From Patriarchy to Policy: Norms, Votes, and Gender Equal Laws*

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Abstract

Legal institutions play an important role in shaping gender equality in economic domains, from education to labor markets. But where do gender equal laws come from? Using cross-country data on social norms and legal equality, this paper investigates the socio-cultural roots of gender inequity in the legal system. To identify the effect of social norms on legal gender equality, we address reverse causality by instrumenting norms with persistent pre-modern patriarchal traits that predate current laws. We show that ancestral patriarchal culture is a strong predictor of contemporary gender norms, and that conservative social norms tend to increase gender inequality in the de jure legal framework, the de facto implementation of laws, and the labor market. We present evidence for a political selection mechanism linking norms to laws: countries with more conservative norms elect political leaders more hostile to gender equality, who then pass less progressive legislation. The results highlight the cultural roots and political drivers of legalized gender inequality.

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1 Introduction

Across the world, gender inequality in economic domains remains a persistent fact of life: women work less for pay, earn less when they do, and spend more time on childcare and household work (Goldin, 1994; Blau and Kahn, 2017; Van der Gaag et al., 2019). Such gaps are often attributed, in part, to the fact that in many nations, women do not enjoy the same legal protection of basic rights—freedom of mobility, marriage, asset ownership, employment—as men. Legal gender equality, as measured by the World Bank's Women, Business, and the Law (WBL) index, has advanced markedly worldwide since 1970. And indeed, countries with higher WBL scores also exhibit narrower gender gaps in labor force participation and wages (Hyland et al., 2020a). And yet even if these correlations represent causal effects of legal equality on economic equality,[1] there remains an active debate about the origins of discriminatory legal systems, and what policy levers are available to equalize the law. Are formal legal changes sufficient to close gender gaps, or do enduring social norms limit the reach of the law? Since laws and norms may co-evolve (Acemoglu and Jackson, 2017), progress on paper may stall in practice when prevailing expectations remain misaligned with legal equality. Indeed, if laws are determined in equilibrium by sticky, long-run social norms, then changing the law may not even represent a viable policy lever to begin with.

In this paper, we ask two related questions: do deep-seated cultural norms around gender roles influence equality under the law, and if so, through which channels do social norms translate into law? We argue that social norms mediate the link between laws and gender equality in two crucial ways. First, laws are enacted through a political process, which is itself deeply shaped by prevailing social norms.[2] A Downsian view suggests that in most democratic systems—and even in some authoritarian ones—the views of the majority tend to be represented in legislative bodies, and the median voter has the (indirect) power to pass laws (Downs, 1957; Meltzer and Richard, 1981). As such, the equilibrium existence of legalized gender discrimination is a direct function of social norms. Second, laws can be effective

[1] Several recent studies leverage natural experiments to estimate the causal effects of gender equal legal reform on women's economic outcomes. Examples include reforms to inheritance laws (Naaraayanan, 2019; Heath and Tan, 2020), restrictions on women's work outside the home (Hallward-Driemeier and Gajigo, 2015), and divorce law (Stevenson, 2008). These papers identify local average treatment effects in particular contexts and sectors.

[2] The relatively quick change in attitudes towards gay people and the ensuing shift in legislation towards same-sex marriage (Fernández et al., 2024) is a clear example of this link.

only if correctly implemented. There are numerous examples of well-intentioned gender-equality-enhancing legislation that encountered strong resistance and even social backlash in implementation because of incompatibility with prevailing social norms (Gulesci et al., 2024). Conservative social norms may undermine the implementation of legal reforms.

This paper studies the fundamental role of social norms in shaping legal and economic gender gaps, combining novel cross-country data on gender equality legislation and its implementation, gender norms, political outcomes, and long-run cultural traits. Specifically, we explore: (i) whether social norms have an impact on the existence and implementation of gender-equal laws, and (ii) the political mechanism through which norms translate into the enactment of laws. Estimates of the impact of norms on laws in (i) are likely to be affected by reverse causality, since laws can either formalize widely accepted social norms or signal appropriate behaviors, thereby influencing social norms (Lane et al., 2023). To overcome this challenge, we construct an instrument for social norms by leveraging the persistence of pre-modern patriarchal cultural traits, which are not influenced by current laws, and use it to identify the effect of norms on the enactment of gender-equal laws. To unpack (ii), we study the political processes through which laws are proposed and enacted. To do so, we combine data on electoral outcomes, political party orientations, and gender-equal legislation and estimate the relationship between social norms, political representation, and legal equality.

We identify several core empirical results. First, cross-country regressions reveal a robust positive correlation between social norms and gender equality: countries with more liberal norms tend to have more gender-equal laws, better implementation, and greater female labor-force participation. One empirical challenge facing comparative work on social norms is that most cross-country sources measure only attitudes—that is, individuals' own views—but not the social expectations that determine what people think others expect of them. This mismatch can attenuate estimated relationships when attitudes are used as stand-ins for norms (Bicchieri, 2016; Mackie et al., 2015; Bursztyn et al., 2020; Bussolo et al., 2024). Our data separately elicits attitudes and social expectations about gender roles. We find that *social expectations*—rather than personal beliefs—are most predictive of both legal and economic gender equality. Expectations are strongly associated with women's legal rights and their implementation, while personal beliefs are small or statistically weak once expectations are included in the regression. These patterns are robust to alternative measurement choices and extensive

controls, and they align with the idea that perceived approval and sanction risk—rather than private attitudes per se—sustain norm-conforming behavior.

However, these OLS results are difficult to interpret, given the issues of reverse causality and omitted variables plaguing cross-sectional, cross-country relationships. To address this empirical challenge, we construct an instrument for social norms that leverages the long-run persistence in patriarchal culture. Specifically, we use data from Giuliano and Nunn (2018) on the ancestral cultural characteristics of modern populations, which measures the share of the modern population that is descended from pre-modern ancestors practicing a specific cultural trait (e.g., sedentary agriculture). From this data, we construct an index of ancestral patriarchal culture (APC), averaging across the prevalence of several patriarchal traits such as polygamy and patrilocality to develop a country-level measure of the extent to which the current population is derived from ancestors practicing patriarchal culture. This APC index is our instrument and should be highly correlated with social norms given their cultural persistence (Alesina et al., 2013).[3] However, this index is not affected by current laws, as ancestral patriarchal culture was determined long before contemporary economic and legal outcomes were realized. Therefore, variation in norms driven only by ancestral patriarchal culture cannot be affected by reverse causality.[4]

The instrument has a strong first stage. A 10 point increase in the patriarchy index is associated with an increase of 1.8 and 5.4 percentage points in the social expectations and personal beliefs, respectively, of the female homemaker norm. These estimates are insensitive to various country-level controls and yield a first-stage F statistic of nearly 50. This first stage estimate is accompanied by a strong reduced-form relationship with our economic and legal outcomes of interest. A 10 point increase in the ancestral patriarchy index is associated with a nearly 5% reduction in legal equality relative to the sample mean, as well as a reduction in female labor force participation of almost equal magnitude. Notable negative outliers

[3] OurAPC index is similar in spirit to the ethnicity-level male dominance index from Guarnieri and Tur-Prats (2023), though more directly focused on gendered marriage and inheritance practices, excluding broader cultural-economic traits for which gender bias is less obvious.

[4] Of course omitted variables remain a concern, as the exclusion restriction of ancestral patriarchal culture may not strictly hold. For example, patriarchal cultures may have fought more wars historically, affecting contemporary patterns of economic activity and gender roles through a mechanism outside social norms. However, in our robustness checks, we show that APC is only weakly related to a wide battery of historical covariates (geography, colonial/legal origin, early state formation, pre-modern economy), and 2SLS estimates are stable when saturating models with these covariates. These checks do not prove the exclusion restriction, but they considerably narrow the set of plausible violations.

include South Asian and Middle Eastern countries, with particularly low female labor force participation and legal rights, even given their high degrees of ancestral patriarchal culture.

In our second set of results, we thus combine the reduced-form and first-stage estimates and obtain our 2SLS estimate of interest. A 1 point increase in the instrumented social expectations of the female homemaker norm results in a 2 point decline in legal rights and a 1.4 p.p. fall in female labor force participation. These estimates are 42% and 22% higher than the OLS correlations, respectively, the former being significantly different from the OLS at the 5% level. Larger 2SLS estimates could arise for two reasons. First, it is likely that social norms are measured with error, since they are derived from survey responses. If this measurement error is classical, then the 2SLS solves the attenuation bias. Second, it is possible that the reverse causality effect is actually negative, so that purging it yields an increase in the coefficient magnitude. This is possible if, for example, social norms harden from a backlash effect in response to improved legal equality.

The final set of core results focuses on the mechanism that explains how social norms affect laws. We hypothesize that social norms represent underlying preferences over gender equality. Following standard political economy logic, these preferences are expressed through representative political institutions, since more liberal societies tend to elect more liberal politicians with respect to gender equality on average. These liberal political parties, in turn, tend to pass legislation that supports gender equality, improving the WBL score. We test this logic in two regressions: (i) regressing the ideological composition of national legislative bodies on social norms and (ii) regressing legal equality on the ideological composition of legislative bodies. We measure the ideological composition of the legislature by linking issue-surveys of political parties with electoral outcomes and calculating the share of legislative seats held by parties that adopt a policy stance in favor of women's rights. The results show that societies with more liberal gender views elect parties more friendly to women's rights, and that these more liberal parties pass legislation that increases women's legal equality.

Several secondary results bolster our confidence in this mechanism. First, social expectations are more strongly related to political representation than personal beliefs: expectations predict both the seat share of pro-women parties and their presence in government, while beliefs are typically less significant, consistent with the earlier result that expectations, not private attitudes, constrain behavior even under secret ballot. This link between norms and

representation is strongest in electoral democracies, providing further support to the notion that the institutions of representative government transform gender norms into legal outcomes through the political process. Second, a placebo test shows that only ideological seat share matters for legal change: while pro- and anti-women representation are positively and negatively associated with the WBL index, respectively, the representation of parties with neutral gender ideology is *unrelated* to legal change. Third, a semi-parametric binned specification reveals a clear threshold: legal equality is flat as the pro-women seat share rises from 0–50%, and then jumps once pro-women parties cross roughly 50% of seats. This nonlinearity is exactly what majority-rule lawmaking predicts: policy change becomes feasible only when supportive parties can command a legislative majority, so the shape of the empirical relationship aligns with the institutional mechanism we posit.

To preempt competing accounts, we consider alternative explanations for the patterns we document. A *law-first* view holds that reforms or party platforms, rather than social norms, drive both norms and outcomes. Our identification approach directly addresses this by using ancestral culture as an instrument for norms, eliminating reverse causality. However, a remaining *instrument validity* concern is that ancestral patriarchy proxies for other deep historical forces. We show that our ancestral patriarchy index that is largely orthogonal to wide array of historical correlates measuring geographic and climatic conditions, historical political and economic characteristics, legal and colonial origins, and ethnoreligious demographics. A variety of *measurement* concerns relate to survey-based norms measures and our coding of political ideology. Our results remain robust to replication under a variety of alternative measurement choices. A *legislative composition* view points to women's descriptive representation[5] rather than party gender ideology as a driver of legal equality reform. We include controls for both women's representation and left-wing ideology, but the relationship between legal reform and the gender ideology composition of legislative bodies remains strong. Finally, a *state capacity* view attributes implementation gaps in gender equality legislation to overall governance quality, rather than social norms. However, conditioning on measures of government effectiveness does not diminish the relationship between norms and legal implementation.

In sum, societies that inherit stronger ancestral patriarchal cultural traits have more re-

[5]Descriptive representation refers to the numerical presence of women in elected office; substantive representation refers to policy actions advancing women's rights. We measure the former by the women's seat share and the latter by party gender-ideology coding.

strictive present-day social norms. In turn, these societies experience worse de facto *and* de jure legal frameworks. In these social contexts it is more difficult to propose and enact laws that improve gender equality in the first place. This is because progressive social norms are correlated with electing more pro-women leaders or parties. These pro-women parties then adopt more gender-equal legislation, particularly after passing the threshold of commanding a majority in government. This evidence indicates a strong link between social norms and gender equality that operates both through the implementation of existing laws and the legislative process itself.

This paper bridges and contributes to four strands of the literature which examine: (i) the separate roles of laws and social norms in shaping gender equality and women's economic participation; (ii) the bi-directional relationship between norms and laws; (iii) the political mechanisms through which social norms affect the enactment of formal rules and laws; and (iv) the long-run persistence of culture and gender norms and their imprint on contemporary outcomes. The discussion here below proceeds in this order.

Descriptive evidence links gender discriminatory laws to lower female labor force participation, and shows that legal inequalities restrict women's access to markets and upward mobility (Hyland et al., 2020a; Gonzales et al., 2015). Causal studies of legal reforms—for example, changes in inheritance and family law in India and Ethiopia, and access to birth control in the United States—show increases in women's labor market activity (Sapkal, 2017; Hallward-Driemeier and Gajigo, 2015; Goldin and Katz, 2002; Heath and Tan, 2020; Stevenson, 2008). At the same time, conservative social norms about "appropriate" gender roles correlate with lower female participation (Hyland et al., 2020b; Bicchieri, 2006; Bussolo et al., 2024; Fortin, 2005; Jayachandran, 2021). Causal designs using "epidemiological" variation from immigrants and field experiments indicate that inherited cultural beliefs and changes in perceived social approval materially affect women's job search and employment (Fernandez and Fogli, 2009; Alesina et al., 2013; Bursztyn et al., 2020; Dhar et al., 2022). Overall, the evidence shows that both laws and norms matter for women's economic participation, with deeply entrenched norms often continuing to shape decisions long after formal legal barriers fall. Our contribution is to place laws and norms in a unified cross-country framework that distinguishes social expectations from personal beliefs, showing that expectations are the more powerful, independent predictor of women's participation. This pattern, together with

our broader results, implies that legal reform, while necessary, is unlikely to be sufficient for transformative gains absent shifts in prevailing social norms.

Theoretical work models norms and laws as jointly determined: statutes can displace older norms, and supportive expectations accelerate both adoption and enforcement (Doepke et al., 2012; Acemoglu and Jackson, 2017; Benabou and Tirole, 2025). Empirically, descriptive studies and case evidence link more egalitarian attitudes with "pro-women" laws and show top-down legal change preceding shifts in social norms (Beaman et al., 2012; Maida and Weber, 2022). Randomized exposure to female leaders in India reduced bias and raised parental aspirations—evidence that laws can catalyze norm change—while entrenched patrilineal norms have led families to circumvent inheritance reforms, constraining de jure effects (Beaman et al., 2012; Bahrami-Rad, 2021). Norms often adjust more slowly than laws, but where implementation is paired with outreach and institutional support, legal change can nudge social expectations (Lane et al., 2023; Chai et al., 2022). Taken together, neither theory nor evidence support a general ordering in which norms reliably precede laws—or the reverse—across contexts. We do not attempt to resolve the 'origin' question; instead, we isolate the norms-to-laws channel by exploiting plausibly exogenous variation in social expectations from ancestral patriarchal traits, thus explicitly netting out reverse causality from laws to norms. In so doing, we provide empirical support for a clear mechanism underlying this direction of causality—the political process.

A smaller literature examines the electoral and legislative channels through which social norms shape policy. Descriptively, societies with more egalitarian gender attitudes tend to elect more women, adopt pro-women legislation, and register higher female labor force participation (Htun et al., 2019). Evidence from India shows women legislators delivering better local outcomes and reducing gender gaps, while data from Israel shows that voting behavior translates into narrower gender wage differentials (Baskaran et al., 2024; Priyanka, 2020; Adnan and Miaari, 2018). However, this literature has not yet convincingly traced the path from norms to representation to policy. Furthermore, it typically relies on proxies for electoral preferences—female seat share or broad measures of "liberalness"—leaving open whether gender-specific party ideology mediates the link, how large this mediation is, and whether institutional thresholds constrain lawmaking. Our contribution is to provide rigorous evidence for this mechanism at the global level by separately establishing (i) how social

expectations shape voting and legislative composition and (ii) how this composition translates into policy; in doing so, we also document a clear majority-rule pattern.

Finally, the persistence literature documents how gender norms endure across generations and continue to shape contemporary outcomes (Lowes, 2022a). Canonical examples include the plough hypothesis linking historical reliance on plough agriculture to persistently lower female labor force participation (Alesina et al., 2013), and the legacy of male-biased sex ratios in eighteenth-century Australia on modern attitudes and women's employment (Grosjean and Khattar, 2018). Mechanisms run through durable kinship institutions—patrilineal descent, polygyny, and bride-price practices—that affect women's bargaining power and autonomy for centuries (Alesina et al., 2013; Lowes, 2022b). The implication is not a fixed "origin story," but a robust pattern of intergenerational transmission that can lock in gendered expectations and slow the real-world impact of legal reform. Our paper leverages the insights of this literature to use persistence for identification rather than as an endpoint. We construct a novel country-level ancestral patriarchy (APC) index from pre-modern kinship and marriage practices (Giuliano and Nunn, 2018) and used it as a plausibly exogenous source of variation in social norms. Beyond this identification purpose, APC is a contribution in its own right: a transparent, portable measure of historical patriarchy, largely orthogonal to other historical correlates, that can be used to study persistence and gendered outcomes.

2 Data

2.1 Social norms

Data on social norms come from the Facebook Survey on Gender Equality at Home, conducted in partnership with CARE, the World Bank, and UNICEF. This online survey was rolled out in 2020 and 2021 through Facebook's social media platform, and invited Facebook users to participate. One advantage of this survey is its extensive country coverage. The 2020 survey round received more than 461,000 responses from 126 locations around the world. Another key feature of the survey, which differentiates it from most global opinion surveys that collect data on gender attitudes, is that it contains information on both *personal beliefs* and *social expectations*, rather than just the former. The personal beliefs and social expectations of the respondents were elicited in two dimensions of gender roles: the "male breadwinner"

and the "female homemaker" as follows:

1. Female Homemaker:

    - Personal belief: How much do you agree or disagree with the following statement? "Woman's most important role is to take care of her home and children."
    - Social expectation: Out of 10 of your neighbors, how many do you think believe that a woman's most important role is to take care of her home and children?

2. Male Breadwinner:

    - Personal belief: How much do you agree or disagree with the following statement? "Household expenses are the responsibility of the man, even if his wife can help him."
    - Social expectation: Out of 10 of your neighbors, how many do you think believe that household expenses are the responsibility of the man, even if his wife can help him?

Surveyed individuals answered the questions about personal beliefs on a five-point Likert scale. From the Facebook data, we obtain four country-level average responses. For personal beliefs, we measure the share of respondents who agree or strongly agree with the two normative statements. For social expectations, we measure the average share of neighbors that respondents believe agree with the normative statements.

One drawback of the survey is its lack of a representative national sample. However, the national-level estimates are re-weighted to represent the population with internet access, and not only the Facebook user population.[6] To allay concerns about representativeness, we also collected data on personal beliefs around gender roles from the World Values Survey (WVS),

[6]Because the Facebook Survey covers only the online population, which is disproportionately young, urban, and highly educated, our country-norm estimates are likely to be more egalitarian than the true population averages. See, for example, Rosenzweig et al. (2025); Mercer et al. (2018); Collins et al. (2024); Hossain and Islam (2024). If this selection simply produces a constant level shift for all countries to more liberal (measured) attitudes, then it has no effect on our results, as this is captured in the regression constant. If instead the bias is more severe in the most conservative countries – a reasonable assumption if internet penetration is lower in these countries – then the selection generates a left-censoring problem, which would attenuate OLS estimates. This is because some conservative countries – which are likely to have high patriarchy and low gender equality – are mismeasured as being more liberal. Thus, our reported effects are probably lower bounds on the true causal relationships.

a global public opinion dataset conducted in seven waves from 1981-2022. We use WVS sampling weights so that these survey responses are nationally representative. From the WVS we take national averages of the share of individuals agreeing with the statement: "when jobs are scarce, men have more right to work." We also construct a WVS gender index, which averages the agreement rates across several questions relating to gender attitudes.[7] We obtained 290 country-year observations for which the right-to-work question was asked. Since the WVS collects data only on personal beliefs, rather than distinguishing social expectations, we use WVS data primarily as a robustness test on our main results.

2.2 Legal framework and implementation

Data on the legal framework come from the Women, Business, and the Law (WBL) initiative at the World Bank. The WBL data contains two products. First is a composite index, ranging from 0 to 100, measuring *de jure* gender equality in the legal framework for 190 countries from 1971–2024. This index is built from eight sub-indices: mobility, workplace, pay, marriage, parenthood, entrepreneurship, assets, and pension law. For example, workplace laws may cover gender discrimination or harassment law, marriage law may include gender inequality in divorce and remarriage rights, and assets include inheritance laws and land tenure. For most specifications, we take the aggregate WBL legal gender equality index as our outcome of interest

In addition, WBL has a newly-constructed index, covering only 2024, which measures the *de facto* supportive framework for the implementation of gender-equal laws. As an example, if a woman has a right to a passport, but in practice a male escort must accompany her to the office to obtain this document, then the implementing framework for that legal right is weak. Similarly, if anti-harassment laws are on the books, but police action against these crimes is limited, implementation lags legislation. From this we calculate the "implementation gap," which is the measured as the distance of the country from the frontier of perfect implementation, bounded between 0 and 1.

[7] These are the share of the population agreeing with the statements: *i*) when jobs are scarce, men have more right to work, *ii*) being a housewife is fulfilling, *iii*) university is more important for a boy than a girl, and *iv*) men make better political leaders than women.

2.3 Ancestral culture

Our instrumental variables strategy requires data on ancestral cultural traits. We obtained these data from Giuliano and Nunn (2018), who compile a database of ancestral characteristics of modern populations. This dataset contains the share of contemporary country-level populations that are descended from ethnic groups that engage in a wide range of traditional practices – from casteism, to endogamy, to intensive agriculture. To estimate these population shares, the authors combine data on the spatial distribution of ethnolinguistic groups with ethnographic data on ethnic group-level cultural practices from (Murdock, 1967).[8]

This data allows us to construct variables which measure, for each country, the share of the population descended from ethnic groups that engaged in patriarchal cultural practices in the pre-modern era – for example, polygamy or patrilocality. We construct an index of ancestral patriarchal culture (APC) by averaging across the following variables at the country level: i) the share of the population practicing polygamy, ii) the share of the population practicing patrilocality, iii) the share of the population practicing early marriage, and iv) the share of the population practicing patrilineality. Since these variables are all shares, we obtain an index that varies from 0 to 1 and measures the extent to which contemporary populations derive from ancestral ethnic groups with patriarchal cultural institutions.

We also take from this dataset several control variables capturing climatic, geographic, and historical controls, including the average year in which the ancestral patriarchal culture characteristics are observed, the share of the population historically practicing intensive agriculture, the share of the population living in tropical climates, the average latitude, average distance to the coast, and average ruggedness.

2.4 Electoral outcomes and party ideology

We obtained data on political ideology from the Global Party Survey (GPS), released in 2020, which contains party-level information on 1,043 political parties in 163 countries across the world (Norris, 2020). The GPS measures political ideology across a range of issue and rhetorical positions, including nationalism versus multilateralism, minority rights, economic and social conservatism, populism, and so forth. The survey is conducted on 1,861 party and

[8]Further details on the constructions of ancestral characteristics of modern populations, as well as access instructions for the dataset, are available in Giuliano and Nunn (2018).

election experts, with an average of 12.3 experts responding per party. Experts rank each party on a 10 point scale for each issue, and their responses are then averaged across experts within party-issue.

Of particular interest for this study is the GPS question on party stances toward women's rights, which is available for 954 parties. Experts were asked to rank parties' support for women's rights on a scale of 0-10, with 10 indicating strong opposition to women's rights. We divide parties into three groups. Pro-women parties are defined as those with average stances of [0-2], neutral parties with stances (2-6), and anti-women parties with stances [6-10]. We chose these cutoffs – instead of equal intervals – based on the distribution of party stances. Appendix Figure A1 plots a histogram of all the parties in our GPS analysis sample with vertical lines indicating cutoff points. Since the parties in the sample tend to be more in favor of women's rights than not, we pick a relatively strict cutoff to define pro-women parties, and a relatively more generous one to define anti-women.

We then match the GPS data on party ideology to data on political institutions and electoral outcomes from the Database of Political Institutions (DPI), from Scartascini et al. (2021). DPI, released in 2020, is a panel of 180 countries from 1975-2020, measuring a wide array of political characteristics, from institutional features such as electoral rules, checks and balances, and term limits, to characteristics of political leadership, including the names and seat shares of current governing and opposition parties.

We take from DPI the number of parliamentary seats of all parties listed in the dataset, as well as the total number of seats in the national chamber(s).[9] We then match these parties with gender ideologies in GPS, in order to calculate the share of parliamentary seats held by pro, anti, and neutral parties in each country-year, as well as an indicator variable for whether such parties are part of a governing coalition. Since names, abbreviations, and translations of parties differ between the two datasets, we use manual and fuzzy merging techniques to maximize the match rate. In total, we are able to match 70% of the parties from GPS for which we have gender ideology to any party in DPI.

For 2020, on average across 169 countries that are observed in both DPI and GPS, we are able to assign a gender ideology to 58% of all parliamentary seats.[10] Of course, since, GPS data

[9] DPI only provides the seats of the top three government and opposition parties.

[10] This merge rate is slightly higher, at 61%, when we consider the subsample for which the Facebook social norms data are available.

are observed for a cross-section of parties in 2020, the merge rate falls substantially as we go back in time (see Appendix Figure A2, Panel A). Worse still, nearly 15% of countries in 2020 have no parliamentary seats matched to a gender ideology at all (see Appendix Figure A2, Panel B). This presents a missing data problem, as we cannot assume the gender ideology of these missing seats. As such, for all analysis using the DPI and GPS merged data, we maintain a strict criterion that of less than a 25% unmatched seat share to minimize missing data and reduce bias imposed by measurement error. However, this shrinks our sample substantially – to only 76 countries in 2020, or 54 in the sample using Facebook data – reducing statistical power and representativeness. As such, we test robustness to other thresholds throughout the paper.

2.5 Additional cross-country data and sample

Additional cross-country data are taken from the World Bank World Development Indicators. These include the female labor force participation rate, measured as a share of the working-age (15-64) female population, and log GDP per capita. In total, our sample for the bulk of our analysis is a single cross-section of 120 country-level observations observed in 2020 (or 2024, for the implementation gap), limited primarily by the availability of the Facebook social norms data. Control variables cover a variety of potential confounds—climatic and geographic characteristics, ethnoreligious demographics, legal and colonial origins, and pre-modern political and economic characteristics. These variables come from public datasets published by Nunn and Puga (2012), Borcan et al. (2018), and Dincecco et al. (2019). Data on the share of women in national parliaments, as well as institutional ratings of democratic quality are taken from the Varieties of Democracy (V-Dem) dataset (Coppedge et al., 2025). Summary statistics of key variables can be found in Appendix Table A1.

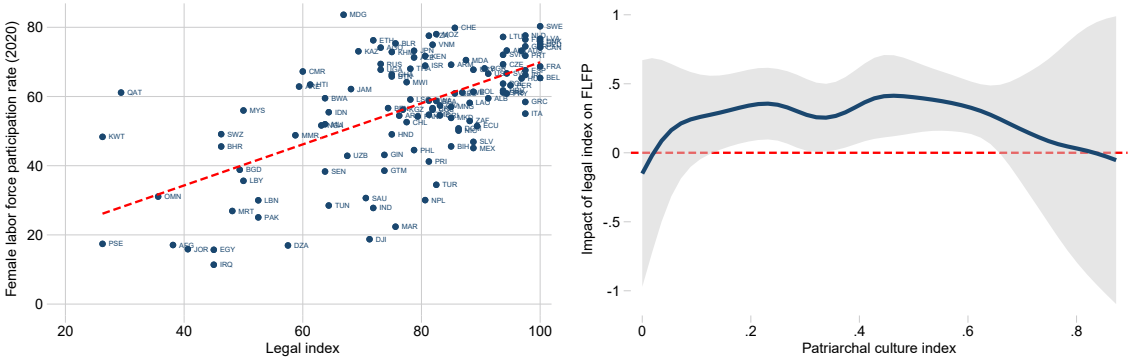
2.6 Motivating analysis

Figure 1 shows the unconditional positive correlation between gender equal laws and female labor force participation in 2020. Places with greater gender equality in the legal framework tend to have higher participation of women in the labor force. Estimates in Table A2 suggest that a one standard deviation increase in the gender equality of the legal framework is

associated with a 10.5 p.p. increase in female labor force participation, roughly an 18.6% gain relative to the mean (see Table A1 for means and standard deviations). Of course, this unconditional comparison likely suffers from omitted variable bias. In particular, social norms are likely to be strongly correlated with laws and influence female labor force participation independently. Columns (2)-(8) introduce various combinations of GDP per capita and its square, to model the standard U-curve (Goldin, 1994), as well as social norms as measured by both personal beliefs and social expectations for the homemaker (Panel A) and breadwinner (Panel B) norms. Despite these controls, the magnitude of the relationship between laws and women's labor market outcomes is remarkably robust. In the "horse race" between social norms and laws, both emerge as important, independent predictors of female labor force participation.

Figure 1: OLS correlations: laws and female labor force participation

(a) Laws and FLFP (b) Laws and FLFP by APC



Note: Figure (a) shows unconditional correlation between WBL legal index and female labor force participation (FLFP), both measured in 2020. Figure (b) shows the predicted impact of the WBL legal index on FLFP along the distribution of the patriarchy index, controlling for log GDP and its square, as well as regional fixed effects. Patriarchy index (varying from 0 to 1) is measured as the average adherence across four ancestral patriarchal culture (APC) practices. FLFP is measured as the share of working-age women (15-64) active in the labor force within the seven days before the labor force survey, from ILO. Sample is 120 countries for which social norms data are available.

Figure 1 (a) shows a scatterplot of the correlation between laws and female labor force participation. Although there is clearly residual variation in female labor force participation for a given level of legal gender equality, the relationship is relatively tight. The univariate R^2 is 0.37, substantially higher than the R^2 for personal beliefs (0.18) or social expectations

(0.27). And while this cross-sectional cross-country analysis is unlikely to uncover a causal relationship, it is certainly consistent with an emerging literature of carefully identified studies linking gender bias in the legal system to economic outcomes (Naaraayanan, 2019; Heath and Tan, 2020; Stevenson, 2008).

However, the relationship between laws and female labor force participation is unlikely to be homogeneous. In particular, social norms are likely to be an important catalyst variable: where norms are consistent with gender equality, improvements in laws are likely to result in improvements in outcomes. However, where norms and laws clash, improvements in the legal framework may not lead to improvements in gender equality in economic domains. We test this norms-laws concordance hypothesis by re-estimating the regression, interacting the WBL legal index with an exogenous measure of patriarchal social norms, the ancestral patriarchal culture (see Section 3.2). The results are in Figure 1 (b), which plots the predicted relationship between laws and female labor force participation over the distribution of ancestral patriarchal culture, allowing for nonlinear interaction effects estimated with a kernel regression. Notably, the relationship is highly heterogeneous, creating an inverse-U. At the extremes of the norm spectrum—highly liberal and highly patriarchal societies—there is no relationship between laws and female labor force participation. In the intermediate cases, however, a significant correlation emerges. The right-hand part of this is consistent with the laws-norms dissonance argument of Acemoglu and Jackson (2017)— liberal laws in conservative countries do not produce the intended effects. Instead, the left part of the curve is consistent with the notion that in liberal societies, social norms already allow for women's economic empowerment, and so legal rights are not a binding constraint.

These results reveal that the relationship between laws, norms, and gender equality in economic outcomes is complex and multi-directional. In particular, we understand reasonably well how gender-equal laws and supportive norms each affect women's labor-market outcomes. However, what remains less clear is how norms and laws interact, and whether social norms serve as a foundation for gender-equal legal frameworks, thereby amplifying their direct effect on female labor force participation via an indirect effect through the legal system. How can we identify this mechanism, given the endogeneity and reverse causality in all of these variables? The remainder of this paper lays out an empirical approach to identify the pathway from norms to laws, and ultimately to gender inequality in economic outcomes.

3 Empirical strategy

3.1 OLS

This paper studies the role of social norms in shaping gender-equal laws (both de jure and de facto) and female labor force participation. The naive approach is simply to regress the key outcomes – legal gender equality and female labor force participation – on the main explanatory variable, social norms, using OLS. In particular, the regression equation for country i is

$$y_i = \alpha + \beta norms_i + X_i'\gamma + \epsilon_i \tag{1}$$

Where y is the female labor force participation rate as a share of the working age female population, the WBL legal index, or the implementation gap. The variable *norms* is measured as either the share of survey respondents that agree with a particular statement about gender roles (personal beliefs), or the average expectation that respondents hold about their peers beliefs with respect to a particular gender norm (social expectations). Throughout, we use both the female homemaker norm and the male breadwinner norm as our measures of social norms about gender roles. The vector X_i contains country-level characteristics, including log GDP per capita and its square, region fixed effects, and several other spatial characteristics including average latitude, distance to the coast, ruggedness (all subnational population-weighted), the share of the population living in tropical climates and traditionally practicing intensive agriculture. Robust standard errors correct for heteroskedasticity.

Note that we only have a single cross section for 2020, since social norms are only observed in one survey. Even if social norms were observed over time, the inclusion of country fixed effects would be questionable, since norms tend to be intergenerationally correlated (Fernandez and Fogli, 2009) and as such typically do not exhibit sufficient within-country temporal variation. Therefore, equation (1) presents a difficult endogeneity problem. First, there are obvious omitted variables. While some of these are subsumed in X, the selection-on-observables assumption is unlikely to hold. Second, the relationship between laws, norms, and economic outcomes is likely to be contaminated by reverse causality. While norms undoubtedly structure the environment in which legal and economic institutions arise, it is equally plausible that rising female economic participation and empowerment may itself undermine traditional

gender norms (Field et al., 2021). Similarly exogenous changes to the legal environment that empower women may either shift gender perceptions (Beaman et al., 2009), or cause backlash when they clash with local norms, worsening traditional gender beliefs.

3.2 Instrumental variables approach

We address this identification problem in two complementary ways. First, we use an instrumental variable, described in this section, to alleviate concerns about reverse causality. Second, in Section 6, we present additional evidence for a political economy driving the relationship between traditional gender norms and gender unequal laws.

Our instrumental variables approach is as follows. We leverage the persistence of cultural traits in a two-stage least-squares (2SLS) framework to control for reverse causality in the relationship between social norms and contemporary gender equality outcomes in the legal system and the labor market. In particular, leveraging data from Giuliano and Nunn (2018), we use the degree of patriarchal culture of ancestral populations as an instrument for contemporary gender norms. We construct an index of ancestral patriarchal culture (APC) by averaging across the following variables: i) the share of the population practicing polygamy, ii) the share of the population practicing patrilocality, iii) the share of the population practicing early marriage, and iv) the share of the population practicing patrilineality. Since these variables are all shares, we obtain an index that varies from 0 to 1 and measures the extent to which contemporary populations derive from ancestral ethnic groups with patriarchal cultural institutions.

This instrument has two attractive properties. First, it is likely to provide a strong first stage and be highly correlated with present-day gender norms, given extensive evidence of the long-run persistence of certain cultural traits (Lowes, 2022a). Second, it allows us to control for reverse causality in estimating the relationship between present-day gender norms and gender equality outcomes. This is because ancestral patriarchal culture is predetermined long *before* present-day legal or labor market outcomes. By using variation in present-day gender norms generated *only* by variation in ancestral culture, we purge all variation in gender norms that is generated by present day economic or legal conditions. Since ancestral patriarchal culture predates contemporary economic and legal conditions, the instrument eliminates reverse causality from equation (1).

While our instrument cleanly addresses reverse causality from contemporary laws to norms, strict exclusion is untestable: ancestral patriarchal culture may also shape outcomes through long-run development trajectories, social conflict (Rexer, 2022), or institutional capacity. We address these possibilities with enriched historical and geographic controls, alternative APC constructions, and sensitivity analyses that admit small direct effects (see Section 7); the magnitudes and significance of the 2SLS estimates remain notably stable. As in any cross-country design, some channels are unobservable, but on balance, we view the estimates as credible evidence consistent with a political mechanism from norms to legal gender equality.

The first stage regression, for country i, is:

$$norms_i = \mu + \pi APC_i + X_i'\varphi + \nu_i \tag{2}$$

Where $norms_i$ are either the personal beliefs or social expectations of gender roles, measured by male breadwinner or female homemaker norms, and APC_i is the country-level ancestral patriarchal culture index. X_i is a vector of controls that contains, depending on specification, contemporary log GDP per capita, a region fixed effect, the average year in which APC is observed, the share of the population historically practicing intensive agriculture, the share of the population living in tropical climates, the average latitude, average distance to the coast, and average ruggedness. We consider primarily historical and geospatial controls in order to minimize the bias introduced by conditioning on "bad" controls that are causally downstream of ancestral patriarchal culture (Cinelli et al., 2024).

The reduced form equation for country i is

$$y_i = \tau + \kappa APC_i + X_i'\vartheta + \omega_i \tag{3}$$

Where, depending on specification, y_i is the WBL legal gender equality index, the implementation gap, or the female labor force participation rate. To complete the 2SLS estimation, the vector X_i contains the covariates as in (2). All standard errors are robust to heteroskedasticity.

4 OLS results: Laws, norms, and female labor force participation

We begin our analysis with the results of OLS estimation of equation (1). The models in Table 1 regress female labor force participation (Panel A), the WBL index (Panel B), and the WBL implementation gap (Panel C) on social norms, measured as the homemaker (columns 1-4) and breadwinner (columns 4-8). Note that we use two key components of social norms: personal beliefs (also called 1st order beliefs) and social expectations (or 2nd order beliefs, i.e. what one believes other people believe should be the expected behavior in a given situation). In addition, columns (2), (4), (6), and (8) augment the specification with the standard u-curve controls for GDP per capita and its square, capturing the dynamics of gender equality over the country income distribution.

Two key results emerge from Table 1. First, there is a strong correlation between social norms and all gender equality outcomes. A one p.p. increase in the social expectation of the female homemaker norm is associated with a 1.2 p.p. reduction in female labor force participation (2.1% of the sample mean), a 1.4 point reduction in the WBL legal gender equality index (1.8% of the sample mean), and a 1.7 p.p. increase in the implementation gap (3.1% of the sample mean).

These estimates are similar when controls for GDP per capita are included, and are similar for both the female homemaker and male breadwinner norms. Controlling for region fixed effects, as well as additional country-level characteristics plausibly associated with social norms in Appendix Table A3 – including latitude, distance to the coast, tropical climate, average ruggedness, and he share of the population traditionally practicing intensive agriculture – reduces the estimated coefficients only slightly.

The second key result from the OLS analysis is that the estimated coefficients are consistently larger for social expectations than for personal beliefs. This is consistent with the literature on social norms and gender equality, which shows that it is the expectation of social sanctions, rather than private beliefs, that constrain behavior (Bursztyn et al., 2020; Bussolo et al., 2024). Specifically, a one-percentage-point shift in social expectations generates an effect on female labor-force participation that is 3.2 times larger than an equivalent shift in personal beliefs; the corresponding multipliers are 2.3 for the legal-equality index and 2.4 for the implementation gap. These relative magnitudes are made clear in Figure 2, which plots the

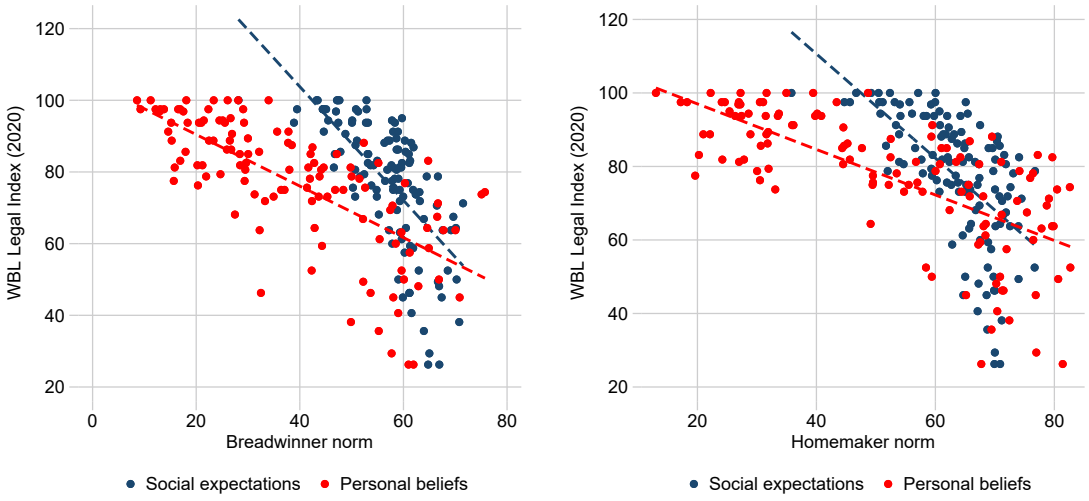
Table 1: Norms and outcomes: OLS correlations

Variable	Homemaker norm				Breadwinner norm			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Female labor force participation								
Social expectations	-1.176***	-1.153***			-1.330***	-1.349***		
	(0.152)	(0.206)			(0.163)	(0.221)		
Personal beliefs			-0.367***	-0.353***			-0.491***	-0.462***
			(0.066)	(0.078)			(0.075)	(0.087)
Per capita GDP (log) (2020)		-33.239**		-52.765***		-32.281**		-46.090***
		(14.947)		(15.117)		(13.743)		(14.621)
Per capita GDP (log squared) (2020)		1.858**		3.038***		1.785**		2.642***
		(0.836)		(0.823)		(0.775)		(0.795)
Observations	119	119	119	119	119	119	119	119
R^2	0.268	0.309	0.182	0.286	0.357	0.398	0.251	0.329
Panel B: Legal index								
Social expectations	-1.417***	-1.676***			-1.585***	-1.818***		
	(0.156)	(0.304)			(0.165)	(0.259)		
Personal beliefs			-0.619***	-0.694***			-0.719***	-0.774***
			(0.059)	(0.091)			(0.071)	(0.104)
Per capita GDP (log) (2020)		13.332		-17.688		13.100		-5.006
		(12.992)		(11.961)		(9.958)		(11.966)
Per capita GDP (log squared) (2020)		-0.864		0.906		-0.850		0.212
		(0.775)		(0.668)		(0.596)		(0.682)
Observations	120	119	120	119	120	119	120	119
R^2	0.365	0.379	0.489	0.507	0.476	0.496	0.506	0.514
Panel C: Implementation gap								
Social expectations	0.017***	0.011***			0.017***	0.011***		
	(0.002)	(0.003)			(0.002)	(0.003)		
Personal beliefs			0.007***	0.005***			0.008***	0.005***
			(0.001)	(0.001)			(0.001)	(0.001)
Per capita GDP (log) (2020)		-0.128		0.083		-0.109		-0.002
		(0.125)		(0.117)		(0.116)		(0.115)
Per capita GDP (log squared) (2020)		0.004		-0.008		0.003		-0.003
		(0.008)		(0.007)		(0.007)		(0.007)
Observations	119	118	119	118	119	118	119	118
R^2	0.416	0.491	0.468	0.543	0.394	0.502	0.444	0.541

Note: Robust standard errors in parentheses. All variables are measured in 2020. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. Legal index is the WBL legal score, ranging from 0 to 100. Implementation gap measures the percentage-point gap between the WBL implementation score and full implementation of existing gender-equal laws, ranging from 0 to 1. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is 120 countries for which social norms data are available. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

OLS correlations between social expectations, personal beliefs, and the WBL legal index in 2020 (similar plots for female labor force participation and the implementation gap are can be found in Appendix Figures A3 and A4). For both dimensions of norms, the slope of the relationship between social expectations and the legal index is much steeper than the slope for personal beliefs, in part because social expectations tend to be much more conservative than personal beliefs and therefore cluster more tightly to the right of the distribution.

Figure 2: OLS correlations: social norms and legal equality



Note: Figure shows the unconditional country-level correlations between social norms components – i.e. social expectations (blue) and personal beliefs (red) – and the WBL legal index, all measured in 2020. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is 120 countries for which social norms data are available.

5 2SLS results: Laws, norms, and female labor force participation

The results in Section 4 reveal strong relationships between norms and gender equality: countries with more conservative social norms have lower female employment, less gender equal legal systems, and weaker implementation of gender equality legislation. But interpreting these correlations as causal in a single cross-country cross section is clearly unjustified. Norms, employment, and the legal system are jointly determined in equilibrium. As such, these correlations reflect not only the causal effect of norms, but also reverse causality of outcomes in shaping norms, as well as omitted variables shaping both outcomes and social norms. We attempt to identify the pathway of norms to laws in a two-part strategy. First, in this section, we use an instrumental variable predetermined long before contemporary outcomes that allows us to, at the very least, rule out reverse causality. Second, in Section 6 we provide additional evidence in support of a political mechanism linking regressive social

norms to gender unequal laws.

Table 2: Patriarchal culture and contemporary social norms: first stage

Variable	Homemaker norm				Breadwinner norm			
Type	Expectations		Beliefs		Expectations		Beliefs	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Patriarchy index	0.188***	0.115***	0.531***	0.404***	0.176***	0.107***	0.416***	0.290***
	(0.028)	(0.026)	(0.056)	(0.067)	(0.026)	(0.027)	(0.050)	(0.060)
Per capita GDP (log) (2020)		10.663**		-20.133*		10.004*		-0.284
		(4.532)		(10.644)		(5.096)		(10.636)
Per capita GDP (log squared) (2020)		-0.781***		0.782		-0.729**		-0.302
		(0.272)		(0.621)		(0.299)		(0.602)
Observations	118	117	118	117	118	117	118	117
R^2	0.325	0.605	0.369	0.554	0.273	0.493	0.299	0.460

Note: Robust standard errors in parentheses. Patriarchy index is measured as the average across four ancestral culture patriarchal characteristics, varying from 0 to 1. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is 120 countries for which social norms data are available. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 2 presents the first stage of our instrumental variables approach, showing estimates from equation (2) of the correlation between pre-colonial patriarchal culture and contemporary gender norms measured in 2020. A 10-point increase in the country-level patriarchal culture index – which ranges from 0 to 100 – is associated with a 1.8 p.p. increase in the social expectations of the homemaker norm (column 1) and a 5.3 p.p. increase in reported personal beliefs in the homemaker norm (column 3), both significant at the 1% level. These estimates are not sensitive to controls for GDP per capita in columns (2) and (4) or the choice of gender norm (homemaker vs. breadwinner). The results are also robust to the inclusion of region fixed effects and additional country-level controls in Appendix Table A5, remaining significant at 1% though the magnitudes are somewhat reduced. The results suggest a robust first-stage relationship between ancestral pre-colonial cultural characteristics and present-day gender norms. Figure 3, top panel, shows the first stage relationship in graphical form. The tight correlation around the line of best fit (with an unconditional R^2 of 0.33) yields a Kleibergen and Paap (2006) first stage F-statistic of 49.1 for the homemaker norm and 45.6 for the breadwinner norm (see Table 4), well above the critical values for the (Stock and Yogo, 2005) weak instruments test.[11] Controlling for national per capita income and its square reduces the estimate of the first stage F by more than half, to 19.5, though it remains large enough to

[11] We note, however, that the first-stage F still falls below the minimum required to ensure a test with size 0.05, according to (Lee et al., 2022).

clear the critical value thresholds and avoid weak instrument inference.

Table 3: Ancestral patriarchal culture and legal and economic outcomes: reduced form

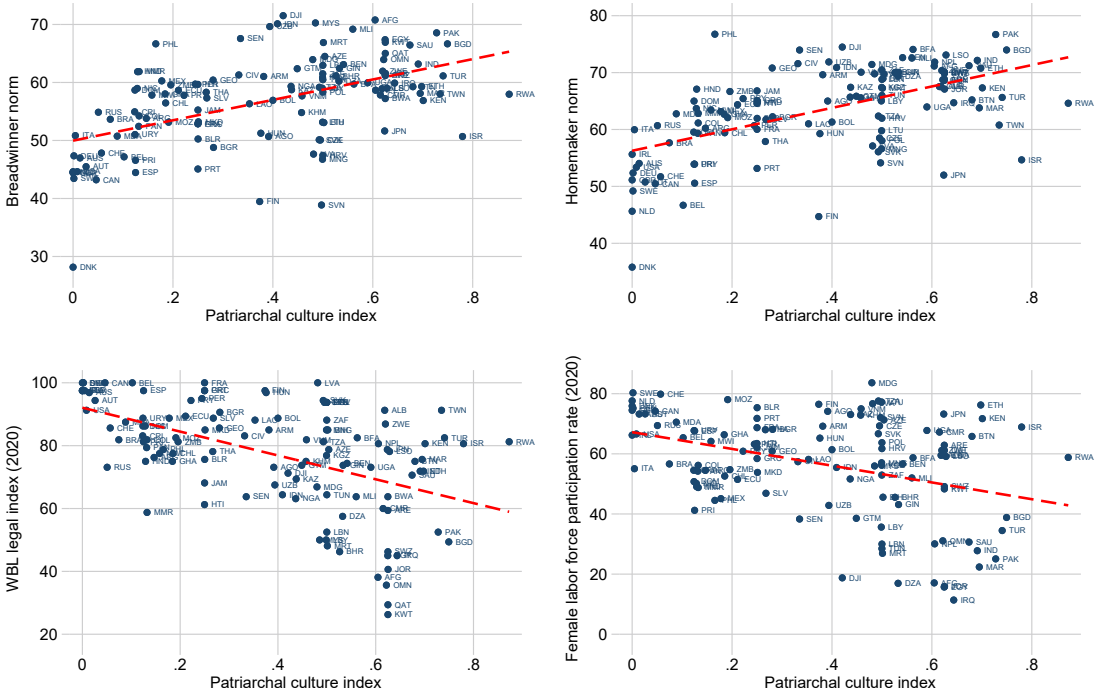
Outcome	FLFP		Legal index		Implementation gap	
	(1)	(2)	(3)	(4)	(5)	(6)
Patriarchy index	-0.279***	-0.204***	-0.379***	-0.344***	0.004***	0.003***
	(0.063)	(0.061)	(0.059)	(0.080)	(0.001)	(0.001)
Per capita GDP (log) (2020)		-43.790***		-1.649		-0.019
		(14.764)		(12.775)		(0.124)
Per capita GDP (log squared) (2020)		2.625***		0.213		-0.003
		(0.817)		(0.739)		(0.007)
Observations	117	117	118	117	118	117
R^2	0.140	0.242	0.258	0.299	0.232	0.482

Note: All outcome variables are measured in 2020. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. Legal index is the WBL legal score, ranging from 0 to 100. Implementation gap measures the percentage-point gap between the WBL implementation score and full implementation of existing gender-equal laws, ranging from 0 to 1. Patriarchy index is measured as the average across four ancestral culture patriarchal characteristics, varying from 0 to 1. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 3 contains reduced form results from the estimation of equation (3), relating pre-colonial patriarchal culture to present-day economic and legal gender equality outcomes. The estimates reveal a strong relationship between gender equality outcomes and patriarchal culture. A 10-unit increase in the patriarchy index on the 100-point scale is associated with a 2.8 p.p. reduction in the female labor force participation rate, or a 4.9% reduction on the sample mean, significant at the 1% level. The estimate is robust to controlling for the participation-income per capita u-curve in column (2).

This correlation suggests minimal convergence in gender equality over time. Countries that are initially conservative in their gendered cultural practices still have large gender gaps in economic outcomes today. We argue that this persistence operates through social norms, which in turn shape the legal environment. Columns (3) and (4) estimate the reduced form relationship between pre-colonial patriarchal culture and the WBL legal equality index. A 10-unit increase in the patriarchy index is associated with a 3.8 point reduction in country-level legal gender equality score, or a 4.9% reduction on the sample mean, significant at the 1% level. Again, the inclusion of controls for log income per capita does not affect the results. Figure 3, bottom panel, shows the reduced form relationship between legal equality (left) or female employment (right) and the instrumental variable in a scatterplot. The legal equality plot suggests a relatively tight, relationship, reflecting the unconditional R^2 if 0.26, though the

Figure 3: First-stage and reduced form correlations: culture, social norms, laws, and economic outcomes



Note: Figure shows first stage and reduced form relationships for the instrumental variables strategy. All outcome variables are measured in 2020. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. Legal index is the WBL legal score, ranging from 0 to 100. Patriarchal culture index is measured as the average across four ancestral culture patriarchal characteristics, varying from 0 to 1. Sample is 120 countries for which social norms data are available.

relationship appears heteroskedastic, with greater variance in legal scores at higher levels of patriarchal culture. Notable negative outliers are South Asian and Middle Eastern countries, with particularly low levels of legal equality even given their high degrees of ancestral patriarchal culture. In contrast, many Sub-Saharan African countries, with relatively high levels of legal equality and female labor force participation despite their high APC scores.

Lastly, in columns (5)-(6), we test the reduced form association between culture and the present-day implementation of gender-equal legislation. Societies with ancestral patriarchal cultures have weaker implementation of gender equal legislation: a 10-point increase in the patriarchy index is associated with a 7.3% increase in the "implementation gap" of the legal

framework. Appendix Table A6 contains robustness tests of the reduced form results to the inclusion of region fixed effects and additional controls. Though the estimates are somewhat weakened in magnitude and significance, they remain of the correct sign in nearly all specifications.

Table 4: Norms and legal and economic gender equality: 2SLS

Outcome	FLFP		Legal index		Implementation gap	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Homemaker norm						
Social expectations	-1.438***	-1.775***	-2.016***	-2.986***	0.023***	0.024***
	(0.297)	(0.502)	(0.303)	(0.567)	(0.004)	(0.006)
First-stage F-statistic	49.069	19.467	46.402	19.467	46.402	19.467
Observations	117	117	118	117	118	117
R^2	0.245	0.262	0.289	0.205	0.378	0.384
Panel B: Breadwinner norm						
Social expectations	-1.559***	-1.916***	-2.158***	-3.223***	0.024***	0.026***
	(0.302)	(0.516)	(0.294)	(0.567)	(0.004)	(0.006)
First-stage F-statistic	45.641	15.402	45.433	15.402	45.433	15.402
Observations	117	117	118	117	118	117
R^2	0.337	0.348	0.400	0.244	0.306	0.309
GDP Controls	No	Yes	No	Yes	No	Yes

Note: Robust standard errors in parentheses. All outcome variables are measured in 2020. Estimates are from a 2SLS model where social expectations is instrumented with the patriarchal culture index. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. Legal index is the WBL legal score, ranging from 0 to 100. Implementation gap measures the percentage-point gap between the WBL implementation score and full implementation of existing gender-equal laws, ranging from 0 to 1. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Patriarchal culture index is measured as the average across four ancestral culture patriarchal characteristics, varying from 0 to 1. Sample is 120 countries for which social norms data are available. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 4 contains two stage least squares estimates of the instrumental variables model in which ancestral patriarchal culture serves as an instrument for present-day gender norms. All estimates are shown with and without controls for the per capita income u-curve, across the three main economic and legal outcomes, and for both the homemaker norm (Panel A) and the breadwinner norm (Panel B). The models use social expectations as the main independent variable, rather than personal beliefs, following the theoretical and empirical literature

demonstrating the primacy of expectations in defining social norms (Bursztyn et al., 2020). However, the results are replicated in Appendix Table A8 using personal beliefs, yielding similar results, as personal beliefs and social expectations are highly correlated in practice.

Across all outcomes, the results are similar in magnitude to the OLS estimates in Section 4. In the 2SLS estimates, a 1 point increase in the share of the population believed to hold conservative beliefs about the homemaker norm is associated with a 1.4 p.p. reduction in female labor force participation (2.5% of the sample mean), an estimate roughly 22% larger than the unconditional correlation in Table 1 Panel A column (1), though we cannot rule out that these estimates are statistically identical to each other. The similarity in magnitudes suggests that the reverse causality channel is a not particularly large component of the unconditional correlation, and may even be *positive*.

With respect to the legal index in Table 4 column (3), in the 2SLS model we find that a 1 point increase in the social expectation of the female homemaker norm is associated with a 2 point reduction in legal gender equality (2.5% of the sample mean), significant at the 1% level. This estimate is 42% larger than the OLS estimate in Table 1 Panel B column (1), and significantly different at the 5% level. Similar, slightly larger effects are observed in Panel B for the male breadwinner norm. The 2SLS estimates are also robust to controlling for region fixed effects and country-level covariates (Appendix Table A7) as well as accounting for missing data in the components of the patriarchal index (Appendix Table A9).

6 Laws and norms: Political mechanism

6.1 Empirical approach

We now turn to the mechanism linking social norms to legal equality. We hypothesize that socially conservative countries will tend to select political leaders that reflect the underlying social norms of the country. These leaders, in turn, will pass legislation that enshrines gender inequality in the legal framework. Ultimately, this inequality translates into the economic sphere in the form of reduced participation in economic life. This effect is likely to be particularly strong for democratic countries, where elections provide a clear mechanism for translating gender preferences into political outcomes. But the effect may also obtain in non-democracies, which remain responsive to citizen preferences and election results despite

the lack of direct accountability mechanisms (Miller, 2015).

We test this hypothesis in two steps. First, we use data on national legislative electoral outcomes and party ideology to estimate the relationship between social norms and political outcomes, in order to demonstrate that a nation's gender norms are reflected in the persuasion of its political leadership. In this step, we run the following regression for country i in 2020.

$$p_i = \delta + \psi norms_i + \gamma log(GDP_i) + \theta_r + v_i \tag{4}$$

Where p_i gives the political representation of pro-women's rights parties in country i's national parliament in 2020, measured as either the share of seats held by these parties, or an indicator variable specifying whether a pro-women's rights party is part of the national governing coalition. θ_r represents a fixed effect for World Bank regions, included in some specifications to control for time-invariant regional heterogeneity. Our main variable of interest, $norms_i$, is a vector including both personal beliefs and social expectations of either the male breadwinner or female homemaker norm. In robustness tests, we also allow for electoral outcomes to be averaged over a longer time period, from 2015-2020, to smooth out variations in political cycles.

In the second step, we show that national legislative control by political parties hostile to women's rights is associated with significantly weaker WBL scores. In this step, we estimate the following two-way fixed effects (TWFE) panel regression for country i at time t

$$WBL_{it} = \kappa + \phi p_{it} + \eta_i + \eta_t + u_{it} \tag{5}$$

Where WBL_{it} is country i's WBL score at time t and p_{it} is the share of seats in country i's national parliament held by parties for, against, or neutral with respect to women's rights, depending on specification. Lastly, η_i and η_t and country and year fixed effects, which control for country-specific heterogeneity and aggregate time trends, respectively. Standard errors are clustered at the country level.

Both equations (4) and (5) suffer from a measurement challenge. The party-level match rate between the DPI and the GPS is far from 100% and varies substantially over time and countries. Parties for which gender ideology is missing cannot be assumed neutral. As such,

we calculate the share of parliamentary seats for which we can match a gender ideology in a given country-year. We then restrict the sample to country-years where 75% or more of the parliamentary seats are matched. This restriction cuts the sample significantly, to only 53 countries in 2022. However, we test robustness to this threshold.

The estimation in equation (5) uses country fixed effects. Given the small number of observations after imposing the 75% matched seat share sample restriction, it is reasonable to assess the extent of residual within-country variation in the pro-woman seat share. We regress the parliamentary seat share of pro, anti, and neutral parties on country and year fixed effects and obtain the R^2 of this regression, plotting these values in Appendix Figure A6. The results reveal that the two-way fixed effects absorb a substantial share of the variation in parliamentary seat shares, particularly in the more restrictive sample where the 25% missingness criteria is imposed. The R^2 in the sample with no restriction ranges between 0.8 and 0.85, monotonically increasing in the sample restrictiveness. However, even in the most restrictive sample, the R^2 of the fixed effects remains below 0.9 for the seat share of pro-women parties, suggesting that there remains enough residual variation to identify the parameter of interest ϕ in the TWFE model.

6.2 Results: norms and representation

Table 5 provides estimates for equation (4). Panel A uses the female homemaker norm while Panel B considers the male breadwinner. The estimates reveal that conservative social norms are significantly negatively associated with representation of pro-women parties. In the most rigorous specification in column (3), which includes both controls for income per capita and regional fixed effects, a one-point increase in the female homemaker norm is associated with a 2.2 percentage point reduction in the parliamentary seat share of pro-women parties, equivalent to 10.8% reduction on the sample mean. This estimate is significant at the 1% level, and is stronger for the homemaker norm than the breadwinner norm (Panel B), where it is only marginally significant at the 10% level. Considering participation in governing coalitions in column (6), a one p.p. increase in the prevalence of the homemaker norm is associated with a 4.2 p.p. reduction in the probability of participation for pro-women parties, or 16.2% on the sample mean, again significant at 1%.

Importantly, the estimate on personal beliefs is quantitatively small and never statistically

Table 5: Gender norms and political outcomes

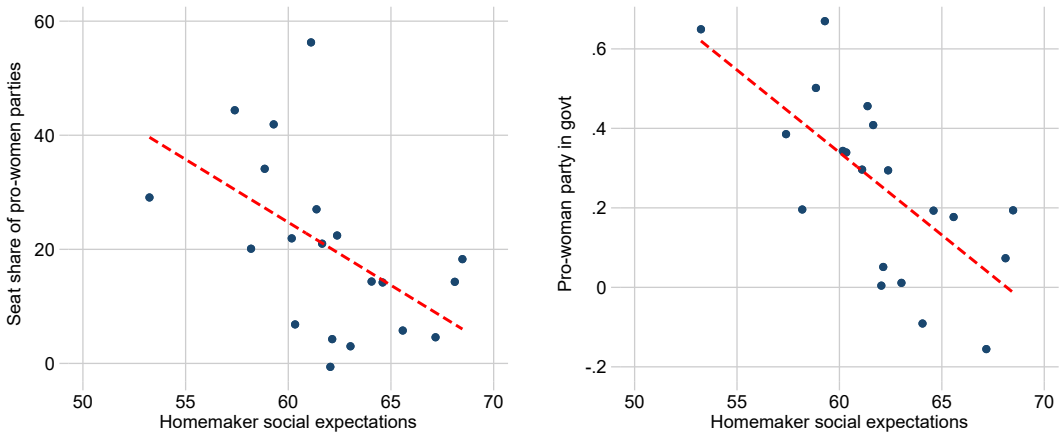
Outcome	Seat share			In government		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Homemaker norm						
Homemaker expectation	-0.871	-2.096***	-2.206***	-0.027**	-0.036***	-0.042***
	(0.857)	(0.657)	(0.796)	(0.011)	(0.011)	(0.012)
Homemaker beliefs	0.478	1.025*	1.082	0.004	0.009	0.010
	(0.403)	(0.602)	(0.674)	(0.006)	(0.008)	(0.009)
GDP per capita (log) (constant 2015 USD)	4.883		-2.233	0.008		-0.108
	(5.291)		(7.723)	(0.072)		(0.104)
Region FE	No	Yes	Yes	No	Yes	Yes
Observations	53	53	52	53	53	52
R^2	0.061	0.225	0.221	0.129	0.246	0.258
Panel B: Breadwinner norm						
Breadwinner expectations	0.148	-1.330**	-1.239*	-0.019	-0.034***	-0.036***
	(0.959)	(0.576)	(0.624)	(0.013)	(0.010)	(0.010)
Breadwinner beliefs	0.298	0.460	0.472	0.005	0.009	0.009
	(0.525)	(0.501)	(0.503)	(0.007)	(0.007)	(0.007)
GDP per capita (log) (constant 2015 USD)	6.691		2.674	0.043		-0.063
	(5.402)		(7.467)	(0.076)		(0.111)
Region FE	No	Yes	Yes	No	Yes	Yes
Observations	53	53	52	53	53	52
R^2	0.043	0.145	0.140	0.098	0.230	0.231

Note: Robust standard errors in parentheses. Seat share is the share of parliamentary seats belonging to political parties expressing an ideology in favor of gender equality. In government is an indicator variable for whether any of these pro-equality parties is a part of the ruling coalition. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is all countries with political leadership data in 2022 for which 75% or more of the parliamentary seats can be matched to a political gender ideology. All variables are measured in 2020. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

significant in any of the specifications. This is consistent with results throughout this paper, including in Table A2 and Figure 2, which point to the primacy of social expectations, rather than personal beliefs, in driving behavior. This result suggests that voters select conservative leaders because of expected social sanctions for deviating from traditional social norms, rather than because of individual beliefs about women's rights.

Figure 4 plots the relationship between political outcomes and the female homemaker norm in a binned scatterplot, controlling for region fixed effects, log GDP per capita, and personal beliefs. The estimates reveal a largely linear conditional correlation in our sample. Appendix Figure A5 recreates the same plot for the breadwinner norm, confirming the weaker relationship than the homemaker norm.

Figure 4: Correlation between gender norms and political orientation: homemaker norm



Note: Figure shows the correlation between social expectations of gender roles and political outcomes, binning at 20 quantiles of the distribution of social expectations and controlling for log GDP per capita, average personal beliefs in the homemaker norm, and region fixed effects. Seat share is the share of parliamentary seats belonging to political parties expressing an ideology in favor of gender equality. In government is an indicator variable for whether any of these pro-equality parties is a part of the ruling coalition. Social expectations are measured as the country-level average belief about the share of peers that agree with the homemaker norm, ranging from 0 to 100. Sample is 53 countries with political leadership data in 2022 for which 75% or more of the parliamentary seats can be matched to a political gender ideology. All variables are measured in 2020.

As an additional falsification test, we argue that the relationship between social norms and parliamentary representation is likely to be stronger in democracies, since electoral accountability more directly translates citizen preferences into political outcomes.[12] We test this hypothesis in Table A10, by interacting the norms variable with the electoral democracy index from V-DEM . The relationship between gender norms and the representation of gender-equal parties is indeed stronger in more democratic countries, for both the extensive (columns 1-2) and intensive (columns 3-4) margins of representation. This effect is observed both for personal beliefs and social expectations, and both for the breadwinner and homemaker norms, though the interaction terms are not always statistically significant. Interestingly, despite the fact that personal beliefs are not significantly related to political outcomes in Table 5, the results in Table A10 reveal that these effects become negative for the most democratic countries.

[12]Importantly, however, even authoritarian regimes are likely to respond to public opinion in the interest of regime survival, as shown by a large literature in political science (Malesky and Schuler, 2010; Chen et al., 2016; Guriev and Treisman, 2020).

This suggests that while the average regime tends to respond to social expectations, electoral democracies are more response to personal attitudes in particular. This is consistent with the voting revealing information about preferences that wouldn't be as legible in an authoritarian regime, where leaders might conflate social expectations with private preferences.

6.3 Results: representation and legal equality

Next, we consider the second step of the political economy mechanism in equation (5), which is estimated in Table 6. All models include country and year fixed effects and cover a country-year panel from 1975 to 2020. In each model, we vary the definition of p_{it} to measure the parliamentary seat share of pro-women parties (1), anti-women parties (2), or neutral parties (3). Note that the panel is unbalanced and the country composition of the sample may change over time, since the 75% threshold may bind differentially depending on the match rate for a given country-year.

Table 6: Political representation and gender-equal laws

Outcome	WBL index		
	(1)	(2)	(3)
Seat share (pro-women)	0.069***		
	(0.022)		
Seat share (anti-women)		-0.099***	
		(0.036)	
Seat share (neutral-women)			-0.028
			(0.028)
Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	2576	2576	2576
R^2	0.916	0.916	0.915

Note: Standard errors in parentheses clustered at the country level. Outcome variable is the WBL legal score, ranging from 0 to 100. Seat share is the share of parliamentary seats belonging to political parties expressing a given gender ideology. Sample is all country-years with political leadership data in 2022 for which 75% or more of the parliamentary seats can be matched to a political gender ideology. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

The results present clear evidence in favor of the hypothesis that party ideology shapes the legal framework with respect to gender equality. An additional percentage point of seat share allocated to a party in favor of women's rights is associated with a 0.069-unit improve-

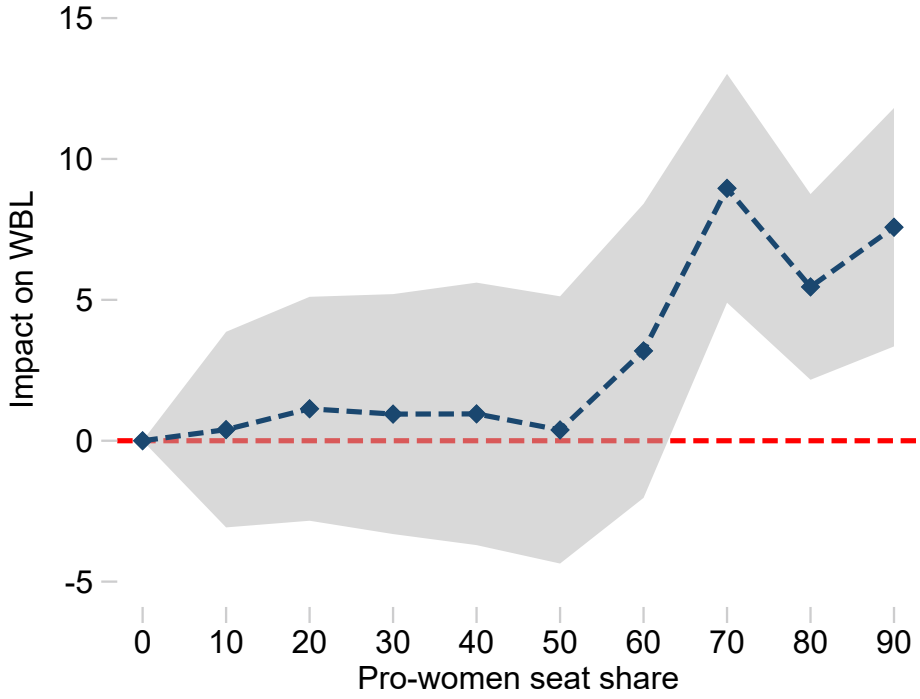
ment on the WBL index. In contrast, allocating this percentage point in representation to an anti-woman party is associated with a 0.099 point reduction in the WBL index, with both estimates significant at 1%. As a placebo test, we consider the impact of parties classified as neutral in their ideology with respect to women's rights in column (3). We find that political representation of these neutral parties has no significant association with gender equality in the legal framework.

We test the robustness of these results to several different potential threats. Appendix Table A11 shows that the results are robust to using the less stringent 25% cutoff for our match rate, though the anti-women coefficient loses significance in this sample. Appendix Table A12 show that the results are unaffected by controlling for time-varying log GDP per capita and region-by-year fixed effects, for both the 25% and 75% missingness thresholds, respectively.

An additional piece of evidence provides further support to our mechanism. In Figure 5, we plot coefficients from a modified estimation of equation (5), in which the linear term p_{it}, the share of seats for pro-women parties, is replaced by indicators for seat shares binned in ten p.p. intervals. The coefficients are normalized relative to the omitted group, country-years with [0-10] percent representation of pro-women parties. The estimates reveal a jump in the WBL score above 50%, when pro-women parties attain parliamentary majorities. This nonlinear relationship provides additional support for the political mechanism driving the relationship between norms and laws: more liberal societies elect more progressive political parties, which translate into more gender-equal laws. However, the final stage of this causal chain should exhibit the type of threshold effects observed in Figure 5, since popular preferences are more easily translated into policy outcomes under majority rule.

What kinds of laws are most affected by progressive politics? The WBL data contains detailed scores on gender inequality across 8 sub-categories, which together are aggregated up to the total index: workplace, marriage, mobility, pay, parenthood, assets, entrepreneurship, and pension laws. Appendix Figure A9 plots coefficients from estimating equation 5 for the seat share of pro-women parties, varying the outcome variable across all WBL sub-indices. The results reveal that workplace, marriage, and mobility laws see the largest gains from increasing representation of pro-women parties. In contrast, laws around female entrepreneurship and pensions are not significantly affected. These results are reasonable, as

Figure 5: Impact of political regimes on gender-equal laws: threshold effects



Note: Figure shows coefficient estimates and 95% confidence intervals from a binned regression of WBL index on indicators for 10 p.p. bins of the seat share of pro-women parties, omitting the 0-10 bin and controlling for country and year fixed effects. Outcome variable is the WBL legal score, ranging from 0 to 100. Seat share is the share of parliamentary seats belonging to political parties expressing a given gender ideology. Sample is all country-years with political leadership data in 2022 for which 75% or more of the parliamentary seats can be matched to a political gender ideology. Standard errors are clustered at the country level.

the former are politically salient dimensions of gender inequality in the legal system, while the latter are not. Taken together, these results establish a clear link between social norms and gender equality via a political economy mechanism.

7 Robustness and alternative explanations

We consider several rival accounts for the patterns discussed above. The first possibility relates to violations of *instrument validity*: while our instrument reliably addresses reverse causality because it is predetermined relative to contemporary laws and economic outcomes, it is still possible that ancestral patriarchal culture may proxy for historical features—legal

origin, colonial institutions, geography, early state formation, religious composition, or pre-modern economic structure—that independently affect today's laws, enforcement, or labor markets. We assess this alternative story in two steps. First, we run "balance" regressions for a wide set of standardized historical characteristics, each regressed on APC controlling for log GDP per capita, and display estimates in Figure A10. If APC worked mainly through these alternative channels, we would expect strong and systematic associations. We consider a set of 23 variables measuring geographic and climate features, colonial origins, legal origins, pre-modern economic characteristics, historical state formation, and ethnoreligious demographics. Of the 23 tests, only five are significant at the 5% level, and magnitudes are small: a 10-point rise in APC is associated with at most a 0.2 SD change in any characteristic, with a mean absolute effect across all variables of just 0.07 SD.[13] These patterns suggest limited scope for large omitted-variables effects. Second, we re-estimate the 2SLS specifications adding controls for each historical domain (Table A13). The coefficients of interest remain essentially unchanged, which is what one would expect if APC affects outcomes primarily through norms rather than through other historical routes. Stability to these rich controls makes violations of the exclusion restriction—via correlations between APC and omitted historical factors—unlikely to be driving the results.

A second possibility is our results are contaminated by *measurement error*—survey-based norms measures or our coding of political ideology could introduce systematic error or selection. To address the first issue, we replicate the main relationships using alternative attitudinal measures from the World Values Survey (WVS). The WVS results in Appendix Table A4 closely mirror our baseline patterns, indicating that findings are not an artefact of the World Bank–Facebook survey instrument. Because the WVS captures personal beliefs rather than social expectations, we treat this as a robustness check rather than a substitute for our main measure. To address missing data in ideology coding in the DPI–GPS merge, we restrict the panel to country-years where at least 75% of seats can be matched to a party gender ideology and verify robustness to alternative thresholds. Appendix Table A14 compares the results in the 25 and 75% samples without controls. Appendix Table A16 uses a time window of 2015-2020 to allow for greater political turnover. None of these robustness tests meaningfully

[13]Countries with a higher APC are somewhat more likely to be Muslim, former British colonies, and desert climates. Correspondingly, they are less likely to be tropical or former Spanish colonies.

affects the result.

A third possibility is that the results of our political mechanism, are explained by *legislative composition*. Perhaps women's descriptive representation, rather than parties' gender ideology, drives statutory change, as female representation has been shown to affect policy outcomes (Chattopadhyay and Duflo, 2004). This form of omitted variable bias is plausible, as the female share of legislators is correlated with the share of pro-women parties, gender norms, and the WBL legal index (Figure A8). In Table A17, we re-estimate our two-way fixed effects regression of WBL scores on parliamentary gender ideology, controlling for the time-varying share of women in parliament. While female representation is indeed positively and significantly correlated with the WBL index, the relationship between political support for women and legal equality remains robust. A related concern is that progressive gender ideology is correlated with overall left-wing political orientation, in which case our estimates would be capturing the left-right divide, rather than gender-specific ideology. Appendix Table A18 controls for variables indicating whether a left-wing party is in government or the executive, as well as the left-wing parliamentary seat share. The coefficient on pro-women parties remains robustly positive and significant.

A final alternative explanation is that of *state capacity*—that cross-country variation in government effectiveness, not social expectations, explains gaps between laws on the books and their implementation. In particular, the implementation gap is likely to be strongly linked to bureaucratic quality, state capacity, and government effectiveness. It is also possible that these characteristics are correlated with social norms (in the OLS) or ancestral patriarchal culture (in the 2SLS). We control for government effectiveness using the World Bank Worldwide Governance Indicators in Table A19. OLS, 2SLS, and reduced-form results for the implementation gap all remain robust.

8 Conclusion

Legal institutions structure the economic "rules of the game" and in turn play an important role in determining the functioning of factor, asset, and output markets. Gender inequality in the legal framework—restrictions on women's inheritance and asset ownership rights, physical mobility, labor market participation, or entrepreneurship—begets gender inequality

in economic outcomes. But where do gender-unequal laws come from? This paper studies how social norms inherited from the pre-modern ancestral culture shape the political process, patterns of representation, and, in turn, gender equality in legal institutions.

Our analysis reveals three key findings. First, consistent with existing literature, we identify strong persistence in cultural norms—countries with ancestral cultures that engaged in patriarchal practices such as patrilocality, polygamy, and male inheritance, tend to have less progressive gender norms today, even conditional on their level of economic development. Since this ancestral patriarchal culture predates present-day legal and economic outcomes, we use it as an instrument for social norms in identifying the impact of norms on laws, purged of reverse causality. Second, using this instrumental variables approach, we identify a positive relationship between liberal social norms, legal equality, and ultimately female labor force participation. Finally, we provide evidence for a political economy mechanism linking social norms to gender-equal laws. Social norms translate into political preferences, and more liberal countries elect representatives from parties more supportive of gender equality. When the vote share of these parties is sufficiently high that they are able to form a governing majority, countries experience large increases in the gender equality of the legal framework.

The results highlight that legalized gender inequality has deep roots. The contemporary social norms that support regressive laws are linked to long-run cultural traits with a high degree of persistence. These norms are expressed politically through representative government, and so the resulting laws that these governments pass should be seen as a reflection of underlying preferences. Simply changing laws in a political context of conservative norms will result in weak implementation, at best, and social backlash at worst.

Despite this, an emerging literature shows that it is possible to shift social norms over a relatively short period of time, particularly when personal beliefs are more permissive than social expectations. Our research shows that in addition to their direct effect on economic inequality, such norm shifts will filter through the political system, and ultimately result in better legal and economic outcomes for women. Still, more research is needed on how to durably change social norms toward gender equality.

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ONLINE APPENDIX

Appendix Tables

Table A1: Summary statistics

	Mean	SD	Min	Max	p25	p50	p75	N
Personal beliefs in breadwinner norm	0.383	0.174	0.086	0.757	0.239	0.367	0.525	120
Personal beliefs in homemaker norm	0.518	0.199	0.130	0.827	0.317	0.541	0.695	120
Normative expectations in breadwinner norm	0.567	0.077	0.282	0.715	0.514	0.582	0.613	120
Normative expectations in homemaker norm	0.635	0.075	0.358	0.768	0.595	0.648	0.698	120
Labor force participation, female (ILO 15-64 years)(2020)	56.358	17.141	11.374	83.626	48.334	59.490	69.189	119
WBL legal index	77.292	17.625	26.250	100.000	68.750	80.938	90.938	120
Per capita GDP (log) (2020)	8.686	1.331	6.073	11.346	7.691	8.583	9.757	119
Per capita GDP (log squared) (2020)	77.209	23.421	128.735	73.676	36.877	59.154	95.209	119

Summary statistics

Table A2: Female labor force participation, laws and norms

Outcome	Female labor force participation rate							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Homemaker norm								
WBL legal index	0.594***			0.594***	0.567***	0.457***	0.482***	0.543***
	(0.080)			(0.109)	(0.100)	(0.103)	(0.095)	(0.104)
Personal beliefs		-36.659***		0.050	4.051			16.178
		(6.626)		(7.920)	(10.201)			(11.214)
Social expectations			-117.566***			-53.059**	-34.610	-58.150
			(15.196)			(18.056)	(26.406)	(31.134)
Per capita GDP (log)					-42.741**		-39.660**	-33.906*
					(13.441)		(13.429)	(15.687)
Per capita GDP (log square)					2.525***		2.274**	1.964*
					(0.737)		(0.773)	(0.890)
Observations	119	119	119	119	119	119	119	119
R^2	0.374	0.182	0.268	0.374	0.454	0.408	0.462	0.470
Panel B: Breadwinner norm								
WBL legal index	0.594***			0.501***	0.496***	0.369**	0.394***	0.405***
	(0.080)			(0.109)	(0.105)	(0.112)	(0.105)	(0.114)
Personal beliefs		-49.068***		-13.105	-7.800			3.049
		(7.549)		(9.181)	(12.012)			(11.941)
Social expectations			-132.976***			-74.439***	-63.356*	-66.149*
			(16.277)			(21.057)	(28.495)	(30.454)
Per capita GDP (log)					-43.605***		-37.439**	-37.139**
					(12.823)		(13.171)	(13.757)
Per capita GDP (log square)					2.537***		2.119**	2.107**
					(0.706)		(0.756)	(0.779)
Observations	119	119	119	119	119	119	119	119
R^2	0.374	0.251	0.357	0.382	0.456	0.432	0.481	0.481

Note: Robust standard errors in parentheses. All variables are measured in 2020. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. Legal index is the WBL legal score, ranging from 0 to 100. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is 120 countries for which social norms data are available. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A3: Norms and outcomes: OLS correlations, robustness to controls

Variable	Homemaker norm				Breadwinner norm			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Female labor force participation								
Social expectations	-1.004***	-0.446*			-1.311***	-0.626***		
	(0.255)	(0.233)			(0.237)	(0.217)		
Personal beliefs			-0.334***	-0.164			-0.440***	-0.232**
			(0.090)	(0.107)			(0.091)	(0.098)
Per capita GDP (log) (2020)	-29.691*	-29.071*	-42.970**	-34.913**	-26.102	-30.294**	-36.667**	-34.599**
	(17.274)	(15.645)	(16.483)	(14.445)	(15.771)	(14.582)	(16.439)	(14.694)
Per capita GDP (log squared) (2020)	1.973**	1.853**	2.757***	2.205***	1.716*	1.896**	2.329**	2.146**
	(0.981)	(0.900)	(0.916)	(0.823)	(0.904)	(0.845)	(0.914)	(0.835)
Region FE	No	Yes	No	Yes	No	Yes	No	Yes
Observations	117	118	117	118	117	118	117	118
R^2	0.429	0.628	0.424	0.625	0.512	0.648	0.455	0.634
Panel B: Legal index								
Social expectations	-1.070***	-0.564***			-1.275***	-0.894***		
	(0.224)	(0.203)			(0.201)	(0.181)		
Personal beliefs			-0.534***	-0.445***			-0.585***	-0.448***
			(0.072)	(0.070)			(0.077)	(0.088)
Per capita GDP (log) (2020)	-3.720	15.615	-18.437	5.838	-1.367	14.555	-9.774	7.730
	(13.526)	(13.469)	(12.987)	(12.829)	(11.371)	(11.923)	(13.171)	(13.312)
Per capita GDP (log squared) (2020)	0.367	-1.013	1.140	-0.462	0.201	-0.997	0.603	-0.634
	(0.762)	(0.752)	(0.712)	(0.715)	(0.643)	(0.657)	(0.726)	(0.740)
Region FE	No	Yes	No	Yes	No	Yes	No	Yes
Observations	117	118	117	118	117	118	117	118
R^2	0.575	0.662	0.663	0.713	0.638	0.708	0.664	0.713
Panel C: Implementation gap								
Social expectations	0.004	0.003			0.004**	0.003		
	(0.003)	(0.003)			(0.002)	(0.002)		
Personal beliefs			0.003***	0.002**			0.004***	0.003***
			(0.001)	(0.001)			(0.001)	(0.001)
Per capita GDP (log) (2020)	0.038	-0.006	0.098	0.047	0.035	0.009	0.044	0.038
	(0.115)	(0.144)	(0.112)	(0.141)	(0.112)	(0.143)	(0.112)	(0.142)
Per capita GDP (log squared) (2020)	-0.008	-0.002	-0.010	-0.005	-0.008	-0.002	-0.007	-0.004
	(0.007)	(0.008)	(0.006)	(0.008)	(0.006)	(0.008)	(0.006)	(0.008)
Region FE	No	Yes	No	Yes	No	Yes	No	Yes
Observations	117	118	117	118	117	118	117	118
R^2	0.655	0.665	0.686	0.676	0.659	0.666	0.696	0.678

Note: Robust standard errors in parentheses. All variables are measured in 2020. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. Legal index is the WBL legal score, ranging from 0 to 100. Implementation gap measures the percentage-point gap between the WBL implementation score and full implementation of existing gender-equal laws, ranging from 0 to 1. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is 120 countries for which social norms data are available. Controls are the date at which cultural data is recorded, latitude, distance to coast, average ruggedness, share of population living in tropical climate, and share of population traditionally practicing intensive agriculture. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A4: Norms and outcomes: OLS correlations, robustness World Values Survey data

	(1)	(2)	(3)	(4)
Panel A: Female labor force participation				
Men have more right to work	-55.793***	-47.485***		
	(4.218)	(8.210)		
WVS gender index			-72.642***	-54.342***
			(6.748)	(11.714)
Per capita GDP (log)		-23.488		-21.518
		(13.478)		(13.671)
Per capita GDP (log squared)		1.425		1.414
		(0.735)		(0.736)
Observations	287	284	288	285
R^2	0.418	0.452	0.320	0.388
Panel B: Legal index				
Men have more right to work	-58.628***	-56.165***		
	(3.507)	(7.143)		
WVS gender index			-81.851***	-72.614***
			(5.697)	(10.255)
Per capita GDP (log)		7.040		11.402
		(10.888)		(11.774)
Per capita GDP (log squared)		-0.334		-0.486
		(0.597)		(0.644)
Observations	290	283	291	284
R^2	0.557	0.571	0.490	0.525
Panel C: Implementation gap				
Men have more right to work	0.549***	0.338***		
	(0.045)	(0.082)		
WVS gender index			0.717***	0.405***
			(0.072)	(0.115)
Per capita GDP (log)		-0.016		-0.045
		(0.145)		(0.161)
Per capita GDP (log squared)		-0.003		-0.002
		(0.008)		(0.009)
Observations	239	235	240	236
R^2	0.392	0.537	0.296	0.508

Note: Standard errors clustered at the country level in parentheses. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. "Men have more right to work" captures the share of men agreeing with this statement in a given WVS round. WVS gender index averages the agreement shares across several questions relating to gender attitudes: *i*) when jobs are scarce, men have more right to work, *ii*) being a housewife is fulfilling, *iii*) university is more important for a boy than a girl, and *iv*) men make better political leaders than women. Sample is 290 country-year observations for which the right-to-work question is asked and legal index data is available. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A5: Patriarchal culture and contemporary social norms: first stage, robustness to controls

Variable	Homemaker norm				Breadwinner norm			
Type	Expectations		Beliefs		Expectations		Beliefs	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Patriarchy index	0.084***	0.060**	0.340***	0.147***	0.065**	0.062**	0.262***	0.090
	(0.024)	(0.025)	(0.067)	(0.052)	(0.029)	(0.027)	(0.063)	(0.054)
Per capita GDP (log) (2020)	10.368**	6.446	-10.442	-16.971	10.663**	1.776	6.314	-9.709
	(4.508)	(4.847)	(10.663)	(11.335)	(5.254)	(5.266)	(10.225)	(11.972)
Per capita GDP (log squared) (2020)	-0.756***	-0.448	0.220	0.866	-0.773**	-0.197	-0.798	0.301
	(0.267)	(0.287)	(0.612)	(0.622)	(0.301)	(0.308)	(0.572)	(0.651)
Region FE	No	Yes	No	Yes	No	Yes	No	Yes
Observations	117	117	117	117	117	117	117	117
R^2	0.680	0.705	0.658	0.756	0.588	0.616	0.593	0.678

Note: Robust standard errors in parentheses. Patriarchy index is measured as the average across four ancestral culture patriarchal characteristics, varying from 0 to 1. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is 120 countries for which social norms data are available. Controls are the date at which cultural data is recorded, latitude, distance to coast, average ruggedness, share of population living in tropical climate, and share of population traditionally practicing intensive agriculture. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A6: Patriarchal culture and legal/economic outcomes: reduced form, robustness to controls

Outcome	FLFP		Legal index		Implementation gap	
	(1)	(2)	(3)	(4)	(5)	(6)
Patriarchy index	-0.109	0.030	-0.184***	-0.111**	0.002**	0.001
	(0.075)	(0.064)	(0.062)	(0.052)	(0.001)	(0.001)
Per capita GDP (log) (2020)	-39.573**	-34.777**	-12.817	15.495	0.055	-0.030
	(16.708)	(15.349)	(14.135)	(13.826)	(0.116)	(0.149)
Per capita GDP (log squared) (2020)	2.690***	2.224**	1.019	-0.976	-0.009	-0.000
	(0.937)	(0.873)	(0.794)	(0.775)	(0.007)	(0.008)
Region FE	No	Yes	No	Yes	No	Yes
Observations	117	117	117	117	117	117
R^2	0.369	0.616	0.530	0.655	0.664	0.668

Note: Robust standard errors in parentheses. All outcome variables are measured in 2020. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. Legal index is the WBL legal score, ranging from 0 to 100. Implementation gap measures the percentage-point gap between the WBL implementation score and full implementation of existing gender-equal laws, ranging from 0 to 1. Patriarchy index is measured as the average across four ancestral culture patriarchal characteristics, varying from 0 to 1. Controls are the date at which cultural data is recorded, latitude, distance to coast, average ruggedness, share of population living in tropical climate, and share of population traditionally practicing intensive agriculture. Sample is 120 countries for which social norms data are available. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A7: Norms and legal/economic outcomes: 2SLS, robustness to controls

Outcome	FLFP		Legal index		Implementation gap	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Homemaker norm						
Social expectations	-1.299*	0.506	-2.181***	-1.849*	0.018**	0.018
	(0.739)	(1.083)	(0.690)	(1.042)	(0.007)	(0.012)
Region FE	No	Yes	No	Yes	No	Yes
First-stage F-statistic	12.023	5.948	12.023	5.948	12.023	5.948
Observations	117	117	117	117	117	117
R^2	0.423	0.571	0.488	0.560	0.557	0.563
Panel B: Breadwinner norm						
Social expectations	-1.672*	0.492	-2.808***	-1.797**	0.023**	0.018
	(0.853)	(1.097)	(0.988)	(0.872)	(0.012)	(0.012)
Region FE	No	Yes	No	Yes	No	Yes
First-stage F-statistic	5.227	5.293	5.227	5.293	5.227	5.293
Observations	117	117	117	117	117	117
R^2	0.500	0.543	0.430	0.639	0.433	0.537

Note: Robust standard errors in parentheses. All outcome variables are measured in 2020. Estimates are from a 2SLS model where social expectations is instrumented with the patriarchal culture index. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. Legal index is the WBL legal score, ranging from 0 to 100. Implementation gap measures the percentage-point gap between the WBL implementation score and full implementation of existing gender-equal laws, ranging from 0 to 1. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Patriarchal culture index is measured as the average across four ancestral culture patriarchal characteristics, varying from 0 to 1. Sample is 120 countries for which social norms data are available. Controls are the date at which cultural data is recorded, latitude, distance to coast, average ruggedness, share of population living in tropical climate, and share of population traditionally practicing intensive agriculture. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A8: Norms and legal/economic outcomes: 2SLS (personal beliefs)

Outcome	FLFP		Legal index		Implementation gap	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Homemaker norm						
Personal beliefs	-0.505***	-0.506***	-0.714***	-0.851***	0.008***	0.007***
	(0.111)	(0.141)	(0.089)	(0.137)	(0.001)	(0.002)
First-stage F-statistic	104.515	36.024	88.911	36.024	88.911	36.024
Observations	117	117	118	117	118	117
R^2	0.146	0.257	0.482	0.491	0.455	0.519
Panel B: Breadwinner norm						
Personal beliefs	-0.654***	-0.704***	-0.913***	-1.185***	0.010***	0.009***
	(0.136)	(0.194)	(0.114)	(0.190)	(0.002)	(0.002)
First-stage F-statistic	71.241	23.387	68.834	23.387	68.834	23.387
Observations	117	117	118	117	118	117
R^2	0.206	0.269	0.452	0.377	0.395	0.455

Note: Robust standard errors in parentheses. All outcome variables are measured in 2020. Estimates are from a 2SLS model where social expectations is instrumented with the patriarchal culture index. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. Legal index is the WBL legal score, ranging from 0 to 100. Implementation gap measures the percentage-point gap between the WBL implementation score and full implementation of existing gender-equal laws, ranging from 0 to 1. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Patriarchal culture index is measured as the average across four ancestral culture patriarchal characteristics, varying from 0 to 1. Sample is 120 countries for which social norms data are available. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A9: Norms and legal/economic outcomes: 2SLS, robustness to missing data

Outcome	FLFP			Legal index			Implementation gap		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: Homemaker norm									
Social expectations	-1.924***	-1.966***	-2.059***	-3.835***	-3.621***	-3.399***	0.028***	0.028***	0.026***
	(0.622)	(0.620)	(0.578)	(0.738)	(0.697)	(0.602)	(0.006)	(0.006)	(0.005)
First-stage F-statistic	15.379	18.454	24.902	15.379	18.454	24.902	15.379	18.454	24.902
Observations	112	117	117	112	117	117	112	117	117
R^2	0.221	0.233	0.217	-0.095	-0.002	0.079	0.268	0.302	0.339
Panel B: Breadwinner norm									
Social expectations	-1.677***	-1.794***	-2.011***	-3.342***	-3.304***	-3.320***	0.025***	0.025***	0.025***
	(0.471)	(0.501)	(0.530)	(0.495)	(0.510)	(0.495)	(0.005)	(0.005)	(0.005)
First-stage F-statistic	21.115	22.604	24.939	21.115	22.604	24.939	21.115	22.604	24.939
Observations	112	117	117	112	117	117	112	117	117
R^2	0.366	0.364	0.333	0.199	0.215	0.209	0.312	0.316	0.313
Threshold (%)	0	50	100	0	50	100	0	50	100

Note: Robust standard errors in parentheses. All outcome variables are measured in 2020. Estimates are from a 2SLS model where social expectations is instrumented with the patriarchal culture index. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. Legal index is the WBL legal score, ranging from 0 to 100. Implementation gap measures the percentage-point gap between the WBL implementation score and full implementation of existing gender-equal laws, ranging from 0 to 1. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Patriarchal culture index is measured as the average across four ancestral culture patriarchal characteristics, varying from 0 to 1. Threshold refers to the inclusion criterion for calculating ancestral patriarchal culture, wherein a variable is only included in the index if it is nonmissing for greater than x share of the population, according to Giuliano and Nunn (2018). *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A10: Norms and political representation: democracy

Norm	Homemaker		Breadwinner	
Outcome	In gov	Share	In gov	Share
	(1)	(2)	(3)	(4)
Panel A: 75% threshold				
Social expectations	0.021	1.248	0.027	1.993
	(0.018)	(1.526)	(0.018)	(1.424)
Personal beliefs	0.027***	2.114***	0.022**	1.698**
	(0.007)	(0.651)	(0.008)	(0.710)
Social expectations × Electoral democracy index	-0.042	-3.239*	-0.047	-3.544**
	(0.025)	(1.942)	(0.029)	(1.710)
Personal beliefs × Electoral democracy index	-0.023*	-1.547	-0.028*	-2.308*
	(0.012)	(0.960)	(0.015)	(1.167)
Region FE	Yes	Yes	Yes	Yes
GDP controls	Yes	Yes	Yes	Yes
Observations	1523	1523	1523	1523
R^2	0.231	0.307	0.208	0.252
Panel B: 25% threshold				
Social expectations	0.013	0.885	0.031*	2.473**
	(0.019)	(1.302)	(0.018)	(1.203)
Personal beliefs	0.018**	1.224**	0.017**	1.092**
	(0.007)	(0.521)	(0.008)	(0.515)
Social expectations × Electoral democracy index	-0.036	-2.718	-0.048*	-4.035***
	(0.029)	(1.670)	(0.029)	(1.478)
Personal beliefs × Electoral democracy index	-0.016	-0.796	-0.025*	-1.580*
	(0.012)	(0.829)	(0.013)	(0.868)
Region FE	Yes	Yes	Yes	Yes
GDP controls	Yes	Yes	Yes	Yes
Observations	2643	2643	2643	2643
R^2	0.194	0.209	0.197	0.213

Note: Standard errors in parentheses are clustered at the country level. Seat share is the share of parliamentary seats belonging to political parties expressing an ideology in favor of gender equality. In government is an indicator variable for whether any of these pro-equality parties is a part of the ruling coalition. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Democracy index is average across V-DEM indices for electoral, liberal, participatory, deliberative, and egalitarian democracy. Sample is all country-years with political leadership data for which 75% or more of the parliamentary seats can be matched to a political gender ideology. Sample period is 1983-2020. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A11: Politics and gender-equal laws (25% threshold)

Outcome	WBL index		
	(1)	(2)	(3)
Seat share (pro)	0.063***		
	(0.019)		
Seat share (anti)		-0.021	
		(0.030)	
Seat share (neutral)			0.013
			(0.017)
Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Observations	4231	4231	4231
R^2	0.901	0.900	0.900

Note: Standard errors in parentheses clustered at the country level. Outcome variable is the WBL legal score, ranging from 0 to 100. Seat share is the share of parliamentary seats belonging to political parties expressing a given gender ideology. Sample is all country-years with political leadership data in 2022 for which 25% or more of the parliamentary seats can be matched to a political gender ideology. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A12: Politics and gender-equal laws: robustness to region and income

Outcome	WBL index								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: 75% threshold									
Seat share (pro)	0.061***			0.081***			0.076***		
	(0.018)			(0.021)			(0.020)		
Seat share (anti)		-0.087**			-0.098***			-0.091**	
		(0.037)			(0.036)			(0.037)	
Seat share (neutral)			-0.033			-0.044			-0.050
			(0.030)			(0.031)			(0.032)
GDP per capita (log) (constant 2015 US$)	2.954	2.624	3.068				2.345	1.977	2.592
	(3.308)	(3.207)	(3.379)				(3.696)	(3.550)	(3.761)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	No	No	No	No	No	No
Year × Region FE	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2231	2231	2231	2534	2534	2534	2192	2192	2192
R^2	0.919	0.919	0.918	0.927	0.927	0.926	0.926	0.926	0.925
Panel B: 25% threshold									
Seat share (pro)	0.055***			0.062***			0.061***		
	(0.016)			(0.018)			(0.015)		
Seat share (anti)		-0.013			-0.021			-0.015	
		(0.028)			(0.029)			(0.027)	
Seat share (neutral)			-0.000			0.000			-0.012
			(0.017)			(0.017)			(0.017)
GDP per capita (log) (constant 2015 US)	3.125	3.173	3.187				4.129	4.145	4.249
	(2.717)	(2.732)	(2.745)				(3.315)	(3.311)	(3.361)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	No	No	No	No	No	No
Year × Region FE	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3727	3727	3727	4209	4209	4209	3714	3714	3714
R^2	0.908	0.907	0.907	0.909	0.908	0.908	0.915	0.914	0.914

Note: Standard errors in parentheses clustered at the country level. Outcome variable is the WBL legal score, ranging from 0 to 100. Seat share is the share of parliamentary seats belonging to political parties expressing a given gender ideology. Sample is all country-years with political leadership data in 2022 for which 75% (Panel A) or 25% (Panel B) or more of the parliamentary seats can be matched to a political gender ideology. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A13: Norms and outcomes: 2SLS, robustness to historical controls

Controls	Geo	Colonial	Legal	Econ	Pol	Demog
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Female labor force participation						
Homemaker expectation	-1.212***	-1.581***	-1.636***	-1.487***	-1.493***	-0.375
	(0.452)	(0.317)	(0.360)	(0.301)	(0.400)	(0.382)
First-stage F-statistic	20.787	40.228	41.371	71.763	29.624	16.965
Observations	115	117	117	84	107	116
R^2	0.421	0.255	0.320	0.338	0.253	0.501
Panel B: Legal index						
Homemaker expectation	-2.426***	-1.624***	-2.217***	-1.656***	-1.712***	-1.156***
	(0.448)	(0.285)	(0.359)	(0.259)	(0.350)	(0.367)
First-stage F-statistic	20.787	39.048	46.237	71.763	29.624	16.965
Observations	115	118	118	84	107	116
R^2	0.418	0.441	0.320	0.379	0.354	0.568
Panel C: Implementation gap						
Homemaker expectation	0.025***	0.020***	0.024***	0.025***	0.018***	0.024***
	(0.006)	(0.004)	(0.004)	(0.003)	(0.004)	(0.006)
First-stage F-statistic	20.787	39.048	46.237	71.763	29.624	16.965
Observations	115	118	118	84	107	116
R^2	0.408	0.476	0.392	0.465	0.476	0.392

Note: Robust standard errors in parentheses. All outcome variables are measured in 2020. Female labor force participation is measured as the share of working-age women (15-64) in the labor force. Legal index is the WBL legal score, ranging from 0 to 100. Implementation gap measures the percentage-point gap between the WBL implementation score and full implementation of existing gender-equal laws, ranging from 0 to 1. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Controls are as follows. Geo: absolute latitude, distance to the coast, intensive agriculture, ruggedness, tropical climate, soil quality, malaria exposure, and desert climate. Colonial: Spanish, French, British, and Portuguese colonial indicators. Legal: British, French, or socialist legal origins. Econ: log population in 1400, slave exports per capita (1400-1900), technology adoption in 1500. Pol: state formation index (1400-1800), historical conflict (1400-1600). Demog: Share Muslim, ethnolinguistic fractionalization. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A14: Norms and politics: robustness to threshold

Outcome	Seat share		In government	
	(1)	(2)	(3)	(4)
Panel A: 75% threshold				
Homemaker social expectations	-1.356*		-0.028**	
	(0.700)		(0.011)	
Homemaker personal beliefs	0.393		0.004	
	(0.358)		(0.005)	
Breadwinner social expectations		-0.463		-0.023**
		(0.786)		(0.011)
Breadwinner personal beliefs		0.085		0.004
		(0.450)		(0.006)
Observations	54	54	54	54
R^2	0.043	0.007	0.129	0.093
Panel B: 25% threshold				
Homemaker social expectations	-1.200***		-0.029***	
	(0.436)		(0.008)	
Homemaker personal beliefs	0.374*		0.007*	
	(0.209)		(0.003)	
Breadwinner social expectations		-0.574		-0.024***
		(0.497)		(0.009)
Breadwinner personal beliefs		0.189		0.007*
		(0.235)		(0.004)
Observations	92	92	92	92
R^2	0.051	0.012	0.110	0.075

Note: Robust standard errors in parentheses. Seat share is the share of parliamentary seats belonging to political parties expressing an ideology in favor of gender equality. In government is an indicator variable for whether any of these pro-equality parties is a part of the ruling coalition. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is all countries with political leadership data in 2022 for which 75% (Panel A) or 25% (Panel B) or more of the parliamentary seats can be matched to a political gender ideology. All variables are measured in 2020. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A15: Norms and politics (25% threshold): robustness to income and region

Outcome	Seat share			In government		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Homemaker norm						
Social expectations	-0.765	-1.314**	-1.259**	-0.024***	-0.029***	-0.031***
	(0.555)	(0.563)	(0.578)	(0.009)	(0.010)	(0.010)
Personal beliefs	0.476*	0.688*	0.690*	0.008*	0.011**	0.011**
	(0.243)	(0.362)	(0.377)	(0.004)	(0.005)	(0.005)
GDP per capita (log) (constant 2015 US$)	4.964		1.649	0.053		-0.057
	(3.891)		(4.814)	(0.055)		(0.081)
Region FE	No	Yes	Yes	No	Yes	Yes
Observations	91	92	91	91	92	91
R^2	0.073	0.139	0.137	0.118	0.198	0.200
Panel B: Breadwinner norm						
Social expectations	-0.055	-0.420	-0.334	-0.017	-0.021**	-0.021*
	(0.611)	(0.634)	(0.640)	(0.010)	(0.010)	(0.011)
Personal beliefs	0.364	0.392	0.426	0.010**	0.013**	0.012**
	(0.279)	(0.268)	(0.280)	(0.005)	(0.005)	(0.005)
GDP per capita (log) (constant 2015 US$)	6.188*		3.458	0.094*		-0.009
	(3.695)		(5.081)	(0.054)		(0.086)
Region FE	No	Yes	Yes	No	Yes	Yes
Observations	91	92	91	91	92	91
R^2	0.051	0.087	0.090	0.105	0.178	0.175

Note: Robust standard errors in parentheses. Seat share is the share of parliamentary seats belonging to political parties expressing an ideology in favor of gender equality. In government is an indicator variable for whether any of these pro-equality parties is a part of the ruling coalition. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is all countries with political leadership data in 2022 for which 75% or more of the parliamentary seats can be matched to a political gender ideology. All variables are measured in 2020. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A16: Norms and politics (75% threshold): 2015-2020

Outcome	Seat share			In government		
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Homemaker norm						
Social expectations	-0.456	-1.684**	-1.629**	-0.005	-0.018*	-0.019*
	(0.893)	(0.670)	(0.775)	(0.011)	(0.010)	(0.011)
Personal beliefs	0.437	1.071**	1.086**	0.004	0.012*	0.012*
	(0.367)	(0.509)	(0.529)	(0.005)	(0.006)	(0.006)
GDP per capita (log) (constant 2015 US$)	5.831		0.963	0.070		-0.010
	(5.637)		(6.289)	(0.071)		(0.085)
Region FE	No	Yes	Yes	No	Yes	Yes
Observations	323	329	323	323	329	323
R^2	0.059	0.295	0.291	0.042	0.209	0.205
Panel B: Breadwinner norm						
Social expectations	0.255	-1.213*	-1.135*	-0.007	-0.026**	-0.026**
	(0.855)	(0.627)	(0.653)	(0.013)	(0.010)	(0.010)
Personal beliefs	0.274	0.422	0.466	0.004	0.009	0.009
	(0.481)	(0.455)	(0.455)	(0.007)	(0.006)	(0.006)
GDP per capita (log) (constant 2015 US$)	6.517		3.478	0.062		0.009
	(5.346)		(6.311)	(0.070)		(0.090)
Region FE	No	Yes	Yes	No	Yes	Yes
Observations	323	329	323	323	329	323
R^2	0.042	0.217	0.216	0.040	0.203	0.198

Note: Standard errors in parentheses are clustered at the country level. Seat share is the share of parliamentary seats belonging to political parties expressing an ideology in favor of gender equality. In government is an indicator variable for whether any of these pro-equality parties is a part of the ruling coalition. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is all countries with political leadership data in 2022 for which 75% or more of the parliamentary seats can be matched to a political gender ideology. Outcome variable is measured from 2015-2020. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A17: Political representation and gender-equal laws

Outcome	WBL index					
	(1)	(2)	(3)	(4)	(5)	(6)
Seat share (pro)	0.066***	0.058***				
	(0.022)	(0.022)				
Seat share (anti)			-0.100**	-0.088**		
			(0.042)	(0.041)		
Seat share (neutral)					-0.033	-0.031
					(0.029)	(0.028)
Share of women in legislature		0.282***		0.279***		0.289***
		(0.074)		(0.074)		(0.075)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2471	2471	2471	2471	2471	2471
R^2	0.917	0.922	0.917	0.922	0.916	0.921

Note: Standard errors in parentheses clustered at the country level. Outcome variable is the WBL legal score, ranging from 0 to 100. Seat share is the share of parliamentary seats belonging to political parties expressing a given gender ideology. Sample is all country-years with political leadership data for which 75% or more of the parliamentary seats can be matched to a political gender ideology. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A18: Politics and gender-equal laws: robustness to left-wing parties

Outcome	WBL index								
Party orientation	Pro			Anti			Neutral		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: 75% threshold									
Share of seats	0.072***	0.064***	0.057***	-0.104***	-0.098***	-0.075**	-0.028	-0.029	-0.037
	(0.024)	(0.021)	(0.020)	(0.037)	(0.036)	(0.032)	(0.028)	(0.028)	(0.027)
Left-wing party in government	0.360			0.241			0.645		
	(0.768)			(0.754)			(0.739)		
Left-wing executive		0.408			0.187			0.623	
		(0.799)			(0.753)			(0.746)	
Left-wing seat share			4.781*			4.238*			5.612**
			(2.569)			(2.512)			(2.542)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2571	2555	2565	2571	2555	2565	2571	2555	2565
R^2	0.916	0.917	0.918	0.916	0.918	0.918	0.914	0.916	0.917
Panel B: 25% threshold									
Share of seats	0.062***	0.056***	0.053***	-0.017	-0.021	-0.004	0.013	0.013	0.005
	(0.020)	(0.018)	(0.018)	(0.031)	(0.030)	(0.027)	(0.017)	(0.017)	(0.017)
Left-wing party in government	1.110*			1.222*			1.290**		
	(0.621)			(0.635)			(0.608)		
Left-wing executive		1.204*			1.255*			1.344**	
		(0.618)			(0.637)			(0.606)	
Left-wing seat share			5.102***			5.477***			5.464***
			(1.706)			(1.681)			(1.731)
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4209	4158	4202	4209	4158	4202	4209	4158	4202
R^2	0.901	0.903	0.903	0.900	0.902	0.902	0.900	0.902	0.902

Note: Standard errors in parentheses clustered at the country level. Outcome variable is the WBL legal score, ranging from 0 to 100. Seat share is the share of parliamentary seats belonging to political parties expressing a given gender ideology. Left wing party variables are indicators for left-wing political control in various branches of national government, according to Scartascini et al. (2021). Sample is all country-years with political leadership data in 2022 for which 75% (Panel A) or 25% (Panel B) or more of the parliamentary seats can be matched to a political gender ideology. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

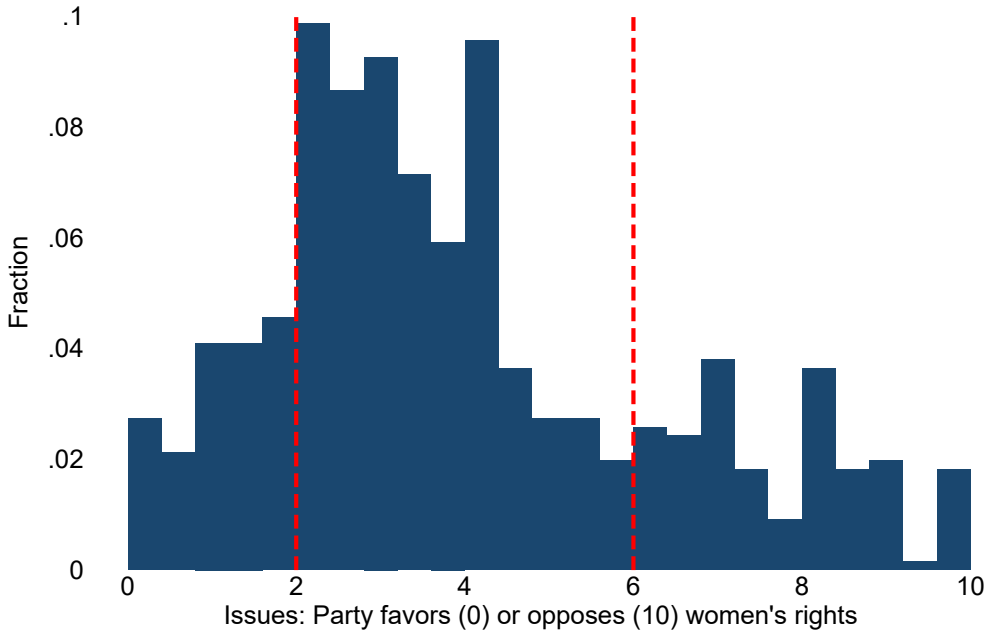
Table A19: Norms and implementation: Controls for governance quality

Outcome	Implementation gap						
Model	OLS				2SLS		RF
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Homemaker personal beliefs	0.004***						
	(0.001)						
Homemaker social expectations		0.009***			0.024***		
		(0.003)			(0.006)		
Breadwinner personal beliefs			0.004***				
			(0.001)				
Breadwinner social expectations				0.009***		0.026***	
				(0.003)		(0.006)	
Patriarchy index							0.003***
							(0.001)
Government effectiveness	-0.098**	-0.110***	-0.092**	-0.109***	-0.061	-0.049	-0.143***
	(0.038)	(0.040)	(0.037)	(0.038)	(0.047)	(0.051)	(0.037)
GDP controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	118	118	118	118	117	117	117
R^2	0.578	0.535	0.572	0.546	0.398	0.318	0.562

Note: Robust standard errors in parentheses. All variables are measured in 2020. Implementation gap measures the percentage-point gap between the WBL implementation score and full implementation of existing gender-equal laws, ranging from 0 to 1. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is 120 countries for which social norms data are available. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Appendix Figures

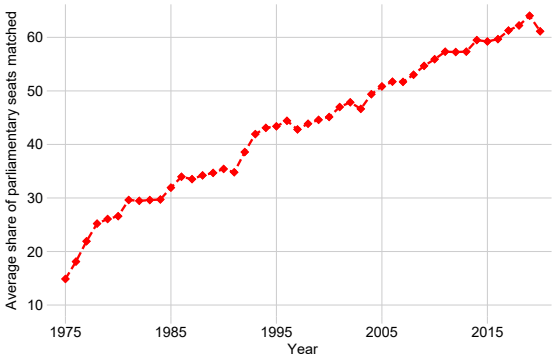
Figure A1: Gender ideology among matched parties



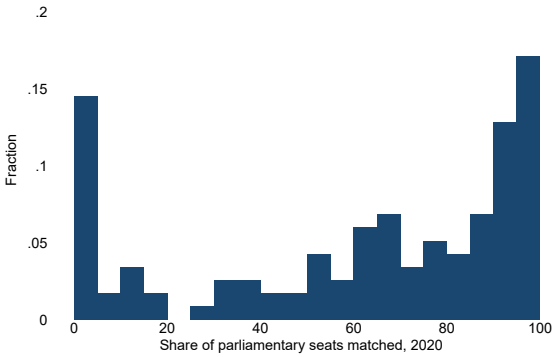
Note: Figure shows party-level distribution of gender ideology from Norris (2020) among sample of 659 parties that have information on gender ideology and can be matched to a party in the Dataset of Political Institutions. Parties rank ideology on a scale of 0 to 10, with 10 indicating more opposition to women's rights. Red lines indicate cutoff points for pro, neutral, and anti-women categories.

Figure A2: Match rates between DPI and GPS across countries and over time

(a) Match rates over time

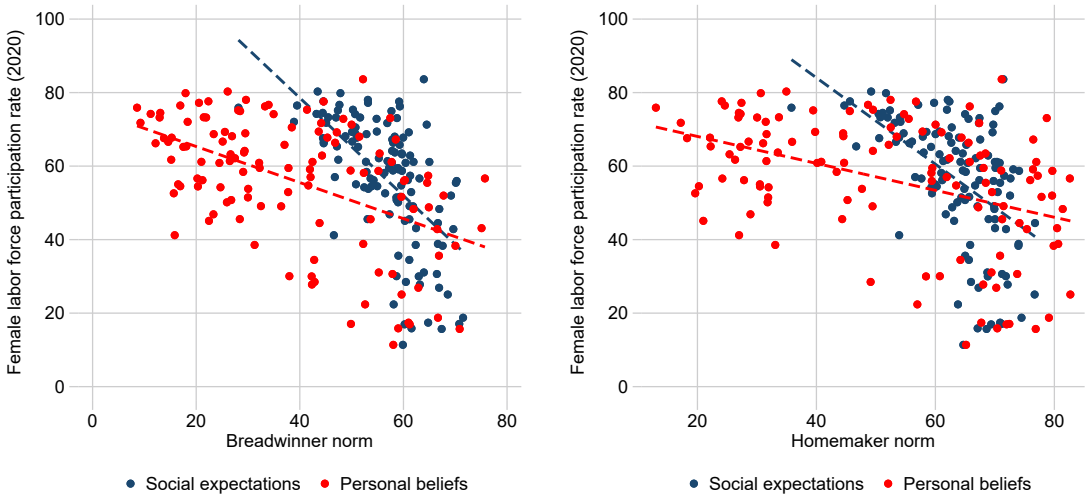


(b) Distribution of match rates in 2020



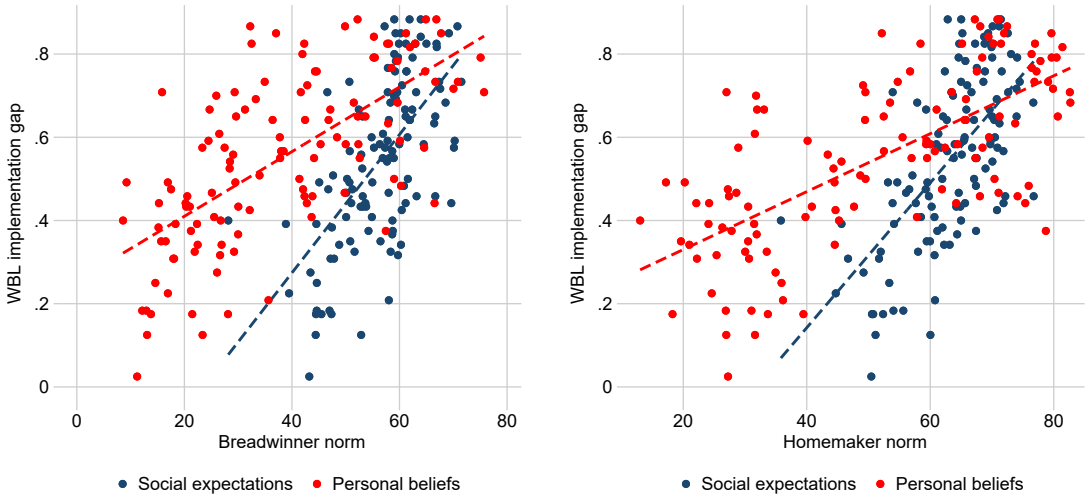
Note: Figure shows the annual cross-country average share of matched parliamentary seats between DPI and GPS over time (left) and the distribution of this country-level match rate in 2020 (right).

Figure A3: OLS correlations: social expectations, personal beliefs, and female labor force participation



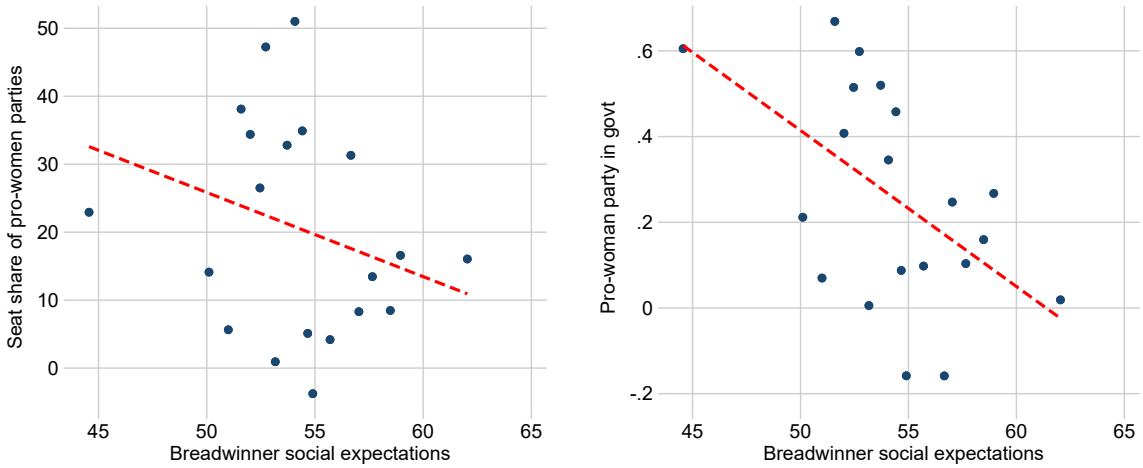
Note: Figure shows the unconditional country-level correlations between social norms (blue), personal beliefs (red), and female labor force participation, all measured in 2020. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is 120 countries for which social norms data are available.

Figure A4: OLS correlations: social expectations, personal beliefs, and implementation gaps



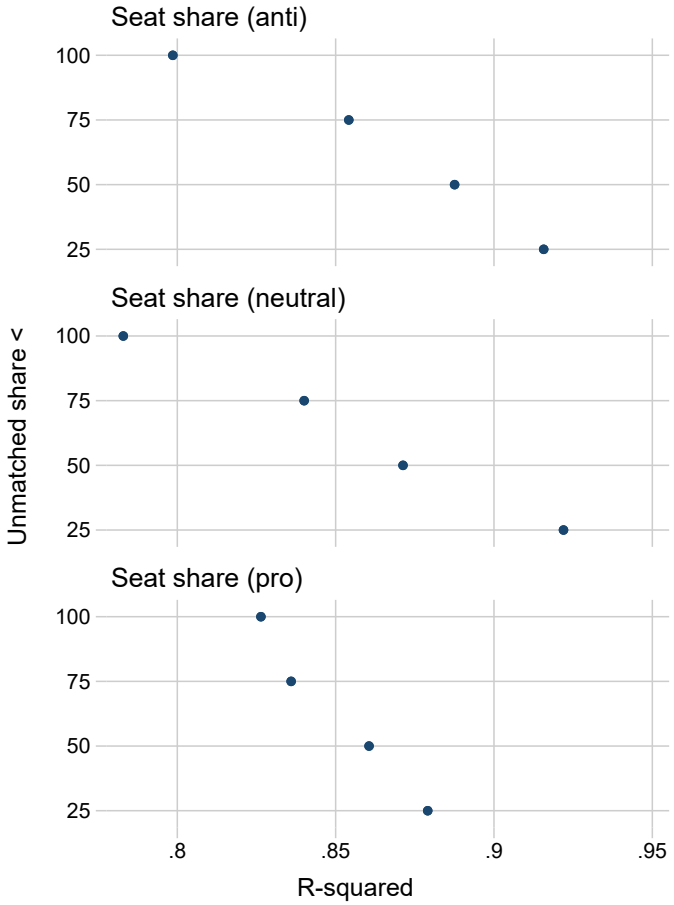
Note: Figure shows the unconditional country-level correlations between social norms (blue), personal beliefs (red), and the implementation gap, all measured in 2020. Social expectations are measured as the country-level average belief about the share of peers that hold a particular gender norm, ranging from 0 to 100. Personal beliefs measures the share of respondents who agree with a given gender norm, ranging from 0 to 100. Sample is 120 countries for which social norms data are available.

Figure A5: Correlation between norms and political orientation: breadwinner norm



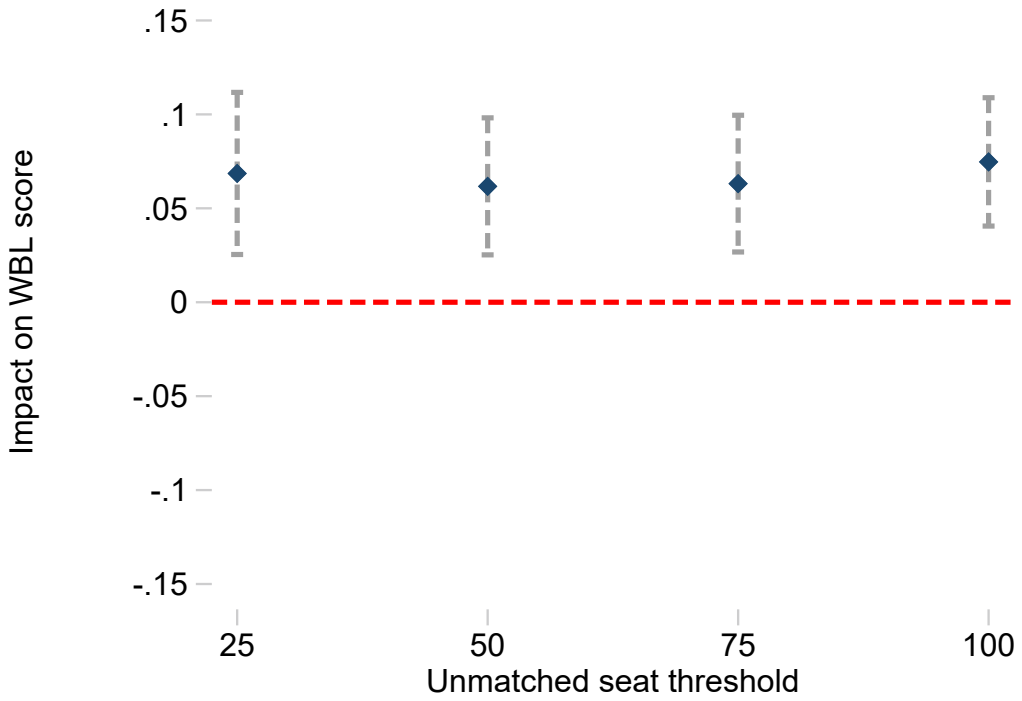
Note: Figure shows the correlation between social expectations of gender norms and political outcomes, binning at 20 quantiles of the distribution of social norms and controlling for log GDP per capita, personal beliefs, and region fixed effects. Seat share is the share of parliamentary seats belonging to political parties expressing an ideology in favor of gender equality. In government is an indicator variable for whether any of these pro-equality parties is a part of the ruling coalition. Social expectations are measured as the country-level average belief about the share of peers that agree with the male breadwinner norm, ranging from 0 to 100. Sample is 53 countries with political leadership data in 2022 for which 75% or more of the parliamentary seats can be matched to a political gender ideology. All variables are measured in 2020.

Figure A6: Residual variation in parliamentary seat shares: two-way fixed effects



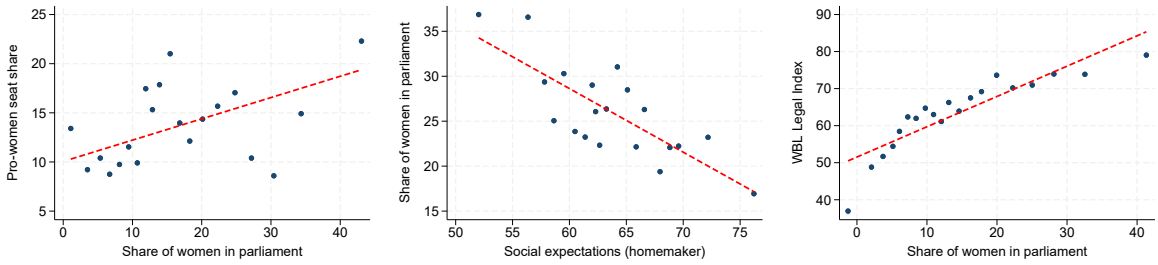
Note: Figure shows the estimated R^2 values from a regression of each seat share outcome on country and year fixed effects. This regression is estimated separately for each unmatched share threshold from 25 to 100%. Unmatched share refers to the share of parliamentary seats in a given country-year that can be matched to gender ideology.

Figure A7: Impact of political regimes on gender-equal laws by matched seat share thresholds



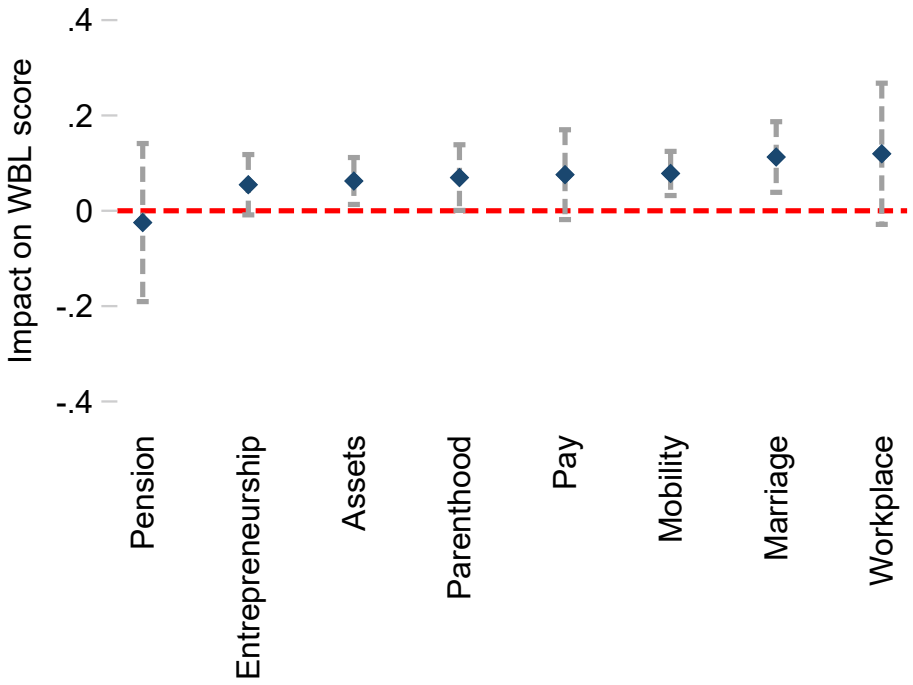
Note: Figure shows coefficients from a regression of WBL score on the parliamentary seat share of pro-women parties controlling for country and year fixed effects. Each estimate is from a regression on the subsample of country-years for which the share of seats that cannot be matched to a gender ideology is less than the threshold. Standard errors are clustered at the country level.

Figure A8: Norms, political ideology, and female representation



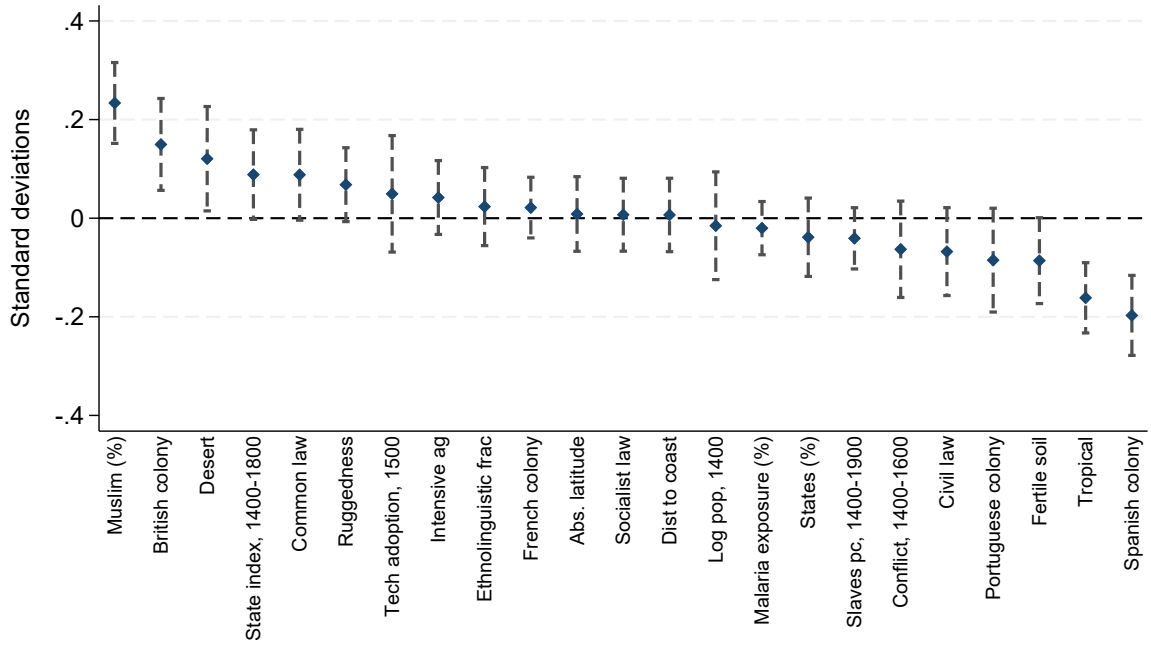
Note: Figure shows three binned scatter plots, plotting the relationship between the share of women in parliament and the share of pro-women parties (left), homemaker social expectations and and the share of women in parliament (center), and share of women in parliament and the WBL index (right). All plots control for log GDP. Social expectations are measured as the country-level average belief about the share of peers that agree with the male breadwinner norm, ranging from 0 to 100.

Figure A9: Impact of political regimes on gender-equal laws: WBL sub-indices



Note: Figure shows estimates from regressions of each WBL score sub-index on the parliamentary seat share of pro-women parties controlling for country and year fixed effects. Sample is all country-years for which the unmatched parliamentary seat share is less than 25%. Standard errors are clustered at the country level.

Figure A10: Instrument exogeneity: correlations between patriarchy and historical covariates



Note: Figure shows estimates from regressions of each country-level covariate on the ancestral patriarchal culture index, controlling for log GDP and its square. All covariates are standardized. 95% confidence intervals are derived from robust standard errors.