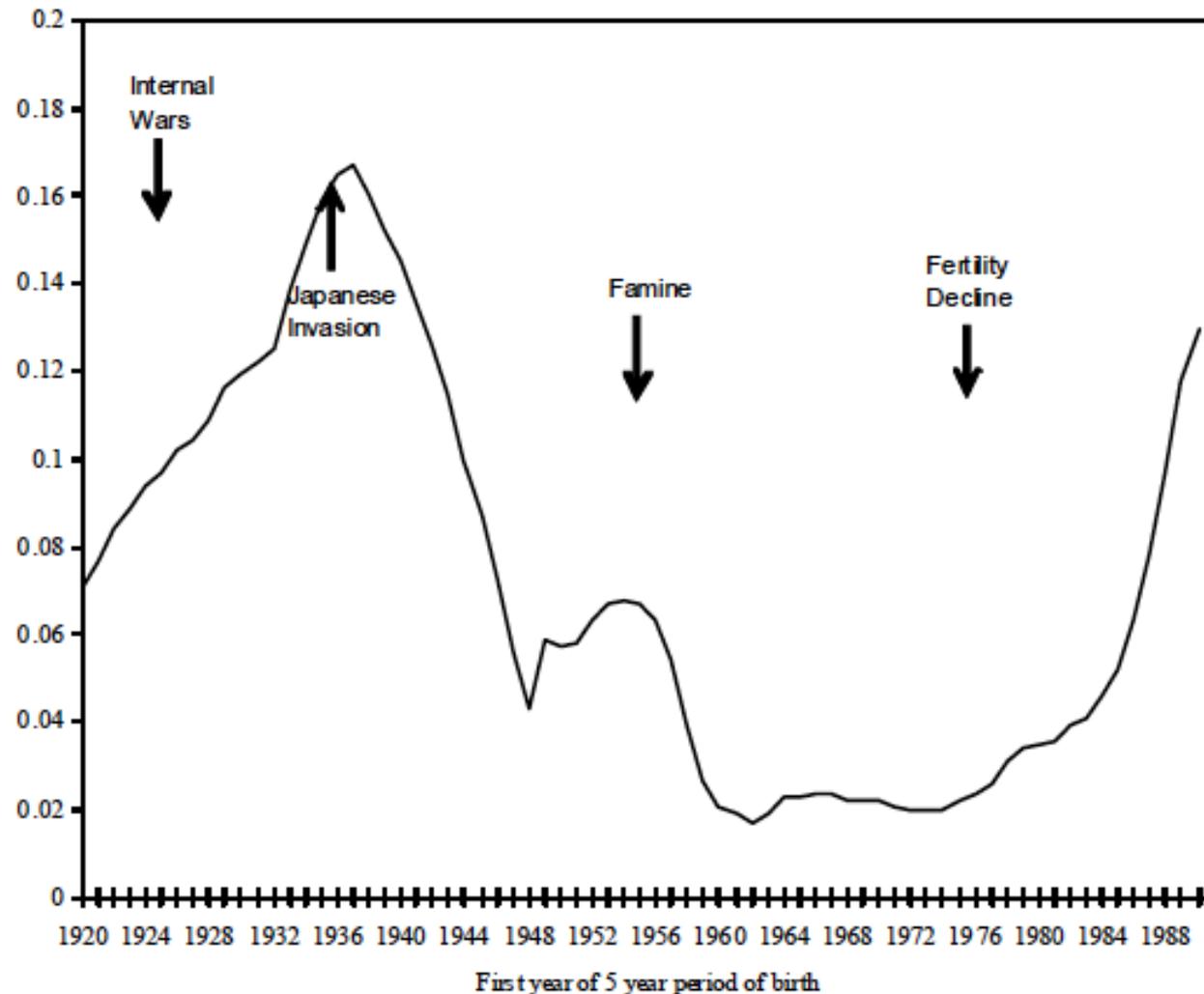- 1.15–1.19
- 1.10–1.14
- 1.07–1.09
- 1.06 or below
- No data
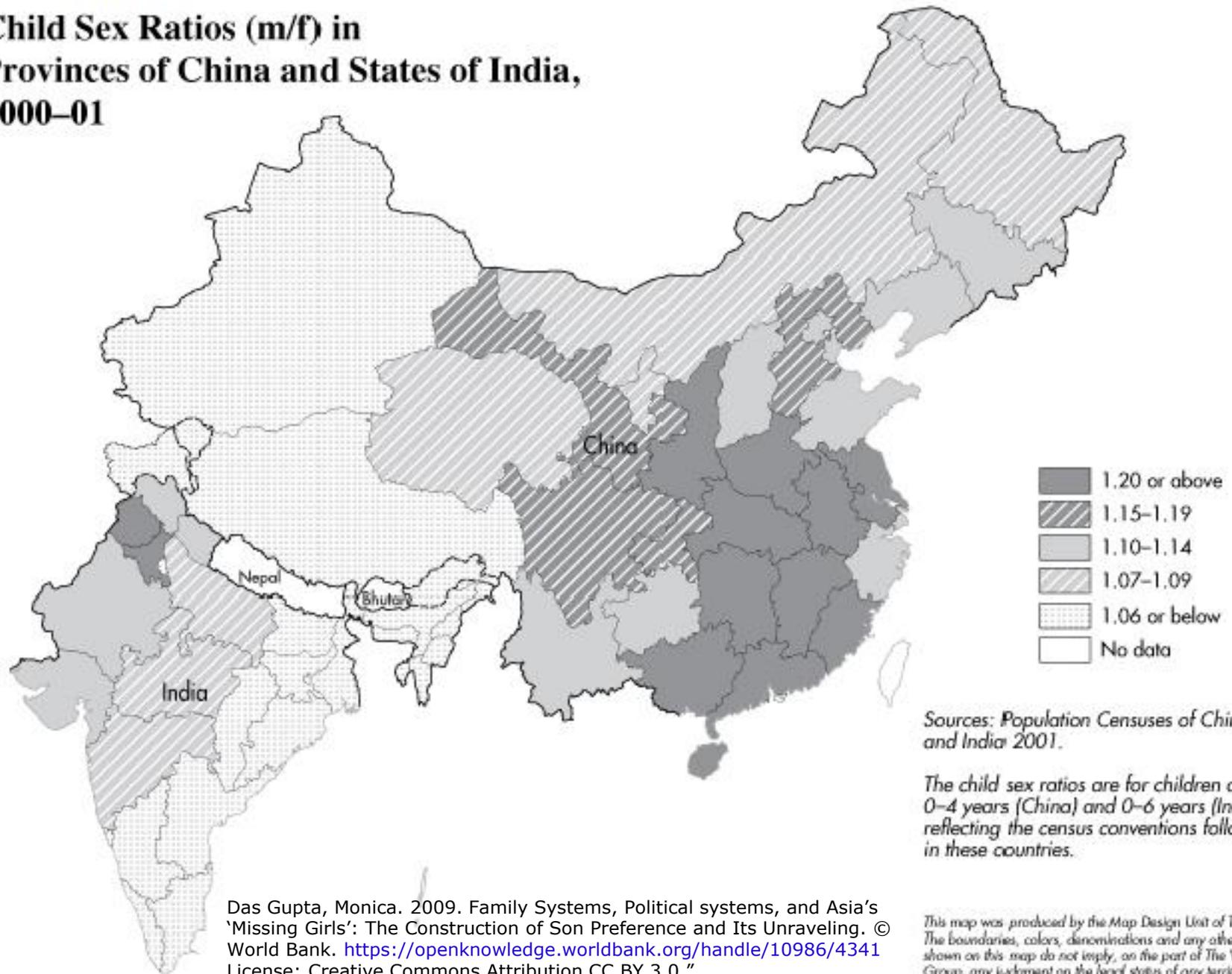
Sources: Population Censuses of China 2000, and India 2001.

The child sex ratios are for children aged 0–4 years (China) and 0–6 years (India), reflecting the census conventions followed in these countries.

Figure 1 Excess sex ratios at census time by 5 year birth cohorts, China 1920-1995

From census of India

Sex Ratio in India from 1901–2001

Census Year	Sex ratio (females per 1,000 males)
1901	972
1911	964
1921	955
1931	950
1941	945
1951	946
1961	941
1971	930
1981	934
1991	927
2001	933

Image by MIT OpenCourseWare.

How are we "losing" girls: Is it tradition?

- Neglect of girls is the tradition: may be they are not fed enough?
- How can we find out whether girls are given less to eat than boys?
- Impossible to observe who eats what
- However, imagine that the family has a fixed budget
  - There are 2 goods: cigarettes and bread. Kids consume only bread, adults consume cigarettes and bread.
- What happens to the total adult consumption when a child is born?
- What happens to cigarette consumption when a child is born?
- Imagine that girls are given less to eat than boys. How does drop in cigarette consumption differ when the newborn is male vs female?
- When can this be evidence of discrimination?

Test of discrimination

- Angus Deaton used this idea to look for discrimination in various countries.
- We focus on India (Maharashtra: Deaton and Subramanian)
- The next two slides have the tables, copied from an ancient copy of the journal where it was published.
- Each column is the effect of an additional child on spending on some adult good.
- What do you see?
- Similar results in Cote D'Ivoire (are you surprised?), Thailand.

				BEVERAGES		PROCESSED FOOD		EDUCATION	
				coeff	|t|	coeff	|t|	coeff	|t|
In (x/n)	.	.	.	—0.5	(9.0)	0.0	(0.1)	0.3	(5.1)
In n	.	.	.	—0.3	(7.8)	—2.5	(13.1)	0.3	(6.3)
males									
0— 4	.	.	.	0.10	(0.4)	4.79	(4.6)	—0.88	(2.7)
5— 9	.	.	.	—0.03	(0.1)	4.66	(4.8)	0.16	(0.5)
10—14	.	.	.	0.27	(1.2)	5.86	(6.4)	1.38	(4.8)
15—54	.	.	.	1.01	(5.4)	6.51	(9.0)	—0.12	(0.5)
55—	.	.	.	1.14	(4.5)	8.03	(8.2)	—0.14	(0.4)
females									
0— 4	.	.	.	0.33	(1.3)	5.78	(5.6)	—0.37	(1.1)
5— 9	.	.	.	0.08	(0.3)	4.51	(4.4)	0.20	(0.6)
10—14	.	.	.	—0.38	(1.5)	4.53	(4.5)	0.82	(2.6)
15—54	.	.	.	0.04	(0.2)	—1.70	(2.5)	—0.14	(0.6)

		RICE		WHEAT		COARSE CEREALS	
		coeff.	| t |	coeff.	| t |	coeff.	| t |
In (x/n)	. . . .	−2.27	(11.4)	0.60	(4.2)	−9.69	(40.6)
In n	. . . .	−0.23	(1.4)	0.92	(7.8)	−1.18	(5.9)
males							
0— 4	. . . . . .	−2.26	(2.6)	0.33	(0.5)	−4.38	(4.1)
5— 9	. . . . . .	−2.33	(2.8)	0.08	(0.1)	−0.08	(0.1)
10—14	. . . .	−1.97	(2.5)	−0.57	(1.0)	1.48	(1.6)
15—54	. . . .	−1.94	(3.1)	−0.62	(1.4)	0.25	(0.3)
55—	. . . .	−2.90	(3.4)	−0.98	(1.6)	−1.21	(1.2)
females							
0— 4	. . . .	−3.09	(3.5)	−1.07	(1.7)	−5.51	(5.2)
5— 9	. . . .	−2.11	(2.4)	−0.24	(0.4)	−0.22	(0.2)
10—14	. . . .	−1.22	(1.4)	−0.53	(0.8)	1.50	(1.4)
15—54	. . . .	−0.04	(0.1)	0.67	(1.6)	1.13	(1.6)

May be girls die more in emergencies?

- May be tradition dictates less urgent action
- Not taken to the hospital soon enough, say.
- One piece of evidence: Elaina Rose's study of droughts in India: Do girls die more when parents face emergencies?
- She looks at the fraction of surviving children who are girls in a drought year versus a non-drought-year.
- Finds evidence that girls die more in droughts.

However

- Droughts are not common enough to explain the magnitude
- In China today it is unlikely that this kind of extreme events are that common
- Dependence on agriculture has fallen massively in both India and China
- Share of girls is falling in China and is unchanged in India. Falling in the rich areas.
- Suggests that something else is going on: Economics rather than tradition or instinct
- Also lots of evidence that medical technology was being used to identify gender and carry out selective abortions.

Economics of the gender ratio: Evidence from the price of tea (from Qian (2008)

- Liberalization of agriculture under the household responsibility system in China led to an increase in the production of cash crops (tea, orchards, vegetables) relative to cereals after 1979.
- Tea is a crop where women have comparative advantage, whereas orchard fruits is a crop where men have comparative advantage.
- Suppose parents respond to expected returns of having boys and girls.
- What would you expect to see if you plotted the gender ratio over time in regions suitable to tea production and in other regions? If you plotted the difference?
- What do we see? Could this be an income effect?

(Marriage) market forces

- What will happen in the marriage market in India or China?

- What effect do we expect on the bride price or dowry?

- What would be the effect of population growth if men marry younger women?

- What happens when population growth slows?

- Effect on savings in China: Wei and Zhang

14.73 The Challenge of World Poverty

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