

Do pro-equality laws reduce gender pay gaps across countries? Evidence from the executive labor market*

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Abstract

We examine whether the gender pay gap among executives is mitigated by the introduction of laws that facilitate progress toward gender equality. Using data on 366,440 executive-firm-year observations from 35 countries, we document that female executives earn a significantly lower compensation than males. The pay gap is smaller in countries with higher legal gender equality. Importantly, introducing pro-equality laws seems to be particularly effective in reducing pay gap in countries where social norms tend to assign different roles to men and women and in countries with loose cultures. Especially laws that enhance pay, entrepreneurship, and ownership rights of women reduce the pay gap that female executives face in countries with low gender equality.

Keywords: Gender Inequality, Executives, Law, Compensation; National Culture

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1. Introduction

While progress has been made, the gender pay gap is still globally pervasive. Even after controlling for structural factors that contribute to the pay gap (e.g., different industries, jobs, part-time work),¹ a substantial disparity remains. For example, the World Economic Forum (2021) estimates that globally women earn on average 37% less than men in similar positions. Similar estimates have been reported for female executives (e.g., Homroy & Mukherjee, 2021). In addition, World Economic Forum (2022) estimates that at the current pace of convergence in the global economic participation and opportunity gender gap, it will take 151 years to reach complete gender equality.²

Can gender pay gap be eliminated proactively through legal interventions? The extant literature demonstrates that changes in legislation (e.g., paternity leave laws or board diversity laws; Burns et al., 2022; Homroy & Mukherjee, 2021; equal pay for equal work; Cruz & Rau, 2022) and policy (e.g., pay transparency; Lyons & Zhang, 2023) can significantly reduce the gender pay gap. However, these studies typically focus on a single country and examine one or two types of interventions. Thus, it is unclear whether legal progression aimed at reducing gender discrimination is effective homogeneously across countries. Moreover, while previous research suggests that the impact of institutional environment (i.e., policy and legislation) and national culture or social norms are interconnected (Chen et al., 2022), we do not know yet whether there is a distinctive tension between institutional and cultural forces regarding the progress towards gender equality.

¹ The non-adjusted gender pay gap is commonly attributed to differences in barriers to entry into the labor market, occupational segregation, women's overall paid working hours, vertical segregation, and ineffective equal pay legislation (Leythienne & Ronkowski, 2018).

² <https://www.weforum.org/reports/global-gender-gap-report-2022/digest/>

Our study attempts to fill these voids in the literature in two steps. First, we study globally whether the pay gap between men and women in executive positions is affected by the overall progression towards legal gender equality, as measured by the scores in the Women Business Law Database constructed by the World Bank.³ Second, using a sample from 35 countries, we examine whether and how the impact of legal gender equality in the executive labor market depends on underlying cultural norms pertaining to gender roles (Homroy & Mukherjee, 2021) or tightness of the gender norms (e.g., Gelfand et al., 2006; 2011; Uz, 2015).

We argue that there are two different kinds of pressures that could potentially explain the amount and type of executive gender pay gap and whether it is becoming narrower over time. As we are taking a global perspective, the first pressure we consider is the national context. According to the role congruity theory (Eagly & Karau, 2002), female gender role expectations are typically incompatible with leadership qualities, often referred to as “think manager–think male” stereotype, aggravated in countries with less gender equality. As these differential role expectations have been linked to gender pay gap (Blau & Kahn, 2017), it is not surprising that a substantial part of the gender pay gap can be explained by cultural factors (Burns et al., 2022). Second, while previous research has assumed that the cultural and institutional pressures work in concert (Chen et al., 2022), we assert that pro-equality legislation may have larger impact in cultures with biggest gender role differences in the society, as institutional pressures partly substitute for the effects of cultural pressures (Aguilera & Jackson, 2010). As a whole, we are extending the previous literature on gender pay gap by exploring the dynamic impact of the pressures coming from the societal assumptions (role congruity), and institutional pressures (pro-equality legislation).

³ See Hyland et al. (2020) for a detailed description of the WBL database and index.

To test our predictions, we combine data from Capital IQ and the Women, Business and Law (WBL) index, World Bank's comparable data on the laws and regulations that affect women's economic opportunities. Our final sample consists of 366,440 executive-firm-year observations from 17,606 unique firms across 35 countries over 14 years. Using these data, we first confirm that total compensation for female executives is on average significantly lower than that of male executives. We also find pay gap mainly exists in the form of salary and equity pay, but not in bonuses. Second, we find that female executives are less disadvantaged as the extend of pro-equality law adoption is higher.

Our main contribution pertains to our test of the effects across countries with varied gender norms. Overall, we find that the adoption level of pro-equality legislation is most effective in the countries with traditionally more gender differentiation, where differences between males and females are assigned social significance and are used as a means of social classification. Furthermore, we find that pro-equality laws also have stronger impact in loose cultures. In the context of our study, this means a looser or less consistent social norm or view of gender roles. Thus, combined, this evidence suggests that the pro-equality legislation has the strongest impact where national cultural norms on average tend to highlight gender-specific roles, yet those norms are loosely held.

Our findings suggest that both differences in legal protection and local cultural norms considering gender equality are important in explaining the gender disparities in pay, in a more dynamic way that the previous research has established (Chen et al., 2022). These results highlight that it is important not to confound the institutional and cultural effects. The findings have implications for policy makers, as they suggest that while social norms change slowly (e.g., Bisin & Verdier, 2000; Alesina et al., 2013), institutional actors may have significant impact on the progress towards achieving gender parity by introducing pro-equal legislation, especially in

the countries that are traditionally less egalitarian, or have loose cultural social norms about gender equality. Our findings indicate that especially laws that enhance the pay, entrepreneurship, and ownership rights of women are associated with a lower the pay gap among executives. However, the pro-equality laws are associated with a reduced pay gap only in the form of a salary.

The rest of the paper is organized as follows. In the second section, we provide an overview of the literature on the executive gender pay gap, the effectiveness of pro-equality legal interventions, cross-cultural differences, and develop hypotheses. In the third section, we describe our data, our empirical results, and finally discuss the implications from our research on theory and practice.

2. Literature Review and Hypothesis Development

2.1 Gender Pay Gap in Executive Pay

Theoretically, gender pay disparities can be explained by gender stereotypes, which are especially salient in high-status leadership positions (for a meta-analysis, see Koenig et al., 2011). According to role congruity theory (Eagly & Karau, 2002), female gender role expectations are incompatible with leadership qualities, often referred to as “think manager–think male” stereotype. These differential role expectations have been linked to the gender pay gap. For example, according to a study by Arulampalam et al. (2007), women face greater challenges in climbing the corporate ladder and those patterns are accompanied by unequal compensation at senior levels. Blau and Kahn (2017) find that while the gender pay gap shrank in the US from 1980 to 2010, there were still large differences between genders, especially at the high end of the income spectrum. Using data from Canada, Sweden, and the United Kingdom, Fortin et al. (2017) found evidence of “swimming upstream effect”, where top earnings rise faster than the representation of women in top earnings groups. Overall, while

there has been progress during the past decades, the reduction of the gender pay gap has been slower at the right tail of the income distribution – due to what is often called “the glass ceiling effect” (Albrecht et al., 2003; Arulampalam et al., 2007).

While studies focusing on the US markets find inconclusive evidence such that the pay gap between male and female CEOs seems insignificant (Adams et al., 2007; Bugeja et al., 2012; Gupta et al., 2018), or in some circumstances in favor of high-potential female executives (Hill et al., 2015; see also Bonet et al., 2020), studies from other countries (e.g., the UK, Sweden, Canada, China and Thailand) generally suggest that a gender pay gap exists in the executive labor market (Geiler & Renneboog, 2015; Keloharju et al., 2016; Lam et al., 2013; Xiao et al., 2013, Namwong et al., 2017). In a study spanning across eighteen countries (2002–2015), Homroy and Mukherjee (2021) estimate that women executive directors received 34% lower compensation than comparable men.

2.2 Effectiveness of Pro-Equality Legal Interventions

Are laws aimed at reducing gender discrimination in the labor market *effective*? While progress is painfully slow, evidence suggests that many pro-equality laws have reduced the gender pay gap. In the global context, Sever (2022) finds evidence that legal gender equality (as measured by the WBL index) can help countries bridge the gender gap in labor force participation whereby more-gender equal laws translate into a larger share of women in the workforce. Homroy and Mukherjee (2021) provide evidence across 18 countries that board gender quotas are associated with lower gender pay gap for experienced female executives in the highest age bracket. In contrast, they found that family policies are associated with lower gender pay gap for the youngest female executives.

Country-level data reiterate these findings. In late 2003, Norway passed a law mandating 40% representation of each gender on the board of public limited liability companies. The

primary objective of this reform was to increase the representation of women in top positions in the corporate sector and decrease the gender disparity in earnings within that sector. According to a study by Bertrand et al. (2019), the women appointed to these boards post-reform were observably more qualified than their female predecessors along many dimensions, and that the gender gap in earnings within boards fell substantially.

Using detailed Swedish data, Keloharju et al. (2022) study what prevents women reaching the top positions (CEO) and find that it mostly comes from absences and unemployment that are twice as likely for women as men. They also show that these gender differences increase following childbirth, and they persist in the long run. Against this background, perhaps it is not surprising that flexible working arrangements seem to increase the gender pay gap at least in some contexts. More precisely, among accountants in Britain, Smithson et al. (2004) found that women who worked flexibly or part time typically did so to combined working with caring commitments, in ways that damaged their career prospects. As the existing research suggests, work–family trade-offs have an impact on gender pay gap, leading some countries to pass laws facilitating father’s leave. A study in Denmark found that paternal leave laws reduced within-household gender wage gap through increases in mothers’ wages (Andersen, 2018). Paternal leave also enabled an increase in total household income.

In addition to making compensation systems more purposeful and mitigating excessive compensation, pay disclosure mandates are believed to also reduce gender pay gap. For example, Chile’s 2009 Equal Pay for Equal Work Law (EPL), included a disclosure requirement for firms with 200 or more workers. Cruz and Rau (2022) find that EPL reduced the firm premium gender gap by 6.1%, driven by the bargaining power channel. The effects were larger in firms exposed to higher penalties and disclosure requirements. Bennedsen et al. (2022) show that a 2006 legislation in Denmark that required firms to provide gender disaggregated wage

statistics reduced the average gender pay gap in the country by two percentage points. However, the reduction was due primarily to the slower post-legislation growth in male-employee compensation. Lastly, Lyons and Chang (2023) document that a policy enacted in one Canadian province that required salary disclosure through a publicly searchable database improved gender pay equality, particularly in most visible organizations.

2.3 Cross-Cultural Differences in Gender Pay Gap and Pro-Equality Legal Interventions

Is the impact of the progress in pro-equality legislation homogenous across countries? Prior research indicates that the gender pay gap is smallest in countries with egalitarian views, implying that corporations tend to conform to social norms in their compensation policies. Using data from World Values Surveys on the impact of gender role attitudes and work values on labor-market outcomes across 25 OECD countries, Fortin (2005) found that anti-egalitarian views are strongly negatively associated with female employee rates and positively with the gender pay gap. Even in within-country analysis, McLean et al. (2022) find that counties in the US with populations originating from countries with stronger gender-egalitarian beliefs have more women in the labor market, and lower gender-pay gaps. Furthermore, McLean et al. (2022) demonstrated that when firms move to more gender-egalitarian counties within the US, the representation of women on boards increased.

At the executive level, a recent study by Chen et al. (2022) found that while there was an unexplained gender pay gap of 3.3 % at CEO level, compensation differences between male and female CEOs were smaller in more gender egalitarian countries. Burns et al. (2022) explicitly analyzed the extent to which cultural attributes explained the gender pay gap among executives. Using a cross-country sample, they found that female executives were compensated less, but the gap was smallest in the CEO role. After controlling for human capital differences and firm-related factors, adding cultural measures increased the explanatory power from 44%

to 95%. Indeed, when culture was accounted for, the CEO pay gap disappeared. In essence, Burns et al. (2022) found that cultural norms explained most of the gap that is left unexplained by traditional factors, namely, human capital differences between men and women (Lazear and Rosen, 1990). This result suggests that legal interventions could be more effective in the countries where cultural norms explain most of the unexplained gender pay gap.

Overall, studies in sociology and economics have shown that local culture plays a significant role in corporate decisions (Putnam, 1995; Kanagaratnam, et al. 2018). It is likely that it will also influence decisions to equalize the pay of women relative to men. For example, Duchin et al. (2022) demonstrates that CEOs with childhood experiences of gender differentiation (i.e., with all-male high school experience from male-dominated families and neighborhoods with greater gender inequality) allocated less resources (here investment capital) to female division managers than males. As social norms are likely to be persistent over time in a given geographical region or country (e.g., Bisin & Verdier, 2000; Alesina et al., 2013), normative changes, such as those through legislative means, might be required to make progress. Thus, while previous research has demonstrated that culture affects the evolution of laws to support women's rights to economic participation (e.g., Malaquias et al., 2022), also the effectiveness of laws in curtailing gender pay disparities is likely to depend on how egalitarian the society is (Chen et al., 2022; Hyland et al., 2020). In essence, the introduction of pro-equality legislation might make discrimination more salient and therefore have the highest impact where such discrimination exists.

Furthermore, cultures differ not only in the level of gender equality, but also their tightness, which refers to the strength of social norms and the degree of sanctioning within societies (e.g., Gelfand et al., 2006; 2011; Uz, 2015). Organizations in tight societies tend to have greater order, precision, cohesion, stability, and resistance to change (Gelfand et al., 2006).

In contrast, organizations in loose societies tend to have less order and cohesion, more deviance, innovation, and tolerance for organizational change. In the context of our study, countries with looser gender norms might reconsider their practices and implement change at the company level faster after the introduction of new pro-equality legislation. Thus, we expect that the degree to which pro-equality laws will have impact in reducing the gender pay gap depends on the social norms in the country. More specifically, we expect that pro-equality laws will have a larger impact in countries with lower gender egalitarianism and looser gender equality norms. Formally, we present the following hypothesis.

Hypothesis: Pro-equality laws will have a higher impact in countries with (a) a lower level of gender equality and (b) loose cultures.

3. Data and Variables

In this section, we describe our data and variable construction. The definition of variables is also presented in Appendix A.

3.1. Sample Construction

We obtain data on firm characteristics, stock market, and executive compensation from publicly listed companies around the world from the Standard & Poor's Capital IQ database for the period between 2004 and 2017. We identify female executives by searching the Capital IQ biography for the words: Ms., Mrs., She, and Her. We remove countries without female executives. To have a meaningful number of observations for each country, we exclude the countries with less than 100 observations. We also require that among the executive compensation items salary is not missing.

Pro-equality legislation. We collect time-varying information on legal treatment of women from the newly constructed WBL database,⁴ which focuses on legislation that may

⁴ The WBL database is publicly available at <https://wbl.worldbank.org/en/wbl-data>.

impact a woman's access to employment and entrepreneurial activity. The WBL database covers 190 countries starting from 1971 and is updated annually. It is constructed based on a questionnaire sent out to an international network of over 2,000 respondents, who are experts in various aspects of the law. Expert answers on 35 individual legislative issues are then aggregated under 8 indicators. The indicator-level scores are obtained by calculating the unweighted average of the four or five binary questions within that indicator and scaling the result to 100. Our main explanatory variable is the overall WBL index scores which are calculated by taking an unweighted average of the eight indicators, with 100 representing the highest possible score. Our final sample includes 366,440 executive-year observations with 17,612 unique firms from 35 countries. Appendix B presents the distribution of our sample by country.

Executive compensation. *Total Pay* denotes the total executive compensation, i.e., the sum of salary, bonuses, restricted stock and option grants, long-term incentive plans, pension contributions, and all other compensation measured in 2009 US dollars. The average total executive compensation is \$985,506, which is comparable to that reported in related studies, e.g., \$1.09 million in Correa and Lel (2016). We then decompose total executive compensation to its components: salary, bonus and equity-based pay. Table 1 presents the summary statistics for our full sample. In Panel A, we present the compensation variable and executive characteristics used in our empirical analysis. Note also that all unbounded variables are winsorized at the 1st and 99th percentiles. According to the mean values, salary and bonus account for 46% of *Total Pay*, while equity-based pay that consists of restricted stock and option grants accounts for 27% of *Total Pay*. In Panels B and C, we present the summary statistics for the firm, industry and country characteristics used in our empirical analysis.

National gender norms. In our analysis, we study two dimensions of national gender norms. The first, *cultural gender egalitarianism*, captures whether the local culture has inherent gender biases reinforcing the pay gap. It is formally defined as "the degree to which a collective minimizes gender inequality" (House et al, 2004). Low gender egalitarian cultures are characterized by beliefs in the traditional gendered division of labor; men are viewed as breadwinners and women are viewed as caretakers and mothers. In high gender egalitarian cultures, on the other hand, there is more similarity in women's and men's involvement in work and home domains (Emrich et al., 2004). To empirically measure cultural gender egalitarianism, we use the *WVS 7Q EGAL* index, which is defined as the average country-level index based on individual responses to seven questions concerning perceptions about women's role in the society in the World Value Survey⁵. Our second cultural dimension is *cultural tightness*, which captures whether a nation has strong norms and a low tolerance for change ("tight") or it has weak norms and a high tolerance for change ("loose") (Gelfand et al., 2006; 2011). As an empirical measure of cultural tightness on gender roles, we use *WVS 7Q Std Dev*, which is defined as the standard deviation of individual seven-question egalitarianism scores by country (Uz, 2015).

4. Findings

In this section, we present our multivariate analysis.

4.1. Baseline Results

We begin our empirical analysis with general implications of the legal rights of women in the executive labor market.

⁵ The database is available at <https://www.worldvaluessurvey.org/wvs.jsp> (see also Haerpfer et al., 2022)

4.1.1 Legal Treatment of Women and Gender Pay Gap

In this section, we examine how the pay gap between men and women in executive positions is affected by the legal context regarding gender equality.

$$\begin{aligned} \ln(\text{Executive Pay})_{k,i,c,t} = & \alpha + \beta_1 \text{Female} \times \text{WBL Index}_{c,t-1} + \beta_2 \text{Female}_{c,t-1} + \\ & \beta_3 \text{WBL Index}_{c,t-1} + \gamma X_{i(c)t-1} + \epsilon_{k,i,c,t} \end{aligned} \quad (2)$$

where the dependent variable is the natural logarithm of total pay for executive k , firm i , year t , and country c . Our key variables of interest are $\text{WBL Index}_{c,t-1}$ and its interaction with Female . The set of variables that we control for, $X_{i(c)t-1}$, follows largely from the extant literature (e.g., Chen et al., 2022; McLean et al., 2022) and consists of an extensive list of executive, firm, industry, and country characteristics that may influence the gender pay gap in a firm's executive suite, namely: executive age, graduate degree, general ability, tenure with the current firm, lagged total pay, firm return on assets, book leverage, asset tangibility, cash holdings, capital expenditures, stock return volatility, firm size, market-to-book ratio, number of executive positions in the firm, CEO-Chairman duality, institutional ownership, insider ownership, percentage of female executives in the firm's two-digit SIC industry, GDP per capita, and GDP growth. All left-hand-side variables are lagged by one year relative to the dependent variable. We also include title, firm, and year fixed effects, and country time trends in all specifications.

Table 2 Panel A presents our baseline results on the relationship between executive pay and WBL Index . In column (1), we document that the average female executive is paid approximately 15% (statistically significant at 1%) less than the average male executive, controlling for unobservable and time-invariant firm, year, and country characteristics. This gap shrinks to about 9% in column (2), where we additionally control for the observable differences

between male and female executives such as education, tenure, and general ability, and observable time-varying firm, industry, and country characteristics.

Next, we focus on the impact of pro-equality laws in reducing this gap. In column (3), we find that our point estimate for the coefficient of *Female* \times *WBL Index* is positive and statistically significant at the 1% level. This finding is also economically meaningful: a one-standard-deviation increase in *WBL Index*, which is approximately 0.16, is associated with a 4% reduction in the pay gap between male and female executives. This finding is important as it shows that pre-equality laws do indeed reduce gender pay gaps around the world.

In Panel B of Table 2, we further examine whether the components of executive compensation differ in their sensitivities to gender-related laws. We expect salary to be particularly sensitive to these laws given that performance-based pay strongly depends on other individual factors such as risk tolerance, which is likely to differ between men and women rather than gender discrimination. Consistent with this prediction, we find that salary gap shrinks significantly when pro-equality laws are in effect in the country. Female executives do not seem to be at a disadvantage when it comes to bonuses. Hence, it is not surprising that bonuses for female executives relative to that for male ones are unaffected by gendered laws. Lastly, we find that the gap in equity pay between men and women is the other major source of the total gender pay gap. However, unlike the salary gap, company policies regarding the pay gap in equity-based remuneration are unaffected by legal interventions by policy makers.

4.1.2 Specific Laws and Gender Pay Gap

In this subsection, we examine which types of pro-equality laws are more effective in reducing the gender pay gap. We analyze eight different types of pro-equality laws: mobility rights, workplace rights, pay rights, marriage rights, parenthood rights, entrepreneurship rights, assets rights, and pension rights. Our empirical setup is again built on Equation 2, but we replace *WBL*

Index with its components. The results shown in Table 3 indicate that women in countries where there are laws that are specifically targeting equality with regards to legal pay, marriage, entrepreneurship, and asset-ownership rights are more effective in lowering the compensation gap at the executive level, while the other types of laws do not seem to be as effective. In terms of the economic magnitudes, better asset-ownership and entrepreneurship rights are associated with a much smaller gender pay gap than better pay and marriage rights: a one standard deviation change in entrepreneurship and asset-ownership rights are, respectively, associated with 4.23%, and 8.53% change in the relative compensation of female executives, whereas the respective percentages for pay and marriage rights are merely 2.95% and 2.01%.

4.2. *The Role of the Local Culture/Norms*

Next, we explore under what kind of socioeconomic conditions the passage of law helps with gender pay equality. We particularly focus on cultural and social norms that prevail in a country. We analyze which types of laws are more effective when national cultures have different degree of gender egalitarianism.

4.2.1. *The pro-equality laws and cultural resistance to gender equality*

Table 4 conducts sub-sample analyses across *WVS 7Q EGAL* (High versus Low) and *WVS 7Q Std Dev* (Loose versus Tight) indicators of a country. The first four columns of the table analyze Total Pay gap and last four focus on Salary gap prevalent in a corporation. Columns 1 and 2 of the table show that in countries with less egalitarian culture, the gender pay gap is larger. While in countries with higher gender egalitarianism gender pay gap is only around 23.7%, in lower gender egalitarianism countries the gender pay gap is substantially larger at 40.2% (*Female* dummy is significantly negative and large in magnitude in column 2). Thus, local culture does matter for gender pay gap. In general, the egalitarianism culture of a country is associated with a smaller gender pay gap.

Most importantly, however, the interaction term between *Female* and *WBL Index* is significantly positive only for the countries with low egalitarian culture. That is, according to our findings, the passage of pro-equality laws in low egalitarianism cultures is effective in curbing the gender discrimination among executives in that nation. For the high egalitarianism countries, the gender pay gap does not seem to be responsive to the legislative actions. This is an important finding that can help us understand under which circumstances introduction of gender equality laws would be more effective in reducing the gender pay gap.

In columns 3 and 4, on the other hand, we observe that the interaction term *Female* × *WBL Index* (β) is significant only for loose cultures with economic magnitude of around +27.9%. It is much lower in magnitude (around 10.9%) and insignificant under column 4 (tight cultures). Thus, when a nation has weak norms and a high tolerance for change, enacting certain gender equality laws is a very effective way of dealing with gender pay gap among corporate executives. The same cannot be said about tight cultures whereby the nation has strong (i.e., centralized) norms and a low tolerance for change.

Quantitatively much stronger results are obtained in the last four columns where we focus on *Salary* rather than *Total Pay*. The overall gender salary-based pay gap for countries with low egalitarianism is more pronounced than the total-pay-based pay gap. By comparing columns 1 and 5, we see that gender pay gap is larger (68.6%) for salary than for total pay (40.2%). We reach qualitatively similar conclusions when we compare the overall pay gap in loose countries when measured with total pay versus when it is measured with salary (columns 2 versus 6).

When focusing on the effectiveness of the laws in lowering salary-based pay gap, we observe that the interaction term *Female* × *WBL Index* is significant only for the countries with low egalitarian culture as well as for countries with loose cultures, consistent with our

predictions. When comparing the magnitudes of the interaction coefficients under columns 1 and 5, we again see that the laws are more effective for salary-based pay gap, perhaps because the salaries are much easier to calculate and measure across individuals than performance-based measures that depend on executive options.

In summary, we observe a strong cultural element present in the adaptation of societies to pro-equality laws. On the one hand, legislation of gender equality works only in countries with a low egalitarian (i.e., male dominant) culture. The gender pay gap is more severe in those societies to begin with (column 2 of panel A). Thus, it is not surprising that the laws are effective in the societies that need them the most. On the other hand, societies that have a relatively loose culture and hence are more adaptable to change are those that react to the progression in legislated gender equality mandates and guidelines.

4.2.2. Which type of pro-equality laws are more effective in overcoming cultural inequality?

Next, we study which type of pro-equality laws are effective in overcoming cultural norms that have created structural and persistent gender pay gap in the country. Table 5 analyzes eight different types of pro-equality laws: mobility rights, workplace rights, pay rights, marriage rights, parenthood rights, entrepreneurship rights, assets rights, and pension rights. The sorting of these laws into each of the seven categories was originally done by World Bank and we rely on their classification scheme.

Panel A of Table 5 analyzes the gender pay gap in the countries with low gender egalitarian cultures and Panel B in the countries with high egalitarian cultures. Focusing on the interaction coefficients for total pay, we observe in Panel B that none of the seven types of laws are effective in countries with high gender equality. In societies with widespread gender inequality (Panel A), on the other hand, some laws are indeed effective in closing the gender gap. Namely, pay rights laws, entrepreneurship rights laws, and assets rights laws are effective

in closing the salary gap between man and women. In terms of economic significance, asset rights have the highest impact on the pay gap with an interaction coefficient that is +52.9%. Next, are entrepreneurship rights and pay rights with coefficients of +36.0% and +14.5%, respectively. The other laws have statistically insignificant interaction coefficients and thus, they are deemed as ineffective in the low gender-equality societies.

5. Conclusion

Aligned with the existing cross-country evidence, our results reiterate that total pay for female executives is on average significantly lower than that of male executives. The pay gap exists mainly in the form of salary and equity pay, but not in bonuses. Importantly, we find that when pro-equality laws have been introduced, female executives are less disadvantaged in total pay and especially in salary whereas the gap in equity-based compensation remains unaffected.

Our main contribution is to uncover the tension between legal institutions and cultural gender-related norms in shaping the treatment of women in the executive labor market. More specifically, we focus on two key dimensions of the local norms that define a country's cultural landscape: cultural gender egalitarianism and cultural tightness. Our findings indicated that pro-equality laws are most effective in the countries with low gender egalitarianism, where differences between men and women are assigned social significance and used as a means of social classification in favor of men. Further, pro-equality laws are more effective in countries where gender norms are loose, i.e., when there is less consensus about the role of women in the society and, as a result, less resistance to the reduction of gender inequality through legislative actions. Differences in legal protection and local cultural norms concerning gender equality are important in explaining the gender disparities in pay, yet in a more interactive manner than previously established (Chen et al., 2022).

Studies in sociology and economics have shown that local culture affects the corporate culture of the firms located nearby, which ultimately affects corporate decisions and other economic outcomes (Putnam, 1995; Kanagaratnam, et al. 2018). However, the literature linking culture to pay gap is still in its nascent stage. A recent study by Burns et al. (2022) demonstrates that local cultures can partially explain the cross-country variation in gender pay gap. We extend this literature by providing evidence that the pro-equality law changes on gender pay equality are able to overcome the local cultural resistances to gender equality. More specifically, our evidence supports the substitution effects of cultural pressures (Aguilera & Jackson, 2010) in that the gender pay gap is smaller in egalitarian countries and that institutional pressures (legislation) partly substitute for national culture, coercing the progression towards gender equality.

In terms of policy implications, we propose that institutional actors design their policies towards achieving gender parity according to the underlying culture. In countries that are traditionally less egalitarian, policy interventions should be proactively introduced and implemented as they are more likely to reduce the pay gap due to gender discrimination. Furthermore, policy makers aiming at less gender discrimination in tight cultures should first entertain policies that loosen the consensus against equal treatment of women in the labor market. We find that especially pay rights, entrepreneurship rights, and assets rights laws are effective in closing the executive gender pay gap. This finding is very important, as it guides legislators around the world in how to effectively combat gender discrimination in pay.

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Appendix A: Definitions of Variables

All compensation and financial values are in 2009 US dollars. Our data source is Capital IQ if not specified in parenthesis.

Variable	Definition (Data Source)
Executive Characteristics	
<i>Total Pay</i> (\$000)	Total executive compensation, including salaries, bonuses, restricted stock awards, option grants, long-term incentive plans, changes in pension, and all other compensation
<i>Salary</i> (\$000)	Cash compensation including only salary
<i>Bonus</i> (\$000)	Cash compensation including only bonuses
<i>Equity Pay</i> (\$000)	Restricted stock and option grants
<i>Female</i>	Dummy variable that equals one if the executive is female
<i>CEO</i>	Dummy variable that equals one if the executive's title is chief executive officer (CEO)
<i>COO</i>	Dummy variable that equals one if the executive's title is chief operation officer (COO)
<i>CFO</i>	Dummy variable that equals one if the executive's title is chief operation officer (COO)
<i>Other Executive Title</i>	Dummy variable that equals one if the executive's title is not CEO, COO or CFO
<i>CEO-Chairman</i>	Dummy variable that equals one if the chairman of the board is the CEO
<i>Executive Age</i>	Executive's age in years
<i>Executive Graduate Degree</i>	Dummy variable that equals one if the executive has at least one Master or PhD degree
<i>Executive General Ability</i>	The first principal component of four measures of the executive's experience/expertise: Number of positions, number of firms, number of industries, and experience. Number of positions refers to the number of different positions the executive held; number of firms refers to the number of different firms in which the executive has worked; number of industries refers to the number of 4-digit SIC industries in which the executive has worked; and experience is an indicator variable that equals 1 if the executive has worked in another firm, and 0 otherwise.
<i>Executive Tenure</i>	Number of years that the executive has worked in the current firm.
Firm/Industry Characteristics	
<i>Female Dummy</i>	Dummy variable that equals one if the firm has at least one female executive
<i>Female Ratio</i> (%)	Fraction of female executives among all executives at firm-year level
<i>ROA</i>	Return on assets
<i>Book Leverage</i>	Book value of total debt scaled by total assets
<i>Tangibility</i>	Net property, plant and equipment scaled by total assets
<i>Cash Holdings</i>	Short-term investment and cash scaled by total assets
<i>Capex</i>	Capital expenditures scaled by total assets
<i>Stock return volatility</i>	Annualized standard deviation of weekly stock returns in US dollars
<i>Firm size</i>	Total assets in billion \$
<i>Market-to-Book Ratio</i>	Ratio of market value of equity to book value of equity
<i>Institutional Ownership</i>	Percentage of a firm's shares owned by top 10 insider shareholders
<i>Insider Ownership</i>	Percentage of a firm's shares owned by top 10 institutional investors
<i>Number of Executives</i>	Number of top executives of the firm (reported on Capital IQ)
<i>Industry Female Percentage</i>	Percentage of female executives in the firm's two-digit SIC industry
Country Characteristics	
<i>WBL Index</i>	Unweighted average of the eight legislation indicators on a scale of 0 to 100, provided by World Bank Women, Business and the Law (WBL) database.
<i>Mobility Rights</i>	WBL indicator of constraints on women's freedom of movement.
<i>Workplace Rights</i>	WBL indicator of laws affecting a woman's decision to work.
<i>Pay Rights</i>	WBL indicator of laws and regulations affecting a woman's pay.
<i>Marriage Rights</i>	WBL indicator of constraints related to marriage.

<i>Parenthood Rights</i>	WBL indicator of laws that affect women’s work after having children
<i>Entrepreneurship Rights</i>	WBL indicator of constraints to women starting and running a business
<i>Assets Rights</i>	WBL indicator of property ownership rights, inheritance rights, authority of assets during marriage, and valuation of nonmonetary contributions.
<i>Pension Rights</i>	WBL indicator of equalization of retirement ages and whether periods of absence from employment due to childcare are accounted for in pension benefits.
<i>WVS 7Q EGAL</i>	Average country-level index based on individual responses to seven questions concerning perceptions about women’s role in the society in the World Value Survey (WVS). WVS is a database provided by the Institute for Social Research of the University of Michigan and constructed based on national surveys of values and beliefs of individual participants. <i>WVS 7Q EGAL</i> index reflects respondents’ level of (dis)agreement with the following statements: (1) “When jobs are scarce, men should have more right to a job than women;” (2) “A working mother can establish just as warm and secure a relationship with her children as a mother who does not work;” (3) “being a housewife is just as fulfilling as working for pay;” (4) “both the husband and wife should contribute to household income;” (5) “men make better political leaders than women do;” (6) “if a woman earns more money than her husband, it’s almost certain to cause problems;” and (7) “university education is more important for a boy than for a girl.” For statement (1), there were three choices: “agree,” “neither,” and “disagree” while for statements (2)-(7), a scale from 1 to 4 showing level of <i>disagreement</i> is used. To construct the index, the answer “disagree” to the anti-equality statement (1) is given the score of 1, the scores for the pro-equality statements (3), (5), (6) and (7) are unchanged, and the scores for the anti-equality statements (2) and (4) are subtracted from 4. All of these scores are averaged to create the <i>WVS 7Q EGAL</i> index, which is higher when the respondent is more gender egalitarian.
<i>WVS 7Q Std Dev</i>	The standard deviation of the average country score of seven questions concerning individual perceptions about women’s role and society in the World Value Survey.
<i>GDP per Capita</i>	Annual GDP per capita
<i>GDP Growth</i>	Annual GDP growth

Appendix B: Distribution of Observations and WBL Index by Country

Country	Firm-Year Obs	Firm Obs	Average WBL	WVS 7Q EGAL	WVS 7Q Std Dev
Australia	33556	1474	0.86	0.64	0.67
Austria	736	46	0.90		
Belgium	571	81	0.94		
Canada	35523	1895	0.98	0.63	0.69
China	15509	765	0.72	0.59	0.67
Cyprus	191	24	0.88	0.62	0.78
Denmark	573	49	0.97		
Finland	692	105	0.95	0.65	0.76
France	8261	504	0.96	0.69	0.73
Germany	8049	443	0.90	0.67	0.72
Iceland	131	13	0.95		
India	41224	2817	0.64	0.59	0.82
Ireland	2100	82	0.95		
Israel	3043	369	0.78		
Italy	3045	251	0.88	0.64	0.62
Japan	1664	284	0.82	0.55	0.65
Jordan	586	61	0.31	0.53	0.84
Luxembourg	204	22	0.97		
Malaysia	920	115	0.48	0.54	0.78
Netherlands	2920	175	0.93	0.65	0.63
New Zealand	402	77	0.91	0.64	0.64
Norway	4454	187	0.96	0.72	0.78
Pakistan	287	148	0.38	0.55	0.97
Philippines	157	14	0.75	0.56	0.76
Poland	2932	212	0.79	0.56	0.75
Portugal	587	33	0.97		
S. Africa	7758	332	0.81	0.58	0.87
Singapore	1537	180	0.73	0.61	0.68
Slovenia	360	16	0.90	0.64	0.70
Spain	504	70	0.97	0.65	0.74
Sweden	2310	367	0.97	0.71	0.76
Switzerland	2484	221	0.85	0.55	0.70
UK	28250	1653	0.92	0.53	0.63
USA	151622	4517	0.84	0.62	0.68

Table 1: Descriptive Statistics

This table provides descriptive statistics on all the variables that we use in our empirical analysis. Definitions of all variables are provided in Appendix A. Panel A reports statistics on executive characteristics, Panel B on firm characteristics and Panel C on country characteristics.

<i>Panel A: Executive Level</i>	Obs.	Mean	Median	Std. Dev.
<i>Total Pay (\$000)</i>	363,142	985.506	455.513	1463.152
<i>Salary (\$000)</i>	363,142	338.780	272.547	276.471
<i>Bonus (\$000)</i>	363,142	115.914	0.000	295.405
<i>Equity Pay (\$000)</i>	363,142	266.626	0.000	719.433
<i>Female</i>	363,142	0.072	0.000	0.259
<i>CEO</i>	363,142	0.381	0.000	0.486
<i>CFO</i>	363,142	0.228	0.000	0.420
<i>COO</i>	363,142	0.136	0.000	0.343
<i>Executive Age</i>	363,142	51.875	50.000	7.885
<i>Executive Graduate Degree</i>	363,142	0.237	0.000	0.425
<i>Executive Tenure</i>	363,142	6.014	5.000	3.666
<i>Executive Ability</i>	363,142	0.081	-0.331	0.908
<i>Panel B: Firm/Industry Level</i>				
<i>ROA</i>	111,384	0.083	0.100	0.265
<i>Sales Growth</i>	111,384	0.157	0.052	0.979
<i>Book Leverage</i>	111,384	0.233	0.187	0.287
<i>Tangibility</i>	111,384	0.268	0.192	0.244
<i>Cash Holdings</i>	111,384	0.165	0.093	0.190
<i>Capex</i>	111,384	0.055	0.030	0.078
<i>Stock return volatility</i>	111,384	0.228	0.062	0.992
<i>Firm size</i>	111,384	0.495	0.421	0.323
<i>Market-to-Book Ratio</i>	111,384	5.048	0.257	33.912
<i>Institutional Ownership</i>	111,384	2.393	1.541	10.942
<i>Insider Ownership</i>	111,384	0.109	0.053	0.139
<i>CEO-Chairman Duality</i>	111,384	0.111	0.015	0.182
<i>Number of Executives</i>	111,384	0.535	1.000	0.499
<i>Industry Female Percentage</i>	111,384	4.031	4.000	2.254
<i>Panel C: Country Level</i>				
<i>WBL Index</i>	452	0.840	0.894	0.158
<i>Mobility Rights</i>	452	0.938	1.000	0.194
<i>Workplace Rights</i>	452	0.835	1.000	0.287
<i>Pay Rights</i>	452	0.768	0.750	0.284
<i>Marriage Rights</i>	452	0.873	1.000	0.212
<i>Parenthood Rights</i>	452	0.670	0.800	0.298
<i>Entrepreneurship Rights</i>	452	0.888	1.000	0.130
<i>Assets Rights</i>	452	0.943	1.000	0.154
<i>Pension Rights</i>	452	0.800	1.000	0.239
<i>WVS 7Q EGAL</i>	342	0.615	0.624	0.055

<i>WVS 7Q Std Dev</i>	342	0.726	0.724	0.073
<i>GDP per Capita (\$000)</i>	452	38.178	40.497	24.293
<i>GDP Growth</i>	452	0.028	0.026	0.028

Table 2: Pro-Equality Laws and Female Pay Gap in the C-Suite

This table reports the results on how gender-related laws affect the compensation gap between male and female executives. *Female* is a dummy variable that equals one if the gender of the executive is identified as female. *WBL Index* is an unweighted average of the eight legislation indicators on a scale of 0 to 1, provided by the World Bank Women, Business and the Law (WBL) database. Control variables consist of executive age, graduate degree, general ability, tenure with the current firm, lagged total pay, sales growth, firm return on assets, book leverage, asset tangibility, cash holdings, capital expenditures, stock return, stock volatility, firm size, market-to-book ratio, number of executive positions in the firm, CEO-Chairman duality, institutional ownership, insider ownership, percentage of female executives in the firm's two-digit SIC industry, GDP per capita, and GDP growth. In all columns, we also include executive title, year and firm fixed-effects and country time trends. Robust standard errors clustered at the firm level are reported in parenthesis.

Panel A: Total compensation. The dependent variable in all columns is the natural logarithm of total compensation.

Dependent Variable:	<i>Ln(Total Pay)</i>		
	(1)	(2)	(3)
<i>Female</i>	-0.147 (0.008)	-0.087 (0.014)	-0.295 (0.053)
<i>Female</i> × <i>WBL Index</i>			0.249 (0.059)
<i>WBL Index</i>			-0.509 (0.078)
<i>ROA</i>		0.023 (0.016)	0.025 (0.016)
<i>Sales Growth</i>		0.033 (0.004)	0.034 (0.004)
<i>Leverage</i>		-0.047 (0.015)	-0.050 (0.015)
<i>Tangibility</i>		-0.035 (0.022)	-0.039 (0.023)
<i>Cash Holdings</i>		0.004 (0.017)	0.002 (0.017)
<i>Capex</i>		-0.083 (0.035)	-0.084 (0.035)
<i>Stock return</i>		0.041 (0.002)	0.041 (0.002)
<i>Stock return volatility</i>		-0.037 (0.010)	-0.035 (0.010)
<i>Firm size</i>		0.156 (0.004)	0.155 (0.004)
<i>Market-to-Book Ratio</i>		0.002 (0.001)	0.002 (0.001)
<i>Institutional Ownership</i>		0.027 (0.023)	0.025 (0.023)
<i>Insider Ownership</i>		-0.045 (0.019)	-0.046 (0.019)
<i>Number of Executives</i>		-0.022 (0.001)	-0.022 (0.001)
<i>Industry Female Percentage</i>		-0.001 (0.002)	-0.000 (0.002)
<i>Female</i> × <i>Industry Female Percentage</i>		0.003 (0.002)	0.003 (0.002)
<i>CEO-Chairman Duality</i>		-0.022 (0.007)	-0.020 (0.007)

<i>CEO Dummy</i>		0.212 (0.005)	0.212 (0.005)
<i>Executive Age</i>		-0.000 (0.000)	-0.000 (0.000)
<i>Executive Graduate Degree</i>		0.026 (0.003)	0.026 (0.003)
<i>Executive Tenure</i>		0.015 (0.001)	0.015 (0.001)
<i>Executive Ability</i>		0.006 (0.002)	0.006 (0.002)
<i>Lagged Ln(Total Pay)</i>		0.468 (0.006)	0.468 (0.006)
<i>GDP per Capita</i>		0.156 (0.016)	0.147 (0.017)
<i>GDP Growth</i>		0.097 (0.136)	0.031 (0.136)
Title Fixed-Effects	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes
Firm Fixed-Effects	Yes	Yes	Yes
Country Time Trends	Yes	Yes	Yes
Observations	363,142	363,142	363,142
Adjusted R-squared	0.814	0.870	0.870

Panel B: Components of Executive Pay. The dependent variable in column (1) is the natural logarithm of salary, in Column (2) the natural logarithm of bonuses, and in Column (3) the natural logarithm of restricted stock and stock options.

Dependent Variable:	<i>Ln(Salary)</i>	<i>Ln(Bonus)</i>	<i>Ln(Equity Pay)</i>
	(1)	(2)	(3)
<i>Female</i>	-0.267 (0.050)	0.022 (0.222)	-0.237 (0.161)
<i>Female × WBL Index</i>	0.232 (0.055)	-0.065 (0.237)	0.022 (0.153)
<i>WBL Index</i>	-0.308 (0.065)	9.958 (0.771)	-6.488 (0.790)
Control Variables	Yes	Yes	Yes
Title Fixed-Effects	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes
Firm Fixed-Effects	Yes	Yes	Yes
Country Time Trends	Yes	Yes	Yes
Observations	363,142	363,142	363,142
Adjusted R-squared	0.830	0.551	0.681

Table 3: Types of Pro-Equality Laws and Female Pay Gap in the C-Suite

This table reports the results on how different types of gender-related laws affect the compensation gap between male and female executives. Variable definitions are provided in Appendix A. In all columns, we include the control variables from Table 2, executive title, year and firm fixed-effects, and country time trends. Robust standard errors that account for clusters at the firm level are reported in parenthesis.

Panel A: Total compensation. The dependent variable in all columns is the natural logarithm of total compensation.

Dependent Variable:	<i>Ln(Total Pay)</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Female</i>	-0.210 (0.083)	-0.105 (0.032)	-0.165 (0.023)	-0.178 (0.048)	-0.089 (0.015)	-0.395 (0.061)	-0.636 (0.089)	-0.113 (0.025)
<i>Female×Mobility Rights</i>	0.117 (0.081)							
<i>Mobility Rights</i>	-1.237 (0.046)							
<i>Female×Workplace Rights</i>		0.021 (0.030)						
<i>Workplace Rights</i>		-0.100 (0.015)						
<i>Female×Pay Rights</i>			0.104 (0.020)					
<i>Pay Rights</i>			-0.136 (0.046)					
<i>Female×Marriage Rights</i>				0.095 (0.048)				
<i>Marriage Rights</i>				0.102 (0.048)				
<i>Female×Parenthood Rights</i>					0.002 (0.016)			
<i>Parenthood Rights</i>					-0.064 (0.018)			
<i>Female×Entrepreneurship Rights</i>						0.325 (0.059)		
<i>Entrepreneurship Rights</i>						-0.166 (0.057)		
<i>Female×Assets Rights</i>							0.554 (0.088)	
<i>Assets Rights</i>							-1.180	

							(0.066)	0.035
<i>Female</i> × <i>Pension Rights</i>								(0.026)
<i>Pension Rights</i>								0.130
								(0.050)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Title Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Time Trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	363,142	363,142	363,142	363,142	363,142	363,142	363,142	363,142
Adjusted R-squared	0.872	0.870	0.870	0.870	0.870	0.870	0.870	0.870

Panel B: Salary. The dependent variable in all columns is the natural logarithm of salary.

Dependent Variable:	<i>Ln(Salary)</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Female</i>	-0.233 (0.076)	-0.156 (0.037)	-0.202 (0.025)	-0.186 (0.054)	-0.060 (0.015)	-0.625 (0.070)	-0.990 (0.098)	-0.098 (0.029)
<i>Female</i> × <i>Mobility Rights</i>	0.156 (0.105)							
<i>Mobility Rights</i>	-0.084 (0.028)							
<i>Female</i> × <i>Workplace Rights</i>		0.092 (0.034)						
<i>Workplace Rights</i>		-0.009 (0.016)						
<i>Female</i> × <i>Pay Rights</i>			0.167 (0.022)					
<i>Pay Rights</i>			-0.126 (0.042)					
<i>Female</i> × <i>Marriage Rights</i>				0.114 (0.053)				
<i>Marriage Rights</i>				0.008				

					(0.048)				
<i>Female</i> × <i>Parenthood Rights</i>						-0.039			
						(0.017)			
<i>Parenthood Rights</i>						-0.059			
						(0.017)			
<i>Female</i> × <i>Entrepreneurship Rights</i>							0.580		
							(0.068)		
<i>Entrepreneurship Rights</i>							-0.001		
							(0.066)		
<i>Female</i> × <i>Assets Rights</i>								0.923	
								(0.097)	
<i>Assets Rights</i>								0.029	
								(0.030)	
<i>Female</i> × <i>Pension Rights</i>									0.028
									(0.029)
<i>Pension Rights</i>									0.240
									(0.053)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Title Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Time Trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	363,142	363,142	363,142	363,142	363,142	363,142	363,142	363,142	363,142
Adjusted R-squared	0.830	0.830	0.830	0.830	0.830	0.830	0.830	0.830	0.830

Table 4: Pro-Equality Laws and Female Pay Gap in the C-Suite – Conditional on Social Norms on Gender Roles

This table reports the results on how pro-equality laws affect the compensation gap between male and female executives conditional on cultural norms on gender roles. The dependent variable is the natural logarithm of total compensation in columns (1)-(4) and the natural logarithm of salary in columns (5)-(8). *Female* is a dummy variable that equals one if the gender of the executive is identified as female. *WBL Index* is an unweighted average of the eight legislation indicators on a scale of 0 to 100, provided by the World Bank Women, Business and the Law (WBL) database. To measure gender egalitarianism, we use the *WVS 7Q EGAL* index, which is defined as the average country-level index based on individual responses to seven questions concerning perceptions about women’s role in the society in the World Value Survey. To measure cultural tightness on gender roles, we use *WVS 7Q Std Dev*, which is defined as the standard deviation of individual seven-question scores by country. Columns (1) and (5) include countries for which *WVS 7Q EGAL* index is below the median, while columns (2) and (6) include those for which it is above the median. Columns (3) and (7) include countries for which *WVS 7Q Std Dev* is above the median, while columns (4) and (8) include countries for which it is below the median. In all columns, we include the control variables from Table 2, year, executive title, and firm fixed-effects, and country time trends. Robust standard errors that account for clusters at the firm level are reported in parenthesis.

Dependent Variable:	<i>Ln(Total Pay)</i>				<i>Ln(Salary)</i>			
Measure of Cultural Norms:	<i>WVS 7Q EGAL</i>		<i>WVS 7Q Std Dev</i>		<i>WVS 7Q EGAL</i>		<i>WVS 7Q Std Dev</i>	
Gender Norms:	Low	High	Loose	Tight	Low	High	Loose	Tight
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Female</i>	-0.402 (0.069)	-0.237 (0.114)	-0.267 (0.070)	-0.191 (0.114)	-0.686 (0.076)	-0.211 (0.124)	-0.407 (0.073)	-0.206 (0.132)
<i>Female</i> × <i>WBL Index</i> (β)	0.414 (0.080)	0.127 (0.123)	0.279 (0.065)	0.109 (0.134)	0.786 (0.087)	0.112 (0.133)	0.442 (0.068)	0.146 (0.152)
<i>WBL Index</i>	-0.486 (0.145)	-0.331 (0.108)	-0.227 (0.123)	-0.839 (0.144)	-0.250 (0.162)	-0.086 (0.092)	-0.287 (0.126)	-0.877 (0.136)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Title Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Time Trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
$H_0: \beta_{Low} = \beta_{High}$ [<i>p-value</i>]	[0.02]		[0.09]		[0.00]		[0.03]	
Observations	254,930	100,267	116,692	238,505	254,930	100,267	116,692	238,505
Adjusted R-squared	0.888	0.782	0.882	0.828	0.858	0.699	0.846	0.773

Table 5: Types of Pro-Equality Laws and Female Pay Gap in the C-Suite – Conditional on Social Norms on Gender Roles

This table reports the results on how different types of gender-related laws affect the compensation gap between male and female executives conditional on social norms on gender roles. The dependent variable in all columns is the natural logarithm of salary. To measure gender egalitarianism, we use the *WVS 7Q EGAL* index, which is defined as the average country-level index based on individual responses to seven questions concerning perceptions about women’s role in the society in the World Value Survey. Variable definitions are provided in Appendix A. In all columns, we include the control variables from Table 2, year, executive title, and firm fixed-effects, and country time trends. Robust standard errors that account for clusters at the firm level are reported in parenthesis.

Panel A: Low Gender Egalitarianism. This panel uses the subsample of countries for which *WVS 7Q EGAL* index is below the median.

Dependent Variable:	<i>Ln(Total Pay)</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Female</i>	-0.190 (0.082)	-0.092 (0.033)	-0.163 (0.025)	-0.200 (0.086)	-0.076 (0.018)	-0.410 (0.067)	-0.594 (0.086)	-0.094 (0.032)
<i>Female</i> × <i>Mobility Rights</i>	0.109 (0.080)							
<i>Mobility Rights</i>	-1.163 (0.050)							
<i>Female</i> × <i>Workplace Rights</i>		0.023 (0.030)						
<i>Workplace Rights</i>		-0.034 (0.023)						
<i>Female</i> × <i>Pay Rights</i>			0.145 (0.023)					
<i>Pay Rights</i>			-0.377 (0.100)					
<i>Female</i> × <i>Marriage Rights</i>				0.127 (0.084)				
<i>Marriage Rights</i>				-0.264 (0.153)				
<i>Female</i> × <i>Parenthood Rights</i>					0.007 (0.029)			
<i>Parenthood Rights</i>					-0.210 (0.053)			
<i>Female</i> × <i>Entrepreneurship Rights</i>						0.360 (0.064)		
<i>Entrepreneurship Rights</i>						-0.389 (0.122)		
<i>Female</i> × <i>Assets Rights</i>							0.529 (0.084)	
<i>Assets Rights</i>							-1.062	

							(0.109)	0.030
<i>Female</i> × <i>Pension Rights</i>								(0.036)
<i>Pension Rights</i>								0.217
								(0.097)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Title Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Time Trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	254,930	254,930	254,930	254,930	254,930	254,930	254,930	254,930
Adjusted R-squared	0.890	0.888	0.888	0.888	0.888	0.888	0.888	0.888

Panel B: High Gender Egalitarianism. This panel uses the subsample of countries for which *WVS 7Q EGAL* index is above the median.

Dependent Variable:	<i>Ln(Total Pay)</i>							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Female</i>	-0.602 (0.490)	-0.128 (0.109)	0.005 (0.110)	-0.180 (0.082)	-0.131 (0.031)	-0.248 (0.112)	-0.124 (0.028)	-0.171 (0.041)
<i>Female</i> × <i>Mobility Rights</i>	0.478 (0.488)							
<i>Mobility Rights</i>	-1.735 (0.114)							
<i>Female</i> × <i>Workplace Rights</i>		0.005 (0.109)						
<i>Workplace Rights</i>		-0.042 (0.043)						
<i>Female</i> × <i>Pay Rights</i>			-0.131 (0.107)					
<i>Pay Rights</i>			0.012 (0.066)					
<i>Female</i> × <i>Marriage Rights</i>				0.064 (0.086)				
<i>Marriage Rights</i>				0.058 (0.061)				
<i>Female</i> × <i>Parenthood Rights</i>					0.012			

						(0.029)			
<i>Parenthood Rights</i>						-0.093			
						(0.022)			
<i>Female×Entrepreneurship Rights</i>							0.130		
							(0.110)		
<i>Entrepreneurship Rights</i>							-0.182		
							(0.075)		
<i>Female×Assets Rights</i>								0.008	
								(0.039)	
<i>Assets Rights</i>								-1.433	
								(0.100)	
<i>Female×Pension Rights</i>									0.058
									(0.038)
<i>Pension Rights</i>									-0.052
									(0.068)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Title Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Fixed-Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Time Trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	100,267	100,267	100,267	100,267	100,267	100,267	100,267	100,267	100,267
Adjusted R-squared	0.785	0.782	0.782	0.782	0.782	0.782	0.782	0.784	0.782