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Gender Norms and the Labor Market
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ABSTRACT

Despite substantial convergence in men's and women's economic roles, gender gaps in labor market outcomes persist across countries. This article provides a unified framework for understanding how gender norms shape economic behavior, distinguishing between internalized norms—preferences and beliefs tied to gender identity—and external norms arising from peer pressure and social coordination. We first document cross-country and within-country variation in gender attitudes, alongside gradual but uneven shifts toward more egalitarian views. We then review empirical evidence on the origins, persistence, and transmission of gender norms, and their effects on human capital accumulation, labor supply, wages, and policy take-up. The review highlights both the durability of gender norms and the mechanisms through which policies, institutions, and media can induce norm change, with implications for the design of effective interventions.

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1 Introduction

Despite significant convergence in women’s and men’s economic roles in many societies over the past half a century, persistent labor market disparities remain. As human capital gaps narrow and overt discrimination wanes, economists have shifted focus to the role of gender norms as a key constraint on women’s progress in the labor market. It is now widely accepted that these deeply embedded societal expectations continue to shape gender roles within the household, work-life decisions, career choices and trajectories, and workplace dynamics.¹ Recent research focuses on understanding the mechanisms behind the formation and perpetuation of such norms, and how these norms interact with market forces to influence individual and collective behavior. Through this work, economists aim to gain insight into what it takes to initiate and sustain broad cultural shifts that can address persistent gender inequalities in the labor market.

In this article, we provide an overview of gender norms in the labor market, focusing on how such norms shape economic behavior and perpetuate gender inequality. We begin in Section 2 by providing descriptive evidence on gender norms from large-scale attitudinal surveys, illustrating the variation in gender-related attitudes across and within countries, their evolution over time, as well as their associations with labor market outcomes for women. Next, we outline a simple conceptual framework in Section 3 to illustrate how gender norms and wages affect individuals’ choices over two alternatives, working versus not working. A key feature of the framework is the distinction between two sets of norms – *internalized norms* that directly affect an individual’s preferences and beliefs and *external norms* that reflect peer pressure and preferences for conformity. This distinction is crucial for understanding the origins and mechanisms through which norms are transmitted and perpetuated, which in turn has significant implications for the design of effective policies and intervention strategies. The framework also captures, in a reduced

¹See review articles by [Cortés and Pan \(2023\)](#) and [Olivetti et al. \(2025\)](#). [Jayachandran \(2021\)](#) provides a review on the role of gender norms as a barrier to women’s participation and success in the labor market in developing countries.

form way, how gender norms can influence expected wages through pre-labor market investments (i.e., human capital formation), productivity markdowns due to discrimination or market power, and the policy environment.

In Section 4, we use the conceptual framework to guide and structure the discussion of the empirical evidence on gender norms. Section 4.1 reviews the literature on the origins and persistence of internalized gender norms through vertical and oblique transmission from parents and non-parental elders/peers. Section 4.2 discusses existing work on external norms and how peer pressure and preferences for conformity can result in snowball effects and coordination failures. Section 4.3 reviews the evidence on the influence of gender norms on human capital accumulation, focusing on the role of gender stereotypes, teachers, and the broader cultural environment in shaping educational choices and outcomes. Section 4.4 examines how gender norms and stereotypes may underpin various forms of wage discrimination, including taste-based and statistical discrimination, as well as the degree of monopsonistic power, all of which can result in wages falling below productivity levels. Section 4.5 reviews a growing body of work that examines the role of public policies and the media in shaping and shifting gender norms.

Finally, we conclude in Section 5 with suggestions for future research.

2 Descriptive Evidence on Gender Norms

In this section, we provide a brief overview of how gender norms differ across and within countries and how they have evolved over time. We further show that, at the national level, gender attitudes are closely linked to female labor force participation rates and the extent of child-related penalties.

*** [Figure 1](#) here ***

[Figure 1](#) utilizes data from the 1994-1998 and 2017-2022 waves of the World Values Survey (WVS) to illustrate the proportion of individuals who strongly agree or agree with

the statement presented at the bottom of each panel across five country groups: Eastern Asia, Eastern Europe, Latin America, the U.S., and Germany.² Two key patterns emerge. First, gender attitudes have become more egalitarian across all five regions. For instance, in Eastern Asia (comprising China, Japan, and South Korea), the share of respondents who strongly agreed or agreed that “men make better political leaders than women” decreased from 58% in 1994 to 47% in 2022. Second, substantial regional differences in gender attitudes persist. Generally, individuals in the U.S. and Germany tend to hold more egalitarian views compared to those in Eastern Asia, Latin America, and Eastern Europe. For example, in the 2017-2022 wave, 47% of respondents in Eastern Asia and Eastern Europe strongly agreed or agreed with the statement that men are better political leaders than women, whereas only 16% in the U.S. and 8% in Germany shared this view.

*** [Figure 2](#) here ***

[Figure 2](#) presents a similar analysis using the 1994 and 2022 waves of the International Social Survey Programme (ISSP), focusing on gender attitudes related to working mothers and their families. These data also indicate a shift toward more egalitarian gender norms over time. For example, in Western Europe (comprising Austria, Germany, Italy, the Netherlands, and Spain), the proportion of respondents who agreed or strongly agreed with the statement “A working mom cannot establish as warm a relationship as a mom not working” decreased from 24% in 1994 to 13% in 2022. Respondents in Nordic countries (Sweden and Norway) and in the U.S. appear to hold more gender-egalitarian attitudes compared to those in other regions.

*** [Table 1](#) here ***

In [Table 1](#), we examine the relationship between individual gender attitudes and personal characteristics while controlling for country fixed effects, focusing on the 2017-2022 wave of the WVS.³ Better-educated and younger individuals, as well as women, are

²We only use countries that participated in both waves of the WVS.

³The ISSP reveals similar patterns.

more likely to express gender-egalitarian attitudes. However, country fixed effects and individual characteristics explain only a modest portion of the overall variation in attitudes—ranging from 3% to 20% according to the *R*-squared, depending on the question and data source. This indicates that there is substantial variation in gender attitudes within countries that is not captured by observed characteristics.

*** [Figure 3](#) here ***

We next ask whether gender norms are systematically related to women’s labor market outcomes. [Figure 3](#) explores this question using data from the most recent (2017-2022) wave of the WVS and, unlike [Figure 1](#) and [Figure 2](#), includes many countries that did not participate in earlier survey waves. This broader coverage reveals that, even as of 2017-2022, some countries continue to hold markedly conservative views about gender roles: in several countries in the Middle East and South Asia, more than 80 percent of respondents agree or strongly agree that “when mothers work, preschool children suffer” and that “when jobs are scarce, men should have priority.” Across this expanded set of countries, agreement with these statements is strongly negatively correlated with female labor force participation.

*** [Figure 4](#) here ***

[Figure 4](#) presents complementary evidence using the ISSP for a sample of high-income countries (as defined by the World Bank) and relates gender norms not only to female labor force participation but also to the “child penalty,” measured using estimates from the Child Penalty Atlas ([Kleven et al., 2024](#)). Consistent with the broader cross-country evidence, countries with more conservative views about mothers’ employment exhibit both lower female labor force participation and larger child-related penalties in employment.

Taken together, these correlations provide suggestive evidence that gender norms are associated with women’s labor supply decisions and raise important questions about the

mechanisms through which norms influence behavior. Before turning to empirical studies that estimate causal effects, we introduce a simple conceptual framework to organize the potential channels through which gender norms may affect economic outcomes.

3 A Simple Conceptual Framework

In this section, we outline a simple conceptual framework that distinguishes between internalized norms (those that directly affect an individual’s preferences and beliefs, irrespective of their peers’ behaviors and beliefs), external norms (e.g., peer pressure or preferences for conformity), and skills, wages, and public policies (e.g., discrimination and child care policies). This framework will be used to organize and interpret the empirical evidence on gender norms reviewed in Section 4.

3.1 Utility Function

Consider individuals who choose between two alternatives. To illustrate, consider a mother with a young child choosing between “working” and “not working.” Alternatively, the two choices could represent fathers’ decisions to take parental leave or the choices of a young adult to pursue a career that is not gender-conforming.

Individuals (indexed by the subscript i) can belong to different groups (indexed by the subscript g) that differ with respect to gender norms. For example, across a large set of countries, more educated individuals typically hold more gender-egalitarian preferences and beliefs, as documented in Table 1. Gender norms may also differ between immigrants and natives, as well as across immigrant groups of different origins.

Define the utility of individual i belonging to group g from alternative 1 (“working”) and alternative 0 (“not working”) as follows:

$$U_{i(g)} = \begin{cases} w_g + u_{1i} - \gamma_g |1 - \text{Norm}_g| - C & \text{if } d_i = 1 \text{ (working)} \\ p_g + u_{0i} - \gamma_g |0 - \text{Norm}_g| & \text{if } d_i = 0 \text{ (not working)} \end{cases} \quad (1)$$

Here, w_g is the wage that a mother from group g can expect to earn in the labor market, and u_{1i} is an idiosyncratic, individual-specific wage component. Think of p_g as the average enjoyment that a mother belonging to group g derives from staying at home with her child, while u_{0i} represents the idiosyncratic, individual-specific utility component.

The second component of the utility function, $-\gamma_g |1 - \text{Norm}_g|$ and $-\gamma_g |0 - \text{Norm}_g|$, captures that the mother's utility does not only depend on her own actions, wages, preferences, and beliefs (captured by w_g , p_g , u_{1i} , and u_{0i}), but also directly on the norm. We can think of this part as “external” norms, capturing, for example, peer pressure or preferences for group conformity. The parameter γ_g governs the strength of external norms. This parameter is allowed to vary across groups, capturing the idea that some groups might be more tolerant of accepting behaviors that deviate from the group norm than other groups.

Finally, C is a catch-all parameter representing the policy environment (which is assumed to be the same across groups). For example, mothers may derive a lower utility from working if child care is expensive.

3.2 Internalized Norms

In this simple conceptual framework, the parameter p_g captures internalized gender norms. The mother's utility from staying at home with her child, ignoring external norms and policies (i.e., $p_g + u_{0i}$) will depend on her preferences, as well as her beliefs about how staying at home will affect her children. Importantly, these preferences and beliefs are likely to be shaped by the gender norms of her group. Mothers from more gender-conservative groups – where many mothers identify as “stay-at-home mothers” or believe that “it is best for a young child if the mother stays at home” – will typically derive

greater enjoyment from staying at home with their child (i.e., higher p_g), regardless of how mothers around them behave. That is, individuals may internalize the values and beliefs of their group.

Identity-based utility provides the first building block for understanding internalized gender norms. In their seminal paper, [Akerlof and Kranton \(2000\)](#) develop a model in which individuals belong to social categories, such as “woman” or “man,” which carry prescribed behaviors. For example, women are expected to take primary responsibility for caregiving and domestic tasks, whereas men are expected to prioritize market work and the role of financial provider. When individuals internalize such prescriptions, acting in accordance with them affirms their sense of identity, whereas deviations generate psychological discomfort even in the absence of external pressure. In this sense, identity-based utility formalizes internalized norms by embedding the value (or cost) of certain behaviors directly into preferences, altering the effective payoff to actions (e.g., p_g in the utility function).

While the identity framework explains how norms shape utility and, hence, behaviors, the model developed by [Bisin and Verdier \(2001\)](#) provides the dynamic machinery for how such norms persist over time. In their framework, parents care about transmitting their own preference traits to their children and, therefore, invest in direct (“vertical”) socialization. Children, however, are also exposed to alternative traits through interactions outside the family—through peers, teachers, role models, and the broader social environment—generating a second channel of (“horizontal” and “oblique”) transmission. Cultural evolution is determined by the relative strength of parental socialization and outside influences. We review the empirical evidence on the origins and transmission of internalized norms in [Section 4.1](#).

3.3 External Gender Norms

The second component of the utility function, $-\gamma_g|1-Norm_g|$ and $-\gamma_g|0-Norm_g|$, captures the idea that the mother's utility depends not only on her own actions, skills, preferences, beliefs, and policies (captured by $w_g + u_{1i}$, $p_g + u_{0i}$, and C in the utility function) but also directly on the group norm. That is, the mother's utility from working and not working also depends on how other mothers in the group behave and what other members in the group believe. We label this component of the utility function as "external norms."

External norms can be conceptualized in different ways. In the simplest case, $Norm_g$ may take a specific (exogenous) value. For example, $Norm_g = 0$ would represent a gender-conservative group where attitudes such as "Mothers should stay at home to take care of their children" are dominant. Such a norm will induce some mothers who would have chosen to work in the absence of the external norm (i.e., $w_g + u_{1i} - C > p_g + u_{0i}$) to stay at home to avoid utility cost from deviating from the norm (i.e., $-\gamma_g$).

Peer Pressure and Peer Conformity. $Norm_g$ could be modeled as the average actions of individuals in that group. That is, if all mothers in the group work, $Norm_g = 1$; if 75% of mothers in the group work, $Norm_g = 0.75$, etc. In this setup, the mother's utility directly depends on the actions of other mothers. One reason for this dependency is leisure complementarities. A mother may enjoy staying at home more if other mothers also stay at home, as they can meet up in the playground, attend play groups together, etc. An alternative reason could be peer pressure or preferences for peer-conformity: individuals tend to align their behaviors and choices with those of their peers or social group. These preferences are driven by the desire for social acceptance, approval, or avoidance of disapproval. As highlighted above, they can influence decision-making beyond purely personal or economic considerations and push some mothers toward a choice that does not maximize their personal utility in isolation.

Such peer pressure can lead to spillover effects of public policies. Consider, for exam-

ple, a policy that subsidizes childcare, thereby lowering C in the utility function. Such a policy may initially induce some mothers to work. This change in their actions also implies a change in the group norm ($Norm_g$) which, in turn, induces more mothers to work, further changing the group norm, and so on. Policies may, therefore, trigger a “snowball effect,” amplifying their effects beyond what we would observe if individuals maximized their personal utility in isolation. We briefly summarize selected empirical studies on peer pressure and peer conformity and the snowball effects of public policies in Section 4.2.1.

An Illustration of Coordination Failures. Peer conformity can potentially lead to coordination failures. To illustrate this, consider two mothers (indexed by i and j) who are employed in the same firm at childbirth. The utility of mother i from returning to work at the firm versus staying at home with her child depends on what mother j does, and vice versa. The two mothers play the game as illustrated in Figure 5 below.⁴

*** Figure 5 here ***

Suppose that $w > p$; that is, in the absence of peer pressure, both mothers prefer to work. Indeed, $(work, work)$ is a Nash equilibrium in the game above. However, it might not be the only equilibrium. If $w > p > w - 0.5\gamma$, the best response of mother i is to stay at home if mother j stays at home, and vice versa. Hence, $(stay\ home, stay\ home)$ is also a Nash equilibrium—even though it is Pareto-dominated by $(work, work)$. This example illustrates that, due to external norms, groups might be trapped in an inferior equilibrium. In Section 4.2.1, we also discuss the small set of papers that are consistent with such “coordination failures.”

Second-Order Beliefs and Pluralistic Ignorance. Instead of modeling the external norm ($Norm_g$) as the average actions of individuals in the group, it could be conceptualized as

⁴Here, we have set u_{1i} , u_{0j} , and $C = 0$ and dropped the subscript g for simplicity.

the average of the individual beliefs within that group. For example, suppose that individuals hold either gender-egalitarian beliefs (“it is acceptable for mother to work”) or gender-conservative beliefs (“a mother should stay at home”). In this context, $Norm_g$ is the share of individuals in the group who believe that a mother may work. Since individuals typically do not directly observe others’ beliefs, they form beliefs about what others believe—i.e., second-order beliefs. They may observe other individuals’ actions such as whether or not the mother works, and infer from these actions the beliefs of those individuals. This setup may give rise to pluralistic ignorance, where individuals misperceive the true distribution of beliefs in the group based on observed behaviors.

To illustrate, consider a simplified setup in which all individuals in the group earn the same wage and have the same preferences, and there are no costs from working (i.e., u_{1i} , u_{0i} , and $C = 0$). Suppose $w > p$; hence, in the absence of external norms, all mothers would work. Further suppose that all individuals hold first-order beliefs such as “it is acceptable for mother to work.” Hence, the “true” norm that would prevail if individuals could directly observe other individuals’ beliefs is $Norm_g = 1$.

Yet, if individuals cannot directly observe other individuals’ beliefs, it is possible that no mothers in the group work. This situation can arise if $w > p > w - \gamma$, and if the mother assumes that another mother holds conservative beliefs if she does not work. If no mothers in the society are working, then mothers will erroneously deduce that all mothers in the society hold gender-conservative beliefs resulting in a perceived norm of $Norm_g = 0$, even though the true norm is $Norm_g = 1$. With $Norm_g = 0$, it is indeed optimal for mothers in the group not to work. In this example, the society is stuck in a suboptimal equilibrium. While the second-order beliefs that individuals form about the beliefs of other individuals are perfectly rational, they are incorrect. In Section 4.2.2, we briefly review papers on second-order beliefs and pluralistic ignorance.

3.4 Human Capital, Wages, and Public Policies

Gender Norms and Human Capital Formation. A mother’s decision to work with a young child also depends on the expected wage she can earn in the labor market (i.e., $w_g + u_{1i}$ in the utility function), which is influenced by her skills and productivity in her job. Her skills and productivity, in turn, are affected by the gender norms of her group. For example, a woman raised in a gender-conservative environment may invest less in education as she anticipates staying at home after childbirth. Similarly, girls raised in such environments, especially when taught by biased teachers who (unconsciously) believe that “boys are better at math than girls” may perform worse in math compared to equally capable boys. A gender-conservative upbringing could also influence girls to pursue female-dominated and gender-conforming occupations and university subjects, even when their true talents and interests lie in male-dominated fields. In Section 4.3, we review the empirical evidence on how gender norms can affect skill development, human capital formation, and career choices.

Gender Norms and Markdowns from Productivity. Mothers may earn lower wages than men even if they are equally productive in the job. This could be due to outright taste-based or statistical discrimination. If mothers face high search costs and are not willing to commute long distances to work, firms may have more monopsony power over mothers than over fathers, which they could exploit by paying mothers lower wages. Firms may also have biased beliefs about a mother’s productivity. Discrimination, differential monopsony power, and biased beliefs could be more widespread in more gender-conservative environments. In Section 4.4, we highlight a selected set of empirical studies on how discrimination, monopsony power, and biased beliefs affect women’s and mothers’ success in the labor market.

Gender Norms and Public Policies. Moreover, policies may directly affect a mother’s utility from working with a young child, which is captured by the parameter C in the utility function. One important example is childcare costs—high childcare costs (or low-quality childcare) may prevent a mother from working. Parental leave legislation that protects the mother’s job may improve her wages as it allows her to retain valuable firm- and match-specific human capital. In contrast, joint taxation of the husband’s and wife’s income typically disincentivizes mothers from working.

Policies and gender norms interact in significant ways. On the one hand, more gender-egalitarian societies tend to adopt more family-friendly policies that support mothers’ labor market participation when their children are young. On the other hand, policies can influence gender norms over time by shaping individuals’ beliefs and preferences (i.e., p_g in the utility function). Additionally, policies may impact mothers’ wages by increasing their productivity or by reducing the markdown from productivity—such as by addressing biases, eliminating discriminatory practices, or promoting pay transparency—thereby affecting their economic incentives to participate in the labor force. In [Section 4.5](#), we discuss several empirical studies that explore the impact of policies (and other external factors) on preferences and beliefs.

4 Empirical Evidence

4.1 Internalized Gender Norms

A large empirical literature documents how gender norms are transmitted and persist over time. One strand of evidence comes from studies that directly link parental behaviors or attitudes to their children’s later outcomes. Exploiting regional variation in the World War II shock on women’s labor force participation in the U.S., [Fernández et al. \(2004\)](#) show that men whose mothers worked when they were young are significantly more likely to have working wives as adults. They interpret this pattern as evidence that

growing up with a working mother shapes a man's preferences (or abilities) in ways that influence the labor supply choices within their own households. Consistent with this mechanism, [Farré and Vella \(2013\)](#) use the NLSY to show that mothers' gender role attitudes have a significant effect on their children's own attitudes, and that sons' adolescent attitudes are strongly associated with their wives' labor supply in adulthood.

A complementary body of "epidemiological" studies examines how gender norms persist across institutional environments. The central identification idea here is the portability of culture: if individuals from different cultural backgrounds behave differently despite living in the same institutional setting, then the most plausible mechanism is internalized norms rather than current economic or policy conditions. For example, [Fernández and Fogli \(2009\)](#) and [Blau et al. \(2013\)](#) show that U.S.-born daughters of immigrants exhibit labor supply and fertility behaviors that closely mirror those prevailing in their parents' countries of origin. Because these second-generation women share the same institutional context in the U.S., such behavioral differences are interpreted as evidence of cultural transmission. This evidence complements the family-based findings above: whereas family-based research identifies vertical transmission directly from parents to children, epidemiological studies show that the cultural content being transmitted is highly persistent, even across institutional contexts.

[Hwang et al. \(2019\)](#) refine this epidemiological approach by exploiting within-country variation in a single, ethnically homogeneous country, thereby ruling out cross-country immigrant differences unrelated to culture. They proxy gender norms using regional sex ratios at birth in South Korea, a measure capturing the intensity of son preference. Among dual-earner couples, they find that wives spend significantly more time on housework if their husbands were born in regions with historically high sex ratios, whereas the husband's own housework time is unaffected by birthplace norms. This asymmetry suggests that men from traditional backgrounds carry preferences for a gendered division of labor, reinforcing the insight that internalized norms can remain influential even after

individuals leave the environment in which those norms were formed.

Historical and formative institutional environments provide further evidence on the long-run persistence of internalized gender norms. [Alesina et al. \(2013\)](#) show that contemporary gender norms are linked to ancestral reliance on plough agriculture, a technology that historically induced a gendered division of labor. Importantly, this association persists even among descendants now living in modern economies where the original production technology is irrelevant, demonstrating that internalized beliefs about gender roles can survive long after the underlying economic rationale has disappeared.

The case of German division and reunification provides another powerful illustration. [Lippmann et al. \(2020\)](#) show that women who spent their formative years under East Germany's socialist, gender-egalitarian institutions continue to exhibit more egalitarian attitudes and more symmetric household and labor-market behaviors after reunification. East German women who out-earn their husbands do not increase housework, face no higher risk of divorce, and are less likely to withdraw from the labor force, in stark contrast to West German couples where violating the male-breadwinner norm triggers these behaviors. Because post-1990 institutional conditions converged across East and West Germany, these persistent differences reflect internalized beliefs formed during the German Democratic Republic era rather than ongoing policy differences.

Finally, early-life social environments, such as peers, also contribute to the formation and “oblique” transmission of internalized norms. Using detailed friendship networks from the U.S. AddHealth data, [Olivetti et al. \(2020\)](#) show that adolescent girls who are exposed to peers whose mothers work more (i.e., higher “dosage” of working mother identity) adopt less traditional gender-role attitudes and are more likely to work as adults.

4.2 External Gender Norms

External gender norms shape individuals' behavior by encouraging conformity through peer interactions and deterring deviations from social norms through the threat of so-

cial sanctions. Such external gender norms operate through preferences for peer conformity and/or peer pressure, often sustained through the enforcement and transmission of norms via peer networks.

The presence of such external norms is widely explored in the literature that studies immigrants and their assimilation. As discussed in the section above, papers that utilize the “epidemiological” approach typically find that origin country norms matter for the work and fertility preferences of first- and second-generation immigrants, suggesting the internalization of such norms through family-based channels. Nevertheless, the persistence of such origin country norms could also reflect the role played by ethnic social networks that enforce origin country norms in the new destination—a form of external gender norms.

At the same time, as immigrants spend more time in the host country, they may assimilate toward native outcomes. For example, [Blau et al. \(2013\)](#) study both the intergenerational transmission and cultural assimilation of immigrants’ fertility, human capital, and labor supply. Their results indicate that while immigrant source country gender roles influence immigrant and second-generation women’s behavior, there is considerable evidence of assimilation of immigrants toward native levels for all three outcomes. Such assimilation toward native outcomes may occur for at least two reasons. First, because of external norms – immigrants may feel the pressure or desire to conform with the “native” norms of the host country. And second, because of internal norms – immigrants may adopt and internalize the dominant preferences and beliefs of the host country.

Focusing on migrants within the U.S., [Charles et al. \(forthcoming\)](#) distinguish the roles of internalized norms and external norms/discrimination by showing that both higher prevailing sexism (as measured by gender-role attitudes in the General Social Survey) where a woman was born (background sexism) and where she currently lives (residential sexism), are associated with worse gender gaps in employment and wages, as well as lower ages of marriage and childbearing.

[Boelmann et al. \(2025\)](#) offers one of the few studies that aims to unravel these two channels. Exploiting German reunification, they show that West German migrant women who give birth in the more gender-egalitarian East Germany adjust their post-birth labor supply behavior nearly entirely to that of their East German peers and colleagues. By contrast, East German migrants who give birth in West Germany return to work earlier and work longer hours than West German mothers. To distinguish whether the assimilation of West German migrant women to the East German norm reflects external or internalized norms, the authors focus on West German *return migrants*—women who migrated to East Germany as young adults but later returned to West Germany and gave birth there. Despite giving birth in the same environment as other West German mothers, these return migrants are significantly more likely to work and to work longer hours after childbirth. Because this pattern cannot be explained by contemporaneous external pressure to conform, the findings suggest that earlier exposure to East German gender norms led these women to update and partially internalize more egalitarian preferences and beliefs regarding maternal employment.

Beyond immigrants, several papers study the role of peers by examining how married women's labor supply is influenced by the labor market participation of close peers such as neighbors and relatives. For example, [Maurin and Moschion \(2009\)](#) and [Mota et al. \(2016\)](#) provide evidence from France that mothers' labor market participation is affected by the labor supply behavior of women living nearby. Using Norwegian administrative data, [Nicoletti et al. \(2018\)](#) examine family peer effects and show that cousins and sisters significantly influence the work hours of mothers of preschool children, with family peers exerting a stronger effect than neighborhood peers. These papers highlight the social multiplier effect of norms through peers, which could reflect the pressure to conform due to external norms as well as the internalization and transmission of peer preferences.

4.2.1 Snowball Effects and Coordination Failures

The peer pressure element of social norms can lead to substantial spillover effects of policies that affect behavior and norms by triggering a “snowball” effect whereby social interactions amplify the direct effects of the program through peer networks. This is especially likely to happen in settings where information is scarce and there is a strong role for information transmission to affect beliefs. [Dahl et al. \(2014\)](#) provide a nice illustration of such peer effects at work in the context of paid paternity leave in Norway. Exploiting a 1993 reform that reserved a part of paid paternity leave exclusively for some fathers but not others in a regression discontinuity design, the authors find not only that fathers directly affected by the reform increased their leave-taking, but that other groups not directly affected by the policy such as the coworkers and brothers of treated fathers are significantly more likely to take paid leave after the birth of their first child. The peer effects are larger when the peer father has greater seniority in the firm and in work environments where there is less job security, consistent with an information transmission channel whereby the reform-induced increase in leave-taking by peers reduces the perceived costs of leave-taking by others in the network. This interpretation is further supported by pre-reform survey data suggesting that fathers were reluctant to take leave due to concerns about how employers and coworkers would react.

Peer conformity and pressure can also help to explain why the initial take-up of policies that seek to counteract stereotypical behaviors might fail to gain traction. This is commonly observed in the case of paternity leave-taking where despite relatively generous paternity leave provisions in many countries, men remain quite reluctant to take the leave.⁵ As illustrated in Section 3.3, coordination failure could result in groups being trapped in an inferior equilibrium due to peer pressure arising from perceived or real

⁵For example, in most OECD countries in 2021, fewer than 50 men claim publicly administered parental leave benefits or use publicly administered parental leave for every 100 live births. This is in comparison to a female recipient rate of well above 100 per 100 live births in more than half of OECD countries. In nine OECD countries, including Japan, Australia, Korea, and France, the rate is below 15 users/recipients per 100 live births (OECD Family Database).

concerns about competition or signaling. [Johnson et al. \(2024\)](#) study the role of such implicit tournaments in paternity leave take-up in the workplace where performance is tied to in-person presence or visibility. The authors estimate the career impacts on a worker when his competitors (i.e., male workers in the same firm) take paternity leave because of their eligibility under the 1993 paternity leave reform in Norway. They find that when a larger share of competitors takes leave due to the reform, the focal worker experiences a more favorable earnings trajectory; however, the focal worker's own leave has no direct effect on his earnings trajectory as long as his competitors also take leave.

These results suggest that low take-up of paternity leave and the associated career penalties are mutually reinforcing, but can potentially be resolved with effective coordination. Relatedly, [Tô \(2018\)](#) examines the signaling role of parental leave among mothers in Denmark and finds that asymmetric information affects mothers' decisions about whether to take leave due to their desire to signal their productivity types. These papers suggest that in the presence of coordination failures, designing policies to address information frictions and wasteful signaling is critical to shift groups of workers to a new, pareto-optimal, equilibrium.

4.2.2 Second-Order Beliefs and Pluralistic Ignorance

Coordination failure can also stem from pluralistic ignorance, where individuals privately disagree with a norm but mistakenly believe that everyone else supports it, and end up conforming to the norm. Such misperceptions can explain why gender norms remain persistent even when changes to the economic or social environment makes adherence to the norms increasingly costly, or less relevant. [Bursztyn et al. \(2020\)](#) provides one of the first studies of the empirical relevance of pluralistic ignorance for understanding economic behavior. Drawing on several surveys, the authors document that the vast majority of young married men in Saudi Arabia privately support women working outside their home yet substantially underestimate the level of support by their peers. Ran-

domly correcting these beliefs through an information intervention increases married men's willingness to help their wives search for jobs and increases the likelihood that their wives apply and interview for a job outside the home.

[Cameron et al. \(2024\)](#) document similar misperceptions in Indonesia: women (but not men) underestimate other women's support for female work, and the level of support among men for sharing childcare. Providing accurate community-level information raises support for working women for both genders, especially among men with school-aged children whose wives were not working. [Cortés et al. \(forthcoming\)](#) provide evidence of similar misperceptions regarding support for mothers' participation in the labor market in the U.S., where the prevailing norm is much less extreme and women and men have similar access to education and labor market opportunities. Consistent with earlier work, the authors find that exposure to information on peer beliefs leads to a shift in individuals' beliefs and attitudes about maternal labor supply.

Overall, these papers suggest that in the presence of widespread misperceptions regarding gender norms, information provision holds the key to facilitating the shift toward more progressive norms that reflect individuals' true private sentiments. Nevertheless, evidence on whether such interventions produce sustained behavioral or normative change remains limited. Most studies document short-term attitude shifts and at best medium-term effects on intermediate outcomes (e.g., job search), with little long-run evidence on actual behavior or durable norm change. Moreover, information interventions studied by economists tend to be light touch, individual targeted messages (often delivered via surveys), leaving open whether they can resolve systematic misperceptions and trigger sustained behavior change. Simple individual-level messaging also typically ignores group processes and social interactions that theory and evidence identify as central to belief updating and norm diffusion ([Dahl et al., 2014](#); [Cialdini et al., 1999](#); [Prentice and Paluck, 2020](#)). Future work should consider the design of informational interventions that explicitly leverage these social dynamics.

4.3 Gender Norms and Human Capital Accumulation

Gender norms shape labor market outcomes long before individuals enter the labor market through their effect on human capital accumulation. Gendered beliefs about ability and appropriate roles in society influence educational choices of boys and girls. These decisions, in turn, affect the occupational distribution by gender, earnings trajectories, and the persistence of gender gaps.

Gendered beliefs about cognitive ability emerge early in childhood. Experimental evidence from [Bian et al. \(2017\)](#) shows that by age six—though not at age five—girls are already less likely than boys to associate their gender with high-level intellectual ability and begin to avoid activities portrayed as requiring brilliance or innate talent. These early-emerging stereotypes continue to matter later in life: fields that emphasize “brilliance” rather than effort tend to exhibit larger gender gaps ([Hannak et al., 2023](#)). Such findings suggest that gender norms establish early expectations about who is likely to succeed in high-return cognitive domains, shaping subsequent investments in skill formation.

Teachers play an important role in transmitting these gendered biases and beliefs. Using administrative data from Tel Aviv public schools, [Lavy and Sand \(2018\)](#) construct a teacher-specific bias measure by comparing each teacher’s classroom grades to students’ scores on externally graded, blind national exams in math and language. They show that girls exposed to teachers who systematically under-grade them experience worse long-term outcomes: lower scores on subsequent standardized tests, reduced enrollment in advanced math and science tracks in high school, and poorer performance on high-stakes exams. Complementary evidence from Italian middle schools is provided by [Carlana \(2019\)](#), who uses teachers’ Implicit Association Test (IAT) scores as a measure of unconscious gender–science stereotypes. Exposure to teachers who hold stronger stereotypes leads to lower math achievement among girls, with the largest impacts observed among initially lower-performing students. These teachers also transmit stereotypes:

girls taught by more biased teachers report lower math self-confidence, are more likely to accept biased track recommendations, and ultimately sort into less demanding academic high schools. In the Italian context—where track placement is highly predictive of tertiary study and labor-market opportunities—this provides a direct and well-identified link between teacher stereotypes and long-run gender differences in skill accumulation.

Teachers' broader gender-role attitudes also matter. Studying Turkey, [Alan et al. \(2018\)](#) show that exposure to teachers with more traditional gender-role views reduces girls' performance in both math and language, particularly when students are assigned to such teachers for longer periods. Survey evidence indicates that these teachers transmit their gender-role beliefs to students, thereby dampening girls' aspirations and academic outcomes.

Finally, broader cultural environments influence educational choices and skill formation. Cross-country evidence from [Guiso et al. \(2008\)](#) shows that the math gender gap is smallest in societies with higher gender equality. [Nollenberger et al. \(2016\)](#) provide suggestive causal evidence for this relationship using an epidemiological approach: they study second-generation immigrants and exploit the gender-gap index of the parents' country of origin to disentangle the role of cultural norms from that of the current environment in shaping girls' math performance on the PISA exam.

Additional within-country evidence comes from [Friedman-Sokuler and Senik \(2025\)](#), who study the mass influx of immigrants from the former Soviet Union (FSU) into Israel – a setting where Soviet educational and labor-market institutions historically led to high female participation in STEM disciplines. The authors show that immigrant girls from the former Soviet Union exhibit higher math performance and are substantially more likely to sort into STEM fields in tertiary education compared with both native Israelis and other immigrant groups. Importantly, the diffusion of norms also affects natives: native Israeli girls who attended schools or lived in neighborhoods with greater exposure to FSU immigrants likewise show improved math performance and increased STEM enrollment,

suggesting that gender norms can spread through peer interactions and local cultural environments. Overall, these studies demonstrate that gender norms have persistent, measurable effects on the development of cognitive skills and the educational trajectories that ultimately feed into labor-market outcomes

Taken together, the evidence shows that stereotypes and gender norms influence human capital accumulation through multiple, mutually reinforcing channels: early beliefs about ability, teacher expectations and interactions, and cultural environments. These mechanisms affect not only the level of human capital but also its composition across fields, thereby shaping the labor-market opportunities and wage trajectories of men and women.

4.4 Gender Norms and Markdowns from Productivity

Gender norms and stereotypes can also affect women’s relative wages and access to jobs, even if they are as productive as men. Traditional models of discrimination suggest that this could arise due to outright taste discrimination or statistical discrimination. Unlike taste discrimination against other minority groups where inter-group contact in itself is the source of aversion, in the case of gender, the source of “taste” discrimination is likely rooted in prevailing stereotypes and beliefs about what constitutes gender-appropriate roles and attributes in society. For example, [Akerlof and Kranton \(2000\)](#) point out that violation of identity norms could explain the “distaste” of men for working with women in the same job, similar in spirit to [Goldin \(2014\)](#)’s pollution theory of discrimination, whereby differential gender access to the labor market could persist due to the perception that the entry of women dilutes the prestige of male-dominated occupations. [Greenberg et al. \(2024\)](#) provide a direct test of this idea by examining the integration of women into combat and leadership roles in the U.S. Army after the 2016 repeal of the Ground Combat Exclusion Policy. Drawing on rich personnel records and survey data, they find that the integration of women into previously all-male unit did not adversely affect men’s

performance as captured by behavioral outcomes such as retention and promotion rates; however, integration resulted in a decline in male soldiers' reported perceptions of workplace quality.

Statistical discrimination on the basis of gender is closely linked to beliefs and expectations about women's commitment to their careers after parenthood. Several studies use lab-based experiments and field-based resume audit studies to show evidence of employer discrimination on the basis of both realized and potential fertility of women (e.g., [Correll et al., 2007](#); [Becker et al., 2019](#)). A recent study by [He et al. \(2023\)](#) exploits the unexpected relaxation in China's one-child policy to study labor market discrimination against family responsibilities. The policy shift allowed all families to have up to two children, thereby increasing the expected fertility for men and women with siblings, but not for only-child adults (who were already allowed to have more than one child). Varying gender and only-child/sibling status across fictitious resumes in a two-wave correspondence study, the authors find evidence consistent with labor market discrimination on the basis of expected fertility for women, but not for men, with the extent of discrimination increasing as women approach their peak childbearing years.

Several recent papers study other forms of differential treatment by employers, managers, or clients based on gendered beliefs about workers' abilities. [Buchmann et al. \(2024\)](#) argue that employers could engage in "sexist paternalism," whereby in attempting to protect women from potentially harmful or unpleasant situations, employers inadvertently harm women's labor market outcomes by preventing them from making their own choices. Combining two field experiments in Bangladesh with a structural labor model, the authors find that eliminating paternalistic discrimination reduces the gender employment gap and increases female wages. Differential treatment by employers could also affect male employees when they deviate from commonly accepted behavior. For example, [Weisshaar \(2018\)](#) find that fathers face a higher penalty when they take time off work to care for family relative to mothers, possibly due to a violation of "ideal worker"

norms. This could explain the reluctance of men to take paternity leave especially in countries with traditional gender norms.

Other papers document how attribution bias leads to differential outcomes for women in fields like business, finance, and medicine. [Landsman \(2019\)](#) shows that among S&P 1500 executives, women are more likely to lose their positions relative to their male counterparts following poor firm performance. Similar asymmetric punishment gaps are also found in the financial advisory industry ([Egan et al., 2022](#)). Relatedly, in the medical profession, [Sarsons \(2024\)](#) document that female surgeons experience a larger drop in patient referrals following a patient death relative to male surgeons. Conversely, male surgeons receive more referrals than female surgeons following positive surgical outcomes.

Besides discrimination, productivity markdowns could also arise in monopsonistic labor markets. To the extent that gender norms result in more constrained job search for mothers relative to fathers, this could serve as a source of monopsonistic power for firms, which they could exploit by lowering women's relative wages. While there are numerous studies that show that mothers face more constrained job search, generally have a lower willingness to commute, and are exposed to more concentrated labor markets (e.g., [Le Barbanchon et al., 2021](#); [Philippe and Skandalis, 2024](#); [Petrongolo and Ronchi, 2020](#); [Bütikofer et al., 2025](#)), direct evidence on the extent to which firms exert monopsonistic power over female workers remains limited. A study of Uber drivers by [Caldwell and Oehlsen \(2023\)](#) suggest that women's labor supply to the firm is not more inelastic than that of men's. On the other hand, leveraging firm-specific demand shocks to estimate labor supply elasticities in the Brazilian manufacturing sector, [Sharma \(2024\)](#) finds evidence of differential separation elasticities by gender, consistent with firms exerting greater monopsonistic power over female employees relative to male employees. Further research studying the extent to which monopsonistic labor markets contribute to differential markdowns by gender would be highly valuable.

4.5 Policies and Media as Levers of Change in Gender Norms

A growing body of research shows that gender norms can respond to policy reforms and media exposure. Although gender norms are typically slow-moving and highly persistent, as discussed above, recent evidence demonstrates that they are nonetheless malleable when individuals encounter new incentives, information, or representations of gender roles. Importantly, these changes may operate through multiple channels: by reshaping internalized beliefs and preferences, by relaxing external social pressure, or by limiting the scope for discrimination. In practice, reforms rarely affect only one mechanism; observed outcomes typically reflect several channels operating simultaneously. With this in mind, we begin by reviewing interventions that primarily shift internalized norms, followed by those that appear to operate more through relaxing external social pressure, and finally, policies that influence gender norms indirectly by altering the institutional environment to reduce discriminatory practices.

Education-based interventions provide direct evidence that adolescents' internalized gender attitudes can be changed. In a large-scale randomized controlled trial in Haryana, India, [Dhar et al. \(2022\)](#) implement a two-year school-based program that engaged adolescent girls and boys in classroom discussions about gender equality. The program led to significantly more gender-egalitarian attitudes among both boys and girls, with effects persisting two years after the intervention. Complementing this experimental evidence, [Hara and Rodríguez-Planas \(2025\)](#) exploit the desegregation of gender-segregated "industrial arts" and "home economics" courses in Japanese junior high schools. They find that students exposed to the reform exhibit more gender-equal behaviors as adults: treated men spend significantly more time on weekend housework and less on job-related activities, while treated women are more likely to hold regular jobs and earn higher labor income.

Policies that increase women's visibility in leadership can also shift internalized beliefs through role-model effects. [Beaman et al. \(2012\)](#) exploit the random assignment of

reservation of village-council chief positions for women across villages in West Bengal, India, which generated exogenous variation in exposure to female leaders. They show that in villages reserved for a woman leader for two election cycles, parents' and adolescents' gender bias in educational aspirations declined, the gender gap in educational attainment narrowed, and girls spent less time on household chores. Because the reservation policy did not change local labor-market opportunities, the authors interpret these changes as arising through a role-model channel: observing female leaders updates beliefs about what women can achieve.

Similarly, family policies can change internalized norms by altering gender roles within the household. [Farre et al. \(2023\)](#) analyze Spain's 2007 paternity leave reform, which expanded fathers' entitlement from 2 to 13 days. They find that children of eligible fathers express more gender-egalitarian attitudes by early adolescence and engage in more counter-stereotypical household tasks. This study suggests that even modest increases in fathers' involvement can alter both contemporaneous social expectations and the gender-role beliefs that children internalize.

Finally, mass media can shift gender norms by altering beliefs about gender roles and acceptable behaviors. [Jensen and Oster \(2009\)](#) exploit the staggered introduction of cable television in rural India and show that access to cable improves the status of women: women report lower acceptability of spousal abuse, lower son preference, more autonomy, and lower fertility. The authors argue that these changes may reflect exposure to urban lifestyles, values, and behaviors. Similarly, [Ferrara et al. \(2012\)](#) analyze the expansion of Brazil's Globo network, which broadcasts soap operas characterized by small families. They find that municipalities with earlier Globo access experienced declines in fertility, especially among less-educated women. These findings underscore the role of media in reshaping norms about family size, gender roles, and women's status.

On the other hand, policies can also shift gender norms by relaxing external peer pressure. As discussed earlier, [Dahl et al. \(2014\)](#) find that the introduction of Norway's

“daddy quota” significantly increased leave-taking of not only the fathers who were directly affected by the policy, but also coworkers and brothers of treated fathers, resulting in large multiplier effects of the policy. The authors interpret these spillovers as arising from information and social learning—such as learning that taking leave is not penalized by employers—rather than from changes in preferences. Subsequent studies corroborate the effectiveness of non-transferable paternity leave quotas in increasing fathers’ leave-taking in other contexts, including Sweden ([Avdic and Karimi, 2018](#)), Canada ([Patnaik, 2019](#)), Spain ([Farre and Gonzalez, 2019](#)), and Iceland ([Olafsson and Steingrimsdottir, 2020](#)).⁶ These studies suggest that the “daddy quota” can function as a coordination device, reducing the stigma associated with men taking parental leave.

In addition to shifting internalized beliefs or relaxing external social pressure, policies can also alter gender norms indirectly by reducing discriminatory practices. In a classic study, [Goldin and Rouse \(2000\)](#) examine the adoption of “blind” auditions by symphony orchestras and find that concealing the candidate’s identity significantly increases the probability that women will be advanced and hired. More recently, pay-transparency mandates have been shown to narrow gender wage gaps by reducing firms’ ability to apply discretionary or biased pay-setting practices. Research exploiting reforms in Canada ([Baker et al., 2023](#)) and Denmark ([Bennedsen et al., 2022](#)) consistently finds that transparency leads to significant reductions in the gender pay gap. Notably, both studies show that this convergence is driven primarily by slower wage growth for men rather than faster growth for women. These findings suggest that transparency mandates operate effectively by limiting the scope for unexplained or discretionary wage premiums often enjoyed by men. Even if such practices do not immediately shift gender norms, they can reshape them over the long run by altering economic expectations. By ensuring that skills are rewarded fairly, these policies raise women’s expected returns to labor market participation, thereby incentivizing greater human capital investment and career aspirations.

⁶See [Canaan et al. \(2022\)](#) for an overview of the impact of parental leave reforms in high income countries.

Simultaneously, from the firm’s perspective, constraining discretionary bias may gradually erode the reliance on gender stereotypes in hiring and promotion, further weakening the feedback loop between gender discrimination and norms.

5 Conclusion

This article provides a systematic overview of how gender norms shape economic behavior and outcomes. By proposing a unified conceptual framework, we distinguish between internalized norms—preferences and beliefs regarding gender roles and identity—and external norms, which operate through peer pressure, social conformity, and coordination. Our review of the empirical literature demonstrates that norms are not merely static background cultural features but remain active determinants of human capital investment, labor supply, fertility, intra-household allocation, and policy take-up across a wide range of institutional contexts.

While the evidence suggests that gender attitudes are moving in an egalitarian direction globally, significant regional disparities persist, and the pace of change remains uneven. The literature reviewed here identifies several forces that shift gender norms, including early-life social environments, educational environments, exposure to role models, policy reforms, and mass media. However, the persistence of suboptimal equilibria—driven by coordination failures and pluralistic ignorance—highlights that economic incentives alone are often insufficient to achieve gender equality.

Despite the significant progress in the economics of gender norms, several important questions remain open for future research: First, we have limited understanding of which dimensions of gender norms change more rapidly than others, and why. Attitudes toward women’s education or labor force participation often evolve faster than norms governing caregiving, household responsibility, or motherhood. This uneven pace of change generates tensions: women’s rising earnings potential increasingly conflicts with persistent

expectations about family roles, contributing to delayed marriage and ultra-low fertility in several high-income countries (e.g., [Hwang, 2016](#); [Goldin, 2025](#)). Future research should investigate the structural, psychological, and social mechanisms that make some norms more resistant to change than others.

Second, a critical frontier for research concerns the precise definition and boundaries of the reference group—the relevant “Joneses”—through which gender norms are enforced and transmitted. While existing studies have identified various influential networks, such as geographical neighbors, family members, and workplace colleagues, we lack a systematic understanding of how the salient reference group might shift depending on the specific norm in question. For example, norms about labor supply may be primarily shaped in the workplace, while norms about caregiving or fertility may be enforced more strongly within families or local communities. Understanding how the reference group differs by norm, life stage, and institutional context is crucial for both theory and policy design.

Third, while much of the literature emphasizes constraints faced by women, masculinity norms and identity costs for men remain comparatively understudied. Emerging evidence suggests that norms surrounding male breadwinning, dominance, and occupational identity can restrict men’s choices and reinforce gender inequality. For instance, recent work by [De Haas et al. \(2024\)](#) introduce “dominance masculinity” as a distinct constraint, showing it predicts lower support for market liberalization and restricts men’s occupational choices to traditionally masculine sectors. Future research should explore how masculinity norms interact with and reinforce traditional gender outcomes.

Finally, from a policy perspective, a central open question is how to design interventions that leverage social interactions. Many existing policies and information interventions target individuals in isolation, even though both theory and evidence emphasize that norms evolve through peer dynamics, social learning, and collective belief updating. Understanding how policies can coordinate groups toward new equilibria, rather than

leaving first-mover individuals exposed to social penalties, is a crucial area for future work.

References

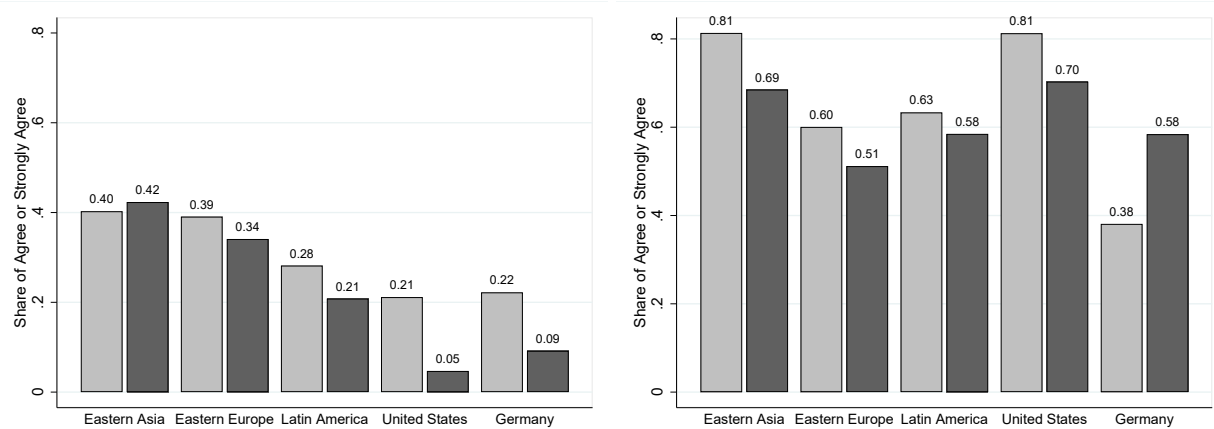
- Akerlof, George A. and Rachel E. Kranton**, “Economics and Identity,” *Quarterly Journal of Economics*, 2000, 115 (3), 715–753.
- Alan, Sule, Seda Ertac, and Ipek Mumcu**, “Gender Stereotypes in the Classroom and Effects on Achievement,” *Review of Economics and Statistics*, 2018, 100 (5), 876–890.
- Alesina, Alberto, Paola Giuliano, and Nathan Nunn**, “On the Origins of Gender Roles,” *Quarterly Journal of Economics*, 2013, 128 (1), 469–530.
- Avdic, Daniel and Arizo Karimi**, “Modern Family? Paternity Leave and Marital Stability,” *American Economic Journal: Applied Economics*, 2018, 10 (4), 283–307.
- Baker, Michael, Yosh Halberstam, Kory Kroft, Alexandre Mas, and Derek Messacar**, “Pay transparency and the gender gap,” *American Economic Journal: Applied Economics*, 2023, 15 (2), 157–183.
- Barbanchon, Thomas Le, Roland Rathelot, and Alexandra Roulet**, “Gender Differences in Job Search: Trading off Commute Against Wage,” *Quarterly Journal of Economics*, 2021, 136 (1), 381–426.
- Beaman, Lori, Esther Duflo, Rohini Pande, and Petia Topalova**, “Female leadership raises aspirations and educational attainment for girls: A policy experiment in India,” *science*, 2012, 335 (6068), 582–586.
- Becker, Sascha O., Ana Fernandes, and Doris Weichselbaumer**, “Discrimination in Hiring Based on Potential and Realized Fertility: Evidence from a Large-Scale Field Experiment,” *Labour Economics*, 2019, 59, 139–152.
- Bennedsen, Morten, Elena Simintzi, Margarita Tsoutsoura, and Daniel Wolfenzon**, “Do firms respond to gender pay gap transparency?,” *The Journal of Finance*, 2022, 77 (4), 2051–2091.
- Bian, Lin, Sarah-Jane Leslie, and Andrei Cimpian**, “Gender Stereotypes about Intellectual Ability Emerge Early and Influence Children’s Interests,” *Science*, 2017, 355 (6323), 389–391.
- Bisin, Alberto and Thierry Verdier**, “The Economics of Cultural Transmission and the Dynamics of Preferences,” *Journal of Economic Theory*, 2001, 97, 298–319.
- Blau, Francine D., Lawrence M. Kahn, Albert Yung-Hsu Liu, and Kerry L. Papps**, “The Transmission of Women’s Fertility, Human Capital, and Work Orientation across Immigrant Generations,” *Journal of Population Economics*, 2013, 26 (2), 405–435.
- Boelmann, Barbara, Anna Raute, and Uta Schönberg**, “Wind of Change? Cultural Determinants of Maternal Labor Supply,” *AEJ: Applied Economics*, 2025, 17 (2), 41–74.
- Buchmann, Nina, Carl Meyer, and Colin D. Sullivan**, “Paternalistic Discrimination,” Technical Report 2024.

- Bursztyn, Leonardo, Alessandra L. Gonzalez, and David Yangizawa-Drott**, “Misperceived Social Norms: Women Working Outside the Home in Saudi Arabia,” *American Economic Review*, 2020, 110 (10), 2997–3029.
- Bütikofer, Aline, Rene Karadakic, and Alexander Willen**, “Parenthood and the Gender Gap in Commuting,” *Journal of Public Economics*, 2025, 248, 105371.
- Caldwell, Sydnee and Emily Oehlsen**, “Gender, Outside Options, and Labor Supply: Experimental Evidence from the Gig Economy,” University of California, Berkeley Working Paper 2023.
- Cameron, Lisa, Diana Contreras Suarez, and Diahhadi Setyonaluri**, “Leveraging Women’s Views to Influence Gender Norms Around Women Working: Evidence from an Online Intervention in Indonesia,” Policy Research Working Paper 10681, The World Bank 2024.
- Canaan, Serena, Anne Lassen, Philip Rosenbaum, and Herdis Steingrimsdottir**, “Maternity leave and paternity leave: Evidence on the economic impact of legislative changes in high income countries,” 2022.
- Carlana, Michela**, “Implicit Stereotypes: Evidence from Teachers’ Gender Bias,” *Quarterly Journal of Economics*, 2019, 134 (3), 1163–1224.
- Charles, Kerwin, Jonathan Guryan, and Jessica Pan**, “The Effects of Sexism on American Women: The Role of Norms vs. Discrimination,” *Journal of Human Resources*, forthcoming.
- Cialdini, Robert B., Wilhelmina Wosinska, Daniel W. Barrett, Jonathan Butner, and Malgorzata Gornik-Durose**, “Compliance with a Request in Two Cultures: The Differential Influence of Social Proof and Commitment/Consistency on Collectivists and Individualists,” *Personality and Social Psychology Bulletin*, 1999, 25 (10).
- Correll, Shelley J., Stephen Benard, and In Paik**, “Getting a Job: Is There a Motherhood Penalty?,” *American Journal of Sociology*, 2007, 112 (5), 1297–1338.
- Cortés, Patricia and Jessica Pan**, “Children and the Remaining Gender Gaps in the Labor Market,” *Journal of Economic Literature*, 2023, 61 (4), 1359–1409.
- , **Gizem Kosar, Jessica Pan, and Basit Zafar**, “Should Mothers Work? How Perceptions of the Social Norm Affect Individual Attitudes Toward Work in the U.S.,” *Review of Economics and Statistics*, forthcoming.
- Dahl, Gordan B., Katrine V. Loken, and Magne Mogstad**, “Peer Effects in Program Participation,” *American Economic Review*, 2014, 104 (7), 2049–2074.
- Dhar, Diva, Tarun Jain, and Seema Jayachandran**, “Reshaping adolescents’ gender attitudes: Evidence from a school-based experiment in India,” *American economic review*, 2022, 112 (3), 899–927.

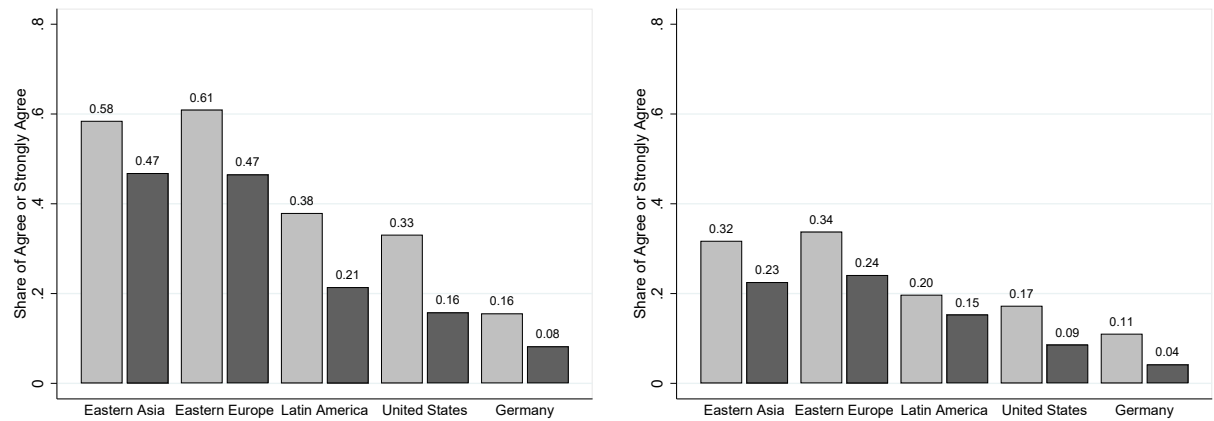
- Egan, Mark, Gregor Matvos, and Amit Seru**, “When Harry Fired Sally: The Double Standard in Punishing Misconduct,” *Journal of Political Economy*, 2022, 130 (5), 1184–1248.
- Farré, Lúdia and Francis Vella**, “The Intergenerational Transmission of Gender Role Attitudes,” *Economica*, 2013, 80 (318), 219–247.
- Farre, Lidia and Libertad Gonzalez**, “Does Paternity Leave Reduce Fertility?,” *Journal of Public Economics*, 2019, 172, 52–66.
- , **Christina Felfe, Libertad Gonzalez, and Patrick Schneider**, “Changing Gender Norms across Generations: Evidence from a Paternity Leave Reform,” IZA Discussion Paper 16341, 2023.
- Fernández, Raquel, Alessandra Fogli, and Claudia Olivetti**, “Mothers and Sons: Preference Formation and Female Labor Force Dynamics,” *Quarterly Journal of Economics*, 2004, 119 (4), 1249–1299.
- and —, “Culture: An Empirical Investigation of Beliefs, Work, and Fertility,” *AEJ: Macroeconomics*, 2009, 1 (1), 146–177.
- Ferrara, Eliana La, Alberto Chong, and Suzanne Duryea**, “Soap operas and fertility: Evidence from Brazil,” *American Economic Journal: Applied Economics*, 2012, 4 (4), 1–31.
- Friedman-Sokuler, Nachum and Claudia Senik**, “From Pink Collar to Lab Coat: Cultural Persistence and Diffusion of Gender Norms in Study Choices,” *Journal of Population Economics*, 2025, 38 (1), 123–159.
- Goldin, Claudia**, “A Pollution Theory of Discrimination: Male and Female Differences in Occupations and Earnings,” in “Human Capital in History: The American Record,” University of Chicago Press, 2014, pp. 313–348.
- , “Babies and the macroeconomy,” *Economica*, 2025.
- and **Cecilia Rouse**, “Orchestrating impartiality: The impact of “blind” auditions on female musicians,” *American economic review*, 2000, 90 (4), 715–741.
- Greenberg, Kyle, Melanie Wasserman, and Anna Weber**, “The Effects of Gender Integration on Men: Evidence from the U.S. Military,” Technical Report 2024.
- Guiso, Luigi, Federico Monte, Paola Sapienza, and Luigi Zingales**, “Culture, Gender, and Math,” *Science*, 2008, 320 (5880), 1164–1165.
- Haas, Ralph De, Victoria Baranov, Ieda Matavelli, and Pauline Grosjean**, “Masculinity around the world,” *Working Paper*, 2024.
- Hannak, Aniko, Kenneth Joseph, Daniel B Larremore, and Andrei Cimpian**, “Field-specific ability beliefs as an explanation for gender differences in academics’ career trajectories: Evidence from public profiles on ORCID. Org.,” *Journal of Personality and Social Psychology*, 2023, 125 (4), 681.

- Hara, Hiromi and Núria Rodríguez-Planas**, “Long-Term Consequences of Teaching Gender Roles,” *Journal of Labor Economics*, 2025, 43 (2), 349–389.
- He, Haoran, Sherry Xin Li, and Yuling Han**, “Labor Market Discrimination against Family Responsibilities: A Correspondence Study with Policy Change in China,” *Journal of Labor Economics*, 2023, 41 (2), 361–387.
- Hwang, Jisoo**, “Housewife, “gold miss,” and equal: the evolution of educated women’s role in Asia and the US,” *Journal of Population Economics*, 2016, 29 (2), 529–570.
- , **Chulhee Lee, and Esther Lee**, “Gender Norms and Housework Time Allocation among Dual-Earner Couples,” *Labour Economics*, 2019, 57, 102–116.
- Jayachandran, Seema**, “Social Norms as a Barrier to Women’s Employment in Developing Countries,” *IMF Economic Review*, 2021, 69, 576–595.
- Jensen, Robert and Emily Oster**, “The power of TV: Cable television and women’s status in India,” *The Quarterly Journal of Economics*, 2009, 124 (3), 1057–1094.
- Johnson, Julian V., Hyejin Ku, and Kjell G. Salvanes**, “Competition and Career Advancement,” *Review of Economic Studies*, 2024, 91 (5), 2954–2980.
- Kleven, Henrik, Camille Landais, and Gabriel Leite-Mariante**, “The Child Penalty Atlas,” *Review of Economic Studies*, 2024, 92 (5), 2461–2506.
- Landsman, Rachel**, “Gender Differences in Executive Departure,” Technical Report, Bucknell University 2019. https://economicsdept.blogs.bucknell.edu/files/2019/11/Exec_Departure.pdf.
- Lavy, Victor and Edith Sand**, “On the Origins of Gender Gaps in Human Capital: Short- and Long-Term Consequences of Teachers’ Biases,” *Journal of Public Economics*, 2018, 167, 263–279.
- Lippmann, Quentin, Alexandre Georgieff, and Claudia Senik**, “Undoing Gender with Institutions,” *Economic Journal*, 2020, 130 (629), 1445–1470.
- Maurin, Eric and Julie Moschion**, “The Social Multiplier and Labor Market Participation of Mothers,” *American Economic Journal: Applied Economics*, 2009, 1 (1), 251–272.
- Mota, Nuno, Eleonora Patacchini, and Stuart S. Rosenthal**, “Neighborhood Effects, Peer Classification, and the Decision of Women to Work,” IZA Discussion Paper 9985, 2016.
- Nicoletti, Cheti, Kjell Salvanes, and Emma Tominey**, “The Family Peer Effect on Mothers’ Labor Supply,” *AEJ: Applied Economics*, 2018, 10 (3), 206–234.
- Nollenberger, Natalia, Núria Rodríguez-Planas, and Almudena Sevilla**, “The Math Gender Gap: The Role of Culture,” *American Economic Review: Papers and Proceedings*, 2016, 106 (5), 257–261.

- Olafsson, Arna and Herdis Steingrimsdottir**, “How does daddy at home affect marital stability?,” *The Economic Journal*, 2020, 130 (629), 1471–1500.
- Olivetti, Claudia, Barbara Petrongolo, and Jessica Pan**, “The Evolution of Gender in the Labor Market,” *Handbook of Labor Economics*, 2025, 5, 619–677.
- , **Eleonora Patacchini, and Yves Zenou**, “Mothers, Peers, and Gender Role Identity,” *Journal of the European Economic Association*, 2020, 18 (1), 266–301.
- Patnaik, Ankita**, “Reserving Time for Daddy: the Consequences of Fathers’ Quotas,” *Journal of Labor Economics*, 2019, 37 (4), 1009–1059.
- Petrongolo, Barbara and Maddalena Ronchi**, “Gender gaps and the structure of local labor markets,” *Labour Economics*, 2020, 64, 101819.
- Philippe, Arnaud and Daphne Skandalis**, “Motherhood and the Cost of Job Search,” CEPR Discussion Paper 18727, 2024.
- Prentice, Deborah and Elizabeth Levy Paluck**, “Engineering social change using social norms: lessons from the study of collective action,” *Current Opinion in Psychology*, 2020, 35, 138–142.
- Sarsons, Heather**, “Interpreting Signals in the Labor Market: Evidence from Medical Referrals,” Working Paper 2024.
- Sharma, Garima**, “Monopsony and gender,” Technical Report 2024.
- Tô, Linh**, “The Signaling Role of Parental Leave,” Working Paper 2018.
- Weisshaar, Katherine**, “For Opt Out to Blocked Out: The Challenges for Labor Market Re-entry After Family-Related Employment Lapses,” *American Sociological Review*, 2018, 83 (1), 34–60.



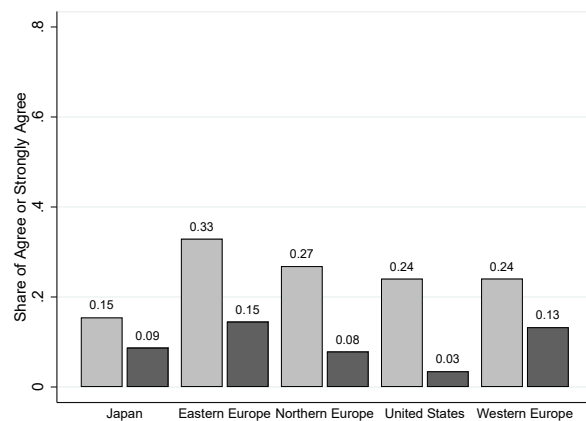
(a) Jobs scarce: Men should have more right to a job than women. (b) Being a housewife is just as fulfilling as work.



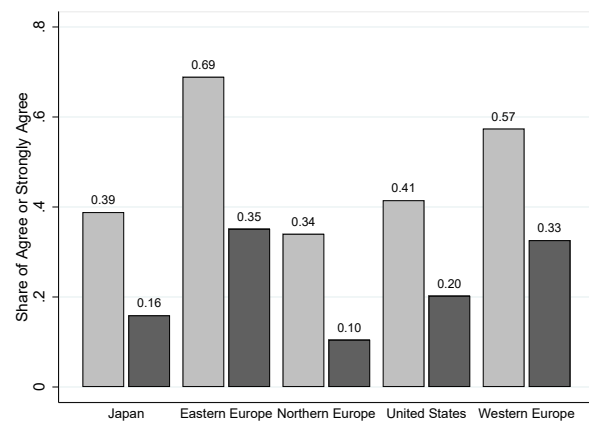
(c) Men make better political leaders than women do. (d) University is more important for a boy than for a girl.

Figure 1: Changes in Gender Attitudes between the 1994-1998 and 2017-2022 Waves of the World Values Survey

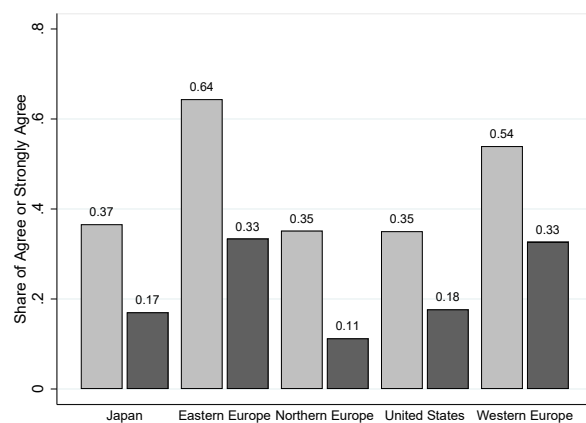
Notes: Lighter shade for wave 1994-1998 and darker shade for wave 2017-2022. The countries included in the analysis are: Eastern Asia (China, Japan, South Korea); Eastern Europe (Czechia, Romania, Russia, Serbia, Slovakia, Ukraine); Latin America (Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay, Venezuela); US; Germany.



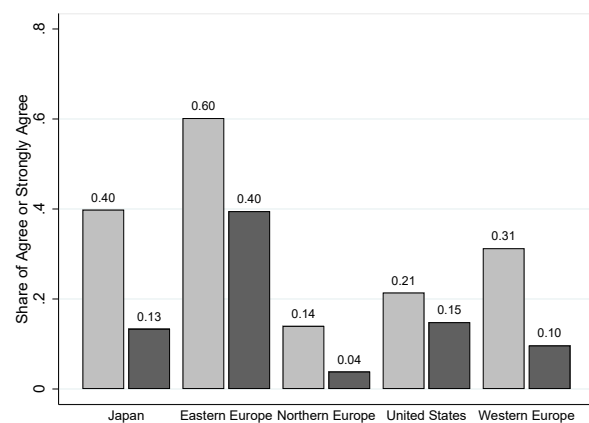
(a) Working mom cannot establish as warm relationship as a not working mom.



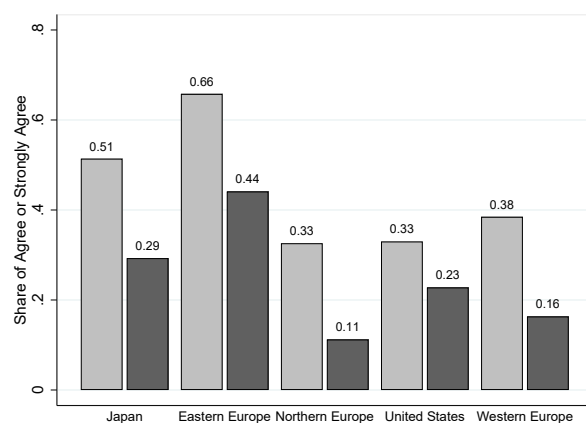
(b) Pre-school child is likely to suffer if mother works.



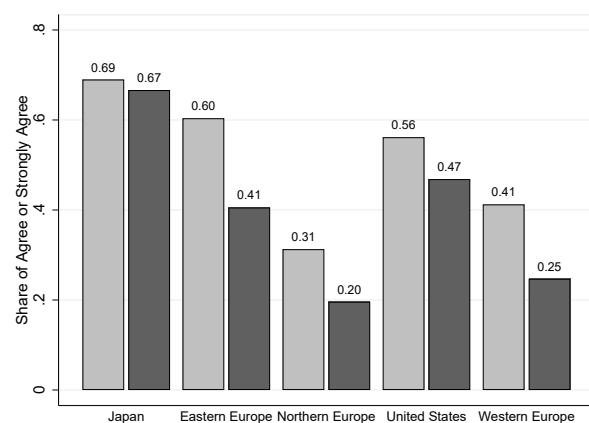
(c) Family life suffers when woman has a full-time job.



(d) Men's job earn money, women's job look after home.



(e) What women really want is home and kids.



(f) Being a housewife is as fulfilling as working for pay.

Figure 2: Changes in Gender Attitudes between the 1994 and 2022 Waves of the International Social Survey Programme

Notes: Lighter shade for wave 1994 and darker shade for wave 2022. The countries included in the analysis are: Japan; Eastern Europe (Bulgaria, Czech Republic, Hungary, Poland, Russia, Slovenia); Northern Europe (Norway, Sweden); US; Western Europe (Austria, Netherlands, Spain, Italy, Germany).

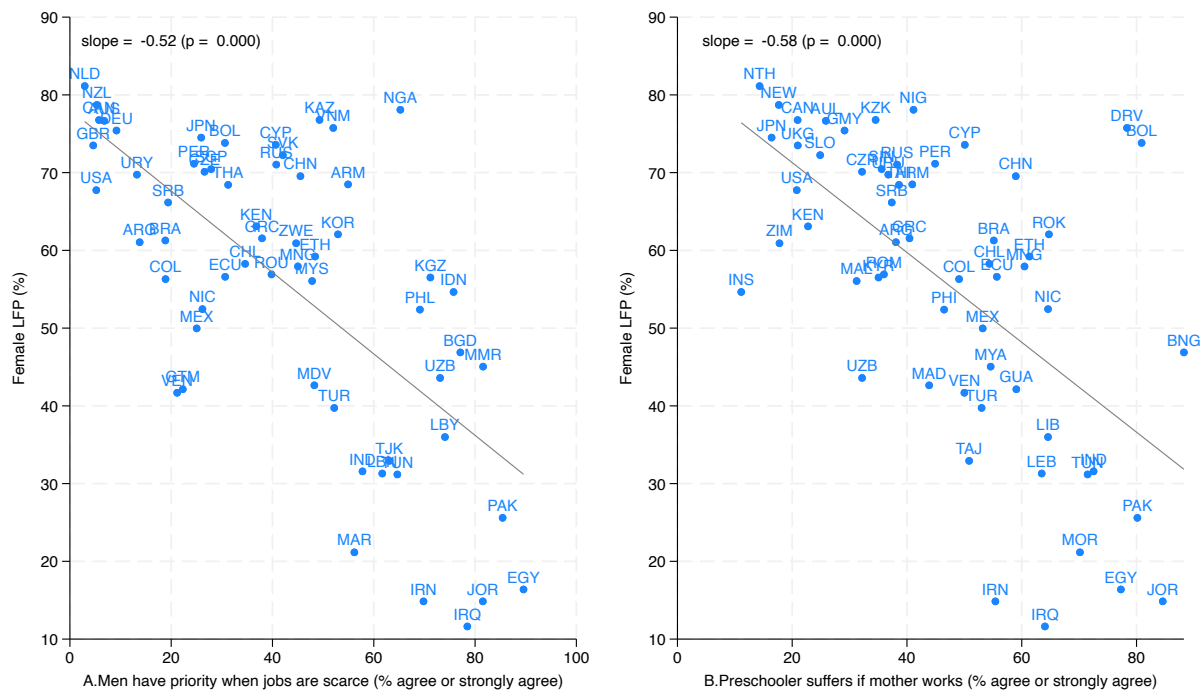


Figure 3: Gender Norms and Female Labor Force Participation

Notes: Gender norms are measured using the 2017-2022 wave of the World Values Survey. Female labor force participation is measured as the share of women aged 15 and older in the labor force in 2022, using data from the World Bank World Development Indicators.

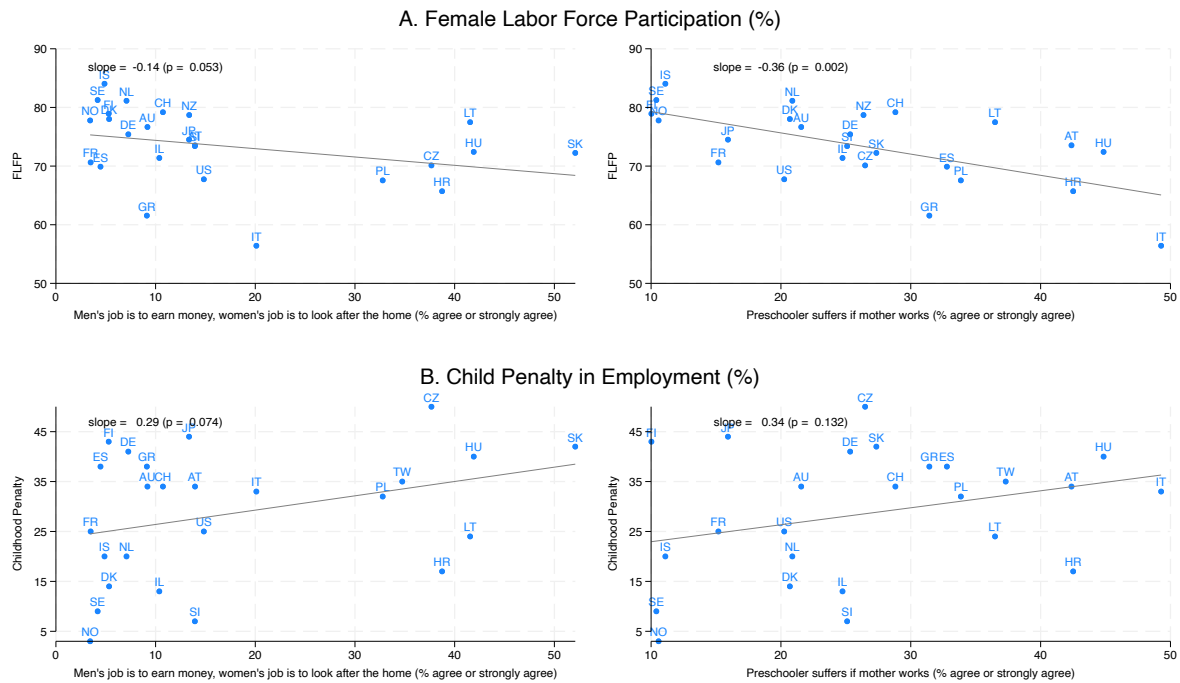


Figure 4: Gender Norms, Female Labor Force Participation, and Child Penalties in High Income Countries

Notes: Gender norms are measured using the 2022 International Social Survey Programme (ISSP). Female labor force participation is measured as the share of women aged 15 and older in the labor force in 2022, using data from the World Bank World Development Indicators. The child penalty in employment is taken from [Kleven et al. \(2024\)](#). The sample includes countries classified as high income by the World Bank.

Figure 5: An Illustration of Coordination Failures Arising from External Norms

		Mother j	
		Work	Stay Home
Mother i	Work	w, w	$w - 0.5\gamma, p - 0.5\gamma$
	Stay Home	$p - 0.5\gamma, w - 0.5\gamma$	p, p

Table 1: Gender Attitudes and Individual Characteristics, 2017-2022 Wave of the World Values Survey

	(1)	(2)	(3)	(4)
	Jobs scarce: Men should have more right to a job than women	Being a housewife is just as fulfilling as work	Men make better political leaders than women do	University is more important for a boy than for a girl
Some postsecondary or BA	-0.087*** (0.015)	-0.049*** (0.015)	-0.053*** (0.008)	-0.060*** (0.009)
Master/PhD	-0.111*** (0.015)	-0.067*** (0.018)	-0.055*** (0.017)	-0.057*** (0.015)
Female	-0.070*** (0.011)	-0.014 (0.013)	-0.115*** (0.012)	-0.046*** (0.007)
Age 30–55	0.045** (0.019)	0.034*** (0.009)	0.028** (0.013)	0.027*** (0.008)
Age 55+	0.093*** (0.023)	0.092*** (0.012)	0.068*** (0.018)	0.054*** (0.015)
Observations	27657	26655	26774	27287
R^2	0.116	0.078	0.136	0.057
Adjusted R^2	0.115	0.077	0.135	0.056
Partial $R^2(FE controls)$	0.092	0.073	0.117	0.045
Partial $R^2(Controls FE)$	0.024	0.009	0.023	0.012

Notes: Standard errors in parentheses. The dependent variable is an indicator for “agree” or “strongly agree”. Partial $R^2(FE|controls)$ measures the unique explanatory power of country fixed effects after accounting for individual characteristics. Partial $R^2(Controls|FE)$ measures the unique explanatory power of individual characteristics after accounting for country fixed effects. Both are computed as $(R^2_{full} - R^2_{reduced}) / (1 - R^2_{reduced})$, where R^2_{full} is from the model with both country fixed effects and individual controls, and $R^2_{reduced}$ comes from models excluding either country fixed effects or individual controls. The countries included in the analysis are: Eastern Asia (China, Japan, South Korea); Eastern Europe (Czechia, Romania, Russia, Serbia, Slovakia, Ukraine); Latin America (Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay, Venezuela); Germany and US.