INDIA POLITICAL ECONOMY PROGRAM ESSAY

MAIDEN INDIA

A STORY OF INDIA PRE- AND POST-1991 FROM A 29-YEAR-OLD FEMALE GAZE

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SUMMARY

The essay critically examines socio-economic changes in India from the perspective of gender roles and norms, focusing on ongoing challenges despite economic liberalization in 1991. It discusses significant issues such as sex selection, education, maternal health, and employment disparities, highlighting how deeper societal and cultural norms affect women's lives despite economic progress.

Keywords: Gender norms; 1991 economic reforms; socioeconomic change; India political economy, women's rights

JEL codes: J16, O15, I14, P11, B29, O53

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On the cover: Pillar of Ashoka (detail) at Sanchi, Madhya Pradesh, India. The pillars of the emperor Ashoka the Great (268–232 B.C.), renowned for their polished sandstone and intricate carvings, were dispersed throughout the Indian subcontinent and carried imperial edicts promoting moral and ethical conduct. The Lion Capital of Ashoka, which tops the pillar at Sarnath, Uttar Pradesh, has been adopted as India's national emblem. Twenty of the pillars of Ashoka still survive.

CRADLE

I was born in 1994, six months before the Indian government passed the Pre-Conception & Pre-Natal Diagnostic Techniques Act. This was parliament's top-down attempt to prohibit prenatal sex selection against girls (figure 1). I went to an all-girls boarding school in Dehradun, Uttarakhand. Many of my classmates were from a family of one or two sisters with a youngest brother. I was among the odd few from an only-girl-child family without any male sibling adventure stories to share with friends.

Did this top-down intervention prevent sex selection against girls? How about the 1991 reforms and liberalization? Did increased income, schooling, and job opportunities make the birth of a daughter less damning or did sex selection against girls worsen?

There were several plausible reasons to expect a change in sex ratios post-1991. First, the 1991 liberalization reforms unlocked economic growth across many sectors; employment opportunities expanded and incomes improved for millions of Indians. This rise in income increased education, and more educated people, especially moms, are more likely to reverse the tide on son preference. Second, this period saw greater access to television and broadcast media, which exposed people to the cultural norms of more gender-equal societies. Third, there were more employment opportunities in the service sector, which could help offset dowry and wedding expense expectations.

But higher income also meant more people could afford sex-selective abortion. The needle could have moved either way. Indeed, things did not look up in the post-1991 period. On the contrary, selective abortion of girls, especially after a firstborn girl, increased substantially (figure 2).

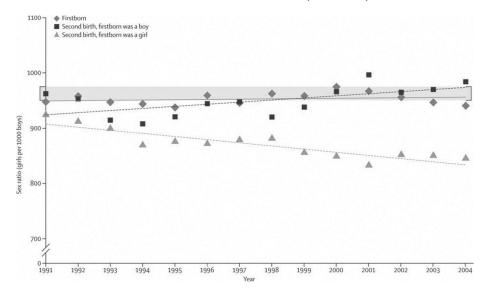
While the aggregate news of worsening sex-ratio trends was disappointing, India is massive, and there was enormous variation across sub-districts between 2001–2011 (figure 3).

FIGURE 1. PRE-NINETIES: A DISMAL SNAPSHOT



 $Source: Census\ of\ India\ Archives,\ 1971,\ http://lsi.gov.in:8081/jspui/handle/123456789/27? offset=20.$

FIGURE 2. SON PREFERENCE CONDITIONAL ON BIRTH ORDER (1990-2005)



Source: Prabhat Jha et al., "Trends in Selective Abortions of Girls in India: Analysis of Nationally Representative Birth Histories from 1990 to 2005 and Census Data from 1991 to 2011," *The Lancet* 377, no. 9781 (2011): 1921–28.

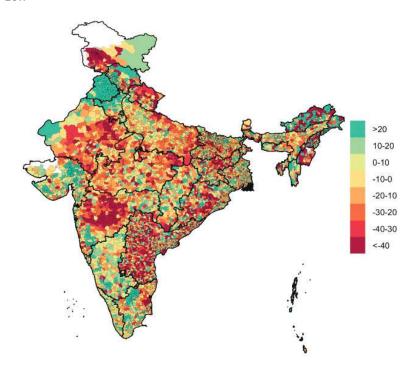


FIGURE 3. CHANGE IN CHILD SEX RATIOS (FEMALE/MALE, 0-6 YEARS OLD) ACROSS INDIA IN 2001-2011

Source: Pradeep Chhibber, Francesca R. Jensenius, and Susan L. Ostermann, "Missing Girls: Women's Education and Declining Child Sex Ratios in India," *Economic and Political Weekly* 56, no. 6 (February 2021).

Education of mothers explains part of the variation observed in figure 3. Analysis by Pradeep Chhibber, Francesca R. Jensenius, and Susan L. Ostermann suggests that more educated mothers are less likely to prefer girl children. Yet, they are also less likely to sex-select against girls.

My only-girl-child status still stuns a lot of well-meaning adults who ask how many brothers and sisters I have. My parents were by no means anywhere near the top of the education or income distribution. My paternal grandparents reacted true to form—that is, firstborn girl child is rarely welcome if you are not able to afford many children. My parents, however, were delighted. They stood their ground and decided not to have any more children. In fact, they asked me in second grade if I felt the need for a sibling for company. My seven-year-old brain

^{1.} I have glossed over my paternal grandparents' reaction here on purpose. Dealing with not being wanted is visceral and emotional, and I have been so hurt by it that my relationship with them remains strained to this day.

was already optimizing my family's constrained resources, and I figured that a sibling would mean less money to go around for me and told them so.

Let's move on to what happens once a girl child is born, starting with nutrition. India's stunting rates are worse than poorer countries. Seema Jayachandran and Rohini Pande show us that birth order and gender nuance India's stunting story. Using post-1990 survey data, they find that eldest-born sons have a height advantage compared to sub-Saharan African contemporaries. This advantage is only an eldest-son phenomenon. The India-Africa height gap is widest for Indian girls with no older brothers. These girls have higher stunting rates than their sub-Saharan African contemporaries.² This is potentially because families are conserving resources for more children, hoping to hit the lottery with a son. My parents were stubborn about their unconventional family size and composition. Unlike other parents, they declined to save up for a down-the-line brother. As a result, my nutrition did not suffer.

My mother had a particularly difficult childbearing experience. This was partly because she was severely underweight as well as the anxiety caused by my paternal grandmother's constant pressure to give her a grandson. My father, maternal aunt, and maternal grandmother took great care of my mother during her pregnancy when she was on bed rest for the first few months. Fortunately, her experience at the hospital was not too traumatic. Abuse during deliveries is pretty common in hospitals across India. I was shocked to hear about extensive physical and verbal abuse in delivery rooms, even at the fanciest private hospitals. My maternal aunt was physically abused by the nurses during her delivery, and my mother could do nothing to help her sister except bite back her rage and wait for the ordeal to pass.

From 1998 to 2018, maternal mortality has declined dramatically in India. In figure 4, the horizontal axis represents the three-year spans for maternal mortality ratio (MMR), except for 1998, which represents the second of two years. The shaded band represents the United Nations/World Health Organization estimates. Absolute maternal deaths are scaled to the United Nations demographic totals for females 15–49 years of age.

But stark regional inequalities persist. Kerala has an MMR of about 30 per 100,000 live births. This number is about 300 in most of Uttar Pradesh and Arunachal Pradesh.³ Coffey et al. find that neonatal mortality is higher among

^{2.} Seema Jayachandran and Rohini Pande, "Why Are Indian Children So Short? The Role of Birth Order and Son Preference," *American Economic Review* 107, no. 9 (September 2017): 2600–2629.

3. Diane Coffey et al., "Excess Neonatal Mortality among Private Facility Births in North India" (presentation at the International Population Conference, Hyderabad, India, December 2021).

600 IIHEW SRS 500 100,000 live births 400 300 200 100 Year: 1997 2000 2003 2006 2012 2015 2018 2021 rnal deaths ('000s): % of 15-49 deaths

FIGURE 4. TRENDS IN MATERNAL MORTALITY RATIO FROM 1998 TO 2018 AND PROJECTION FOR 2020 $\,$

Note: NFHS-2 (National Family Health Survey, second round), IIHFW (Indian Institute of Health and Family Welfare), SRS (Sample Registration System), and WHO (World Health Organization). Source: C. Meh et al., "Trends in Maternal Mortality in India over Two Decades in Nationally Representative Surveys," BJOG: An International Journal of Obstetrics and Gynaecology 129, no. 4 (March 2022): 550-61.

private facility births in North India. It is unknown if this also holds true for maternal mortality and physical trauma during childbirth. Horror stories abound about delivery rooms of health facilities across the entire spectrum of socioeconomic class. India continues to fail mothers at their most vulnerable. Pinching, slapping, threatening, and emotional blackmailing are rampant.

Thankfully, my maternal grandmother and aunt stayed with my mother for over a year to help with my care and her recovery. I was cared for and loved by overjoyed parents and nourished by the wonderful women in my mother's family. And I made it to the gates of that greatest leveler (one hopes): school.

Speaking of education, over time, more girls went to school. But that is far from the full story.

SCHOOL

Do you remember the first book you ever read? I remember mine. I grew up on Enid Blyton. The standard *Secret Sevens*, *Famous Fives*, as well as boarding school adventure series such as *St. Clare* and, my favorite, *Malory Towers*. But

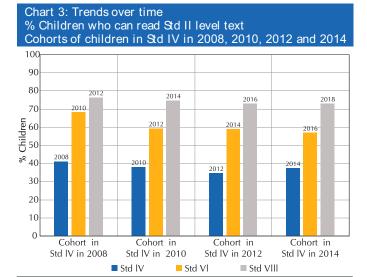
% Children not enrolled in school by age group and gender 2006, 2008, 2010, 2012, 2014, 2016 and 2018

40
35
30
25
10
5

Each line shows trends in the proportion of children not enrolled in school for a particular subset of children. For example, the proportion of girls (age 15-16) not enrolled in school was 22.6% in 2006, 17.9% in 2012, and 13.5% in 2018.

- 11 to 14 Bovs - 11 to 14 Girls - 15 to 16 Bovs -

2012



This graph shows the progress of four cohorts from $Sd\ IV\$ to $Sd\ VIII$. For example, the first cohort was in $Sd\ IV\$ in 2008, in $Sd\ VI\$ in 2010, and in $Sd\ VIII\$ in 2012. For this cohort, % children who could read $Sd\ II\$ level text in $Sd\ IV\$ (in 2008) was 41% and in $Sd\ VI\$ (in 2010) was 68.2%. When the cohort reached $Sd\ VIII\$ in 2012, this figure was 76.5%. The progress of each of these cohorts can be understood in the same way.

Source: ASER Centre, Annual Status of Education Report, 2018.

0

2006

many of my contemporary 1990s kids did not have access to such audacious dreams couched in storybooks about rich-country childhoods.

I was ripping through the *Malory Towers* novels between 2003 and 2006. As of 2006, while 90 percent of my contemporaries were enrolled in formal education, at least 60 percent of them could not read the books that broadened my universe (figure 5).⁴ These numbers have potentially taken a turn for the worse during the pandemic. I would bet that girls have been pulled out of schools before their male siblings to help the family through their loss of livelihoods—a reality for a nontrivial share of rural households in 2020.⁵

Between the autumns 2017 and 2018, I lived in Tamil Nadu. I was a research associate at J-PAL South Asia. Our research team was surveying 2 to 6-year-olds and their parents across six districts. While enumerators conducted the surveys, I sat at the doorway chatting with women, many of whom were quite candid with me. They told me they were okay with not sending the youngest to preschool if

^{4.} ASER Centre, Annual Status of Education Report, 2018.

^{5.} World Bank, Economic Effects of COVID-19: Rapid Surveys of Rural Households in India, 2020.

FIGURE 6. READING AND ARITHMETIC COMPETENCIES BY GENDER

Age group	% Children who can read Std II level text				
	Male	Female	All		
Age 8-10	33.2	36.8	35.0		
Age 11-13	61.2	64.1	62.7		
Age 14-16	76.9	76.9	76.9		

Table 11: Basic arithmetic by age group and gender 2018								
Age group	% Children who can do at least subtraction			% Children who can do division				
	Male	Female	All	Male	Female	All		
Age 8-10	36.4	35.7	36.1	15.7	14.4	15.0		
Age 11-13	61.1	58.4	59.7	38.0	35.0	36.4		
Age 14-16	69.6	64.4	66.8	50.1	44.1	46.9		

Source: ASER Centre, Annual Status of Education Report, 2018.

the oldest was a daughter. I remember sitting in one house where the older sister kept fussing over her baby brother. She chimed in saying there was no need for her brother to go to Anganwadi (government-run preschool) since she would rather take care of him than go to school herself. Her mother beamed with pride. This elder-sister effect is borne out in the data beyond India. A recent study finds a 0.12 standard deviation advantage on an early childhood development index for children who had older sisters in rural Kenya.

For girls who make it to school, around adolescence, existing data exhibit stereotypical gender patterns (i.e., male favoring in math achievement and female favoring in language and reading achievement) in education as they grow older. For instance, consider the reading and arithmetic competencies by gender in figure 6.

A recent study by Sonali Rakshit and Soham Sahoo reveals that these gender-stereotypical achievement gaps are wide and significant at the secondary-school stage and, more importantly, the male favoring math gap is primarily driven by teacher biases regarding male vs. female performance in math. This story is similar and widely documented in other countries, including the United States (figure 7). Across grades and years, the male-female achievement gap in US school districts is mostly female favoring language achievement and male favoring math achievement in wealthier school districts.

In addition to teacher biases, it is worth considering what changes for girls around adolescence. As India's daughters grow older, another barrier materializes to hold them back: a perceived threat of sexual harassment. My late grandmother told me stories of how she would follow my mother to and from college

^{6.} Pamela Jakiela, Owen Ozier, Heather Knauer, and Lia Fernald, "The Impact of Big Sisters" (Working Paper, Center for Global Development, Washington, DC, October 17, 2019), https://custom.cvent.com/4E741122FD8B4A1B97E483EC8BB51CC4/files/bigsisters20191017.pdf.

^{7.} Sonali Rakshit and Soham Sahoo, "Biased Teachers and Gender Gap in Learning Outcomes: Evidence from India," *Journal of Development Economics* 161 (March 2023): 103041.

^{8.} Sean F. Reardon et al., "Gender Achievement Gaps in U.S. School Districts," *American Educational Research Journal* 56, no. 6 (2019): 2474–508.

FIGURE 7. MALE-FEMALE ACHIEVEMENT GAP IN THE UNITED STATES

Note: The Empirical Bayes estimates shown underestimate the true variance in the male-female achievement gaps. Source: Sean F. Reardon et al., "Gender Achievement Gaps in U.S. School Districts," *American Educational Research Journal* 56, no. 6 (2019): 2474–508.

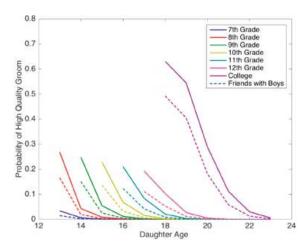
District Socioeconomic Status (Composite Measure)

with rocks in her hand to scare away the leering men who dared to follow her daughter. Her story echoes research about women selecting to attend their second or third-choice colleges despite qualifying for their top-choice because of safety concerns.⁹

I have been very fortunate in my education. An undergraduate degree in the United States meant that I was able to study in the library till 2 a.m. and walk back to my dorm alone. I did not have to worry about night curfews just like my male classmates who were free to continue their study groups. I was also fortunate because my father allocated a lion's share of his savings to my education, which is not what most fathers do. In India, marriage is a huge factor for fathers determining education investments for their daughters. This holds true in rural Rajasthan, where Abi Adams and Alison Andrew researched parents' views on girls' education and marriage prospects using novel vignettes. Their takeaway is illustrated in figure 8.

^{9.} Girija Borker, "Safety First: Perceived Risk of Street Harassment and Educational Choices of Women" (Policy Research Working Paper No. 9731. World Bank, Washington, DC, July 2021).

FIGURE 8. EDUCATION ATTAINMENT AND MARRIAGE MARKET PREFERENCES



Source: Abi Adams and Alison Andrew, "Preferences and Beliefs in the Marriage Market for Young Brides" (IFS Working Paper W19/05, Institute for Fiscal Studies, London, England, March 2019), https://ifs.org.uk/sites/default/files/output_url_files/WP201905.1.pdf.

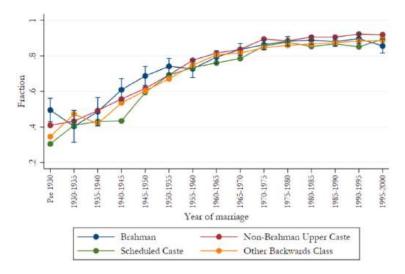
Adams and Andrew find that parents tend to believe an 18-year-old daughter who is pursuing a college education has a significantly higher chance (60 percent) of receiving a marriage proposal from a high-quality groom compared to a daughter with only primary education. The data also show that parents consider the probability of a poorly educated daughter receiving a marriage proposal from a high-quality groom with a government job to be extremely low. Parents believe that the probability increases substantially with education, especially college education, leading to a notable perceived marriage market return. Nevertheless, parents believe that marriage prospects tend to decline with age, particularly after girls complete their formal education.

It is common across families in India to set aside money throughout a girl's childhood—say, when a windfall profit comes in or from an annual salary bonus—for her wedding trousseau and possibly a dowry. Unfortunately, for India's daughters, both the prevalence and the amount of dowry expenditure have been on the rise, throughout all caste groups, despite the fact that dowry is facially illegal (figure 9).

Along with dowry, marriage expenses have continued to increase over time. This is an extra item in the child-investment budget for girls, second only to investment in education. Families do not face this trade-off with boys.

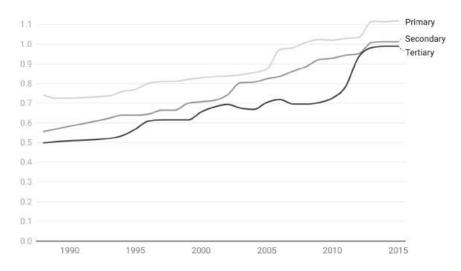
Since the 1990s, gender parity in enrollment across primary, secondary, and tertiary schools has exceeded expectations (figure 10). However, while parity in enrollment is promising, completion is a different story. As of 2011, about one-fourth of all Indian women (25+) had completed lower-secondary school (or

FIGURE 9. PROPORTION OF MARRIAGES WITH DOWRY



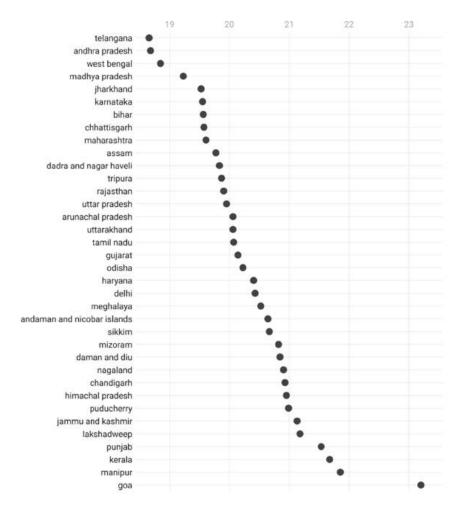
Note: In this figure, we plot the proportion of marriages in which dowry was paid over a given five-year period for different cast groups. For Brahmins, we include 95 percent confidence intervals around the estimate to provide a visual representation for whether we can reject equivalence of dowry among Brahmins and non-Brahmins in a given year. Source: Gaurav Chiplunkar and Jeffrey Weaver, "Marriage Markets and the Rise of Dowry in India," Working Paper, August 2021, SSRN https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3590730.

FIGURE 10. GROSS ENROLLMENT RATIO, GENDER PARITY INDEX



Source: World Bank, World Development Indicators (database), "Enrollment Ratio (Gross) Gender Parity Index," accessed April 20, 2023, https://datatopics.worldbank.org/world-development-indicators/.

FIGURE 11. WOMEN'S AGE AT FIRST BIRTH BY STATE



Source: Author's calculations using the National Family Health Survey, fourth round (NFHS-4), accessed April 20, 2023, http://rchiips.org/nfhs/nfhs4.shtml.

middle school). This number drops to less than 20 percent for upper-secondary school and 7 percent for post-secondary school.¹⁰

National Family Health Survey, fourth round (NFHS-4), suggests that women across India give birth to their first child at a median age of about 20. The median age for women in Madhya Pradesh is about 19, a year after high school (figure 11).

 $^{10.} World\ Bank, World\ Development\ Indicators\ (database), "Enrollment\ Ratio\ (Gross)\ Gender\ Parity\ Index," accessed\ April\ 20,\ 2023,\ https://datatopics.worldbank.org/world-development-indicators/.$

Allowing women to go to school is the first step toward gender parity. While nontrivial, it is still a long way from allowing them to complete post-secondary education. Allowing women to complete post-secondary education is far from allowing them to participate in the post-1990s economic opportunity explosion. Allowing women to take on jobs is far from allowing them to build careers. Finally, allowing women to build careers is far from them no longer needing men's permission to choose their life's path.

India has made great progress on the first step since 1994, the year of my birth in the steel city of Jamshedpur, Jharkhand. But it has only completed the first step. What comes after *Beti Bachao*, *Beti Padhao*? Work.

WORK

When women of my mother's generation worked, they mostly had jobs, not careers. The women of my grandmother's generation worked out of need to support their family.

In the 1960s, my paternal grandmother managed to escape communal riots in Bangladesh with her children. One afternoon, she set off with other women to a refugee camp in Bihar to look for a cleaning job. But fate landed her a stable government job instead, despite her lack of formal education. This led to a decadeslong clerical career at the West Champaran's (Bihar) District Collector's office. Her patriarchal ideas aside, my grandmother is a woman who can hold her own in a room full of Bihari men. She remained headstrong till her last day. Her thick skin and stubborn nature helped her survive, and even thrive, in a corrupt and masculine work environment for decades. Her mother, my great-grandmother, also had taken a job as a local schoolteacher during her time at the refugee camp. They both had entered the workforce to make ends meet.

My grandmother was not a compassionate person. My father, when he was younger, mistook this as a consequence of her being a working woman. He did not recognize that not all women fit the nurturing, selfless Indian mother mold he was socialized to believe was the norm. For this reason, at first, he was very wary of allowing my mother to work. Drawing on his own childhood experience, he believed their children would feel neglected, and endorsed the idea that women did not need to work unless there was a need.

When I was 11, I wrote my father a letter explaining that it was unfair for him to invest his whole heart in my professional fulfillment yet not extend the same empathy to my mother. The one thing I admire most about my father is his ability to grow and adjust his beliefs. He agreed with my point in that letter,

and thus began my mother's career as a pre-primary schoolteacher. At 52, she continues to work, because being a teacher is now a part of her identity. I am the next generation. With the precious privilege of being able to own my labor-market decisions, I have been building a career as a data scientist, an organization builder, and a development economics researcher.

Much has been written about the top-line statistic about the declining female participation in the labor force in India. The research is still scratching the surface data-wise, and it is very far from decisively knowing the why. Some big questions I am looking to answer in the data are: What kinds of work have Indian women taken since the 1990s? When do they exit the labor market? Which women are working what kinds of jobs? What is the analog on the 70-cents-to-a-dollar gender wage gap in India?

Is work the use of one's labor to produce goods and services? If so, all women in my family have participated in the economy, however indirectly. Is work the use of one's labor to produce goods and services *and* earn monetary compensation? Most married Indian women labor away at home supporting families of various sizes. They are always on their feet, well into old age, performing an array of tasks, such as cooking, doing laundry, cleaning, buying groceries, fetching water from the hand pump (when one became available), feeding and rearing the livestock, and so on. They are the first to wake and the last to rest. Are their labor considered work without monetary compensation?

Based on *Time Use in India-2019*, more than half of the about 200,000 women surveyed labor away without pay.¹¹ This number is a stark contrast to the reported primary occupations of men (figure 12).

In a lecture on the transformed economic lives of American women over 150 years, Claudia Goldin talks about this revolution in phases. ¹² The first phase (1880s–1920) saw the emergence of the independent unmarried female worker. The second phase (1930s–1950) saw reduced barriers for married women wanting to work. This phase arose out of two key changes: the emergence of scheduled part-time work in the 1940s and the remarkable diffusion of electrical household appliances (e.g., refrigerators, washing machines, etc.) and the expansion of basic amenities (e.g., running water, electricity, the flush toilet, etc.).

The maiden India of the 1990s, saw a kind of coming of age for women. Much like the United States of the early 20th century, there was a rapid spread

^{11.} Ministry of Statistics and Programme Implementation, *Time Use in India-2019*, accessed April 20, 2023, https://www.mospi.gov.in/sites/default/files/publication_reports/Report_TUS_2019_0.pdf. 12. Claudia Goldin, "The Quiet Revolution That Transformed Women's Employment, Education, and Family," *American Economic Review* 96, no. 2 (May 2006): 1–21.

Women Men 41.35 domestic duties only 0.94 21.53 education institution 11.67 domestic duties & unpaid home production (sewing, weaving etc) 0.36 4.88 salaried/wage worker 4.7 unpaid family work 2.96 4.43 self-employed 4.43 other work 3.12 rentiers, pensioners, remittance recipients 1.18 others (incl. begging, prostitution) 1.24 0.83 unable to work (disability) 1.15 0.82 unemployed & looking 2.32 0.81 casual wage laborer in public works 3.01

FIGURE 12. HOW DO INDIAN MEN AND WOMEN SPEND THEIR TIME?

Note: The figure shows primary activity reported by respondents. N = 218,526 women and 226,644 men. Source: Ministry of Statistics and Programme Implementation, Time Use in India-2019, accessed April 20, 2023, https://www.mospi.gov.in/sites/default/files/publication_reports/Report_TUS_2019_0.pdf.

0.24

1.37

employer

of basic amenities and electrical household appliances—but not so much the parallel rise in part-time jobs. India had not witnessed a shock like World War II, which forced Western women to take on jobs outside the home because the male labor force was swept up by war. Once women had tasted the freedom of getting paid for their labor and the benefits of the formal labor market, there was no going back. Engineering a war is not a viable or moral answer, though. I would wager that India today is somewhere in the second phase in urban areas

In percentage

Tamil Nadu

West Bengal

West Bengal

West Bengal

West Bengal

West Bengal

Wandhya Pradesh

Andhra Pradesh

Rajasthan

Uttar Pradesh

Uttar Pradesh

Uttar Pradesh

FIGURE 13. NON-FARM EMPLOYMENT FOR WOMEN IN 20-29 AGE GROUP IN INDIA

Source: Vidya Mahambare, Sowmya Dhanaraj, and Sankalp Sharma, "Do Young Indian Women Work? Gujarat Tops Single Working Women, among Lowest in Married," *The Print*, November 16, 2021.

and stuck in the first phase in rural areas. I say this because, to the extent that women work, they do so when they are unmarried (figure 13).

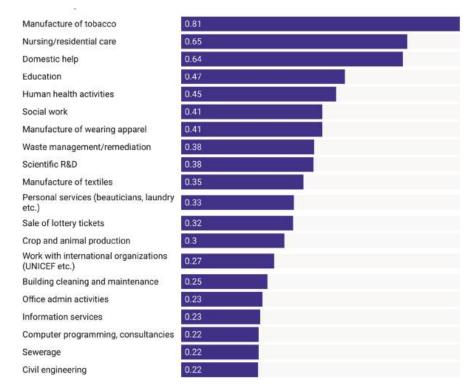
The third phase, where women's labor force participation expands and divorce becomes a tangible threat, is a distant dream. And the final phase, where occupations become less gendered, there are no gender wage gaps, and women plan their careers well in advance and have an altered sense of identity across the board, is even further away.

When women get paid for their labor, what jobs are they taking on? Figure 14 shows the primary occupation of women by industry, according to *Time Use in India-2019*. Ask average Indians what jobs they associate with women, and their immediate responses would be teacher, nurse, weaver, beautician, and so on. The survey also shows that domestic help across urban India is almost always female, and so is the tobacco manufacturing industry. The survey is useful, because it digs into the enormous unorganized sector that represents the lion's share of Indian livelihoods. The International Monetary Fund puts the share of workers in this sector at a staggering 83 percent, with 81.8 percent being women. And thus, data-wise, women's participation in the labor market typically gets swept under the rug.

In Delhi, I have noticed that most fruit and vegetable vendors on the roadside are male. Whenever I see females guarding the vegetable stand, they are

^{13.} Ministry of Statistics and Programme Implementation, *Time Use in India-2019*, accessed April 20, 2023, https://www.mospi.gov.in/sites/default/files/publication_reports/Report_TUS_2019_0.pdf.

FIGURE 14. SHARE OF WOMEN IN EACH OCCUPATION INDUSTRY



Source: Author's calculations using the Time Use in India-2019 survey.

typically accompanying their husband or son. But in Chennai, and even Kolkata, I hear the clamor of female voices when I walk past roadside fruit, vegetable, or flower shops.

The life of a street vendor involves almost daily negotiations with police officers just to go about their business. Is the street environment particularly masculine in North India, deterring female vendors? Do the attitudes of police officers with whom vendors need to bargain daily differ by region? I cannot tell you because I do not have the data. But I can tell you this: in Kolkata, I always buy produce from this and that *maashi* (auntie in Bengali); in Delhi, I always buy things from this and that *bhaiyya* (brother in Hindi).

Figure 15 is pretty stunning. Within India, there is lower women participation in the formal economy than in Afghanistan (see Uttar Pradesh, for instance). But there is higher than the global average women participation in the northeast. Multiple explanations for the variation have been offered by social scientists, ranging from different agricultural practices to matrilineal inheritance rights

20% 40% 60% 80%

20°N

10°N

60°E

70°E

80°E

90°E

FIGURE 15. WOMEN'S RELATIVE LABOR FORCE PARTICIPATION IN BANGLADESH, INDIA, AND PAKISTAN

Source: Florence Kondylis and John Loeser, "28%," Development Impact (World Bank blog), January 15, 2020, https://blogs.worldbank.org/impactevaluations/28.

to colonialism. Which of these factors is the reason for the difference? Which of these social norms has done the greatest damage? Can economic growth battle social norms that hold back daughters, wives, sisters, and mothers? Data and research have yet to find decisive answers.

Returning to the questions at the start of this section, what kinds of work have Indian women taken on since the 1990s? Anecdotally, I would have thought teaching, nursing, or medicine, and data confirm these fields indeed have a higher share of female workers. However, work in the tobacco manufacturing sector tops the charts, as do those in the unorganized sectors, such as domestic help.

Does the declining trend in women's labor force participation suggest they are dropping out of the unorganized sector jobs? These are the jobs that pay poorly and offer no safety nets. Are women exiting the labor force because their families are better off, and they can afford to stay at home? Are these jobs disappearing because of technological transformation? Are women being pushed out

by less competent men because of the job-constrained landscape?¹⁴ Or is it some combination of all of the above?

The degree to which public safety, or the lack thereof, acts as a barrier to women's participation in the labor force remains unclear. We know that women will trade better colleges for safer commutes in Delhi. But I have yet to see numbers on whether investments in increased police presence, better street lighting, and policy legislation such as the Prevention of Sexual Harassment at the Workplace Act (POSH) can push their participation out of its current rate.

My mother, now in her late forties and without my grandmother's protection, would often walk to and from work with a rock in her hand in late afternoons to chase away leering followers. All Indian women know to use the safety pin to defend against groping in crowded public transports. All of us women have been there, done that. Interestingly, the extension of Delhi metro lines to places that previously have lacked access boosted women's labor force participation, but it did not change men's labor force participation. While fear of sexual harassment is a barrier to women stepping outside the home, there is no dearth of barriers within the walls of their home either.

When are women dropping out of the labor force? Right after marriage, according to the most recent *Periodic Labour Force Survey*. ¹⁶ This aligns with what I know about the world around me. Men and their parents do not understand the point of women investing in careers after marriage. Their attitudes are not limited to a specific socioeconomic or geographic spectrum of society. For women, having a career after marriage remains either an act of rebellion or a situation of need in a median-income household. The daughter-in-law having a choice in the matter is not the norm.

Institutional incentives are not enough to unleash the female labor force beyond the household and into the market economy. The groundwork of female

^{14.} Ashwini Deshpande and Jitendra Singh, "Dropping Out, Being Pushed Out or Can't Get In? Decoding Declining Labour Force Participation of Indian Women" (IZA DP No. 14639, IZA Institute of Labor Economics, Bonn, Germany, August 2021); and Nava Ashraf, Oriana Bandiera, Virginia Minni, and Víctor Quintas-Martínez, "Gender Roles and the Misallocation of Labour Across Countries" (IZA Working Paper, IZA Institute of Labor Economics, Bonn, Germany, April 28, 2022), https://legacy.iza.org/en/papers/2762_10112022.pdf.

^{15.} Mai Seki and Eiji Yamada, "Heterogeneous Effects of Urban Public Transportation on Employment by Gender: Evidence from the Delhi Metro" (JICA-RI Working Paper No. 207, JICA Research Institute, Tokyo, Japan, March 2020), https://www.jica.go.jp/jica-ri/publication/workingpaper/l75nbg000019bv7i-att/JICA-RI_WP_No.207.pdf.

 $^{16. \} Ministry \ of \ Statistics \ and \ Programme \ Implementation, \ Periodic \ Labour \ Force \ Survey, \ accessed \ April \ 20, 2023, \ https://mospi.gov.in/Periodic-Labour-Surveys.$

economic liberation starts at home, at the dinner table with the men—more often than not, the husband.

MARRIAGE

The lives of Indian women are complex and varied. Some of us find love; some of us do not. Most of us are compelled to marry irrespective of love. Has this changed since the 1990s?

In *A Room of One's Own*, Virginia Woolf, much like me, was taking stock of how things have come to be for the female sex in the society she knew. She wrote about England of the 1470s:

Wife-beating was a recognized right of man, and was practiced without shame by high as well as low. The daughter who refused to marry the gentleman of her parents' choice was liable to be locked up, beaten and flung about the room. Marriage was not an affair of personal affection, but of family avarice, particularly in the "chivalrous" upper classes. Betrothal often took place while one or both of the parties was in the cradle, and marriage when they were scarcely out of the nurses' charge.¹⁷

This passage really surprised me in how unfortunately relevant it remains in several parts of 21st century India, and I had to include it here, at the start of this section. How have violence in relationships, arranged marriages, dowry, and child marriage fared since the 1990s in India?

Both my grandmothers' marriages were instances of child marriage. Rates of child marriage were shockingly high in West Bengal in 1950s compared to the relatively progressive gender norms in the region today. Six decades after my grandmothers' marriages, Bihar and West Bengal remain hot spots of child marriage (figure 16).

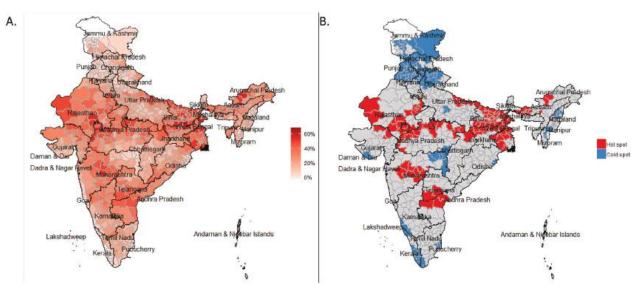
My mother got married at 22, which is about 10 years older than when her mother and mother-in-law got married. My parents' marriage was arranged, and my mother was not allowed to work till I was 11. She needed my father's permission to work, and him getting on board with the notion took some nudging from me. My mother has more equal standing in her marriage today than she did when she married three decades ago. My parents' marriage is not as gender equal as mine, but it does look drastically different from my grandparents' marriages.

^{17.} Virginia Woolf, A Room of One's Own (England: Hogarth Press, 1929), chapter 3.

FIGURE 16. PREVALENCE OF CHILD MARRIAGE AMONG WOMEN AGED 20–24 IN INDIA, 2015–2016

A. ACROSS DISTRICTS

B. DISTRICT-LEVEL HOT SPOTS AND COLD SPOTS



Source: Lotus McDougal et al., "Mapping the Patchwork: Exploring the Subnational Heterogeneity of Child Marriage in India." *SSM-Population Health* 12 (December 2020): 100688.

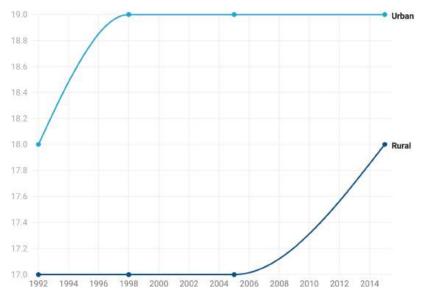
I got married at 27. My marriage is the first intercommunity marital venture among our immediate family. I lived with my husband for full two years before we got engaged. Is such intergenerational transformation the exception or the rule? How has the age when women marry changed over time in India? Unfortunately, the needle has barely moved in 30 years (figure 17).

For most women, a combination of a loveless marriage, limited bargaining power over agency within the marriage/household, and no viable option to leave can result in a lifetime of feeling stuck. A status quo that forces them to such a fate is deeply unfair. It holds them back from living to their fullest potential. Is this not how Amartya Sen, one of the finest economists out there, described poverty? As not having the opportunity to realize one's full potential as a human being? A typical marriage in India represents a power dynamic tilted toward men, who generally tend to be older. But this age gap has been closing over time (figure 18).

I posit that this narrowing age gap is being driven by changing preferences. And preferences are changing within marriage markets across the board because of the narrowing education gap. Figure 19 shows converging education gaps within couples in urban and rural areas.

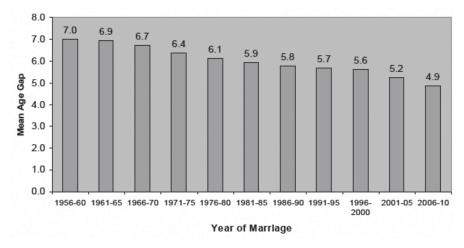
Recent research using global microdata for 2.85 million households in 45 countries suggests that India represents the highest income inequality within

FIGURE 17. AVERAGE AGE AT FIRST MARRIAGE FOR WOMEN IN INDIA, 1992-2015



Source: Author's calculations using National Family Health Survey, first to fourth round (1992–2015), accessed April 20, 2023, http://rchiips.org/nfhs/about.shtml.

FIGURE 18. MEAN AGE GAP AMONG COUPLES IN INDIA BY YEAR OF MARRIAGE



Source: K. Das and K. C. Das, "Levels, Trends and Patterns of Age Difference among the Couples in India," Working Paper, 2013, https://iussp.org/sites/default/files/event_call_for_papers/Levels%20and%20trends%20of%20age%20 difference%20among%20couples%20in%20India_IUSSP2013.pdf.

FIGURE 19. MALE-FEMALE EDUCATION GAPS AMONG INDIAN COUPLES OVER TIME

Years of schooling 4 3.5 3 2.5 2 Rural 0.5 0 1995 2000 2005 2010 2015

Source: Author's calculations using IHDS data, first to third rounds. Data Sharing for Demographic Research, "India Human Development Survey (IHDS), 2005 (ICPSR 22626)," version 12, August 8, 2018, https://www.icpsr.umich.edu/web/DSDR/studies/22626.

couples.¹⁸ In other countries, the share of women's earnings is higher among wealthier couples. This holds true for all couples or couples where both members have non-zero incomes in the denominator. In India, however, as couples get wealthier, the share of women's earnings drop precipitously. What does love have to do with money? A lot.

Without assets or savings, access to credit, or steady stream of income, a woman could be well past any hope of finding love in marriage—and staying in the marriage is the only viable option. Perhaps this is why India (in)famously has the lowest divorce rate in the world. This is not a story of millions of happy, indestructible marriages. It is more likely a story of extreme financial inequality between husbands and wives, leaving the latter with no choice but to remain in the marriage. Interestingly, the probability of women ever being divorced or separated has been trending up over time (figure 20).

Across regions, divorce rates follow the popular perception of gender progressiveness. True to form, North India is at the bottom of the ladder and the northeast at the top (figure 21).

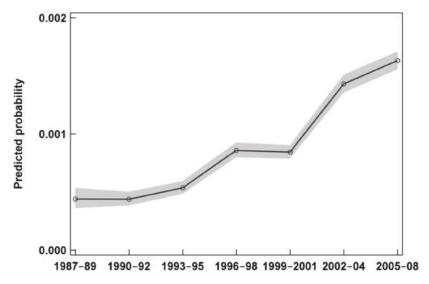
The book A Suitable Boy is a beautiful depiction of Lata, a twenty-something freedom-loving woman, and her battle with the marriage market in India. 20 The

^{18.} Deepak Malghan and Hema Swaminathan, "Global Trends in Intra-Household Gender Inequality," *Journal of Economic Behavior & Organization* 189 (September 2021): 515–46.

^{19.} Akshita Prasad, "Divorce Rates Are Increasing: Here's Why That's a Good Thing," LiveWire, September 7, 2022, https://livewire.thewire.in/gender-and-sexuality/divorce-rates-are-increasing -heres-why-thats-a-good-thing.

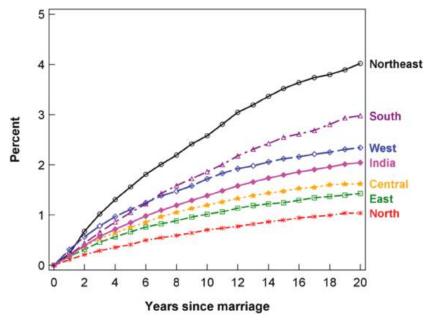
^{20.} Vikram Seth, A Suitable Boy: A Novel (New York: Harper Perennial, 2005).

FIGURE 20. PROBABILITY OF WOMEN (15+) EVER BEING DIVORCED OR SEPARATED IN INDIA



Source: Premchand Dommaraju, "Divorce and Separation in India," Population and Development Review 42, no. 2 (June 2016): 195–223.

FIGURE 21. PERCENTAGE OF MARRIAGES ENDING IN DIVORCE OR SEPARATION BY REGION IN INDIA



Source: Premchand Dommaraju, "Divorce and Separation in India," *Population and Development Review* 42, no. 2 (June 2016): 195–223.

story takes place a couple decades removed from my own experience. My favorite character is Professor Ila Chattopadhyay. There is a scene with Lata and Ila where they are traveling through Calcutta in a rickshaw. At this stage, Lata is split on which suitable boy to pick, while her Jane Austenian mother is breathing down her neck to secure a good match. Ila tells Lata that a good marriage is one that gives her space to grow. This is a profound lesson for young women. One that is far from reality in maiden India, despite the leaps and bounds the country has made in many other sectors.

So, what is the verdict? Has the great economic liberalization of 1991 brought about emancipation from patriarchy? Yes and no. We must celebrate the phenomenal closing of the gender gap in education attainment, downward trend in maternal mortality rates, better age and education parity within married couples, declining number of child marriages, and inclining age at first birth. I will also place my bet that the increase in divorce and separation rates are a signal of stronger agency for women. And this agency would take off if we can unlock female workforce participation, which is especially difficult to achieve given the current state of job creation in India. That said, the unrealized gains of mobilizing 600+ million Indian women could be enormous.

If there is one takeaway from this essay, it is this: economic emancipation for women is the antidote for a number of depressing realities caused by gender inequality, ranging from dowry prevalence to son preference at birth. On a personal note, the one thing my mother wanted most for me was financial independence, so that I would never have to answer to a man. She had figured out the answer to women's liberation in maiden India well before I did. She has always been a step and a half ahead of me.

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