

Gender Norms and the Motherhood Penalty: Experimental Evidence from India

Arjun S. Bedi

Tanmoy Majilla

Matthias Rieger

Erasmus University Rotterdam

Introduction

- Substantial proportion of women do not participate in labor markets
- Gender gaps have declined but they still persist in some parts of the world
- One strand of the literature argues that differences in underlying preferences may explain gender gaps
 - Appetite for competition varies between men and women
 - Raises the issue of what leads to such differences in competitive preferences – nature or nurture debate

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Introduction

- Body of literature (Gneezy et al. 2009) compares competitive preferences of men and women living in a patrilineal (Maasai in Tanzania) and a matrilineal (Khasi in India) community
- Khasi - a community in Northeastern India
 - Maternal grandmothers head households
 - Transmit wealth and power to their youngest daughters
 - After marriage men join household of wife
 - Take on stereotypically “female” tasks such as childcare
- Literature finds that, in experiments, women are as competitive as men (if not more) in a matrilineal society
- Supporting the nurture interpretation of the origin of competitive preferences
- **Does this also translate into labor market outcomes?**



Introduction

- The gap is often attributed to motherhood (Goldin, 1994, 2014)
- Labor markets tend to penalize mothers
- Argument is that, employers may consider mothers “less competent and less committed to their jobs”, (Correll et al., 2007)
- This perception of working mothers reflects “patriarchal stereotypes”
- This paper combines these two aspects – motherhood and matrilineal cultural norms
- This paper hypothesizes that mothers from matrilineal societies are less likely to face a motherhood penalty
- In a well-functioning market, employers value their competitiveness, cultural background, supportive household arrangements, and are likely to view them as “more competent and more committed to their jobs”

Introduction

- Use a CV experiment
- Examine the labor market success, interview callback rates of mothers and non-mothers from matrilineal (ML) and patrilineal (PL) societies in India
- Quantify if employers differentiate between mothers and non-mothers *within* ML and PL societies
- Applicants were mothers and non-mothers of Khasi (matrilineal), Naga and Bengali (patrilineal) origin

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Introduction

- Contributions:
 - Provide (causal) evidence on the effect of culture on labor market outcomes
 - Evidence on the effect of motherhood in a developing country
 - Effect of ethnicity – Naga and Khasi from Northeastern India versus Bengalis

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Theory and Empirical Strategy

- Taste-based discrimination and statistical discrimination
- If taste-based then employers would discriminate against mothers regardless of their community origins
- If statistical discrimination then employers will adjust the extent of their discrimination based on observable community origin (ML) which may be a proxy for competitiveness/commitment
- If discrimination against women from the Northeast is taste based then employers should discriminate across both industry sectors
- If statistical discrimination then there may be variations across sectors

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Experimental details

- Searched for entry-level positions on a job web site in two sectors – finance and Business Process Outsourcing (BPO/Call-centers)
- Three cities (Delhi, Mumbai, Chennai)
- Two round CV experiment – July to September 2017
- 1276 fictitious applications sent to 319 job openings
- First round – 687 female and 229 male CVs without work experience
- Second round – 270 female and 90 male CVs with work experience
- Selection of communities
 - Khasi - ML/expect lower negative effects of motherhood, Christian
 - Naga - PL/from the Northeast, physically similar to Khasi, Christian
 - Bengali – PL/East India, Hindu



Experimental details

- Designed CVs based on input from a human resource consultancy firm
- Comparable CVs
 - Same education level, comparable colleges, similar age, similar subjects
- All married – mothers (1 child, 2-2.5 years old) and non-mothers; men – fatherhood not reported
- Clear signals of community origins
 - Names typical of community
 - Mentioned home state on CV
 - Current addresses indicated C/O (care of) - for Khasi the applicant herself; for others, husband
 - Also used D/O (daughter of) – for Khasi used mother's name; for others, father's name
 - Mentioned native language on CV

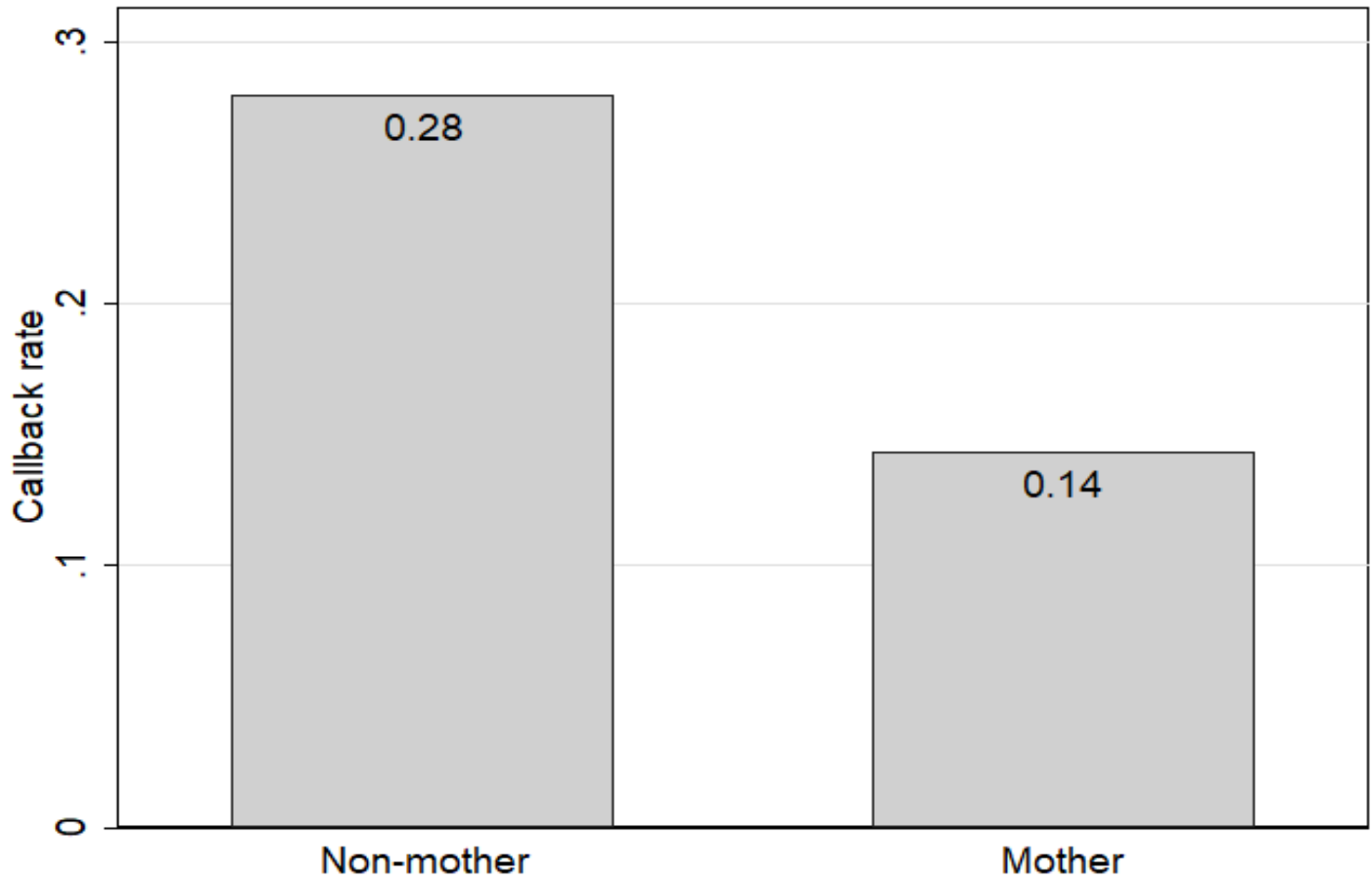
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Sample Sizes

	No prior job experience (1 st round experiment)		Experienced (2 nd round experiment)		Total
	Non-mother	Mother	Non-mother	Mother	
Bengali	115	114	44	46	319
Khasi	113	116	46	44	319
Naga	116	113	44	46	319
Total applications (job openings)	344	343	134	136	957 (258)
<i>... broken down by place and sector:</i>					
Chennai	117	111	44	46	318
Delhi	112	116	45	45	318
Mumbai	115	116	45	45	321
Call center, Business Process Outsourcing (BPO)	182	178	63	72	495
Finance, banking, insurance	162	165	71	64	462



The Motherhood Penalty- Women without prior job experience

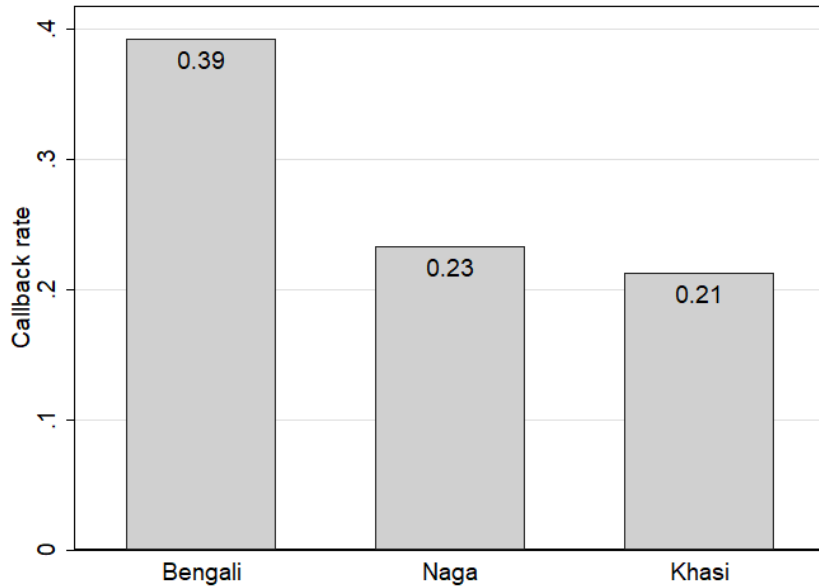


Δ -13.62%-points, p-value=0.00, n=687



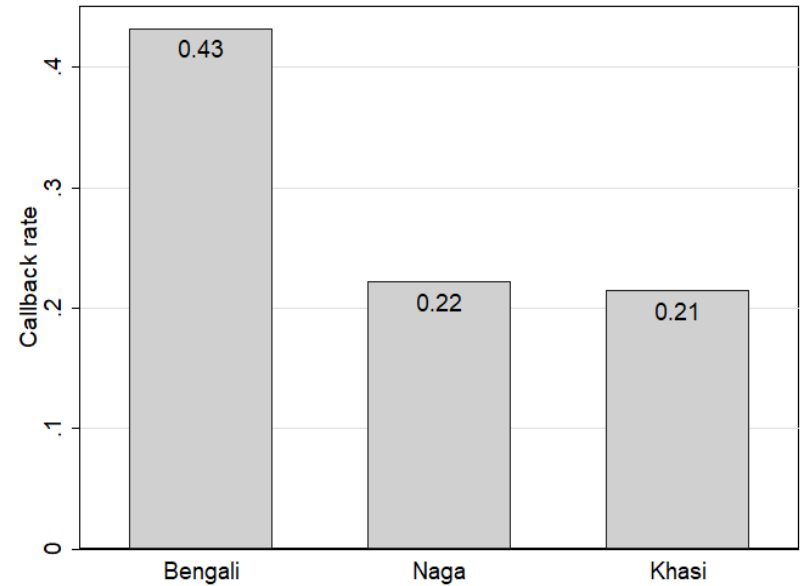
Control Condition – Men and women without children

Panel A: Women (non-mothers)



Δ p-values (N=344):
Bengali vs. Naga: 0.00
Bengali vs. Khasi: 0.00
Naga vs. Khasi: 0.68

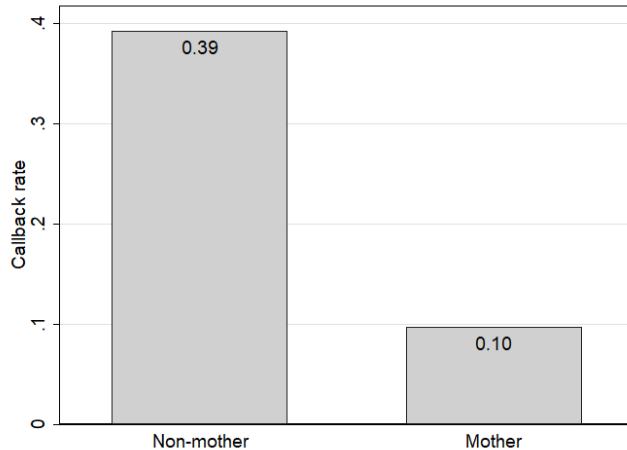
Panel B: Men (non-fathers)



Δ p-values (N=115):
Bengali vs. Naga: 0.05
Bengali vs. Khasi: 0.04
Naga vs. Khasi: 0.93

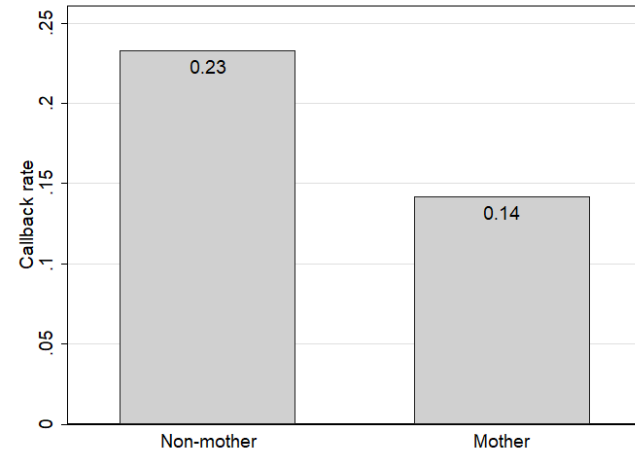
Motherhood Penalties - Patrilineal (Bengali, Naga) vs. Matrilineal (Khasi) Origins

Panel A: Bengali – Patrilineal



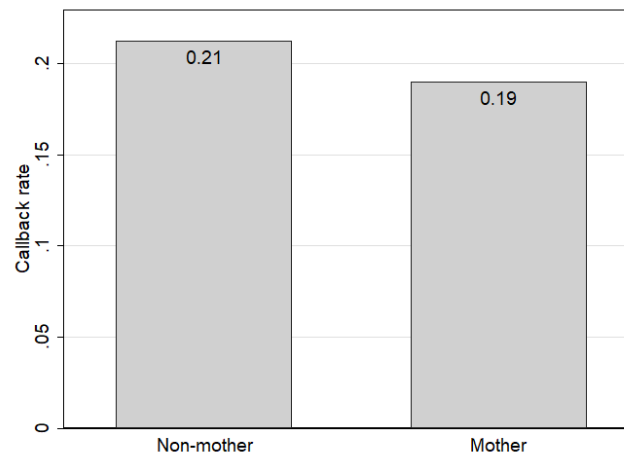
Δ -29.48%-points, p-value=0.00, n=229

Panel B: Naga - Patrilineal



Δ -9.12%-points, p-value=0.08, n=229

Panel C: Khasi - Matrilineal



Δ -2.27%-points, p-value=0.67, n=229

Note: P-values stem from linear regression-based t-tests adjusted for clustering at the job posting level.

Robustness

Dep. var. Callback	(1)	(2)	(3)	(4)	(5)
Mother	-0.14*** (0.03)	-0.14*** (0.03)	-0.30*** (0.05)	-0.08* (0.04)	-0.18* (0.09)
<i>Group (Bengali is excl.)</i>					
Naga	-0.06** (0.02)	-0.06** (0.02)	-0.16*** (0.05)	-0.07 (0.04)	-0.12 (0.09)
Khasi	-0.04 (0.03)	-0.04 (0.03)	-0.18*** (0.05)	-0.11** (0.04)	-0.21** (0.08)
Mother x Naga			0.21*** (0.08)		0.11 (0.14)
Mother x Khasi			0.27*** (0.08)		0.19 (0.13)
<i>City (Chennai is excl.)</i>					
Delhi		0.06 (0.05)	0.05 (0.05)	0.07 (0.08)	0.06 (0.08)
Mumbai		0.05 (0.05)	0.06 (0.05)	0.09 (0.09)	0.09 (0.09)
<i>Sector (Finance is excl.)</i>					
Call center/BPO jobs		0.03 (0.04)	0.02 (0.04)	0.11 (0.07)	0.11 (0.07)
<i>P-values:</i>					
Mother = - Mother x Naga			0.09		0.40
Mother = - Mother x Khasi			0.61		0.94
N	687	687	687	270	270
Prior job experience		No		Yes	

Note: Linear probability model. Constant not shown. Standard errors in brackets below point estimates are clustered at the job posting level. Significance levels are denoted *p<0.1, **p<0.05, ***p<0.01.



Sectoral Heterogeneity

Dep. var. Callback	(1)	(2)	(3)	(4)	(5)	(6)
Mother	-0.12*** (0.02)	-0.26*** (0.05)	-0.17*** (0.03)	-0.25*** (0.06)	-0.07** (0.03)	-0.28*** (0.07)
Naga	-0.06*** (0.02)	-0.15*** (0.04)	-0.01 (0.03)	-0.05 (0.06)	-0.11*** (0.03)	-0.25*** (0.06)
Khasi	-0.06*** (0.02)	-0.19*** (0.04)	-0.04 (0.03)	-0.11* (0.06)	-0.09** (0.04)	-0.27*** (0.06)
Mother x Naga		0.18*** (0.07)		0.09 (0.10)		0.27** (0.10)
Mother x Khasi		0.25*** (0.07)		0.15* (0.09)		0.36*** (0.10)
Call center/BPO jobs	0.05 (0.04)	0.05 (0.04)				
Inexperienced	-0.02 (0.04)	-0.02 (0.04)	-0.06 (0.06)	-0.06 (0.06)	0.02 (0.06)	0.02 (0.05)
Sample	Full		Call Center/BPO		Finance	
N	957		495		462	

Note: Linear probability model. Constant and city dummies not shown. Finance/Banking and Bengali are excluded categories in columns 1 and 2. Standard errors in brackets below point estimates are clustered at the job posting level. Significance levels are denoted *p<0.1, **p<0.05, ***p<0.01.



Estimates by City

Dep. Var. Callback	(1)	(2)	(3)	(4)	(5)	(6)
Mother	-0.20*** (0.05)	-0.40*** (0.07)	-0.12*** (0.04)	-0.20** (0.09)	-0.05 (0.03)	-0.19** (0.08)
Naga	-0.05 (0.04)	-0.15* (0.08)	-0.07* (0.04)	-0.11 (0.08)	-0.06* (0.03)	-0.18** (0.07)
Khasi	-0.00 (0.04)	-0.18** (0.08)	-0.06 (0.04)	-0.15* (0.08)	-0.12*** (0.04)	-0.20*** (0.07)
Mother x Naga		0.23** (0.11)		0.07 (0.14)		0.23** (0.11)
Mother x Khasi		0.37*** (0.12)		0.17 (0.12)		0.18* (0.11)
Call center/BPO	0.01 (0.07)	0.02 (0.06)	0.07 (0.07)	0.07 (0.07)	0.08 (0.06)	0.06 (0.06)
Inexperienced	-0.01 (0.07)	-0.02 (0.07)	-0.04 (0.08)	-0.04 (0.08)	-0.01 (0.07)	-0.01 (0.07)
City Sample	Delhi		Mumbai		Chennai	
N	318		321		318	

Note: Linear probability model. Constant not shown. Finance/Banking is an excluded categories. Standard errors in brackets below point estimates are clustered at the job posting level. Significance levels are denoted *p<0.1, **p<0.05, ***p<0.01.



Attribution (Empowerment)

<i>Region</i>	<i>India</i>	<i>East India</i> West Bengal (Bengali, Patrilineal)	<i>North-East India</i> Nagaland (Naga, Patrilineal)	Meghalaya (Khasi, Matrilineal)
Nr. of women (<i>in millions</i> , 2011 Census)	587.58	44.47	0.95	1.48
Women ever worked	0.42	0.30	0.24	0.81
Willing to work	0.61	0.64	0.75	0.95
Average Number of children	2.83	2.40	3.33	3.39
Husband decided number of children	0.92	0.92	0.36	0.75
Husband beats if wife leaves without permission	0.51	0.47	0.12	0.15

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What we learn

- Bad News:
 - Strong evidence of a motherhood penalty in India
 - Clear ethnic discrimination against individuals from the northeast particularly in the Finance/Banking sector
 - Even one child may substantially punish women in the labor market
- Some Good News:
 - Penalty is concentrated among Naga and Bengali women (patrilineal)
 - Cultural norms are strong drivers of gender gaps
 - Some promising results. Policy: gender norm change
 - No overall gender differences in callback rates



What we learn

- Evidence consistent with statistical discrimination/filtering
- In India - declines in fertility and increases in female education
- Labor market participation of women in urban India is stuck at 18% between 1987 to 2011
- Persistence of culturally-induced motherhood norms and lack of suitable childcare
- Behavioral change campaigns
- Child care provision

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Ongoing Extensions

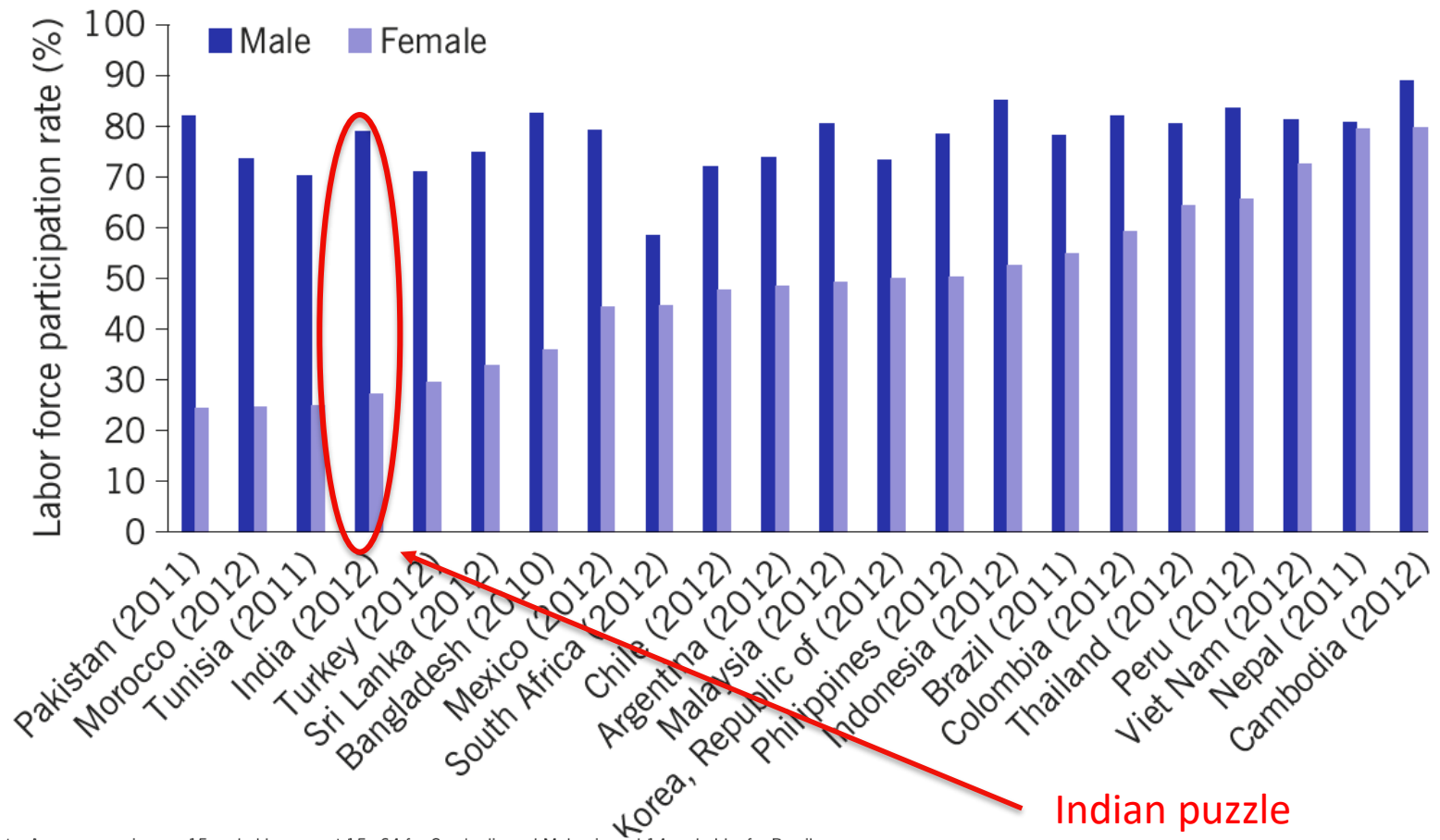
- One possible channel:

Mothers are less flexible, specifically, family obligations put mothers in severe disadvantage in traditional work arrangements.

- To address this: give signal of childcare arrangements at home/ flexible.
 - Childcare availability reduces motherhood penalty
 - But do not fully alleviate motherhood penalty

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Labor Force Participation in the Global South



Indian puzzle

Note: Age coverage is ages 15 and older, except 15–64 for Cambodia and Malaysia and 14 and older for Brazil.

Source: ILO Key Indicators of the Labour Market, 8th Edition. Online at: http://www.ilo.org/empelm/what/WCMS_114240/lang-en/index.htm; Bangladesh Labour Force Survey. Online at: <http://www.sid.gov.bd/wp-content/uploads/2013/01/Key-Findings-of-Labour-Force-Survey-2010.pdf>; Pakistan Labour Force Survey. Online at: http://www.pbs.gov.pk/sites/default/files/Labour%20Force/publications/Pakistan_Employment_2012.pdf; Nepal Living Standards Survey. Online at: <http://cbs.gov.np/nada/index.php/catalog/37>; Sri Lanka Labour Force Survey. Online at: http://www.statistics.gov.lk/sampleurvey/Labour%20Force%20survey_Annual%20Report_2012-final.pdf.

Figure from Verick (2014, IZA World of Labor)



Khasi

Naga

Bengali