



Gender Gaps over the Past Hundred Years

Aishwarya Lakshmi Ratan January 6, 2024

Gender Gaps over the Past Hundred Years

Aishwarya Lakshmi Ratan, Senior Advisor (consultant) to Imago Global Grassroots

Abstract

This article presents a set of descriptive facts and commentary on broad patterns in gender inequality over the past hundred years. The assessment of gender gaps is organized by human life stages. A key takeaway is that gender gaps do not evolve in the same pattern across major regions over time. Certain inequalities shrink universally (example, educational gaps and maternal mortality outcomes), while others stay the same or increase (example, labor market gaps and reproductive rights). Two related drivers of the observed differential persistence in gender inequalities are briefly examined: institutional change (both formal and informal) and intersectional interests. Gaps in political representation and gendered beliefs have seen greater declines in some regions compared to others. The political economy dynamics of shifting such institutional constraints might hold the key to further progress on closing gender gaps.

Key words

gender inequality, cross-regional analysis, descriptive data

Acknowledgements

Isabel Guerrero, Jimena Vallejos, Hannah Clifford, Siddhant Gokhale, and Michael Walton from Imago Global Grassroots commissioned this paper in Fall 2022 and provided critical input in defining the scope and structure for this review. My sincere thanks to Ceclia Conrad, Michael Kevane, and Katherine Hay who provided excellent feedback on a draft version - the paper is significantly improved as a result of their comments. My thanks to Santiago Segovia Baquero, Ojas, Isabela Fonseca, and Athreya Daniel for their help with compiling the graphs presented in this paper. All errors and omissions are my own.

List of Acronyms

Regions:

EAP East Asia & Pacific

ECA Europe & Central Asia

LAC Latin America & the Caribbean
MENA Middle East & North Africa

NA North America SA South Asia

SSA Sub-Saharan Africa

WLD World

Contents

1.	Introduction	4
2.	Trends in gender gaps at various human life stages	6
	2.1. Birth and Infancy	6
	2.2. Childhood	
	2.3. Adulthood – Personhood/Agency and Intra-household Dynamics	11
	2.4. Adulthood - Reproduction	16
	2.5. Adulthood - Market Dynamics	19
	2.6. Old Age and Death	24
3.	What leads gender inequality to persist, and what can be done about this persistence?	25
	3.1. Institutional change	25
	3.1.1. Formal Institutions – Laws and Policies	25
	3.1.2. Informal Institutions: Beliefs and Norms	30
	3.2. Intersectional Interests	32
	Conclusion	
R	eferences:	36

List of Figures and Tables

- Figure 1: Sex ratio at birth (male births per female births)
- Figure 2: Lower-secondary school educational attainment in select Asian countries, 1970-2020
- Figure 3: Lower-secondary school enrollment, 1970-2020
- Figure 4: Number of violent crime victims in the United States from 2005-2022, by gender
- Figure 5A: Intimate Partner Violence (IPV) prevalence Any instance ever experienced among women aged 15-49 years
- Figure 5B: Intimate Partner Violence (IPV) prevalence Any instance experienced in the previous 12-month period among women aged 15-49 years
- Figure 6: Global Under-5 Child Mortality, 1800-2017
- Figure 7: Maternal Mortality Ratio, 2000-2017
- Figure 8: Total Fertility Rate by region, 1960-2022
- Figure 9: Global labor force participation rate, by gender and region, 1990-2022
- Figure 10A: Cumulative distribution of countries where women have the right to vote over time
- Figure 10B: Start of women's suffrage across countries
- Figure 11: Share of parliamentary seats held by women, 1997-2021
- Figure 12: Gender attitudes across regions

Table 1: Life Expectancy at birth (years)

1. Introduction

"At least since the Agricultural Revolution [beginning around 12,000 years ago], most human societies have been patriarchal societies that valued men more highly than women. No matter how a society defined 'man' and 'woman', to be a man was always better. Patriarchal societies educate men to think and act in a masculine way and women to think and act in a feminine way, punishing anyone who dares cross those boundaries. Yet, they do not equally reward those who conform. Qualities considered masculine are more valued than those considered feminine, and members of a society who personify the feminine ideal get less than those who exemplify the masculine ideal. Fewer resources are invested in the health and education of women; they have fewer economic opportunities, less political power, and less freedom of movement. [...]

True, a handful of women have made it to the alpha position, such as Cleopatra of Egypt, Empress Wu Zetian of China (c. AD 700) and Elizabeth I of England. Yet they are exceptions that prove the rule. Throughout Elizabeth's forty-five-year reign l1558-1603 C.E.I, all Members of Parliament were men, all officers in the Royal Navy and army were men, all judges and lawyers were men, all bishops and archbishops were men, all theologians and priests were men, all doctors and surgeons were men, all students and professors in all universities and colleges were men, all mayors and sheriffs were men, and almost all the writers, architects, poets, philosophers, painters, musicians, and scientists were men.

Patriarchy has been the norm in almost all agricultural and industrial societies. It has tenaciously weathered political upheavals, social revolutions and economic transformations." (Harari (2015): pp. 152-153)

Systems of human organization have gone through seismic transformations over the past twelve thousand years as large-scale human settlements expanded in all major regions. Steady increases in trade and knowledge flows across regions, imperialist conquest following religious expansion, the emergence of new institutional structures including nation states, multilateral organizations, and multinational corporations, give us the world we have today, with its particular economic, social, and political structures.

Economic structural transformation from primarily agricultural to industrial to service-based economies has occurred at different rates and over different timeframes in various countries. In social and political terms, an analogous conception of structural transformation refers to the shift in societies from small kinship-based organizing structures to today's larger-scale nation state and citizenry-based polities, and even further to virtually-connected peer-to-peer social affinity groups across countries numbering in the millions in the twenty-first century. These economic, social, and political transformations rely on and in turn impact gender relations and gendered outcomes within the household, community, economy, society, and polity.

This commentary examines a set of key human welfare and agency outcomes by gender over the past century and across major regions. The paper presents a set of descriptive data on trends in gender gaps at each major human life stage, and presents a brief narrative discussion on explanatory factors that contribute to the variation in trends observed.

The underlying conceptual approach of the paper combines traditional resource gap analyses with political economy dynamics, taking the perspective that changes in resource distribution across individuals and groups can shift collective power dynamics and institutions, while reforms in institutions and changes in the balance of power can also shift resource distribution across individuals and groups. These two sets of forces continue to exert bidirectional influence, and are not easily separable.

In each of the human life stages examined, this article discusses the following questions drawing from a set of descriptive data and a few illustrative empirical studies:

- What are key regional data points that describe trends in gender gaps over time in this area?
- Are there major inflection points that produced significant reductions in gender gaps in this area, and were these reductions global or specific to particular countries or regions?
- What are some of the factors preventing a reduction in gender gaps in this area in regions exhibiting high gender gaps today?

Methodologically, this article presents simple descriptive statistics per indicator at a regional level along the lines of Klasen (2019) and Jayachandran (2015), without engaging in econometric correlational or causal analysis to tease out how variables relate to one another or what drives the observed changes in gender gaps. In each section, a few handpicked illustrative studies are noted to describe factors that are important in understanding the trends in gender gaps in that specific domain. Since this is not a systematic review, there is certainly bias in which papers are cited here, often from the US and India that have a large body of research on gender gaps, and we caution readers to treat these studies as illustrative and not definitive.

This article is best used as a broad overview of descriptive trends in gender gaps at the regional and global level. Given the level of aggregation chosen for the descriptive statistics presented, readers might assume that regions move as a group in terms of progress or regress and the underlying assumption is of smaller variability within a region than across regions. Levels of income could just as well have been used as an organizing framework to examine gender gaps. In this article, the region was simply chosen as a historically relevant unit of aggregation for compiling the descriptive statistics presented. There is clearly great heterogeneity across countries within a region (consider the trajectory of gender gaps in Sri Lanka versus Nepal for example within South Asia). We recommend that readers explore other sources for such intra-regional and intra-income-level analysis.

To preview the main insights from this commentary, the article highlights a key stylized fact that gender gaps do not evolve in the same pattern across major regions over time. Certain inequalities shrink universally (example, educational gaps and maternal mortality outcomes), while others stay the same or increase (example, labor market gaps and reproductive rights). Two related drivers of the observed differential persistence in gender inequalities are briefly examined: institutional change (both formal and informal) and intersectional interests. Gaps in political representation and gendered beliefs have seen greater declines in some regions compared to others. The political economy dynamics of shifting such institutional constraints might hold the key to further progress on closing gender gaps.

2. Trends in gender gaps at various human life stages

This section presents key trends in gender gaps at various stages of a human life cycle, over time and across major regions. All data used are from public, open, data repositories and publications, including the World Bank's Gender Data Portal and Our World in Data. Sources for any figures that are reproduced as copies here under a Creative Commons license have their attribution clearly listed. For most indicators examined, available globally comparable data with reasonable coverage of countries per region are from the 1960s at the earliest. The gender data gap remains a major challenge even today. Systematic primary household data collection at regular intervals is often under-funded in low-income countries, and even when collected, often lacks data that can allow for individual disaggregation of outcomes. This evidence gap impedes our understanding of gender gaps, drivers of gaps, and alleviating factors over time. Additionally, the absence of relevant group markers of race/ethnicity, caste, religion, sub-national state/province, individual gender identity, etc. and statistical under-powering of samples in many nationally representative micro-datasets makes quantitative intersectional analysis a persisting challenge. That said, understanding the landscape of stylized facts with the available (incomplete) data will aid in assessing progress to date, potential drivers of progress, stasis, and regress, and current gaps and challenges.

2.1. Birth and Infancy

A first-order consideration on gender differentials relates to the moment of birth and how societies have approached issues of child survival along gendered lines. The invention of new technologies (the ultrasound scanning device that can detect a fetus' sex in utero as early as 14-15 weeks after conception, blood tests that can indicate a fetus' sex even earlier at 8 weeks of pregnancy, and safe pregnancy termination procedures) has allowed parents the newfound capability to make decisions around keeping or aborting a fetus on the basis of gender. While the apparent natural sex ratio at birth, with equal access to health care, is an additional 4 or 5 male babies being delivered for every 100 female babies delivered, this has increased to as many as 11 or 12 additional male babies for every 100 female babies delivered in specific regions, driven by sex-selective abortion.

It is a stark fact that even though females have a biological survival advantage in the early years, gendered dynamics have often resulted in girl infants facing greater barriers to birth and survival. This is a major component of the 'missing women' problem in the economics and public health literature (Sen, 1990) and this problem has increased with economic development, increased incomes, and technological advancement in East Asian and South

Asian communities in particular (Figure 1 below; also see Jayachandran, 2015). Since 2000, sex-selective abortion in East Asia and South Asia has been declining after three decades of increase, though these regions are still well above the global average.

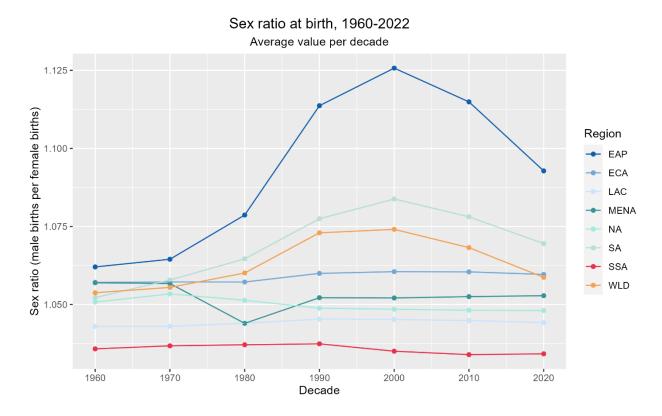


Figure 1: Sex ratio at birth (male births per female births)

Source: World Bank Gender Data Portal

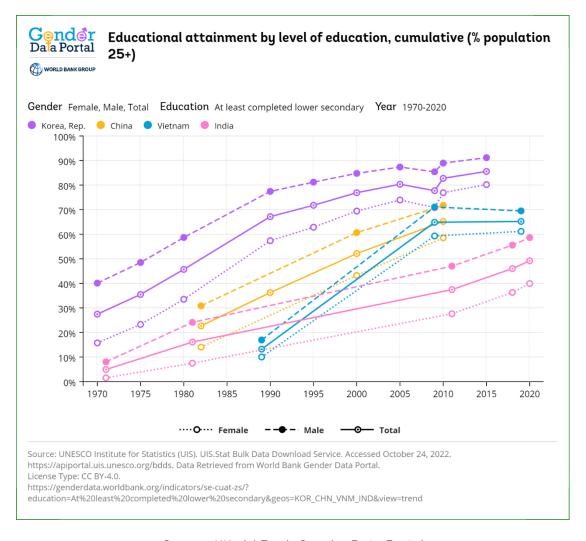
Other forms of gendered discrimination in infancy and early childhood involve differential nutritional and healthcare investments in babies and toddlers based on their gender, though there is more evidence for this occurring during times of shock and crisis, whether for the child or the household (see Duflo (2012) for an overview). A case in point is child stunting. Jayachandran and Pande (2017) examine data on over 168,000 children across India and sub-Saharan Africa and find that the decline in child height with birth order is much starker in India than in sub-Saharan Africa. They find that the stunting gradient in India is steeper for high-son-preference regions and religions. Girls in India receive fewer resources after birth if the family does not yet have a son, driven by the high likelihood of the family continuing to have children in order to have a son, which increases desired family size and leaves fewer resources available per girl child.

2.2. Childhood

The twentieth century witnessed a complete transformation of the educational landscape for children and young adults. The pursuit of the skills and tools of literacy and numeracy, and attainment of a core set of broad-based knowledge were the privilege of the political or religious elite and their offspring throughout much of human history. The pursuit of systematic specialized learning in new frontier disciplines consequently also remained the privilege of elite or mercantile families, often starting with the education of boys. The democratization of education in the twentieth century has had a critical role to play in increasing human capabilities generally for marginalized majorities and raising the critical consciousness of girls and women specifically.

The recency of this shift is remarkable. When we examine the share of adults in a population who have <u>completed</u> a certain level of education, for example, lower secondary education, the share of men who have attained this level of education in a selected sample of countries (South Korea, China, Vietnam and India) has moved from 8-40% of the population in the 1970s to 40-90% in recent years (Figure 2 below). Women's attainment of the same levels of education have always lagged behind men's, with 0-18% of adult women having completed lower secondary education in the 1970s compared to 30-80% in recent years. The gender gap in educational attainment/completion among adult men and women has decreased in some countries (for example, South Korea and China in the graph below), stayed about the same (Vietnam for instance) or increased (India). In very few countries has the gender gap in secondary educational attainment/completion been eliminated thus far.

Figure 2: Lower-secondary school educational attainment in select Asian countries, 1970-2020



Source: World Bank Gender Data Portal

While the graph above discusses educational attainment among adults above 25 years of age, the picture among those currently in the schooling system in the first two decades of the twenty first century is far more promising. The worldwide gender gap in secondary school enrollment has virtually closed today (Figure 3 below), with women's enrolment in tertiary education exceeding men's in several countries.

G⊜nd₫r School enrollment, secondary (%) Dala Portal WORLD BANK GROUP Gender Female, Male, Total Gross/Net Gross Year 1970-2020 World 80% 70% 60% 50% 40% 30% 20% 10% 1975 1970 1980 1985 1995 2000 2005 2010 2015 2020 1990 ····O···· Female Male Source: UNESCO Institute for Statistics (UIS). UIS.Stat Bulk Data Download Service. Accessed October 24, 2022. https://apiportal.uis.unesco.org/bdds. Data Retrieved from World Bank Gender Data Portal. License Type: CC BY-4.0.

Figure 3: Lower-secondary school enrollment, 1970-2020

Source: World Bank Gender Data Portal

https://genderdata.worldbank.org/indicators/se-sec-enrr/?grossNet=Gross&view=trend

How and why has this dramatic shift occurred in educating girls during the twentieth century? While rising incomes and falling fertility have allowed increased investments in each child's capabilities, the drivers of investments in girls' education alongside boys' are not entirely clear. Has this increase in investment been driven primarily by women's own social movements and demands for reform (an example would be the reform movement for girls' education led by Dalit leader Jyotibai Phule in western India in the mid-nineteenth century, or Nobel laureate Malala Yousafzai's advocacy work for girls' education in Pakistan and Afghanistan today), by institutional changes and legal reform (an example here would be Title IX of the Education Amendments of 1972 in the U.S.), or more strategically, by male proponents seeking to gain

from educated women as wives and mothers who would increase the human capital of children by investing in their learning and care (Doepke and Tertilt, 2009)? In a country like India where there has been a dramatic increase in girls' education in recent decades but falling levels of women's labor force participation at the same time, the third explanation is important to consider and we return to this question in Section 3.

2.3. Adulthood - Personhood/Agency and Intra-household Dynamics

"In many societies women were simply the property of men, most often their fathers, husbands or brothers. Rape, in many legal systems, falls under property violation - in other words, the victim is not the woman who was raped but the male who owns her. This being the case, the legal remedy was the transfer of ownership - the rapist was required to pay a bride price to the woman's father or brother, upon which she became the rapist's property. The Bible decrees that 'If a man meets a virgin who is not betrothed, and seizes her and lies with her, and they are found, then the man who lay with her shall give to the father of the young woman fifty shekels of silver, and she shall be his wife' (Deuteronomy 22:28-9). The ancient Hebrews considered this a reasonable arrangement." (Harari, 2015: pp. 145)

Violence in human societies takes numerous shapes and forms, with perpetrators and victims coming from all genders. Crime statistics in most countries show a higher proportion of criminal acts conducted by men compared to women. As a general pattern, men are consistently found to be at elevated risk of violent victimization and women are more often victims of sexual violence (Krug et al., 2002). Men are more often victimized by a stranger whereas women are more likely to be victimized by a friend or an intimate partner. And men are more likely to be victimized in a public space, while women are more likely to be victimized at home (ibid). For more details on global risk of violence and gender gaps, please see Krug et al, 2002. As an example of time trends in violent crime victimhood by gender, taking the case of the U.S. in Figure 4 below, we see that the gender gap has declined over the past two decades and is small even when the number of male victims exceeds women victims in a given year.

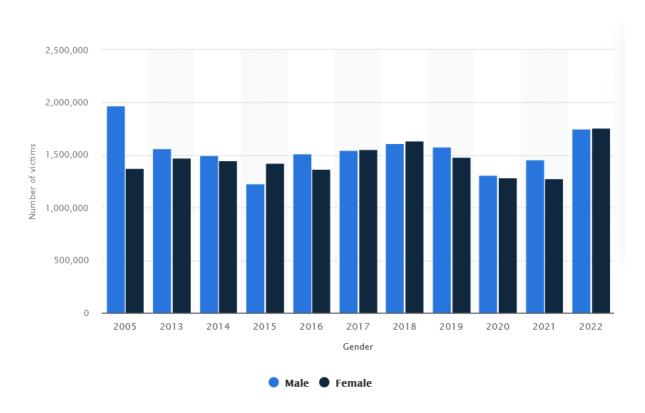


Figure 4: Number of violent crime victims in the United States from 2005-2022, by gender

Source: Statista 2023

If we now look at forms of violence that disproportionately affect women, they tend to be within the household/domestic sphere. There are numerous forms of gendered violence across the life cycle in patriarchal systems, many of which are specific to individual regions (femicide, female genital cutting, dowry murders, foot binding as illustrative examples). The most regularly measured indicator of violence against women across countries has been intimate partner violence (IPV), and the article focuses on this indicator given comparable data availability despite other forms of violence affecting different stages of women's lives.

The WHO estimates that 641 million women (26%) of those aged 15 years and older have suffered violence at the hands of their intimate partners at least once since the age of 15. An estimated 245 million women (10%) have experienced IPV in the past year alone. And these are likely to be underestimated given the difficulties, including social stigma, women face in reporting their experience of violence. Sub-Saharan Africa and South Asia are the regions with the highest prevalence of IPV today (see Figures 5A and 5B below). An estimated 6% of women aged 15-49 years have been subject to sexual violence from a non-partner at least once since age 15. The figures presented below are cross-sectional (so no time trends presented) and show country averages, in addition to regional averages.

During the COVID-19 pandemic-induced lockdowns, there was a widespread sense of a shadow pandemic of intimate partner violence triggered by the limitations in mobility. One

analysis from India found that domestic violence complaints increased significantly in districts with the strictest lockdown rules, as did cybercrime complaints (Ravindran and Shah, 2023). At the same time non-partner rape and sexual assault complaints decreased in districts with the strictest lockdowns, with women's decreased presence in public and work spaces. One year later, while complaints related to non-partner rape, sexual assault and cybercrimes returned to pre-lockdown levels, domestic violence complaints persisted at the higher level induced by the lockdowns.

Figure 5A: Intimate Partner Violence (IPV) prevalence - Any instance ever experienced among women aged 15-49 years

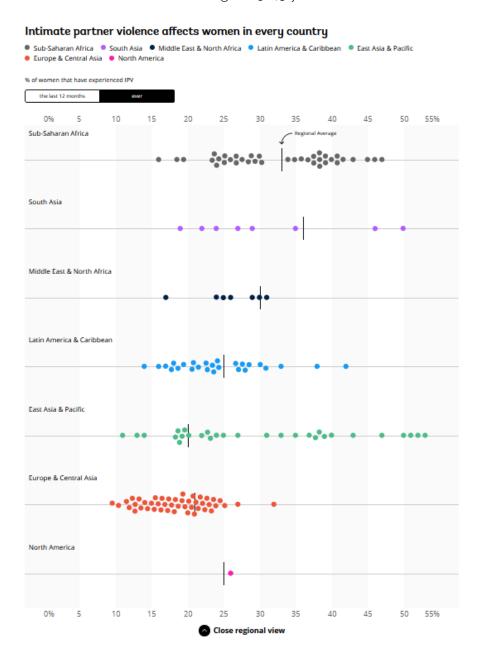
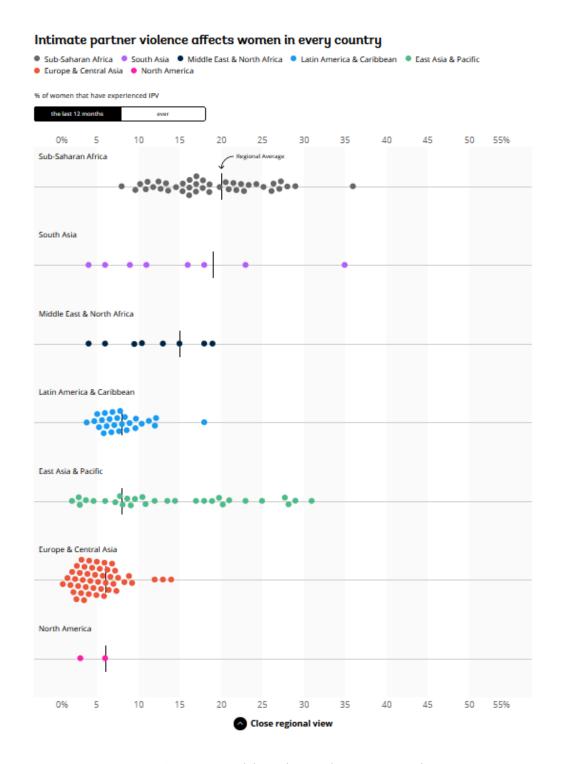


Figure 5B: Intimate Partner Violence (IPV) prevalence - Any instance experienced in the previous 12 month period among women aged 15-49 years



Source: World Bank Gender Data Portal

Moving from bodily integrity and safety as adults in a household, to household division of labor, women on average spend 4.1 hours/day on unpaid care work and domestic work as a global average, compared to 1.7 hours/day for men (UN Women, 2020). Time allocation to unpaid care work follows long-term trends in fertility in terms of household childcare needs. However, increased human longevity has had implications for household elder care needs. Unpaid care work of either variety remains heavily feminized, i.e. disproportionately allocated to women as the global averages above indicate.

Time spent on household domestic work has fallen over the course of the 20th century alongside reductions in household size and the gradual introduction of household appliances, and infrastructure such as running water and electricity. In specific contexts, the U.S. for example, estimates suggest that "time spent in home production by prime-age women (18-64 years) fell by around six hours from 1900 to 1965 and by another 12 hours from 1965 to 2005" per week. Over the same period, time spent by prime-age men on home production rose by 13 hours per week. The total time spent on home production in the US is estimated to be about the same or have increased slightly over the course of the century on a per-capita basis (given smaller family sizes today), with older individuals and children increasing their contributions to home production in recent times (Ramey, 2009).

Women's unpaid care and domestic work has been estimated at contributing the equivalent of 10 and 39 percent of GDP respectively, at times contributing more to an economy than "the manufacturing, commerce, or transportation sectors" (UN Women, 2016). A number of countries have legislated on citizens' right to quality care services, including Uruguay and Colombia. Countries' varied approaches to providing quality care services as a public good have had differential impacts on women's time use and economic participation, not just on mothers, but on grandmothers and older sisters as well (Attanasio et al., 2022).

The absence of parity in intra-household decision-making and differential bargaining power within the household along gendered lines is a well-documented stylized fact in most societies, even though the standard metrics used to measure these variables have recognized limitations. Many factors contribute to this differential, including the age gap between spouses, gender norms around obedience and debate, legal rights, etc. Almas et al. (2018) conducted a novel measurement experiment with spouses in Macedonia, eliciting their degree of control over household resources and decisions through their willingness to pay to receive a cash transfer directly rather than having it given to their spouse. The study finds that women, on average, are "willing to sacrifice some household income to receive the money and gain more power over resources," thereby providing support for a non-unitary model of the household that runs counter to the default unitary model that until recently was standard practice in microeconomic analysis (Becker, 1965). In a follow-up experiment, the same group of researchers found that directing cash transfers to women increases expenditure on food (Armand et al., 2020), a finding that has been echoed in other experiments that direct cash transfers by gender in other settings.

Basu and Maitra (2020) find that among Iranian households, increased bargaining power among women results in greater household expenditure on education and healthcare. Naila Kabeer's seminal work on Bangladeshi women workers producing ready-made garments for

export in factories describes how women's earned income outside the home increases their bargaining power within the household. In a study conducted in Madhya Pradesh, central India, Field et al. (2021) experiment with increasing women's individual control over their earnings by having public workfare wage payments paid directly to women workers' newly-opened individual bank accounts rather than into a default joint household account (typically operated by the male household head), alongside training to use the new accounts. They find that this intervention increases women's labor supply and earned income from public workfare and surprisingly from wage work in private markets as well, and starts to liberalize social norms around women's work outside the home.

2.4. Adulthood - Reproduction

Most women's biological capability to bear children has involved a higher level of health risk during reproductive years (roughly ages 15-49 years). Stark improvements in treating infectious diseases over the past two hundred years stemming from medical and public health advancements have significantly transformed infant, child, and maternal mortality. In 1800, nearly 42 per cent of all children that were born died before they reached the age of 5, and this share remained close to 35 per cent at the start of the twentieth century. This ratio has fallen to less than 5 per cent today (Figure 6). This has had significant implications for the number of pregnancies among women of reproductive age, the risk of child-bearing and delivery, fertility levels, and population dynamics.

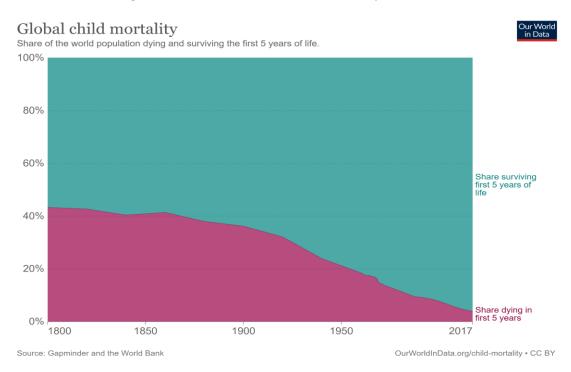


Figure 6: Global Under-5 Child Mortality, 1800-2017

Source: Our World in Data

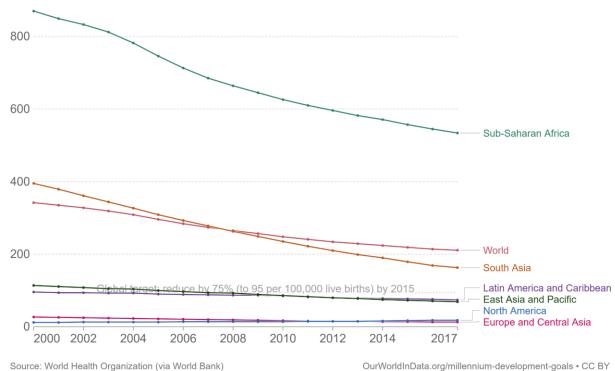
These improvements in public health are reflected in the global maternal mortality data. As summarized by the data-aggregation platform 'Our World in Data,' "in the 19th century about 500 to 1,000 mothers died for every 100,000 births. Every 100th to 200th birth led to the mother's death. Since women gave birth much more often than today, maternal death was not uncommon." A key stylized fact of the past century has been the dramatic global decline in maternal mortality rates due to improvements in child survival and nutrition, women's age of marriage and childbearing, maternal healthcare, hygiene, and women's education. Today, most maternal deaths are concentrated in sub-Saharan Africa and South Asia, where improving healthcare and reducing maternal deaths are urgent public health priorities.

Figure 7: Maternal Mortality Ratio, 2000-2017

MDG5.A: Maternal mortality ratio, 2000 to 2017



Millennium Development Goal (MDG) 5.A was to reduce the global maternal mortality ratio (maternal deaths per 100,000 live births) by 75% from 1991 levels by 2015. This target was not achieved.



Source: Our World in Data

The average woman birthed 5 children over her life in 1960. Today, the average woman births 2.4 children over her reproductive life. This transformation has been both a result and a driver of significant shifts in women's economic, political, and social roles. The overall trend masks significant regional variation. Most regions have seen dramatic reductions in fertility levels in the second half of the twentieth century (Figure 8 below) with rising incomes (and prices), falling infant, child, and maternal mortality, and critically, the scientific development and widespread availability of affordable and safe modern contraceptive methods that in principle

provide women and men with more agency over controlling their fertility (Goldin and Katz, 2002). In the third decade of the twenty-first century, the policy discussion around fertility in many high-income countries is around fertility falling below replacement levels, policy tools to increase fertility, and how countries should adapt to the new demographic reality of aging populations.

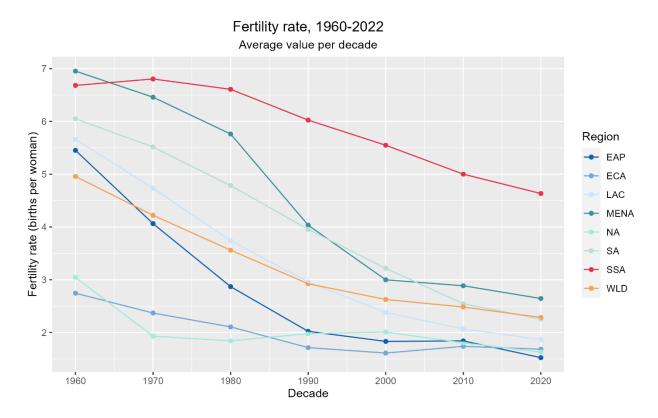


Figure 8: Total Fertility Rate by region, 1960-2022

Source: World Bank Gender Data Portal

Against this landscape, women's agency in controlling their fertility has received extensive backlash and been heavily contested since the development and spread of reliable, low-risk, and lower-cost fertility-management tools (higher risk methods to terminate pregnancies have been in practice for centuries if not millennia). Widespread, ingrained, and varied social and religious patriarchal norms around the control of women's sexuality and control of their fetus in utero have shaped the way sexual and reproductive health and rights (SRHR) have been institutionalized and contested in different countries.

It is useful here to examine the contrasting trends around the legal right to an abortion in North America and in the Latin America and the Caribbean regions. Previous higher-risk methods of abortion were not out-lawed in the United States of America until the mid-1800s. However, this early freedom to control one's reproductive choices applied only to white women; enslaved Black women were prevented from having abortions by slave owners. The implementation of safe abortion procedures became medically commonplace in the 1960s in

the USA, with a corresponding rise in the use of abortions to terminate pregnancies safely. However, sixty years later, in June 2022, the US Supreme Court overturned a key federal ruling (Roe v. Wade) that gave women the legal right to choose to keep or terminate a pregnancy. Since then, 14 of the 50 states in the USA, the richest country in the world by a large margin, have banned most abortions, despite the ready and affordable availability of tested technology to do so.

In contrast, recent legal decisions on reproductive rights and care in countries like Argentina, Colombia, and Chile in the Latin America and the Caribbean (LAC) region have moved from more conservative to more progressive positions. Primarily conservative Catholic Christian opposition to abortion have recently been overcome by opposing political constituencies, and abortion has been decriminalized and legalized in several LAC countries over the past three years. One key aspect of how these present-day differences in SRHR legislation and affirmation of women's agency around their sexual and reproductive rights relates to the broader intersectional political battle for or against specific rights, and influences how women show up/vote as leaders in formal legislatures and informal movements to defend or combat conservative values that treat pregnancies as sacred and interminable from a religious perspective.

There have also been countries that implemented draconian fertility control measures using the same suite of reproductive care tools, most famously communist China's one-child policy and India's forced sterilization campaigns of the 1980s, which stripped millions of women of their agency around fertility. The selective enforcement of forced sterilization policies among marginalized women (for example, rural, lower-income women in India's campaign) brings into focus the particularly tenuous recognition of women's agency among historically marginalized groups, highlighting the complex intersectional dynamics within feminist mobilization and group identity. Conversely, countries like China today join the United States, Western Europe, and Japan, in incentivizing women to have more children given falling fertility rates. Whether these fertility-focused policies give women more power in determining the shape and rules of their societies and economies is not yet clear. While there are positive and negative implications of the current fertility crisis in terms of environmental sustainability and human replacement levels, the institutional dynamics around fertility continue to suggest strong patriarchal control over women's agency in this key domain.

2.5. Adulthood - Market Dynamics

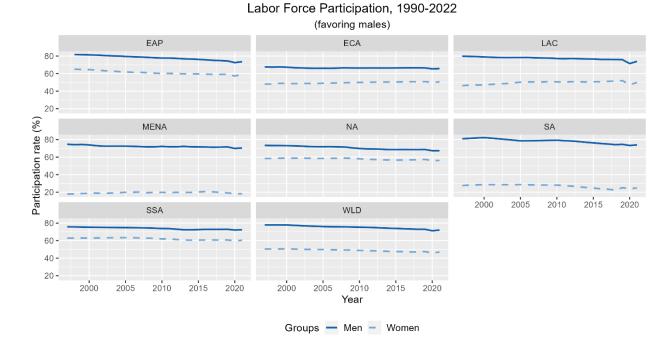
Women and men have distinct patterns of engagement with labor and capital markets, even as participation in the market economy complements/replaces parts of household production and investment with economic growth. Boserup (1970) outlined a feminization-U hypothesis in which women's labor force participation initially falls as the structure of the economy moves from family farms where women's labor is central to household and family farm production, to mechanized agriculture and industrialized manufacturing employment in locations far away from the home, and then rises again with an increase in services-oriented employment opportunities that overcome some of the limitations that industrial factory-based employment posed specifically to women.

Several geo-historical factors have been investigated as potential causes of current day gender inequalities in labor market participation: local resource scarcity (Hazarika et al., 2015); geographic support for pre-industrial 'cool-water conditions' that reduced fertility pressure (Santos Silva et al., 2020); the timing of transition from humans' original foraging lifestyle (considered more gender equal with lower fertility) to sedentary agriculture (less gender equal with higher fertility) that took place at different times in different areas (Hansen et al., 2015); plow-using versus plow-free cultivation systems that privileged those with upper body strength (Boserup, 1970; Alesina et al., 2013) and religious tenets and practices (Feldmann, 2007; Jayachandran, 2015). These analyses present varying evidence of the extent to which each of these deep geo-historical drivers has shaped local gendered division of labor and subsequent evolution of institutions, norms, and values in current times (Klasen, 2019).

Reductions in fertility and increases in women's secondary and tertiary education have been sharp across almost all countries over the past century (as discussed in sections 2.2 and 2.4). However, there has been a far more mixed response in terms of reduced gender gaps in labor force participation, labor supply, employment, entrepreneurship, and earnings in and through market exchange. In recent years and looking across a wider range of countries and a longer expanse of time, a nuanced picture emerges with heterogeneous responses of female labor force participation and women's economic agency and welfare, to processes of structural economic transformation and increases in household income (Agte et al., 2023). The current empirical stylized facts and trends "point to an interplay of initial conditions, economic structure, structural change, and persistent gender norms and values" in determining outcomes such as women's labor force participation (Klasen, 2019).

Figure 9 below highlights falling labor force participation levels across genders, with distinct patterns by region that showcase how falling labor force participation rates among men are more often the reason why gender gaps in labor markets narrow compared to increasing labor force participation rates among women. South Asia and the Middle East and North Africa region stand out with their sizeable and persistent gender gaps in labor force participation rates. North America and sub-Saharan Africa have some of the smallest gaps, though they might be on either side of Boserup (1970)'s U-shaped curve, with the former having a sizeable services-based economy and the latter having a large share of employment in subsistence agriculture where women's participation is high. The one region with a clear increasing trend in women's labor force participation over the past 30 years is Latin America and the Caribbean.

Figure 9: Global labor force participation rate, by gender and region, 1990-2022



Source: World Bank Gender Data Portal

The relationship between women's participation in the labor force and the returns to their labor is a complex one, dependent on the nature of labor markets, gender ratios in specific sectors, industries and occupations (often skewed, see Blau and Kahn (2017) for U.S. analysis), and the driving social, economic and political forces behind women's increased labor force participation. Shocks to the labor market (such as wartime conscription of most men), for example, have been studied as potentially important inflection points in propelling women into the labor market, even against prevailing social norms. Goldin (1991) analyzes the dynamics of married women's labor force entry and exit around the time of World War II in the United States and finds the empirical evidence for the War directly causing a persistent and significant increase in U.S. female labor force participation less convincing, pointing instead to the indirect impacts of the war on women's increased employment being more important.

Local variations in women's comparative advantage given the nature of labor demand are associated with differential gender gaps. Carranza (2014) examines districts in India with clayey soils (where it is difficult to use ploughs) versus loamy soils (where deep tillage with ploughs is easier) and finds that districts that have a smaller share of loamy to clayey soils have higher relative female employment in agriculture, and this is associated with an improved ratio of female to male children given the higher economic value of women in these areas. Qian (2008) investigates differential economic opportunities for women and men across regions in China that specialize in tea-growing as a cash crop (advantageous to women) vs. orchard cultivation (advantageous to men). She finds that the imbalance in the sex ratio at birth is lower in tea-growing areas where there is higher demand for women's labor, and that higher

women's income increases educational attainment for all children while higher men's income decreases girls' educational attainment and has no effect on boys' educational attainment during post-Mao reforms in China (later 1970s, early 1980s) (ibid).

The implications of more recent shifts in technological innovation that reduce the reliance on brawn and shift labor demand towards more 'brain-based' labor is still being investigated for its gendered implications. Rendall (2018) examines patterns in education, employment, and wage gender gaps in the US and proposes a model where the demand for 'brain-based' skill increases within and across education levels, and where men have an average 'brawn-based' advantage over women. She finds that her model is a good fit for the specific pattern of narrowing gender gaps in the US amidst technological change, with an initial stagnation of gender gaps followed by a rapid increase in women's wages and education levels (ibid).

Chiplunkar and Goldberg (2021) analyze recent labor market dynamics in India where only a quarter of women are in the labor force, and find that while supply-side policies that incentivize women to enter the workforce might be important, in such contexts where a number of normative barriers prevent women from pursuing a variety of job opportunities of interest, this could lead to lower wages/returns if the influx of women workers is large and the number of job opportunities is small. However, demand-side growth for women workers, driven in their data by demand for women workers generated by women-led enterprises, leads to both increased labor force participation and increased returns/wages for women workers (ibid).

The two major lifecycle moments that have a differentially important effect on women's occupational and economic pursuits and returns are marriage and childbirth. Constraints around women's participation in public life are often closely tied to patriarchal control over women's sexuality and concerns over women's "purity" (Jayachandran (2015); Barboni et al. (2018)). Child rearing, without care support or services, significantly shrinks time available for non-care work by the primary caregiving parent, most often the mother. Goldin (2021) details U.S. women's labor force participation and earnings across the twentieth century, focusing on how married women have contested and negotiated time allocation across their career and family in various ways over these decades. She concludes with a discussion of the modern manifestation of this longstanding tension, noting "how many professions are "greedy," paying disproportionately more for long hours and weekend work, and how this perpetuates disparities between women and men" (ibid).

Kleven et al. (2019) analyze Danish administrative data on the labor market trajectories of men and women and pay attention to the moment of birth of the first child. They find that the arrival of children creates a long-run gender gap in earnings of around 20 percent (ibid). This is driven by hours worked, participation in the labor market, and wage rates for mothers versus fathers. They also find that child penalties have contributed an increasing share to gender inequalities in the Danish labor market over the past three to four decades as other driving factors have become less important (e.g. gender gaps in human capital and gendered institutional barriers for example) (see Blau and Kahn (2017) for related decomposition analysis of the U.S. gender wage gap).

Delecourt and Fitzpatrick (2021) collect descriptive data from a sample of urban microenterprises in Uganda and find that 37 percent of women owners bring their small children to work, compared to 0 percent of men owners of similar microenterprises. They estimate that these childcare duties correlate with a "baby-profit gap" of 48 percent across women-owned businesses where a child was present versus absent, seemingly operating through the channel of a differential ability to restock the enterprise.

In terms of where women land in the workforce, there is well documented segregation in the labor market by gender, with women clustered in lower paid and often more vulnerable industries and occupations. Women dominate the care industries, comprising 70% of global healthcare workers and comprising similar or higher shares of related care occupations including education, childcare, and elder care (UN Women, 2020). Industries such as construction, transport, and mining are dominated by men across the globe. There are distinct intersectional dynamics at play in terms of labor market opportunities and placements. The transnational care and domestic work industries are dominated by women from low-income countries living with families in higher income settings, often on precarious terms of employment and residency. For example, 60% of the 1.83 million Overseas Filipino Workers are women, often working in locations such as Hong Kong, Singapore, and the Middle East as domestic and/or care workers (Philippines Statistics Authority, 2022).

In terms of occupational roles, women's representation in management roles is much smaller than men's. To take another recent example, women comprised 52% of all workers and 71% of all servers in the restaurant industry in the US, and yet, 70% of chief executive roles in the same industry were occupied by white men (Maroney, 2021).

A key point to highlight on indicators of women's economic participation and returns is the existence of large gaps and inaccuracies in the data, given the lags in conducting labor force surveys in many low- and middle-income countries, incomplete disaggregation of data by gender and other markers of identity, inconsistent coverage of informal and unpaid work, changing definitions of 'work', and limitations of survey approaches in capturing time-varying labor supply and returns. There are inconsistencies in various modeled estimates of labor force participation data, given these gaps in direct household, worker, and enterprise data collection on employment measures (see Klasen (2019) for a good illustration of this issue using Bangladesh data and estimates). More recently, there have been changes in the definitions used by the ILO for measuring labor force participation, labor supply, and employment since the 19th International Conference of Labour Statisticians in 2013 that have had significant gendered effects on measured labor statistics especially in contexts of widespread agricultural activity (see Gaddis et al. (2023) for an assessment of this change for patterns in labor statistics in a number of African economies).

Gender gaps in capital markets and wealth accumulation are more extreme than gender wage gaps, and reflect both the accumulation of gender gaps in market earnings over a lifetime, and gender gaps in asset inheritance disparities across generations. An analysis of women- or men-led single households across eight European countries shows large disparities at the top end of the net wealth distribution in all countries examined (Schneebaum et al., 2018). The authors find that a large part of these wealth gaps is explained

by labor market characteristics and participation in asset and debt categories, while "differences in historical trajectories, institutions, and social norms" also play an important role. Analyses in other countries also find support for large gender wealth gaps (Denton and Boos, 2007; Deere and Doss, 2006).

2.6. Old Age and Death

The dramatic decline in infant and maternal mortality has contributed to the remarkable increase in human lifespan that has come with the broader improvements in public health and medical care over the course of the twentieth and twenty-first centuries. Women have a biological longevity advantage and as public health has improved, women have retained and increased that advantage (Table 1 below).

What is interesting to note here is that this biological longevity advantage of women was severely reduced (or even effectively eliminated/reversed) in certain regions by countervailing gendered mortality risks as of the mid-twentieth century (see South Asia in the 1960s) and restored in more recent years. This is another manifestation of the 'missing women' problem and echoes patterns of gendered mortality risk at infancy or before birth that run counter to biological sex-based advantage, discussed at the start of this section. Differential longevity does not capture quality of life, and there is evidence to suggest that women may have higher morbidity compared to men given gender norms around elder care, despite living longer on average.

Table 1: Life Expectancy at birth (years)

	1960		2020		Gender Gap (favoring women)	
	Women	Men	Women	Men	1960	2020
East Asia & Pacific	50.4	46.6	79.1	74	3.8	5.1
Europe & Central Asia	70.1	64.1	80.6	74.3	6	6.3
Latin America & Caribbean	58.1	54.2	78.9	72.6	3.9	6.3
Middle East & North Africa	47.1	45.8	76.2	72.8	1.3	3.4
North America	73.2	66.8	80.6	75	6.4	5.6
South Asia	41.4	42.8	71.3	68.6	-1.4	2.7
Sub-Saharan Africa	41.8	39	63.7	60.2	2.8	3.5
World	54.6	50.7	75.1	70.6	3.9	4.5

Source: World Bank Gender Data Portal

3. What leads gender inequality to persist, and what can be done about this persistence?

There are a host of reasons that have been investigated for the persistence of gender inequality in particular domains and contexts. For a closer examination of gender gaps in labor markets and driving forces behind persistent gaps, please see Agte et al. (2023). In this analysis, two related explanations for broad-based shifts in gender inequality are discussed: institutional change (formal and informal) and intersectional interests. Each of these could serve as a point of entry for closing gender gaps, though the form of the interventions will necessarily vary by context and domain.

3.1. Institutional change

3.1.1. Formal Institutions - Laws and Policies

The creation of the Universal Declaration of Human Rights at the United Nations General Assembly in 1948 laid out for the first time a set of fundamental human rights that every individual could claim, irrespective of gender, country, race/ethnicity, religion, or other social markers (the UN's Declaration on the Rights of Disabled Persons was adopted in 1975). Building on this foundation, the first international treaty specifically on gender inequality came in 1979 when the UN General Assembly adopted the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW), which went into effect in September 1981 and has been ratified by 189 countries. While both of these mark important advances in the recognition of the principles of gender equality, they suffer from inadequate adjudication or enforcement mechanisms and as a result, have not countered instances of persistent or increased inequality (particularly economic inequality) since these universal charters were adopted (see Moyn, 2018).

A decade later, the Beijing Declaration and Platform for Action adopted in 1995 signaled national and international political commitments to reduce gender gaps and achieve gender equality across legal, political, economic, and social domains. While individual countries had charted their own unique paths to recognize, measure, and address gender inequality, 1995 marked a moment of transitioning the groundswell of feminist activism across countries that started with the suffrage or education movements of the late nineteenth and early twentieth century in several regions and that since the 1960s shifted into more formal political and legal fora to consolidate, harmonize, and advance action to close gender gaps institutionally. There have been 5-year updates on these commitments since 1995, with a larger Generation Equality 25th anniversary celebration in 2021, though the direct impacts of these commitments and their enforcement are ambiguous.

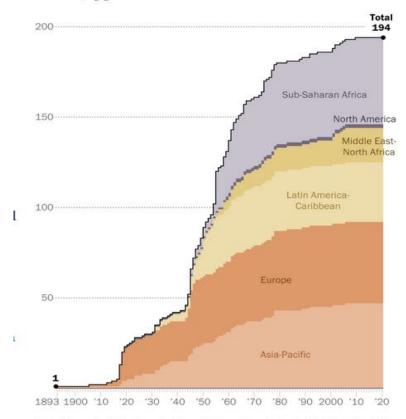
A first step towards formulating policies that enable gender equality is having a voice in deciding who should make the policies. Even as representative democracy spread as a political institution, women like other historically subjugated groups, were not immediate claimants of the right to vote in the earliest democracies. The suffrage movements of the late nineteenth and early twentieth centuries were critical rallying points for feminist collective action in the US, UK, and New Zealand where women fought to have the same rights as men

(see figures 10A and 10B below – source Schaeffer, 2020). In contrast, universal suffrage was written into the constitutions of most newly independent countries in Asia and sub-Saharan Africa from the start in the mid-twentieth century, so women's suffrage was not a similarly galvanizing issue in these countries.

Figure 10A: Cumulative distribution of countries where women have the right to vote over time



Number of nations allowing women the right to vote in national elections, by year



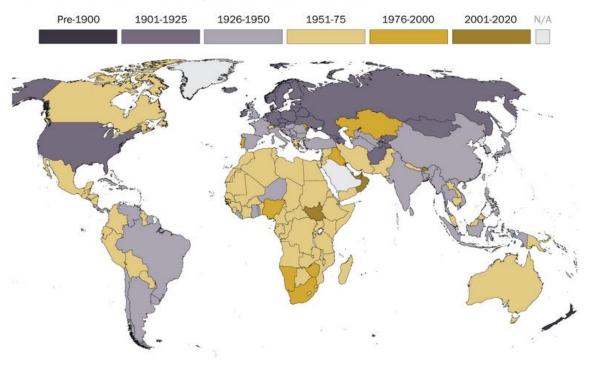
Note: Women in Afghanistan had the right to vote beginning in 1929, but this right was taken away several times before being restored in 2004. Saudi Arabia and Brunei do not hold national elections, and Hong Kong and Macau do not participate in China's elections. Women vote in local elections in all four areas. Source: Pew Research Center analysis of government publications, historical documents from organizations like the United Nations and the Inter-Parliamentary Union, and various news reports to determine women's enfranchisement history in 198 countries and self-administering territories.

PEW RESEARCH CENTER

Figure 10B: Start of women's suffrage across countries

More than half of all countries and territories granted women the right to vote before 1960

Year nation allowed women the right to vote in national elections



Note: Women in Afghanistan had the right to vote beginning in 1929, but this right was taken away several times before being restored in 2004. Saudi Arabia and Brunei do not hold national elections, and Hong Kong and Macau do not participate in China's elections. Women vote in local elections in all four areas.

Source: Pew Research Center analysis of government publications, historical documents from organizations like the United Nations and the Inter-Parliamentary Union, and various news reports to determine women's enfranchisement history in 198 countries and self-administering territories.

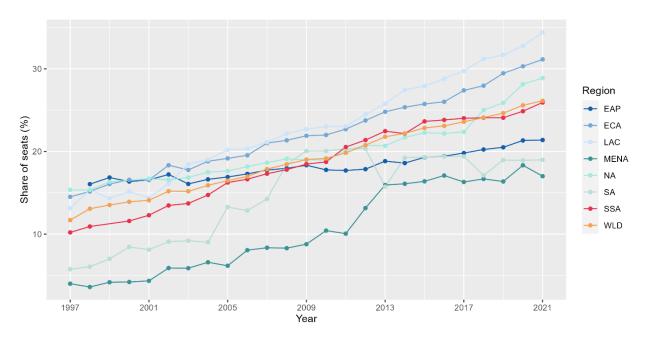
PEW RESEARCH CENTER

Source: PEW Research Center (link)

The past three decades have seen a steady increase in women's participation in political leadership roles across all regions. Figure 11 below shows the change in the share of parliamentary seats held by women since 1995. A remarkable finding is that even with change, the average share of women members of parliament remains at or below 30 percent. The pace of change in Latin America and the Caribbean has been the highest, with women moving from a 11 percent share in 1997 to nearly 30 percent in 2021, with much of that increase occurring since 2010. Sub-Saharan Africa has also seen a strong increase from 9 percent to 23 percent. On the other hand, the share of women in parliament in East Asia and the Pacific, South Asia, and the Middle East and North Africa has shifted more slowly from 3.7-8 percent in 1997 to 16-17 percent today.

Figure 11: Share of parliamentary seats held by women, 1997-2021

Share of parliamentary seats held by women, 1997-2021



Source: World Bank Gender Data Portal (link)

This large increase in women's political leadership in legislatures across Latin America and the Caribbean might have contributed to recent legislative successes, including on defending women's reproductive agency and rights in the region. Chile presents a striking example from the executive branch, where nearly two-thirds of ministerial cabinet positions today are held by women leaders (for other LAC countries, see this graph from the Gender Equality Observatory for Latin America and the Caribbean). At the same time, the rise in women's leadership in political parties and for political platforms that are aligned with policies that increase, rather than decrease, gender gaps (for instance, in the U.S.A) points to the complex interplay of multiple overlapping identities in defining women's political mobilization. We discuss this dynamic in section 3.2 on intersectional interests.

A key tool used to bring more women into leadership roles has been to legislate gender quotas that require a share of political seats - in party rolls, or at the level of legislative seats, or council heads - to be reserved for women candidates and leaders. Chattopadhyay and Duflo (2004) analyze the randomized rollout of India's legislation reserving one-third of Village Council Head seats to be contested only by women candidates in a given election cycle, in the states of West Bengal and Rajasthan. They find that the political reservation of a council seat by gender significantly impacts the provision of public goods in the village, i.e. leaders invest more in local services and infrastructure that are more directly related to the needs of their own gender (ibid). Their study provides empirical support for the premise that women leaders, on average, better serve the needs of women constituents.

In a continuing analysis of the same policy intervention, Beaman et al. (2009) examine the repercussions of a decade of the gender quotas at the elected village council level in the state of West Bengal and find that prior exposure to a woman leader (through the reservation of a given village council leader seat for a woman leader in past election rounds) is associated with electoral gains for women candidates in subsequent rounds without the reservation being in place. They find that this is primarily through changes in voter attitudes, and that repeated exposure "improves perceptions of female leader effectiveness and weakens stereotypes about gender roles in the public and domestic spheres." Mandating equity in political representation can therefore shift resource allocations, welfare outcomes, and mindsets around leadership.

Such 'enforced' shifts in gendered power dynamics are not with male resistance and backlash. Prillaman (2023) analyzes the dynamics behind the large gap in women's non-electoral political participation in India, despite women's high voting levels. She examines the large network of federated grassroots women's Self-Help Group networks in Madhya Pradesh, India, organized under the decade-long National Rural Livelihoods Project and preceded by decades of civil society mobilization by women in rural areas. In examining the accumulating power and resulting backlash to these networks of women amassing political power and accessing social and economic resources, she highlights "how the interests and power of the members of women's most intimate network, the household, both boost and curtail women's political participation" and how an examination of relational dynamics "provides an answer to the puzzle of why women vote but remain politically excluded" (ibid).

Hyland et al. (2020) analyze the 50-year panel dataset recently compiled by the World Bank covering 190 countries on 'Women, Business and the Law' (WBL) that aims to measure equality of economic opportunity under the law between men and women. The WBL database tracks changes in 35 individual legislative issues that are aggregated into 8 indicators measuring equality in economic opportunity by law across 190 countries over the past 50 years as they relate to formal laws providing equal status and protections to women and men.

They find that while the legal treatment of women in the economic sphere has greatly improved over the past half-century, there remain large and persistent gender gaps. In the average country, women are accorded about three-quarters the number of rights accorded to men in the economic domains covered by the index. Some of the largest legal inequalities today are in the realms of Pay and Parenthood, i.e. women around the world are most disadvantaged by the law in terms of their compensation vis-a-vis men and their treatment once they have had children. As Claudia Goldin writes (Goldin, 2021), "greedy work" that demands and rewards long, inflexible work hours in high-wage industries such as law and finance, drives gender inequality at the top-end of high-income economies because of the differential constraints imposed on women from persistent gendered caregiving norms in the context of grueling client-oriented paid work demands. While the time needed for reproductive labour may not be possible to alter, and the reassignment of caregiving work may be slow to alter, the expectations of "greedy work" are in fact comparatively easy to alter. However, such shifts in employer and industry expectations require significant institutional and technological innovation to transform.

Hyland et al (2020) document generally positive correlations between improvements in the law and reductions in gender gap measures such as labor force participation rates and wage gaps, but note that formal institutions and policies and their legal enforcement constitute just one component of de facto movement towards more equal societies. Much of the shift has to also occur in the domain of informal institutions that govern gender beliefs and norms, and enforce social sanctions on norm-deviant individuals and their families. Without a simultaneous shift in informal institutions, the risk of backsliding or slow progress will continue.

3.1.2. Informal Institutions: Beliefs and Norms

Turning now to the universe of social practices, informal institutions govern personal attitudes and behaviors through the maintenance of shared communal norms. These are less well-measured over time and across varied socio-historical contexts. These 'implicit' rules that are passed on generationally, socially, culturally, and economically define the de facto gendered bounds of economic, social, market and political activity.

There is a clear gendered dimension to social practices, whether strictly cultural, or religious and political in nature as well. The World Values survey has included specific questions on gender values (attitudes and beliefs) among women and men since Wave 3 (1994-1999). Figure 12 below, summarized by UNFPA (2016), provides an illustration of the wide variability in stated gender values within and across regions in different domains, with the score indicating the share of respondents who disagree or strongly disagree with the following statements -

- University education: "A university education is more important for a boy than for a girl."
- Business executives: "On the whole, men make better business executives than women do."
- Political leaders: "On the whole, men make better political leaders than women."
- Right to a job: "When jobs are scarce, men should have more right to a job than women."

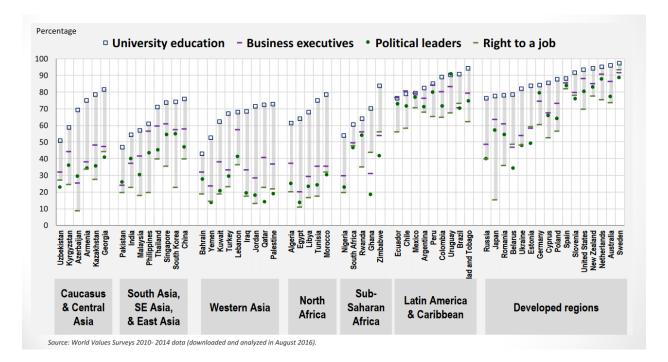


Figure 12: Gender attitudes across regions

Source: World Values Surveys

A key stylized fact across the 58 countries included in this data collection exercise in 2010-2014 from across different regions is that in every single one, support for gender equality in higher education exceeds support for gender equality in all other domains - politics, business, employment. The progressive gender attitudes in Latin America and the Caribbean are also noteworthy as is the reverse in Eastern European countries and Japan among high-income countries. In nearly all countries, support for gender equality in economic opportunities and political leadership is the lowest, mirroring patterns in the de facto outcome patterns observed in section 2. This raises the issue of why men and women feel more comfortable supporting gender equality in learning versus broader economic and political participation and leadership. In general though, beliefs and norms display a certain level of stickiness compared to the pace of change in formal rules (laws and policies).

The influence of informal social institutions and normative incentives runs deep, and shapes human mental models and relational learning in deep and persistent ways across generations, forming the basis for gendered interactions and upbringing in societies (Cornwall, 2016). So much so that the line between biological traits and socially-shaped and rewarded behavioral traits is sometimes fuzzy. In a seminal article Gneezy et al. (2009) conduct a series of behavioral experiments with two contrasting cultures - a patriarchal society such as the Maasai tribe of Tanzania and a rare matrilineal & matrilocal society such as the Khasi tribe of northeastern India. Their main finding is striking: when asked to throw a ball into a basket as a competitive game, men from the patriarchal society chose to compete almost twice as much as women (50 percent vs. 26 percent), whereas it was the reverse in the

matrilineal society, where women chose to compete more than men (54 percent vs. 39 percent) (ibid).

In a recent review paper on behavioral traits and labor market outcomes, Shurchkov and Eckel (2017) find that gender differences in four behavioral traits seem salient in the literature as they relate to labor market participation and outcomes (greater risk aversion, lower levels of competitiveness, less desire to negotiate, and greater sensitivity to social context and framing among women compared to men). However, in light of stylized comparative research such as Gneezy et al. (2009), Shurchkov and Eckel (2017) conclude that there is "no conclusive evidence on whether these differences are inherent or societal for any of the individual traits, although most studies point to the latter".

3.2. Intersectional Interests

Amidst both formal and informal institutional change, generally in the direction of more gender equality, why is there evidence of stasis or regression in certain domains and in certain countries and regions? A second set of explanations focuses on societal interactions as a power struggle between competing groups, and explores progress, stasis, regress in gender equality as a function of political economy dynamics across groups constituted by gender and other social markers.

Folbre (2021) extends traditional Marxian political economy and prior intersectional feminist frameworks to suggest a more fragile and dynamic basis for coalitional collective power and action, and consequently for institutional progression and regression towards gender equality. Folbre's 'intersectional political economy' (IPE) framework locates structural and normative change over time in the interaction and bargaining processes within and between groups that are constituted by social assignment or identity or voluntary interest, and which are themselves dynamic. Individuals can therefore change their views on specific issues on the basis of gender, class, caste, race, ethnicity, religion, nationality, ability or other dimensions depending on their own shifting complex identities and loyalties. In such an environment, successful reclaiming of power comes from coalitions that are hybrid, complex, and dynamic. This complexity is echoed in the emerging subfield of stratification economics (Darity, 2022) in which multiple identities and variation in intensity of group identification contribute to relative group positioning that in turn affects welfare outcomes.

One of the key patterns from the previous assessment of stylized facts relates to the differences in progress across domains. While gender gaps in education, health, and political participation have fallen dramatically across all regions in the twentieth century, gender gaps in political leadership, economic activity/roles, and sexual and reproductive autonomy have seen less change. And there is large variability in performance across measures within the same region (e.g. sub-Saharan Africa is very gender-equal when it comes to sex-selective abortion but has high rates of intimate partner violence; East Asia is very gender-equal on education but is very gender un-equal when it comes to sex-selective abortion and political leadership). Why might this be the case?

Folbre (2021)'s IPE framework would suggest that the stasis and backlash in certain domains stem from bargaining battles across complex, intersectional, dynamically constituted groups

exerting their collective power and seeking to control/protect "the gains [rents] from cooperation". The outcomes therefore are contingent on a number of changing relational factors. In other words, it is important to understand the cost imposed by changes in formal rules and informal norms to those enforcing existing rules and norms that disadvantage specific categories of women (and their allies) and benefit specific categories of men (and their allies) in specific domains.

In domains like education, for example, men might advocate for the closure of gender gaps from a self-interested position. Doepke and Tertilt (2009) present a model of why men in the nineteenth century might have voluntarily ceded certain legal rights to women, even before women gained the right to vote (to democratically demand their political, social, and economic rights through institutionalized collective bargaining processes) in the same countries, corroborating their model with historical evidence from England and the United States. They present a model in which women's legal rights determine the marital bargaining power of husbands and wives. Men face a trade-off in the rights they want for their own wives (very few rights) and the rights they want for other women in the economy, particularly their daughters (many rights). In an environment where technological change increases the importance of human capital, and men see that an expansion of women's rights increases educational investments in children, men voluntarily begin to renounce some power and share some rights with women, based on their expanded self-interest (ibid).

In contrast, educational attainment does not translate to economic and political participation, remuneration, and leadership given the different incentives at play in these domains. Pande and Roy (2021) present an example from academia as an industry in the late nineteenth and early twentieth century in the UK, focusing on the promotion of the 'separate spheres' ideology by Alfred Marshall, one of the leading economists of the time, who was married to one of the first professional women economists in the UK, Mary Paley Marshall. They find that the propagation of the 'separate spheres' ideology might reflect "the rents associated with preferential access to better paid, high-skilled labor market opportunities" and that shifts in gender norms are not cost-less to those enforcing and benefiting from norms that constrain women. Where changes in norms result in economic losses to the ruling classes (more of a zero-sum game), we can expect there to be continued resistance and backlash to women's attempts to close these gender gaps and enter new and lucrative fields.

Similarly, the extraction of surplus from women in the household in the form of unpaid work, including care work and domestic work, is only mirrored in market systems, where women workers generate but do not get rewarded for the value created through care services. The 5R care principles (Recognize, Redistribute, Reduce, Reward and Represent) (Chauhan and Joshi, 2021) provide a compelling practical framework for the formulation of care policies and investments in all countries and in all institutions that can have significant repercussions for persistent gender inequalities in the home and workforce. Yet, part of the failure to make meaningful public or private investments in care services might stem from the presentation of the shift towards gender equality in caregiving as a win-win for all. There may not be such a win-win possibility. Intersectionality becomes even more salient here when we bring in dynamics of class, caste, and race, with millions of low-income women caring for high-income children as paid caregivers, while often leaving their own children to be cared for by

others. A similar complex dynamic is at play with social groups that define themselves on masculinities/family on the issue of reproductive rights and include a large number of women seeking restrictions to reproductive rights and health, which is evident in the pro-life mobilization in U.S. politics that led to the overturning of Roe v. Wade in 2022.

Folbre (2021) and Pande and Roy (2021) locate the struggle for gender equality in the political economy sphere, through individual and collective bargaining processes that must encounter and overcome male backlash and periodic regression, acknowledging the possible zero-sum nature of the closure of specific gender gaps. Folbre (2021) describes the complexity of such coalitional struggle in the presence of multiple, overlapping identities and affinities, providing a framework for understanding current realities where groups of women organize to reduce abortion rights, and groups of workers fight to determine their own collective labor standards rather than have them be imposed by standardized international guidelines. The hard political problem of intersectional interests means that legislating away structural inequality happens only very slowly and is easily reversed.

4. Conclusion

The processes of economic, social, and political transformation of the past century have created multiple overlapping dynamics that can push societies towards gender equality in specific domains or away from it. A surprising takeaway from this brief overview article is that progress in reducing gender gaps is quite uneven across domains, and uneven across regions. Certain inequalities shrink universally (example, educational gaps and maternal mortality outcomes), while others stay the same or increase (example, labor market gaps and reproductive rights). Gaps in specific areas, such as political representation/leadership and gendered beliefs, have seen greater declines in some regions compared to others.

While women and men continue to toil in equal and high measure on subsistence farming in sub-Saharan Africa and South Asia, Boserup's U-shaped feminization curve provides a starting point to understand how women's labor force participation shifts with structural economic transformation, with women exiting the workforce as household incomes increase and economies shift towards industrial agriculture and factory-based manufacturing, and reentering at a later stage when a service-based economy opens up different opportunities for women to work outside the home.

The growth of manufacturing and service sectors over the past century have transformed the production and spread of medical and public health innovations that have delivered critical benefits to women. The decline in maternal mortality and infant mortality, and the dramatic increase in human longevity over the twentieth century, are the direct result of these improvements in applied science, innovation, and public health. The widespread adoption of these innovations has led to a cycle of lower mortality, lower fertility, and increased investment in the fewer boys and girls born.

And yet, the interaction between public health innovations and gender equality is not entirely positive, as evidenced by the increase in sex-selective abortions in East Asia and South Asia in the last decades of the twentieth century. Mediating informal and formal institutions that

recognize and stop discrimination by gender, and defend every woman's agency, matter. There are stark intersectional dynamics that additionally mediate the translation of innovation and resources into reduced inequality. As an example, the higher maternal mortality ratios even today for high-income Black women in the U.S. compared to low-income Caucasian women, reflects persistent inferior outcomes despite the ready availability of resources and technology to reduce the racial maternal mortality gap.

Similarly, women's bodily autonomy and reproductive rights in the US appear to be in a worse position today than sixty years ago when the science of abortion became commonplace and low-risk, and in contrast to many lower-income countries where such rights are guaranteed, though not always with gender equality outcomes in mind. Broad-based increases in growth, development, and household incomes have not translated into women's political representation in East Asia, with Japan and South Korea standing out as key outliers among high-income countries on a series of gender gap indicators. In contrast, several countries in Latin America and the Caribbean have seen sharp increases in women's political leadership in the twenty-first century and gains in contentious areas such as reproductive rights and care work.

As argued in this article, understanding these patterns of progress in some domains, alongside stasis or regress in other domains requires examining the role of formal institutional change and enforcement of laws and policies, shifts in the vast ecosystem of beliefs and informal institutions governing gendered behaviors, collective bargaining, and backlash, and intersectional political economy dynamics that often propel or constrain informal and formal institutional reforms towards gender equality.

With greater adoption of gender as a scale construct rather than a binary construct, gendered analyses of the economy, society and polity are rapidly evolving new approaches and terms. Even as measurement and data collection improve, it is clear that the twenty first century's technology-enabled public dialogue emphasizing the recognition of individual rights and agency, often driven by transnational collective action to secure those rights, will continue to profoundly alter human relations and realities in the century to come. Our success in advancing distributional shifts away from the dominant gender (and class, race/ethnicity, caste, or religion), amidst common existential crises such as climate change, widespread use of generative artificial intelligence, and high inequality, will depend in no small measure on intersectional political economy dynamics and our ability to innovate on coalitional value creation without complete environmental and social destruction.

References:

Agte, P., O. Attanasio, P. Goldberg, A. Lakshmi Ratan, R. Pande, M. Peters, C. Troyer Moore, and F. Zilibotti. (2023). "Gender and Growth Gaps Project White Paper." Working Paper, Economic Growth Center, Yale University.

Alesina, A., Giuliano, P., Nunn, N. (2013). "On the Origins of Gender Roles: Women and the Plough." *The Quarterly Journal of Economics*, 128(2): 469-530.

Almas, I., A. Armand, O. Attanasio and P. Carneiro. (2018). "Measuring and Changing Control: Women's Empowerment and Targeted Transfers." *The Economic Journal*, 128(612): F609-F639.

Armand, A., O. Attanasio, P. Carneiro and V. Lechene. (2020). "The Effect of Gender-Targeted Conditional Cash Transfers on Household Expenditures: Evidence from a Randomized Experiment." *The Economic Journal*, 130(631): 1875-1897.

Attanasio, O. et al. (November 2022). "Public Childcare, Labor Market Outcomes of Caregivers, and Child Development: Experimental Evidence from Brazil." NBER Working Paper No. 30653. Available at url: https://www.nber.org/papers/w30653

Barboni, G. et al. (2018). "A Tough Call: Understanding barriers to and impacts of women's mobile phone adoption in India." Available at url: https://epod.cid.harvard.edu/sites/default/files/2018-10/A_Tough_Call.pdf

Basu, B. and P. Maitra. (2020). "Intra-household bargaining power and household expenditure allocation: Evidence from Iran." *Review of Development Economics*, 24(2): 606-627.

Beaman, L., R. Chattopadhyay, E. Duflo, R. Pande and P. Topalova. (2009). "Powerful Women: Does Exposure reduce Bias?" *Quarterly Journal of Economics*, 124(4): 1497–1540.

Berik, Gunseli. (2022). "Towards improved measures of gender inequality: An evaluation of the United Nations Development Programme's Gender Inequality Index and a proposal." UN Women, Discussion Paper Series. Available at url: https://www.unwomen.org/en/digital-library/publications/2022/11/discussion-paper-towards-improved-measures-of-gender-inequality

Berik, Gunseli and Ebru Kongar, ed. (2021). 'The Routledge Handbook of Feminist Economics.' First edition, Routledge International, Taylor & Francis Group.

Blau, Francine, and Lawrence M. Kahn. (2017). "The Gender Wage Gap: Extent, Trends, and Explanations." *Journal of Economic Literature*, 55(3): 789–865.

Boserup, Ester. (1970). "Woman's Role in Economic Development." George Allen & Unwin. [republished by Routledge in 2017].

Carranza, Eliana. (2014). "Soil Endowments, Female Labor Force Participation, and the Demographic Deficit of Women in India." *American Economic Journal: Applied Economics*, 6(4):197-225.

Chattopadhyay, R. and E. Duflo. (2004). "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India." *Econometrica*, 72(5): 1409-1443.

Chauhan, D. and S. B. Joshi. (2021). "Care Principles: Guidelines for promoting care-responsive institutional strategies." OXFAM Guideline. Available at url:

https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621265/gd-care-principles-institutional-strategies-130921-

en.pdf;jsessionid=BE57F3FADAE355F2E6E4A67BCEA6CD7F?sequence=1

Chiplunkar, G. and P. Goldberg. (February 2021). "Aggregate Implications of Barriers to Female Entrepreneurship." NBER Working Paper 28486. Available at url: https://www.nber.org/papers/w28486

Cornwall, Andrea. (2016). "Women's Empowerment: What Works?" *Journal of International Development*, 28: 342-359.

Darity, William. A. Jr. (2022). "Position and Possessions: Stratification Economics and Intergroup Inequality." *Journal of Economic Literature*, 60(2): 400-426.

Deere, C.D. and C. R. Doss. (2006). "The gender asset gap: What do we know and why does it matter." *Feminist Economics*, 12(1–2):1–50.

Delecourt, S. and A. Fitzpatrick. (2021). "Childcare Matters: Female Business Owners and the Baby-Profit Gap." *Management Science*, 67(7): 3985-4642.

Denton, Margaret and Linda Boos. (2007). "The Gender Wealth Gap: Structural and Material Constraints and Implications for Later Life," *Journal of Women & Aging*, 19(3-4): 105–120.

Doepke, Mattias and Michele Tertilt. (2009). "Women's Liberation: What's in it for Men?" *Quarterly Journal of Economics*, 124(4): 1541–1591.

Duflo, E. (2012). "Women Empowerment and Economic Development." Journal of Economic Literature, 50(4), 1051-1079.

Feldmann, Horst. (2007). "Protestantism, Labor Force Participation and Employment Across Countries." *The American Journal of Economics and Sociology*, 66(4): 795-816.

Field, E., R. Pande, N. Rigol, S. Schaner and C. Troyer Moore. (2021). "On Her Own Account: How Strengthening Women's Financial Control Impacts Labor Supply and Gender Norms." *American Economic Review*, 111(7), 2342-75.

Folbre, Nancy. (2021). "The Rise and Decline of Patriarchal Systems." Verso books.

Gaddis, I., G. Oseni, A. Palacios-Lopez and J. Pieters. (2023). "Who Is Employed? Evidence from Sub-Saharan Africa on Redefining Employment." *Journal of African Economies*, 32(2): pp.151-174.

Gneezy, U., K.L Leonard, and J.A. List. 2009. "Gender differences in competition: evidence from a matrilineal and a patriarchal society." *Econometrica*, 77: 1637-1664.

Goldin, C. (1990). "Understanding the Gender Gap: An Economic History of American Women." Oxford University Press.

Goldin, C. D. (1991). "The Role of World War II in the Rise of Women's Employment." *American Economic Review*, 81(4): 741-756.

Goldin C. (2021). "Career & Family: Women's Century-Long Journey toward Equity." Princeton NJ: Princeton University Press.

Goldin, C. and L. F. Katz. (2002). "The Power of the Pill: Oral Contraceptives and Women's Career and Marriage Decisions." *Journal of Political Economy*, 110(4): 730-770.

Hansen, C. W., Jensen, P. S., Skovsgaard, C. V. (2015). "Modern gender roles and agricultural history: the Neolithic inheritance." *Journal of Economic Growth*, 20(4): 365-404.

Hazarika, G., Jha, C. K., Sarangi, S. (2015). "The Role of Historical Resource Scarcity in Modern Gender Inequality." Working Paper 2015-06, Louisiana State University.

Hyland, M., S. Djankov, and P. Goldberg. (2020). "<u>Gendered Laws and Women in the Workforce</u>." *American Economic Review: Insights*, 2(4): 475–490.

Jayachandran, Seema. (2015). "The Roots of Gender Inequality in Developing Countries." *Annual Review of Economics*, 7: 63–88.

Jayachandran, S. and R. Pande. (2017). "Why Are Indian Children So Short? The Role of Birth Order and Son Preference." *American Economic Review*, 107(9): 2600-2629.

Kabeer, Naila. (1997). "Women, Wages and Intra-household Power Relations in Urban Bangladesh." *Development and Change*, 28(2): 261-302.

Klasen, S. (2019). "What Explains Uneven Female Labor Force Participation Levels and Trends in Developing Countries?" World Bank Research Observer, 34(2): pp.161-197. (Prior version of this paper published as GLM/LIC Synthesis Paper No. 7 in Oct 2017 - available https://example.com/here/bank/lic/synthesis/https://example.com/here/bank/lic/synthesis/<

Kleven, H., C. Landais and J. E. Sogaard. (2019). "Children and Gender Inequality: Evidence from Denmark." *American Economic Journal: Applied Economics*, 11(4): 181–209. Available at url: https://pubs.aeaweb.org/doi/pdfplus/10.1257/app.20180010

Krug, E. G., J. A. Mercy, L. L. Dahlberg, and A.B. Zwi. (2002). "The world report on violence and health." *Lancet*, 360(9339):1083–8. Available at url: https://doi.org/10.1016/S0140-6736(02)11133-0

Maroney, B. (2021). "The restaurant industry has a shortage of women leaders. But the pandemic might change that." Fast Company magazine, 27 July 2021.

Moyn, Samuel. (2018). "Not Enough: Human Rights in an Unequal World." Harvard University Press.

Oxfam. (September 2021). "CARE PRINCIPLES: Guidelines for promoting care-responsive institutional strategies." Oxfam Guideline. Available at url:

https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621265/gd-care-principles-institutional-strategies-130921-

en.pdf;isessionid=95CD20D9D77E085B2EC7B86A571F071B?sequence=1

Pande, Rohini and Helena Roy. (2021). ""If You Compete with us, We Shan'T Marry You" The (Mary Paley and) Alfred Marshall Lecture." *Journal of the European Economic Association*, 19(6): 2992–3024. Available at url: https://doi.org/10.1093/jeea/jvab049

Philippines Statistics Authority. (December 2022). "2021 Overseas Filipino Workers (Final Results)." Available at url: https://psa.gov.ph/statistics/survey/labor-and-employment/survey-overseas-filipinos

Prillaman, Soledad Artiz. (Forthcoming). "The Patriarchal Political Order: the making and unraveling of the gendered political participation gap in India."

Qian, Nancy. (2008). "Missing Women and the Price of Tea in China: The Effect of Sex-Specific Earnings on Sex Imbalance." *Quarterly Journal of Economics*, 123(3):1251-1285.

Ramey, Valerie. (2009). "Time Spent in Home Production in the 20th Century United States," *The Journal of Economic History*, 69: 1-47.

Ravindran, S. and M. Shah. (2023). "<u>Unintended consequences of lockdowns, COVID-19 and the Shadow Pandemic in India</u>." *Nature Human Behavior*, 7:323-331.

Rendall, Michele. (2018). "Brain versus Brawn: The Realization of Women's Comparative Advantage," Working Paper, Monash University.

Schneebaum, Alyssa., Miriam Rehm, Katharina Mader and Katarina Hollan. "The Gender Wealth Gap Across European Countries." (2018). *Review of Income and Wealth*, 64(2): 295-331.

Shurchkov, Olga and Catherine C. Eckel. (2017). "Gender Differences in Behavioral Traits and Labor Market Outcomes." in <u>The Oxford Handbook of Women and the Economy</u>. Edited by Susan L. Averett et al. Oxford University Press, pp.481-512. Public version available here - url: https://www.wellesley.edu/sites/default/files/assets/departments/economics/files/shurchkoveckelchapter201705.pdf

Schaeffer, 2020 - https://www.pewresearch.org/short-reads/2020/10/05/key-facts-about-womens-suffrage-around-the-world-a-century-after-u-s-ratified-19th-amendment/

Santos Silva, Manuel, Amy C. Alexander, Stephan Klasen and Christian Welzel. (December 2020). "The Roots of Female Emancipation: The Initializing Role of Cool Water." QoG Working Paper Series 2020:14, University of Gothenburg.

Sen, Amartya (2005). 'The Argumentative Indian: Writings on Indian History, Culture, and Identity.' Farrar, Straus and Giroux.

UNFPA, 2016, "Changing Attitudes towards Gender Equality: Update from the World Values Survey." The 6th Global Forum on Gender Statistics, Helsinki, Finland, 24 to 26 October 2016

UN Women. (December 2016). "Women's economic empowerment in the changing world of work." Report of the Secretary-General, E/CN.6/2017/3. Available to download at url: https://digitallibrary.un.org/record/856760

UN Women. (April 2020). "COVID-19 sends the care economy deeper into crisis mode." Gender and COVID-19. Available at url: https://data.unwomen.org/features/covid-19-sends-care-economy-deeper-crisis-mode

World Bank Gender Data Portal, September 2022, "Violence against women and girls – what the data tell us", url: https://genderdata.worldbank.org/data-stories/overview-of-gender-based-violence/