The disturbing link between gold prices and the survival of girls in India
Sonia Bhalotra, https://qz.com/india/1399816/in-india-gold-prices-affect-dowries-and-girls-survival/

When world gold prices go up, fewer baby girls in India survive the first month of life, according to our new research. My colleagues and I suggest that this is linked to gold often being part of bridal dowries in India—so when gold prices go up, the cost of raising girls rises and families tend to neglect or abort them.

Dowry, a transfer at marriage from parents to daughters, is an ancient tradition thought to date back to at least 200BC, and was widely prevalent in medieval western Europe. While it has virtually disappeared in most of the rest of the world, it persists in contemporary India—despite prohibition since 1961—and has become increasingly common in Bangladesh, Pakistan, and Sri Lanka.

While dowry payments originally acted as a bequest to daughters that afforded them financial protection after their marriage, dowries are now often appropriated by the groom or his parents rather than retained by the bride.

Dowries impose a considerable tax on girls' families, with estimates indicating that in south Asia it is six times the average annual household income. As a result, even though dowry is banned and can result in prosecution, families in India often start saving for dowry as soon as a girl is born. Previous research has also suggested that dowry costs contribute to a preference among Indian parents for sons rather than daughters, but there is no previous causal quantitative evidence of this.

While there is no consistent time series data on dowry transactions across India, my colleagues and I analysed variation in the financial burden of dowries over more than three decades, based on fluctuation in gold prices on the world market. Gold, typically in the form of jewellery, is an integral part of dowry in India and since India imports more than 90% of its gold, fluctuations in the international price translate into fluctuations in the cost of dowry.

Girl babies neglected

We merged monthly data on international gold prices between 1972 and 2005 with monthly birth cohort data, and analysed whether gold price changes influenced the sex ratio at birth and the survival of a newborn girl up to the age of one month.

Using this large data set with more than 100,000 births, we found that in months where the gold price went up, the chances of a girl surviving through the neonatal period were significantly lower than for boys. In fact, gold price inflation was correlated with an improved survival chance for boys.

Between 1972 and 1985, our analysis showed a 6.3% increase in the monthly price of gold was accompanied by an increase in girl neonatal mortality of 6.4%. During the same period, there was no significant corresponding change in male neonatal mortality.

We also found that those women who were born in months when the gold price was increasing were shorter in adulthood. This is consistent with previous research which has

established that nutritional deprivation in early life leads to lower stature in adulthood, and that some parents in India deprive girls of nutritional inputs. In this case, it could be that lower levels of breastfeeding led to girls born in months of gold inflation being shorter as adults. We found that those girls that survived carried a marker of relative neglect into adulthood, compared to boys born in months of gold price inflation.

We separated out the results for children born between 1986 and 2005, as ultrasound technology became widely available across India after the mid 1980s. My previous research showed that in this period parents shifted away from neglecting girls after birth to aborting unwanted girls before birth. For potential births after 1986, we found that a 2.6% increase in the price of gold during pregnancy was accompanied by a statistically significant 0.3 percentage point decline in the probability that a girl rather than a boy would be born.

Focus on gold

By one means or the other, parents seem to be reacting to gold price increases by trying to reduce the chance of having a surviving girl child. Clearly, to respond in this way parents need to be aware of changes in gold prices. Given the importance of gold in India, gold prices regularly feature in the media but people also talk frequently about gold prices and dowry costs. If Indians were not aware of the gold price fluctuations, it would be hard to find an alternative explanation of our findings.

We conducted various tests of our results to determine how strongly we can link these back to dowry costs. For example, it could be that gold price increases are a proxy for a decline in real income because those who want to buy gold have less money to spend on other things and this may have an impact on girl survival rates. However, after investigating these possibilities statistically, we concluded that the evidence points to dowry costs as the driver of our findings.

One may imagine that parents react to increases in gold prices by reducing the amount of gold given in dowry while maintaining its value. But, using a rural survey containing information on dowry, we found that its value tends to rise more or less proportionately with gold prices, suggesting that social norms may make it hard to adjust quantities downwards.

Recent government figures from India's Census Office suggest that only 900 girls were born for every 1,000 boys between 2013 and 2015, indicating a continuing trend in the abortion of girl foetuses. This is despite persistent high economic growth and declining poverty in India over the past three decades.

Policies to strengthen the monitoring of dowry prohibition in India are unlikely to work because social norms lead families to support tradition and to co-operate in violating the ban. But there is room for hope: the equalisation of property rights for women and rising levels of education for both men and women may slowly but spontaneously loosen the dowry tradition.

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