

Gender Economics: International and Development Economics

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Sciences Po Menton



Introduction

Economic literature on gender inequality is more important for developed/Western countries

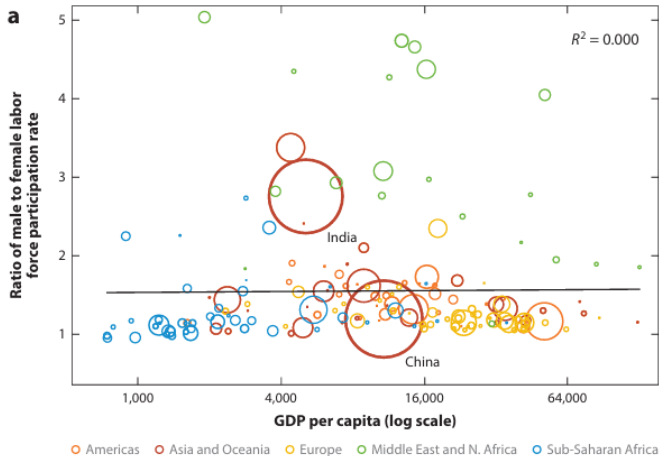
- Lack of available data
- Lack of interest/Knowledge of the context

Context

- Persistent gender inequality in many developing countries ([Duflo, 2012](#))
- Women's empowerment and economic development are interrelated but not automatically self-sustaining.
- Continuous policy efforts are required to improve women's status and reduce gender gaps.

Gender gap in Labour Force Participation

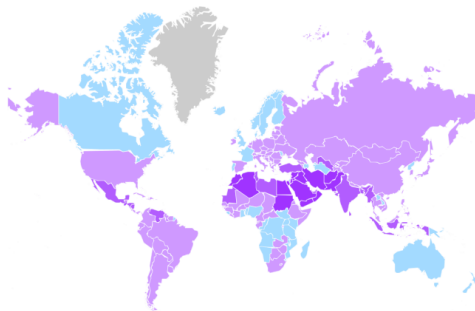
Jayachandran (2015)



Labour force participation rate

Labor force participation rate, total (% of total population ages 15-64) (modeled ILO estimate)

Gender: Gender Gap



Percent Higher for males than females Nearly equal Higher for females than males Data not available

What is a Randomized Controlled Trial (RCT)?

- **Definition:** An RCT is an experimental method where participants are randomly assigned to a treatment group or a control group
- **Purpose:** Used to estimate the causal impact of an intervention by minimizing selection bias
 - ▶ Allow to do a Differences-in-Differences analysis with a treatment and control group that you create
- **Key Features:**
 - ▶ **Randomization:** Ensures that treatment and control groups are statistically similar
 - ▶ **Impact Measurement:** Outcome differences between groups provide causal estimates
- **Application:** Widely used in development economics, public policy, and health interventions.

Question

How to participate?



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Missing women

What is the "Missing Women" Phenomenon?

- Term introduced by [Sen \(1990\)](#) to describe excess female mortality.
- In many developing countries, the **sex ratio at birth and among children** is very low compared with biological norms
- Due to gender-biased practices

Missing Women

Number of 'missing women' in the world, 1970 to 2025

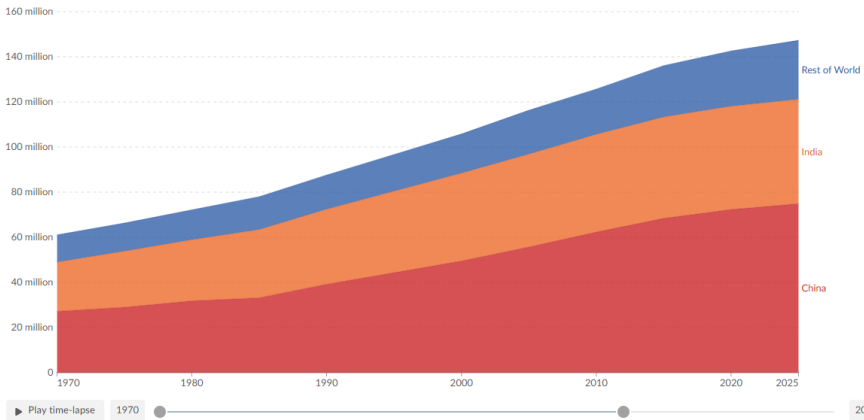
'Missing women' refers to the number who would be alive in the absence of sex discrimination. Missing women are the sum of women missing at birth (as a result of sex-selective abortion) and excess female mortality through infanticide, neglect or poor treatment.

Our World
in Data

Table

Chart

Settings



Data source: Bongaarts & Guilimoto (2015) - [Learn more about this data](#)
OurWorldinData.org/gender-ratio | CC BY

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Missing Women: Sources

How to participate?



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How can we explain the missing women phenomenon

Key Causes of Missing Women: (Sen, 1990)

- ❶ **Sex-Selective Abortion** – Widespread in countries with **strong son preference** (e.g., China, India) leading to skewed birth sex ratios
- ❷ **Neglect of Female Health & Nutrition** – Girls receive **less food, medical care, and vaccinations** in some societies, increasing child mortality.
- ❸ **Maternal Mortality** – **High rates of unsafe childbirth** and limited access to healthcare cause excess deaths among reproductive-age women.
- ❹ **Violence Against Women** – Domestic violence, honour killings, and other gender-based violence contribute to female mortality.

Estimated that 6 million women are “missing” every year Bank (2011)
 – 23% never born, 10% missing in early childhood, 21% in reproductive years, 38% above age 60.

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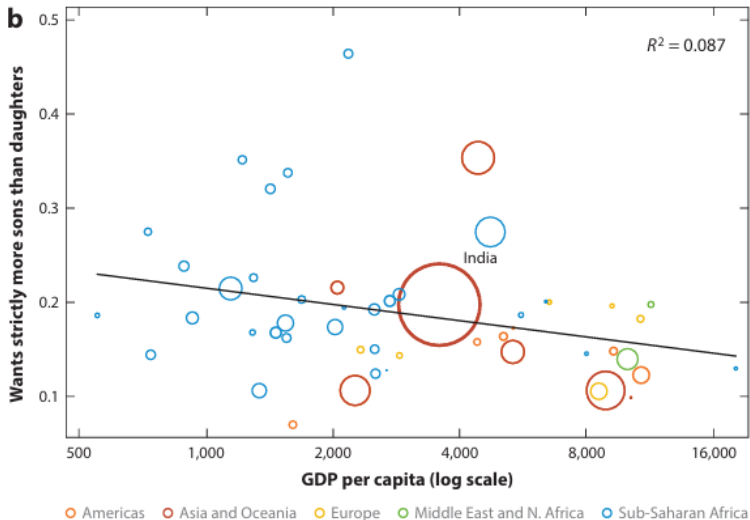
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Missing Women - Policy response

Policy Responses and Interventions:

- **Legal Bans on Sex-Selective Abortion** (e.g., India's Pre-Conception & Pre-Natal Diagnostic Techniques Act)
- **Financial Incentives for Girls:** Conditional cash transfer programs encourage families to value daughters
- **Improving Maternal and Child Healthcare:** Expanding access to reproductive health services reduces excess female mortality
- **Public Awareness Campaigns:** Addressing cultural norms around son preference and promoting gender equality in education and inheritance rights.

Gender Norms Jayachandran (2015)



Why Do Mothers Breastfeed Girls Less Than Boys?

(Jayachandran and Kuziemko, 2011)

Reference: Jayachandran, S. & Kuziemko, I. (2011). *Why Do Mothers Breastfeed Girls Less Than Boys? Evidence and Implications for Child Health in India.*

Research Question:

- Why do mothers in India breastfeed daughters less than sons?
- What are the health implications of this breastfeeding disparity?

How to participate?



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Why Do Mothers Breastfeed Girls Less Than Boys?

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Context and Motivation

- Breastfeeding reduces fertility temporarily (natural contraceptive)
- Son preference prevalent in India (families stop having children after sons)
- **Hypothesis:** mothers wean daughters earlier to try again for sons, creating health disadvantages for girls
 - ▶ Parents have son-biased fertility targets: continue childbearing until reaching desired number of sons
 - ▶ Breastfeeding increases with birth order.
 - ▶ Girls and children without older brothers are breastfed less.
 - ▶ Largest gender gap near target family size (marginal fertility decisions).

Why Do Mothers Breastfeed Girls Less Than Boys?

(Jayachandran and Kuziemko, 2011)

Main Results

- Boys are breastfed significantly longer (about 0.9 months longer completed breastfeeding)
- Gender gap largest at intermediate birth orders (when parents are most uncertain about continuing fertility)
- Having an older brother significantly increases breastfeeding duration
- Confirmed predictions strongly consistent with son-biased fertility hypothesis.

Why Do Mothers Breastfeed Girls Less Than Boys?

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Health Implications

- Breastfeeding provides crucial health benefits, especially in areas lacking sanitation and clean water
- Shorter breastfeeding duration for girls increases their mortality risk
- Estimated 8,000-21,000 “missing girls” annually in India due to reduced breastfeeding
- Accounts for approximately 9% of gender gap in child mortality between ages one and five.

Why Do Mothers Breastfeed Girls Less Than Boys?

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Policy Implications

- Highlights previously unexamined fertility-breastfeeding link for gender gaps
 - Improving contraception availability could have ambiguous effects on breastfeeding duration:
 - ▶ Could substitute breastfeeding if contraception becomes readily accessible.
 - ▶ Could prolong breastfeeding if mothers control fertility timing better.
 - Essential to pair contraception access with breastfeeding promotion and improvements in sanitation to protect child health.
- ⇒ Importance of integrating family planning and gender equity considerations in public health policies.

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Women's empowerment and Economic Development

Can economic development cause women's empowerment or can Women's Empowerment lead to economic development?

Duflo (2012)

Econ. Development Leads to Women's Empowerment

Poverty

- **Poverty forces difficult choices (often at women's expense).**
 - ▶ In poor households, parents may have to prioritize medical care or nutrition for certain family members during crises ([Rose, 1999](#))
- **Economic growth can reduce vulnerability to shocks**
 - ▶ When household income rises or when social safety nets improve, families are less likely to cut spending on girls during economic crisis
 - ▶ [Miguel \(2005\)](#) links poor harvests in rural Tanzania to a spike in so-called "witch" killings (mostly older women)
- **Access to basic health services helps both genders but disproportionately benefits girls, reducing inequality**

Econ. Development Leads to Women's Empowerment

Fertility and Maternal Mortality

- Maternal mortality risk is significantly higher in developing countries (1 in 31 in sub-Saharan Africa vs. 1 in 4,300 in richer regions)
- Economic growth reduces fertility and improves maternal care
- Leads to fewer “missing women” during childbearing years

Expanding Opportunities for Women

- Availability of formal or factory jobs raises girls' schooling (Qian, 2008; Jensen, 2010)
- Shifts parental attitudes and aspirations (Beaman et al., 2011)

⇒ Encourages investment in women, narrowing inequality

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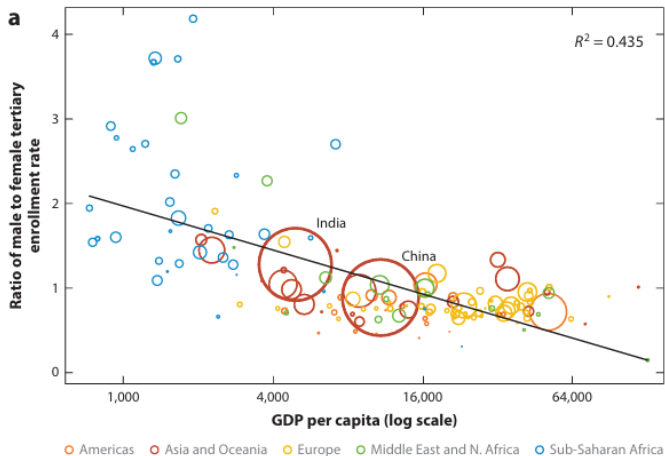
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Gender gap in enrollment rate



Econ. Development Leads to Women's Empowerment

Freeing Up Women's Time

- Women spend significantly more time on domestic work and child care
- Access to infrastructure (electricity, piped water) or appliances can increase female labor force participation ([Dinkelman, 2011](#); [Devoto et al., 2012](#))
- Reduced fertility also frees time for education, market labor ([Field and Ambrus, 2008](#))

Development and Women's Rights

- Strong correlation between women's legal/economic rights and GDP per capita ([Doepke and Tertilt, 2009](#))
- As human capital gains importance, men may support women's rights to enhance children's outcomes
- Still, direct legal reforms often needed to secure property and inheritance rights for women ([Duflo, 2012](#))

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Limits of Economic Development Alone

But Will Economic Development Be Enough?

- Skewed sex ratios persist (China, India) despite growth
 - Son preference reinforced by prenatal sex selection ([Duflo, 2012](#))
 - Gender gaps in earnings, property rights, and political representation remain.
- ⇒ Development alone not enough; targeted interventions remain crucial.

Women's empowerment leads to econ. development

Women Empowerment and Family Outcomes

- Female education, income, and bargaining power correlate with better child health/nutrition (Thomas, 1990; Duflo, 2003)
- More causal evidence emerges from policy changes (mass schooling expansions, pension reforms)
- But differences in father vs. mother impact on child well-being vary by context

Within the Household

- Microcredit or welfare agencies target women to ensure spending on children (Duflo, 2003)
- In Zambia, private distribution of contraceptive vouchers to women significantly reduced unwanted births (Ashraf et al., 2010)

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How does a decline in maternal mortality risk affect women's education and broader human capital investments? (Jayachandran and Lleras-Muney, 2009)

- **Context:** Historical declines in maternal mortality in *Sri Lanka*, exploiting policy-driven improvements in maternal healthcare infrastructure.
- **Key Finding:** A one-year increase in a woman's life expectancy (due to lower maternal mortality risk) leads to about **0.1 additional years of education** for that cohort of women, relative to men
- **Difference-in-Differences (DiD):**
 - ▶ Compare changes in female educational attainment across cohorts/regions with high vs. low MMR declines.
- **Mechanism:** When maternal mortality decreases, the perceived returns to investing in girls' education and training rise

Women's empowerment leads to econ. development

On the Farm: Property Rights

- Women sometimes hold insecure rights to land, leading to inefficiencies (Udry, 1996)
- Reallocating inputs between male and female plots can raise production up to 6%
- Where property rights are insecure, women avoid letting men farm their land, sacrificing efficiency for control

Women's empowerment leads to econ. development

Women in Politics

- Quotas for female political leaders in local councils (India) yield policy shifts favoring local women's concerns ([Chattopadhyay and Duflo, 2004](#))
- Voters initially biased, but exposure to female leaders reduces stereotypes ([Beaman et al., 2009](#))
- Still, women remain underrepresented globally (19.4% in parliaments, IPU, 2011).

Education and Health: Complementary Channels

- Evidence of returns for women's education on child health is strong, yet father education also matters ([Breierova and Duflo, 2004](#))
- Healthcare access for women (maternal and child) also crucial for broader development gains.

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Summary (Duflo, 2012)

- Women empowerment can improve household outcomes and shift policy priorities
- Large potential for synergy: more educated, healthier women invest in children, further driving development
- Yet, impact can be modest if deep-rooted gender norms persist and hamper policy effectiveness.

Policy Implications

- Affirmative action in education, property rights, and political representation can accelerate progress
- Transfers targeted to women may have stronger impact on children, but trade-offs exist

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The Miracle of Microfinance? (Banerjee et al., 2015)

- **Research Question:** How does expanding access to group-lending microcredit affect household outcomes, including investment, consumption, and women's empowerment?
- **Context:** Urban slums in Hyderabad, India. Offered standard group-loans
- **Sampling and Assignment:**
 - ▶ 104 urban neighborhoods ("slums") identified, matched into pairs by baseline average debt and consumption
 - ▶ 52 neighborhoods randomly selected for Spandana branch expansion (treatment); other 52 as comparison

The Miracle of Microfinance? (Banerjee et al., 2015)

Results: Borrowing & Substitution of Credit

- Some substitution away from informal loans; total debt from all sources didn't rise much.
- Take-up was lower than expected – only about 26.7% in treatment areas borrowed from any microfinance institution
- MFI expansion also reached control areas. MFI borrowing is 33% in both groups, but treatment households have borrowed longer and bigger amounts.

The Miracle of Microfinance? (Banerjee et al., 2015)

Results: Business Outcomes

- **Business formation:** No big difference in the probability of starting a new business.
- **Existing businesses:** Some expansions. Revenues and profits rose in the upper tail of profitable businesses
- For an average (median) enterprise, measured profits are unchanged.
- **Interpretation:** Microcredit helps certain entrepreneurs expand – especially those with higher potential – but does not dramatically change the average business.

The Miracle of Microfinance? (Banerjee et al., 2015)

Results: Consumption, Education, and Women's Empowerment

- **Consumption:**

- ▶ No large or significant increase in total monthly consumption.
- ▶ *Durable* expenditure rose somewhat, *temptation* goods spending decreased (unnecessary" or non-essential: alcohol, tobacco)

- **Health and Education:** No meaningful improvements in child health or school enrollment found

- **Women's Empowerment:** No major changes in decision-making power or associated indexes

- **Summary:** Gains are mostly in the form of adjusting household spending patterns and reallocated borrowing – no bigger transformations in living standards or female empowerment found in 2–3.5 years.

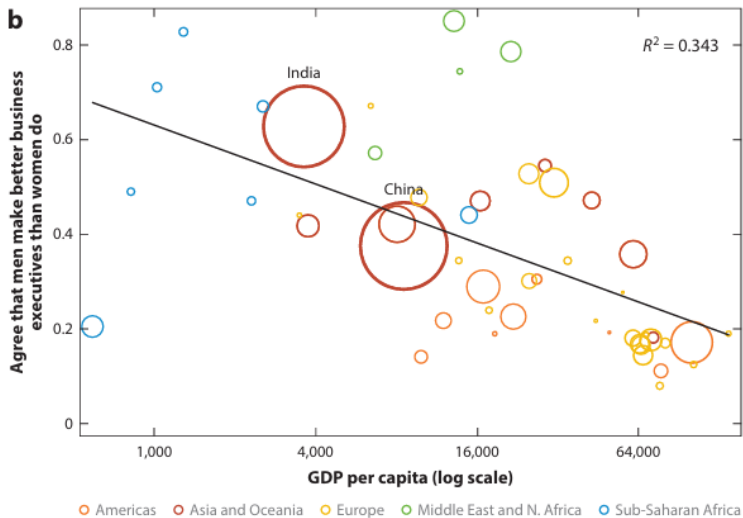
Conclusion and Implications

- **Key Finding:** Modest take-up of new MFI credit (8.4pp difference), small effects on business outcomes, no major changes in general consumption or health/education outcomes.
 - ▶ No impact on women
 - Microcredit is not a “miracle cure”: modest take-up and limited overall changes in consumption or women’s empowerment.
 - Other microcredit RCTs (e.g., in Morocco, Mexico, Bosnia, Mongolia, Ethiopia) find broadly similar patterns.
- ⇒ **Expanding group-based microcredit alone, without additional interventions such as training or empowerment programs, did not produce major gains in women’s empowerment**

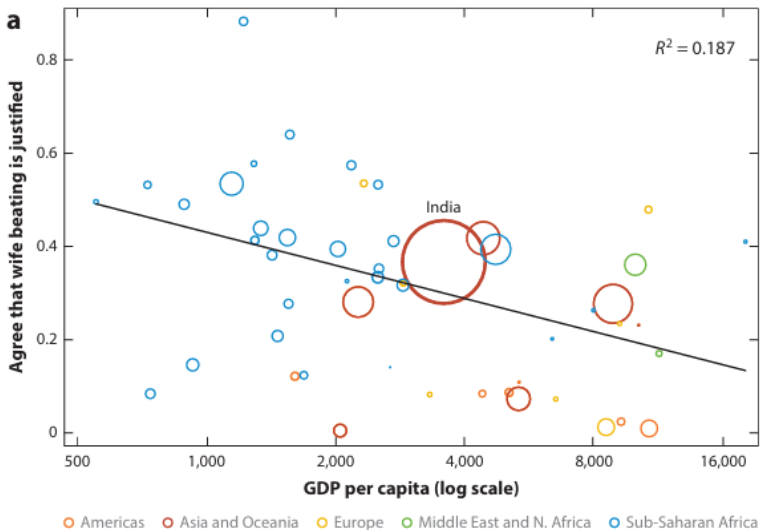
The Roots of Gender Inequality in Developing Countries (Jayachandran, 2015)

- **Research Question:** Why do poor countries exhibit larger gender gaps in health, education, labor markets, and overall status of women compared to rich countries?
 - ▶ Economic development itself narrowing some gaps
 - ▶ Persisting cultural features, such as patrilocal norms, that strongly favour males
 - ▶ Persisting missing women phenomenon

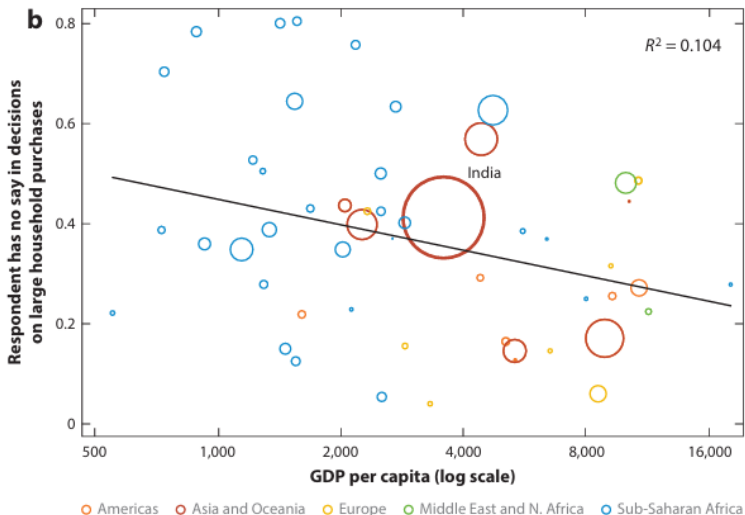
Gender Norms (Jayachandran, 2015)



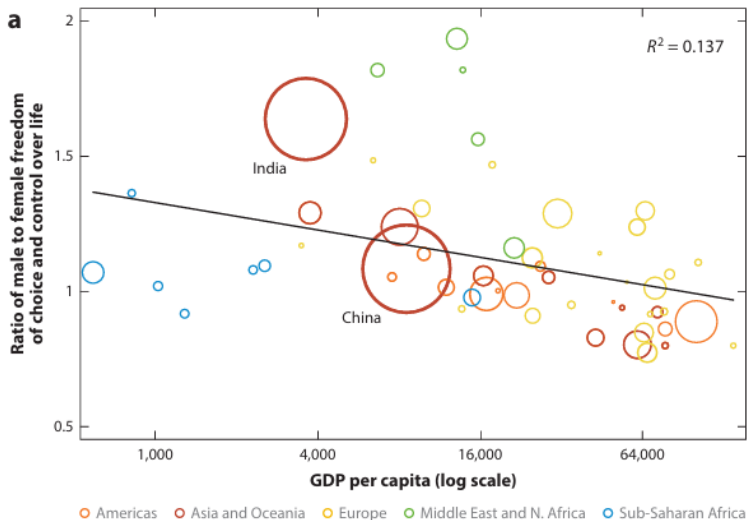
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Cultural Factors that Cause Gender Inequality

(Jayachandran, 2015)

- **Patrilocality:** Daughters “marry out,” while sons remain, so parents invest more in sons. Worsened by poverty constraints (Rose, 1999)
- **Dowry System:** In South Asia, dowry is the “price” of a groom; imposing costs on families with daughters, leading to “son preference” (Rao, 1993)
- **Female Seclusion & Safety:** Societies where women’s “purity” or chastity is stressed often restrict their mobility, lowering FLFP and girls’ schooling
- **Norms’ Persistence:** Even after migration to richer settings, some groups maintain male-biased practices Alesina et al. (2013)
- **Bottom Line:** Cultural or religious norms are powerful drivers of pro-male bias, partly independent of economic forces.

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Conclusion & Policy Approaches (Jayachandran, 2015)

- **Income Growth Alone Not Enough:** While development lowers certain gender gaps, strongly-rooted cultural norms (e.g., son preference) can persist
- **Direct Interventions for Girls/Women:**
 - ▶ Conditional transfers to incentivize girls' schooling
 - ▶ Legal reforms that improve female inheritance or property rights
 - ▶ Targeted campaigns to curb sex-selective abortion, female infanticide, or early marriage.

Alesina et al. (2013)

On the Origins of Gender Roles: Women and the Plough.

- **Research Question:** Why do some societies believe that women's place is predominantly in the home, while others permit greater female participation in outside activities?
- **Hypothesis:** Traditional plough agriculture
 - ▶ Favoured men's labour (physical strength, controlling draft animals)
 - ▶ And reduced tasks typically performed by women (like weeding)
 - ▶ **Cultural Persistence:** Norms are transmitted intergenerationally. Even when societies industrialize, attitudes about "appropriate" female roles persist.
- This shaped persistent cultural norms assigning domestic roles to women.

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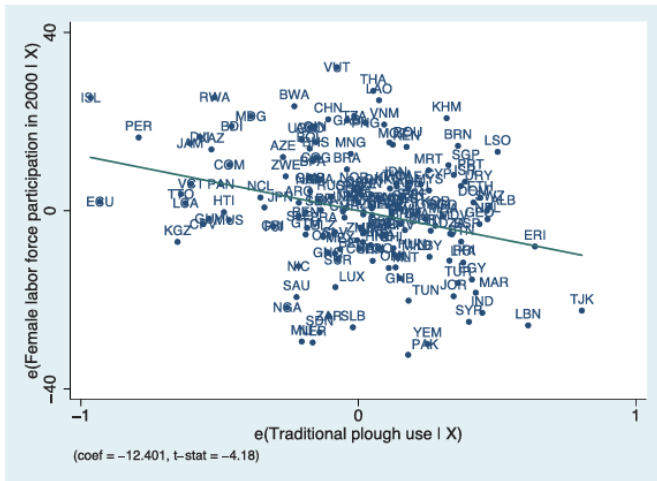
On the Origins of Gender Roles (Alesina et al., 2013)

Empirical Strategy

- **Pre-Industrial Data:** Ethnographic Atlas for 1,265 ethnic groups records whether they used ploughs historically
- **Outcome Variables:**
 - ▶ Female labour force participation
 - ▶ Share of firms with female owners
 - ▶ Proportion of parliamentary seats held by women
 - ▶ Survey measures of gender-role attitudes

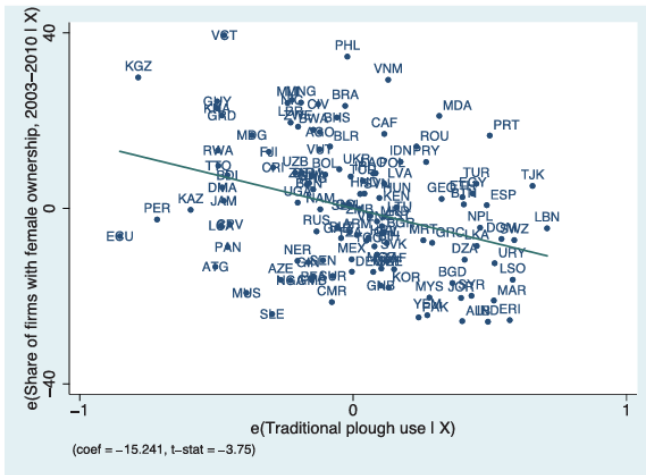
On the Origins of Gender Roles (Alesina et al., 2013)

(a) Traditional plough use and current FLFP



On the Origins of Gender Roles (Alesina et al., 2013)

(b) Traditional plough use and current female firm ownership



(c) Traditional plough use and current female participation in politics



On the Origins of Gender Roles (Alesina et al., 2013)

Key Findings

- **Country-Level:** Higher ancestral plough use → lower female labour force participation, fewer female-owned firms, and fewer women in national parliaments
- **Subnational Variation:** Similar patterns across ethnic groups and across districts within a single country, rejecting purely regional explanations
- **Mechanisms:**
 - ▶ *Culture channel:* Beliefs about gender roles remain ingrained
 - ▶ *Institutional complementarity:* Legal structures, labour markets, or policies reinforcing these norms.
 - ▶ **Evidence of Persistence:** Children of immigrants in Western countries show that those from plough-use ancestries have more conservative gender attitudes, controlling for the same external environment.

Amuedo-Dorantes and Pozo (2006)

Migration, Remittances, and Male and Female Employment Patterns

- **Context:** How international remittances affect labour supply in Mexico, focusing on differences by gender (male vs. female), area (urban vs. rural), and type of employment (formal vs. informal)
- **Key Insight:** Remittances can reduce or increase work hours, depending on whether the income effect (buying more leisure) dominates or the disruptive effect (compensating for absent migrant) dominates
- **Findings:**
 - ▶ Men: Overall hours do not change much, but they shift away from formal/self-employment toward informal work, possibly due to migration's disruptive impact
 - ▶ Women (rural): Significant drop in total work hours, especially nonpaid and informal work, consistent with an income effect

What Is the Income Effect?

- **Definition:** The income effect refers to how a consumer (or worker) changes their behaviour in response to an increase or decrease in income
- If non-labour income (e.g., remittances) rises, individuals often purchase more goods and services, including “leisure” (reducing labour supply)
- Example: When a family in Mexico receives higher remittances, some may work fewer hours because they can afford more leisure or can now pay for services they previously performed themselves
- Contrast with the *substitution effect*: that’s when a higher wage prompts more hours worked (since the opportunity cost of leisure is higher). Income and substitution effects often pull in opposite directions.

Worms: Education and Health Impacts (Miguel and Kremer, 2004)

Research Question:

- *What are the educational and health impacts of school-based deworming in Kenya?*

Empirical Strategy:

- Randomized controlled trial (RCT) with phased implementation across schools
- Identification of externalities (spillover effects) on neighbouring untreated schools.

Worms: Education and Health Impacts (Miguel and Kremer, 2004)

Key findings:

- Deworming reduced absenteeism by at least 25%
- Significant health improvements and externalities benefitting nearby untreated children
- No significant impact on test scores
- Highly cost-effective (\$3.50 per additional year of school attendance).

Anemia and School Participation (Bobonis et al., 2006)

Research Question:

- *What are the impacts of iron supplementation and deworming on preschool attendance in India?*

Empirical Strategy:

- Randomized intervention in Delhi, India
- Supplementation with iron and deworming drugs.

Anemia and School Participation (Bobonis et al., 2006)

Key findings:

- Increased preschool participation rates by 5.8 percentage points, reducing absenteeism by 20%
- Significant improvements in child weight and health.
- Effects particularly large for anemic children and girls.

Ethical Concerns in RCTs

- **Informed Consent and Exploitation**

- ▶ Participants, often from vulnerable populations, may not fully understand the risks
- ▶ Lack of autonomy in decision-making.

- **Equipoise and Withholding Treatment**

- ▶ The necessity of a control group means some individuals do not receive potentially beneficial interventions
- ▶ Ethical dilemma: Is it justifiable to deny treatment for the sake of research?

- **Neocolonialism and Power Dynamics**

- ▶ Research often conducted by institutions from high-income countries on low-income populations
- ▶ Who decides research priorities? Local policymakers or foreign researchers?

Conclusion

- Gender inequality remains prevalent in developing countries due to intertwined economic and cultural factors.
- Economic development alone reduces some gender disparities, such as maternal mortality and educational gaps, but deep-rooted cultural norms limit full empowerment.
- Targeted policies, such as affirmative action, direct cash transfers, and legal reforms, are essential complements to development for substantial gender progress.
- Interventions like microfinance or migration-based remittances have nuanced impacts—highlighting the complexity of empowering women solely through economic channels.
- Effective solutions require integrated approaches addressing both economic constraints and persistent cultural norms.

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