

# **Gender Pay Gap across Cultures**

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Using a cross-country sample, we examine whether cultural differences in gender attitudes relate to wage differentials across corporate executives. We find that societies with greater acceptance of corruption and intolerance, greater importance of religious beliefs, and more acceptance of violence toward women exhibit larger gender pay gaps. Conversely, societies that support women's education and women in the workforce and that value hard work and individualism exhibit smaller gender pay gaps. We use a quasi-exogenous shock that reflects changes in cultural attitudes towards a woman's role in the workforce and find that the gender gap decreases.

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*JEL Classification:* G15, G30, G34, G40

## I. Introduction

In recent decades, countries' governments have made a number of commitments, including adopting new laws, to improve gender diversity in employment. Consequently, women have increasingly entered the labor force and the gap between the compensation for women versus men has narrowed. Despite this progress, however, a significant gender pay gap persists.<sup>1</sup> In fact, the gender gap itself is still so broad as to garner predictions such as the recent World Economic Forum's Gender Gap Report 2021 statement: "On its current trajectory, it will now take 135.6 years to close the gender gap worldwide."<sup>2</sup> In early research, Lazear and Rosen (1990) and Becker (1957) develop two primary explanations that pertain to the gender pay gap — values of human capital differences and taste-based discrimination. The human capital differences argument implies that the gender pay gap reflects differences in perceptions regarding labor market and non-labor market abilities of women versus men. In contrast to this explanation, Becker's (1957) formalized taste-based discrimination model argues that differences in economic outcomes, such as pay, result from beliefs and attitudes held by employers, workers, or clients. Moreover, Becker and others (e.g., Arrow, 1973) further argue that taste-based discrimination should be arbitrated away in a competitive market.

Both the human capital differences and taste-based discrimination explanations rely on individuals' perceptions, beliefs and attitudes, and as such, they reflect a society's cultural norms.<sup>3</sup> In this study we examine the extent to which cross-country cultural norms can explain gender wage differentials, even among highly skilled individuals in a particularly competitive market. We focus on the compensation of top executives, a market for which the pool of people with appropriate

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<sup>1</sup> See [http://www3.weforum.org/docs/WEF\\_GGGR\\_2020.pdf](http://www3.weforum.org/docs/WEF_GGGR_2020.pdf). This prediction is based on their analysis of 107 countries.

<sup>2</sup> See, for example, Blau and Kahn (1992, 1997, 2000, 2017), O'Neill and Polachek (1993), O'Neill (2003), Bertrand, Goldin, Katz (2010), Gayle, Golan and Miller (2012), Guvenen, Kaplan, Song (2021), Sapienza (2021), among others.

<sup>3</sup> Because beliefs are verifiable and falsifiable, they can be changed with facts, whereas attitudes are stable dispositions that are harder to change and serve as a construct that guides motivation and behavior (Eagly and Chaiken 1993, Albarracin et al., 2005, Flood and Peese, 2006).

talent and skill is limited relative to the demand, creating significant competition. Focusing on executives allows us to largely avoid effects from some important possible sources of a gender pay gap as listed by Blau and Kahn (2017), such as human capital differences and self-selection.<sup>4</sup>

Our cross-country sample allows us to exploit differences in country cultural beliefs and attitudes to investigate their effect on gender wage differentials. These beliefs and attitudes manifest in social systems and become reflected in firms' corporate governance systems. For example, Adams, Licht and Sagiv (2011) and Licht and Adams (2021) provide evidence that board members' personal values enter into their decisions and that these personal values are related to country cultural norms. Thus, the board members' decisions on compensating executives should reflect these norms. To test our hypotheses regarding whether executive gender pay gaps can be partially attributable to a society's beliefs and attitudes, we construct measures from the World Values Survey, a global survey of individuals designed to understand people's beliefs, values, and motivations.<sup>5</sup>

Testing our hypotheses on a sample of top executives across 31 countries over the 2004-2016 period, we find a significant gender compensation gap exists, on average, across countries and across various executive roles. Although, in general, male executives tend to receive higher compensation than female executives in many countries, this is not a universal characteristic as variation exists across countries. For example, in some countries no significant executive gender pay gap exists and, in a few countries, female executives receive greater compensation than the male executives, on average.

Importantly, consistent with our hypotheses, we find that a set of cultural norms explains a significant portion of the executive pay gap and that the gap becomes smaller or insignificant

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<sup>4</sup> However, even among the top earners in the United States, Guvenen, Kaplan and Song (2021) show a narrowing but persistent gender pay gap and more pertinent to our analysis, Sapienza (2021) provides evidence that even in the upper echelons of top executives, the gender gap persists.

<sup>5</sup> Measures developed from this survey have been used in previous literature to measure the role of culture in different settings such as identifying the relationship between a society's intensity of religious beliefs and economic attitudes, including attitudes towards working women (Guiso, Sapienza and Zingales, 2003), explaining gender differences in math scores (Guiso, Monte, Sapienza and Zingales, 2008), gender differences in employment choices and the resultant gender pay gap (Fortin, 2005).

once we control for these norms along with other variables previously employed to explain executive compensation. When we test relationships between the executive gender pay gap and each of the cultural measures individually (while controlling for other potential influences), we find significant relationships for almost all of the cultural measures.

Because the cultural measures are highly correlated with each other, we conduct a varimax-rotated principal component factor analysis. According to this analysis, the country cultural attributes divide into three primary categories, each of which is significantly associated with the gender gap. The first category captures a society's beliefs and attitudes regarding women's education and work, that is, whether women should receive equal education to men, and whether positive views toward women's roles in the workplace exist. As early as the 18<sup>th</sup> century, Mary Wollstonecraft (1792) maintained that educating women changes societal beliefs and attitudes toward women, and that such changes would improve the lives of not only women, but also others in society. A country's views toward women's education and role in the workforce reflects the intent behind behaviors that affect outcomes for women in the labor market. Our empirical tests support the hypothesis that in cultures that value education for women and their roles in the workplace, there exists smaller executive gender pay gaps. We also find that the cultural views associated with smaller gender pay gaps are also associated with increased compensation for men.

The second category of cultural attributes revealed through the factor analysis consists of beliefs and attitudes that have an indirect relation to female executives. This factor includes views such as the acceptance of corruption, intolerance, violence toward women, and the degree to which religious beliefs are dogmatic. Given the previous literature on the ways through which such cultural norms are related to gender roles (e.g., Welzel, 2013; Flood and Pease, 2006; Guiso, Sapienza and Zingales, 2003), we hypothesize that such beliefs and attitudes should also be related to increased gender pay gaps. The coefficients on this factor support our hypothesis.

The third category of cultural variables includes views toward hard work and success, the role of the individual in society, and the level of trust in the society.<sup>6</sup> This category would be expected to be related to executive compensation in general given previous research has provided empirical evidence of a relationship between the structure of CEO compensation and with cultural beliefs and attitudes toward hard work (versus connections) and individualism (Burns, Minnick, and Starks, 2017). In addition, trust has been shown to be vital for cooperation and economic transactions (see Smith, 1776; Gambett, 1988; Coleman, 1990; Putnam, 1993; and Fukuyam, 1995; Guiso, Sapienza and Zingales, 2008). Consistent with the hypothesis, we find this factor is also significantly related to the executive gender pay gap.

These relationships between cultural norms and executive compensation hold not only across executives in general but also across subsamples of CEOs only, the top 3 other executives (defined as President, COO, and CFO – but not CEO), or all other executives. We also show that most of the individual cultural variables within each factor grouping are related to the gender pay gap in each of these divisions.

To understand the economic importance of the relationship between cultural norms and gender compensation, we use the decomposition method developed by Oaxaca (1973) and Blinder (1973) and confirm that both the total and the unexplained compensation gaps remain significant for our sample period for CEOs, the top three executives other than CEO, and the other non-top executives. After we account for firm and executive characteristics related to compensation, such as position, CEO tenure, and firm characteristics, we find that these characteristics explain 44 percent of the compensation gap we have identified. When we add cultural measures to the model, the model is able to explain 95% of the gender compensation gap.

The strong implication of our results, thus far, is that country cultural values affect outcomes for women, specifically the executive gender pay gap. The presence of certain societal

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<sup>6</sup> It should be noted that these categories do not have well-defined lines between the groupings as trust and religion show up in both the beliefs related to women's role in society and the beliefs related to hard work, but each variable has a substantially stronger connection to the category in which it is included.

norms seems to reduce the gap, while the presence of other norms appears to exacerbate the gap. In order to strengthen our identification, we employ a quasi-natural experiment of two major country-level policy changes that would be expected to reduce the gender pay gap: (1) the adoption of laws that initiate paternity leaves and (2) the proposal of laws to increase gender diversity on corporate boards. The paternity leave laws should help reduce the career consequences of child-rearing. That is, a primary explanation given for the gender pay gap is that women's career paths face disruptions due to their taking leaves to raise children (e.g., Goldin, 2014). In countries that pass paternity leave laws, men should also potentially experience this career disruption since they would be able (and incentivized) to take advantage of their nonmarket labor skills. This type of law should be exogenous to an executive's compensation.<sup>7</sup> Similarly, board diversity laws should be exogenous to an executive's compensation within a firm. Since each of these laws have had staggered adoption across countries (and they have not been adopted by all countries), we can utilize their individual enactments to test whether they affect the gender pay gap. Consistent with the hypotheses, we find that after a country introduces these laws, the executive gender pay gap becomes smaller.

Our research contributes to the gender gap literature in several important ways. Restricting our sample to the executive level allows us to mitigate many of the issues that arise in analyzing the gender pay gap. That is, determining why gender pay gaps exist faces challenges because of the number of factors that could help explain the gap. For example, the gap could be explained in part by differences in seniority, tenure, and job responsibilities, which are difficult, if not impossible, to control in wide scale studies. Our approach of focusing on executive compensation also allows us to avoid effects from some important possible sources of a gender

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<sup>7</sup> Since many top executives are older and in particular, female executives are less likely to be having children at the top executive average age, the law should not be directly relevant to women who have reached the executive level (where the average age is 53). However, paternity laws are a reflection of the country's current views or goals that both fathers and mothers take time to care for their children.

pay gap as listed by Blau and Kahn (2017), such as human capital differences, the family division of labor, and selection associated with lower tier positions. Lazear and Rosen (1990), Goldin (2014) and Keloharju, Knupfer and Tag (2019) identify one human capital difference that could affect gender pay gaps—the fact that women are more likely to undergo a separation from the work force, which can lead to differences in experience and consequently, lower pay. Goldin, Kerr, Olivetti, and Barth (2017) provide further evidence that the pay gap is associated with early career choices. Similarly, another human capital difference—self-selection—is less likely to be an issue with female executives because they are unlikely to believe in the inferiority of women (in leadership or entitlement) that would self-constrain their labor force participation or investment in labor force training.<sup>8</sup> Although research suggests gender differences in human capital relating to competition—that women may perform differently in or avoid competitive environments (Flory, Leibbrandt, and List, 2015 ), evidence also indicates that this should not be as significant a concern for our sample, because the competitiveness gap tends to disappear for women MBAs over time as well as for older women (Reuben, Sapienza and Zingales, 2015; Flory, Gneezy, Leonard and List, 2020).<sup>9</sup> In addition, our sample allows us to control for measures of performance, e.g., firm earnings, that Azmat and Ferrer (2017) show to explain part of the gender compensation gap. As Blau and Kahn (2016) summarize, “given women’s higher exit rate, women survivors in the executive labor market may be an especially positively-selected

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<sup>8</sup> For example, in a sample of U.S. executives, Kostea (2013) finds that women with less traditional gender role beliefs and attitudes are more likely to invest in training. Thus, variance in human capital in experience and training should be less severe for the talented individuals that reach an executive position. Indeed, the Lazear and Rosen (1990) model suggests that gender should matter less at high levels of ability. See Maasoumi and Wang (2020) for theoretical background on self-selection and its potentially associated misspecification issues in the gender gap research

<sup>9</sup> However, gender differences in competitiveness can vary with patriarchal or matriarchal structures in society (Gneezy, Leonard, and List (2009), which highlights the importance of examining the gender gap in relation to cultural differences. In addition, the effects of gender differences in negotiation choice tend to vary (Leibbrandt and List, 2015; Exley, Niederle, and Vesterlund, 2020).

group.”<sup>10</sup> By focusing on highly accomplished executives we mitigate the effects of differences in job responsibilities as well as effects from potential human capital differences. Moreover, most top executives have significant experience by the time they reach their positions, and therefore returns to experience should be less relevant for the compensation differences of executives. As explained by Bertrand and Hallock (2001), unobservable characteristics such as career/work commitment, motivation, and ambition are relatively insignificant (due to less variance in these characteristics) within a sample of top executives in the US.

Studying compensation at the executive level gives us the advantage of a particularly competitive market (due to the level of compensation and the frequent use of consultants) which should result in lower gender compensation gaps, as suggested by Arrow (1973) who models that a competitive market eliminates taste-based discrimination. In opposition, the top executive market can exhibit imperfections, arising from information asymmetry, nepotism, or taste which may result in higher compensation gaps (Arrow, 1973; Becker, 1957; Black, 1995; Lang, Manove, and Dickens, 2005).

By studying the executive gender pay gap across countries, we are able to bring more understanding to the determinants of the gap through considering differences in cultural norms. Assessing the role of cultural beliefs and attitudes on outcomes allows us to provide evidence that tastes have a measurable impact on outcomes, even in this competitive market in which they should be arbitrated away. In addition, examining the gender pay gap across countries enhances the analysis of cultural effects because cross-country variation in culture is much larger than within-

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<sup>10</sup> Blau and Kahn (2016) on discussion of Gayle, Golan and Miller (2012). Gayle et. al. (2012) show that women have a higher exit rate from employment in their study of U.S. top executives, resulting in survivors being a particularly highly qualified. At a different extreme, Olivetti and Petrongolo (2008) measure the effect of self-selection for employment on the gender wage gap, in a multi-country sample of household data. Their method reveals that non-employment of females is associated with a lower wage gap and attribute this to less qualified/talented females selecting out of employment. See, more recently, Guvenen, Kaplan, and Song (2021) who show top female earners exit rate is greater than male top earners.



country variation in culture (even among the most distant groups within a country (Welzel, 2013)).<sup>11</sup>

More closely related to our study, Fortin (2005) analyzes World Values Survey data and finds that cross-country differences in cultural norms regarding gender roles affect women's employment decisions, employment rates, and the gender compensation gap. However, we address a fundamentally different question. While Fortin analyzes individual outcomes based on the individual's own views, we examine how societal beliefs and attitudes affect a generally collective decision on executive compensation given the norms of the country where the firm and its executives are located. Moreover, we examine the relationship of these societal norms with the compensation of a group of highly skilled workers who are less likely to hold beliefs that are inconsistent with success in the competitive executive labor pool.

## **II. Measures of Cultural Norms, Country Institutional Characteristics and Executive Compensation**

In order to test our hypotheses regarding the relationships between cultural norms and gender differences in executive compensation, we need measures of societal norms in a given country, country institutional characteristics and executive compensation. In this section, we describe these measures.

### *A. Measures of Cultural Norms*

Our measures of cultural values derive from the World Values Survey (WVS), an in-person survey conducted by a worldwide network of social scientists who study cultural values at different points in time, i.e., in waves.<sup>12</sup> To match our sample period, we employ Wave 4 (1999-2004),

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<sup>11</sup> Recent work by Adams, Barber, and Odean (2019) uses international data to analyze whether math education has a significant impact on the representation of women in a math-intensive field—finance.

<sup>12</sup> See Inglehart, et al. (2014) for more detailed information.

Wave 5 (2005-2009) and Wave 6 (2010-2014) and match the closest WVS wave response to the year of our compensation data.

Following the techniques employed by Inglehart and Welzel (2005) and Welzel (2013), we first create index measures of culture from the WVS by adjusting the responses to achieve the same polarity, i.e., a higher value means the same for each aspect of culture. (The WVS responses are measured on different scales—for example, some responses are measured on the degree of agreement to a statement on a scale of 1 to 3, 1 to 5, or 1 to 10, while others are dichotomous, with a 0 or 1 response.) We standardize each WVS item on a scale with a minimum of 0 and a maximum of 1.<sup>13</sup> Finally, we average across groups of related responses because, as argued by Welzel (2013), culture takes place at the group level, thus, the mean values represent aggregate measures of culture in each country. These adjustments provide two benefits, more straightforward interpretations of the survey responses and indices of related values that are averages across the responses.

We employ two sets of WVS questions that focus on a society's values, attitudes, and beliefs about work and success, which should reflect views toward executive compensation in general. Granato, Inglehart and Leblang (1996) study motivation and achievement and find that cultures that value work and individual performance provide substantial motivation to succeed. Thus, the first set of questions reflect a population's views on whether success is more likely to be an outcome of hard work or connections—that is, whether the respondents consider that hard work, rather than luck and connections, brings a better life.<sup>14</sup> Similarly, in this set are questions that address attitudes towards the importance of a balance between work and leisure.

The second set of questions focus on a population's views on the importance of individualism. If individualism is respected, then people should recognize an individual's contribution, thereby reducing taste-based preferences. In contrast, if the collective is more highly

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<sup>13</sup> With binary responses, we recode the response to be either zero or one, where zero is disagreement, and one is agreement. If there are three possible responses, we recode to 0,.5,1; four responses is 0,.33,.66,1; five responses is 0, 0.25, 0.50, 0.75, 1; and 10 possible responses is 0, 0.11, 0.22, 0.33,0.44,0.55, 0.66,1.0 where 0 is disagreement and 10 is agreement with the trait, as suggested by Welzel (2013).

<sup>14</sup> Burns, Minnick, and Starks (2017) provide evidence that compensation differences, i.e., tournament effects, between a CEO and other top executives are associated with a society's views on hard work as measured by the WVS questions.

valued, people who deviate from a norm or expectation may be hampered in society. We list below the components of each of these indices, which include child-rearing values that likely reflect an individual's concerns and ideals that are considered important to pass on, i.e., ingrained in the culture. Each item is preceded by the answer coded to the higher value on our scale:

Hard work— (importance of work)

1. Agree with: Work is what makes life worth living, not leisure
2. Agree with: People who don't work become lazy
3. Agree with: Work should come first above all else
4. Agree with: Hard work brings success versus is more a matter of luck and connections
5. Very important: How important in your life would you say it is: Work
6. Agree with: Importance as a quality for children to learn at home: Hard work.

Individualism— (Individual is preferred)

1. Agree with: Feel have complete control and choice over the way your life turns out
2. Disagree with: one should follow one's superior's instructions even when one does not fully agree with them vs should follow one's superior's instructions only when one is convinced that they are right.
3. Agree with: I seek to be myself rather than to follow others
4. Agree with: How much respect is there for individual human rights in this country
5. Agree with: Importance as a quality for children to learn at home: Independence

We next consider the WVS questions directly related to values, attitudes, and beliefs regarding women, specifically, questions covering women's entitlement to education, the role of women in society, and leadership abilities of men versus women. These questions allow us to infer the average beliefs in a society regarding the importance of building women's human capital, the importance of women's labor force participation, women's right to work, the desirability of women working relative to men, and the impact of women's working on their families. If these beliefs and attitudes provide more power to men, such as an ability to gain rents, then the economic structure should reflect it, including compensation at the executive level.

We group the WVS questions into two groups of gender-related indices—Gender\_education and Gender\_work:

Gender\_education— (positive views regarding female education)

1. Disagree with: a university is more important for a boy than a girl.
2. Agree with: Important traits in a woman: Woman educated.

Gender\_work— (positive views regarding women in the workforce)

1. Agree with: When jobs are scarce: both men and women have the right to work.
2. Agree with: Husband and wife should both contribute to income.
3. Agree with: Important traits in a woman: Woman having work outside the home.
4. Disagree with: Woman should not work outside of the home unless forced to do so.
5. Disagree with: if a woman earns more than her husband, it is almost certain to cause a problem.
6. Agree with: Having a job is the best way for a woman to be an independent person.
7. Disagree with: When a mother works for pay, the children suffer.

We also employ WVS questions that could be argued to be indirectly related to values, attitudes, and beliefs regarding women. These questions focus on religion, intolerance, and violence. The first set relate to a society's religious beliefs as religion is an important source for teaching and shaping cultural values regarding gender differences in the workplace. Further, religion has been found to be important in economic outcomes. For example, Guiso, Sapienza, and Zingales (2003) find a significant relationship between the intensity of religion in a society and the society's economic attitudes, including the views of women's roles. We include a measure of the society's belief in the authority of the church and religion based on the following questions:<sup>15</sup>

Religious beliefs

1. Agree with: Do you have a great deal of confidence in the church?
2. Agree with: When science and religion conflict, religion is always right.

Welzel (2013) and Kristler, Thoni, and Welzel (2015) describe that modernization is a process through which the lives of people improve, providing them with more opportunities to thrive and with fewer threats. They argue that as societies become more modern, acceptance of differences often becomes more important for growth. Kristler, Thoni, Welzel (2015) show that “tolerating and practicing freedoms becomes increasingly vital to take advantage of the options” (pg. 105) and people begin to see more value in freedoms and greater tolerance for those that have different views. Welzel (2013) suggests respecting freedom of choice requires tolerance. Thus, in

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<sup>15</sup> Guiso, Sapienza and Zingales (2003) employ WVS questions related to the adherence to a religious belief and the intensity of religion through frequency of attendance at religious services. Our questions are designed to capture how dogmatic the religious beliefs are.

addition to the measures above, we employ measures of intolerance— racial intolerance and intolerance for immigrants.<sup>16</sup> We measure the intolerance in a country culture using responses to the following questions:

Intolerance

1. Disagree with: Is it proper for churches to speak out on racial discrimination?
2. Agree with: When jobs are scarce, employers should give priority to people of this country over immigrants.

We also employ a measure of the justification of violence towards women and children as an additional way to capture cultural attitudes toward women. Flood and Pease (2006) review the literature on the relation between a society's attitudes regarding gender roles and violence towards women. They summarize that from the early research of Burt (1980) through White and Kurpui (2002), the most consistent predictor of acceptance of violence towards women is holding more traditional gender-role attitudes, and that likewise, holding more egalitarian gender-role attitudes is associated with less acceptance of violence against women.<sup>17</sup> In environments in which violence is more acceptable, the roles tend to involve more inequality in social, political, and economic aspects. To capture this attitude, we employ a measure of whether violence toward a wife or a child is never justified as a variable that is correlated with underlying beliefs, although it is unlikely to directly affect executive compensation.<sup>18</sup>

Violence

1. Never justified: For a man to beat his wife
2. Never justified: To beat your children

A final set of questions includes measures of trust and corruption. Trust is argued to be vital for cooperation and ultimately, economic performance (see Smith, 1776; Gambett, 1988; Coleman, 1990; Putnam, 1993; and Fukuyam, 1995). Trust and cooperation occur when people

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<sup>16</sup> The classic work by Weber (1905, translated 1930) began this approach with his argument that the ethics of ascetic Protestantism and its work ethic was necessary for the rise of Capitalism. See Guiso, Sapienza and Zingales (2003) for further discussion.

<sup>17</sup> More extreme gender-role attitudes (male authoritarianism, aggressiveness, superior to women, hostility to women) are associated with more acceptance of violence towards women.

<sup>18</sup> Other research focuses on violence and outside options by gender. See for example, research ranging from Aizer (2010) on wages and violence towards women to Block, Francis and Rao (2002) on violence and dowries. We use acceptance of violence as a summarizing attitude.

expect fair and competent behavior from others. In cultures where trust and fairness are not strongly present, there may be less cooperation with women if beliefs about women enable justification for this choice. We construct a trust measure using WVS questions that either directly ask about fairness or whether the respondent believes that people can be trusted. Further, acceptance of corruption or bribery implies a lack of trust in a fair system and increases the use of established network ties. Thus, we employ a measure of acceptance of corruption from an idealistic viewpoint.

Trust (people can be trusted)

1. Agree with most people try to be fair: Do you think most people would try to take advantage of you or do you think most people try to be fair
2. Agree with people can be trusted: Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?

Bribery justified

1. Agree with bribery is always justifiable: It is never justifiable to accept a bribe vs. always justifiable

### *B. Labor Force Participation, Law, and Other Controls*

In addition to a country's culture, we expect that a country's institutions and laws would affect gender pay gaps. For example, including female labor force participation rates should capture the effects of a country's work-family policies as well as its societal expectations for women's market and nonmarket contributions, some of which are unobservable. Blau and Kahn (2013) provide evidence that female labor force participation rates are higher in countries with work-family policies and that this result derives mostly from part-time work. Given that part-time work results in selection out of the labor pool likely considered for management positions, such work reduces the chances firms consider women for high-level positions.<sup>19</sup> Because we have a sample of positively selected individuals, it is not clear whether the female labor force participation rates will affect our results. In addition, Guvenian, Kaplan, and Song (2020), using US. data, show

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<sup>19</sup> The authors also show that the U.S. has fewer work-family policies and that women are more likely to be in managerial positions and have less occupational segregation than women in other OECD countries (Blau, Ferber, Winkler, 2010).

that female labor force participation rates explain less than 10 percent of the change in share of women among top earners. Our measure to control for effects of the female labor participation rate in our estimations, *% female labor participation*, derives from the Ortiz-Ospina, Tzvetkova, and Roser (2018) data.

An important aspect of CEO compensation is related to the country's institutions and laws, which a large literature has shown to be important to the economic development and governance of a country. Shleifer and Vishny (1997) suggest that on a cross-country basis, corporate governance captures the essential economic and legal institutions. La Porta et al. (LLSV) (1997, 1998) show the importance of the legal and investor protection on the governance of firms, the development of markets, and economic growth. We use, *ADRI*, the Spamann modified shareholder rights index as the initial LLSV index has been subject to a range of critical responses on both conceptual (Coffee, 1999 and 2000; Pagano and Volpin, 2005) and measurement grounds (Spamann, 2010).

Table 1 presents the culture measures for each country, averaged across the WVS surveys. Because the WVS occurs approximately every five years, we show the average for a country across the years for which data are available. For example, if the survey used the Hard work questions in 2008 and 2014 for Belgium, we present the average across those two waves. In the table we highlight the highest and lowest five values for each cultural measure (including ties) with dark and light highlighting respectively. The two direct gender variables, Gender-education and Gender-work, indicate a large amount of cross-sectional variation exists in acceptance of women's education and participation in the workforce. In fact, we find variation between the two indices even for the same country. For example, Japan has the highest score for positive attitudes about women's education, but the lowest score for acceptance of women working. In contrast, New Zealand and Ireland post among the highest five scores for acceptance of women's working but are both below the average score for acceptance of women's education. South Africa posts among the lowest five scores for both indices.

In Table 2 we present the correlations between the country institution (ADRI and %female labor force participation) and the culture variables. The panel shows that most of the cultural measures are highly correlated to each other.<sup>20</sup> For example, Gender\_education and Gender\_work have an 82% correlation and Hard work and Individualism have an 86% correlation.

### *C. Executive Compensation Sample Construction*

In addition to the described measures of cultural norms and institutions, we employ data on executive compensation and firm characteristics. Our compensation, occupation, employee age and tenure data are from Standard and Poor's Capital IQ. We construct the occupational categories based on the title, professional function ID, and name variables in Capital IQ. We construct the following 10 occupational categories: CEO, President, Chief Operation Officer (COO), Chief Financial Officer (CFO), Chief Investment Officer, Comptroller or Chief Accounting Officer, Chief Administrator, Chief Legal, Chief Human Resources, and we group those that cannot be categorized into Other.<sup>21</sup> The position of President refers to president of subsidiaries as well as presidents of the firm and, as a result, has the greatest number of executives. We identify women by searching the Capital IQ biography for the words: Ms., Mrs., she, and her. We drop countries that do not have any female executives. We calculate age and tenure using the date of birth and the executive start date. Data on firm characteristics is obtained from Capital IQ. These basic characteristics include EBITDA divided by assets, long-term debt to assets, cash divided by assets, institutional ownership, and market value. We include in our sample countries for which this data is available for 100 or more firm-years. These constraints result in a sample of 31 countries over the years 2004 to 2016.

The first column in Panel A of Table 3 shows the distribution of observations by country. As is the case with most cross-country samples, the U.S. has the greatest representation with

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<sup>20</sup> In unreported tests, we separate male answers from female answers to the WVS questions. We find very little differentiation between genders within countries as the answers are correlated at 97% across all countries. These results support the assumption that the cultural measures reflect embedded societal norms.

<sup>21</sup> Examples of positions that are included in the Other category are chief technology officer, chief scientific officer, and chief M&A officer.



253,186 executive-year observations. Given the size of the U.S. sample, we also conduct analyses in which we omit the U.S. data and discuss the differences. Canada has the next largest number of observations with 103,707 executive-firm-years followed by Australia (55,343), India (50,909), China (45,578) and the United Kingdom (40,082).

The panel also reports the representation of women by job title for the top five executive positions for each country. In the United States, women are 2% of the CEOs over the period, a considerable increase relative to the 0.5% reported in Bertrand and Hallock (2001) for data in the mid-1990s, and comparable to recent statistics reported by Hill, Upadhayay, and Beekun (2015) and Gupta, Mortal, and Guo (2018) of 1.7%. Differences likely reflect that our sample contains smaller firms than these other samples, and women are more likely to be CEOs of smaller firms. The U.S. also has a low percentage of women as President (3%), CFO (5%), COO (3%), and Senior Vice President (2%).<sup>22</sup>

The percentage of women who are CEOs is highest in Asian countries: Taiwan (9%), Thailand (6.2%), Hong Kong (4.9%), and Singapore (4.1%). Women have greater than 5% representation in the role of President (which includes presidents of divisions as well as entire firm) in Australia, France, Norway, Israel, Norway, Taiwan, and Thailand. In fact, of all countries, Taiwan has the greatest representation of women across the top ranks, at 8.7%. Finland, Germany, Japan, and Spain are among developed countries with few female CEOs or Presidents.

In Panel B of Table 3 we show the average total compensation for the CEOs, the top three executives (CFO, COO, and President), and the rest of the executives, by gender and country. The univariate results show that there exist significant gender gaps in compensation for the top executives. Across all countries the average compensation for male CEOs is \$1.81mm compared to \$1.41mm for female CEOs. However, the gap could be affected by other factors such as differences in firm size, which we will control for in the multivariate estimation. The table shows an average gender gap for the other top executive positions but with a smaller difference.

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<sup>22</sup> We also find that the percentage of women in other executive positions is higher: Comptroller (6%), Chief Administrator (8%), Chief Legal Counsel (10%), and Head of Human Resources (17%).

Interestingly, across the countries the gender gap is not always defined by men having larger compensation than women. In some countries such as Denmark, and the Netherlands, on average, female CEOs make significantly more than their male counterparts. Similarly, with the top executive category, we find that in the U.S., Ireland, Denmark, and the UK, on average, women are paid significantly more than men.

### **III. The Relationship between Cultural Values and the Gender Pay Gap**

In this section we first provide a preliminary analysis of our hypothesis that the executive gender pay gap should be at least partially explained by country social norms. We then present results from a principal-component analysis of the data.

#### *A. Multivariate Tests*

We first examine the relationship between total compensation (*Compensation*) and each of the cultural variables separately (given their high correlations in Table 2), while controlling for other factors that can affect compensation. Specifically, we estimate multivariate regressions using the log of compensation as the dependent variable. The primary independent variables are an indicator variable for whether the executive is a woman, the cultural variables, and interaction terms between the female executive indicator and each of the cultural variables. We also include a country's percentage of the female labor force participation and ADRI, the variable that measures the country's legal environment.

The regressions also include a number of control variables, which to save space are not reported in the tables. We include the executive's age and tenure because previous research shows that age and tenure are positively correlated with compensation (Guvenen, Kaplan, and Song, 2020; Graham et al, 2012; Ryan and Wiggins, 2001). In addition, we recognize that in this setting, men and women may have different time-lines for starting families, having children, and their age

at first childbirth.<sup>23</sup> Thus, age may play an important role in wage differences. Compensation is also a function of the executive's job responsibilities, accordingly, we include a job title indicator variable, which can also reflect differences in occupations, for example, the difference between being a chief financial officer and chief human resources officer.<sup>24</sup> While the cultural reasons for gender segregation by occupation and its effect on the gender compensation gap is an important consideration, we focus on income differences within occupations to get a clear understanding of the pay differences within a specific executive role. Our goal is to assess the role of culture on the gender pay gap, not the differences in compensation across occupations. The control variables additionally include firm characteristics that have been found to be associated with compensation such as firm size, EBITDA/assets, debt/assets, institutional ownership, and total returns. Finally, we include year and industry (measured by two-digit SIC code) fixed effects to absorb variation from increases in compensation and gender representation over time and across industries. Standard errors are clustered by country.

Panels A and B of Table 4 present a series of models based on the measures of cultural norms. Models 1 and 2 of both panels present the baseline regressions. For comparison purposes, in Model 1, we do not include the cultural measures – we only include the gender indicator with the control variables, job title indicators, firm characteristics, year and industry fixed effect variables, and country fixed effects. Since the gender variable is equal to one if the executive is a woman and zero if the executive is a man, the negative coefficient indicates that female executives receive less compensation in general. In fact, the results show that the average gender gap is not small as the coefficient shows an average gender pay gap of 16.6% across all countries and executive positions. In Model 2, we present the same model except that rather than country fixed effects, we add two country institutional characteristics, the female labor force participation and the proxy for shareholder rights (ADRI). The coefficient on the gender indicator does not change

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<sup>23</sup> We find that across countries, the average age for male CEOs is 53.6 and for women CEOs is 51.3 and this pattern for age differences is similar across the other executive positions.

<sup>24</sup> The job title indicator variables are CEO, President, CFO, COO, SVP, Chief Investment Officer, Comptroller, Chief Administrative Officer, Chief Legal Officer, and Chief HR Officer.

much – there still exists a 15.6% gender gap in executive compensation. The coefficient on %female labor force participation shows that executive compensation tends to be greater in those societies in which women constitute a greater proportion of the working population.<sup>25</sup> On the other hand, the coefficient on shareholder rights (ADRI) is negative. For countries with better legal environments for shareholders, compensation for women executives is lower.

Table 4 also includes each culture measure independently in order to capture its relationship to overall compensation (for both men and women). The table also includes an interaction term between the culture variable and the female indicator and its marginal effect on the compensation of women. Panel A focuses on the first set of culture variables—individualism, hardwork, and views on women’s right to work and education. We find executive compensation to be strongly related to each cultural variable on its own and, in most cases, its interaction with the female indicator.

Models 3 and 4 of Panel A of Table 4 demonstrate that in societies in which hard work and individualism are believed to be important, executive compensation in general is higher—results that are naturally intuitive. Further, the executive compensation generated in these societies have a dramatically reduced gender gap. Models 5 and 6 show similar results for societies that hold more positive views towards women’s education and workforce participation in that overall pay is greater and the gender gap is reduced.

In Panel B we examine the associations of overall executive compensation and the gender pay gap with the cultural measures indirectly related to gender attitudes (Intolerance, Violence, Religion, Corruption, and Trust). Models 1 and 2 of Panel B are identical to those models in Panel A to allow for comparison of the baseline regression results to those of the additional cultural variables. The results in Panel B contrast to those in Panel A. In particular, they show that some

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<sup>25</sup> The variable, %female labor participation, has a significantly positive coefficient in all models except when gender education is included as the culture variable. It is intuitive that the two independent variables (female labor participation and the acceptance of the importance of women being educated) would be related (and they have a correlation of 0.36 as shown in Table 2).

systematic cultural values are associated with significantly lower relative pay for women executives, as expected by our hypotheses. It is notable that the coefficients on the interaction terms for all of the cultural variables in Panel B are negative and at least marginally significant, except for the interaction term between Corruption and Gender. Thus, although greater acceptance of corruption is associated with lower compensation levels for both genders, it is not associated with a gender gap. The significance of the acceptability of violence towards women is noteworthy since the most consistent predictor of acceptance of violence towards women is holding more traditional gender-role attitudes.<sup>26</sup> Unlike the other gender attitudes, it does not have to do with the division of labor (Gender\_work and Gender\_education), and deals most directly with attitudes of male superiority towards women (support for male authoritarianism, aggressiveness, superiority to women, and may include hostility to women).<sup>27</sup>

Overall, the results in Table 4 are consistent with our hypothesis that a population's general cultural beliefs and attitudes towards women are associated with the gender pay gap, even for women in the upper echelon of the workforce. The cultural norms have effects in both directions: the gender gap is lessened, or even potentially reversed, when the population believes that hard work and individualism are valued, women are entitled to the same education as men, and women in the work force are viewed favorably. On the other hand, the gender gap is greater, i.e., the compensation for women executives is less than that of men in the same role, when populations are more intolerant, religious beliefs are more dogmatic, and violence against women is deemed to be okay. In countries that rank higher in trust, women are paid less, which may reflect that trust is important in the context of other values, as the subsequent results suggest.

In unreported results, we separate developed from developing countries and find the regression coefficients to be relatively consistent, but that developing countries tend to have greater gender pay differences.<sup>28</sup> We also run the regression analyses excluding U.S. firms, given

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<sup>26</sup> See Flood and Pease (2006) in their review of literature starting from 1980.

<sup>27</sup> Note that attitudes of superiority do not have to include attitudes of hostility.

<sup>28</sup> We separate developed from developing countries using the World Bank's list.

that these firms comprise approximately 50% of the sample firms, and again find the results with regard to the gender gap to be qualitatively consistent across the regressions with one exception. The coefficient on the interaction term between Corruption and Gender becomes significantly negative when the U.S. is excluded. Thus, in countries where corruption is more acceptable, female executives are paid less relative to their male counterparts.

### *B. Principal Component Factor Analysis Tests*

We noted earlier that because the cultural measures are highly correlated (as shown in Table 2), we do not include the variables in the regressions at the same time. In this section, we conduct a factor analysis in order to examine the relation of the cultural measures to the gender gap while incorporating multiple ones. Accordingly, we first perform a varimax-rotated principal component factor analysis. In Table 5 we report the weightings of the factors on each of the institutional measures and highlight the significant components of each factor. The factors are latent unobservable variables and capture similarities between cultural norms. Factor one (F1) loads on the indirect gender attitudes of Religion, Intolerance, Violence, and Corruption; Factor 2 (F2) loads on the direct gender attitudes of Gender\_education and Gender\_work; and Factor 3 (F3) loads on the more general economy-related cultural attitudes of Hardwork, Individualism, and Trust.<sup>29</sup>

Given our previous hypotheses regarding the associations of these cultural attitudes with the gender gap, we expect that *F1* (Religion, Intolerance, Violence, and Corruption) should have a positive relationship with the gender gap. That is, the gender pay gap will be greater in societies with more corruption, more intolerance, more dogmatic religion, and where violence against women is deemed to be okay. We expect that *F2* (Gender\_education and Gender\_work) should show a negative relationship with the gender gap as the gap should be smaller when a population believes that women are entitled to education and views women in the workplace more positively.

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<sup>29</sup> The factor loadings are the correlations between the factors and the variables. For example, the correlation between the intolerance and F1 is about 0.78. Similarly, the correlation between Hardwork and F1 is only 0.22.

Finally, if hard work and individualism have greater effects than trust in this factor, we expect that F3 (Hardwork, Individualism, and Trust) will also have a negative relationship with the gender gap. That is, the pay gap should be less when the degree to which autonomy or the individual is more appreciated, and hard work is considered important for success relative to networks.

In Table 6 we repeat the regressions from Table 4, but use the factors from the factor analysis rather than the individual cultural measures. We report results for only the variables of interest: the gender indicator, the factors and the interaction terms between gender and the factors. The results in which we include all executive positions are presented in Models 1, 2, 3 and 4, where in Models 1-3, we run the regression with each factor independently and in Model 4 we include all three factors in the regression. In Models 5, 6, and 7 we repeat the regressions for the subsamples: CEO only, Top 3 executives (other than CEO), and other executives. In each model, the coefficient on gender indicates the overall relationship between women executives and compensation, the coefficient of the factor variable indicates the relationship between that factor and compensation (for both female and male executives), and the interaction variables indicate the relationships between each of the factors and the differential between male and female compensation.

Across Models 1-4, the coefficient on gender is negative and significant, demonstrating that, in general, female executives receive significantly lower compensation than do their male counterparts. Model 1 shows that executive compensation loads negatively on factor F1 (Religion, Intolerance, Violence, Corruption). Thus, in societies in which these cultural beliefs and attitudes are more prevalent, the results suggest lower compensation for all executives. In addition, the interaction term between F1 and gender suggests that the reduction in compensation is even greater for women executives in the countries that rank higher in these dimensions. The comparison between the F1 results and the Model 2 F2 (Gender\_education and Gender\_work) results or the Model 3 F3 (Hardwork, Individualism and Trust) results are striking. The level of executive compensation in general is positively related, and the gender gap is negatively related, to the cultural norms reflected in F2 and F3. These results support the hypotheses that overall

compensation is greater and the gender gap is smaller in societies that believe women are entitled to equal education, that value women's roles in the workplace, hard work and individualism, and where trust is higher.

In Model 4, we include all factors in the same regression and find the results to remain basically consistent with those in Models 1-3 in which we include each factor independently. The coefficient on gender remains significantly negative, again indicating a gender pay gap for female executives across all societies. As before, the factors have different relationships with overall compensation for men and women and they remain significant in the same direction. That is the coefficient on F1 is negative and significant (lower compensation for all executives) and the coefficients on F2 and F3 are positive and significant (greater compensation for all executives). In addition, the interaction terms also remain quite similar to Models 1 through 3. The one difference is for the interaction term between gender and F1, which becomes insignificant when all factors are included, indicating the indirect effects may not have the same strength in the presence of the direct effects. For both F2 and F3, the coefficients on the interaction variables between the factor and gender are positive and significant, suggesting that positive values for these cultural factors are associated with less of a gender pay gap. Overall, these results appear to support Wollstonecraft's assertion back in the 1700s that improving women's education and positive attitudes toward women benefits both women and men.

In Models 5, 6 and 7 of Table 6 we again include all factor as in Model 3, but break our sample out into separate groups of executives to examine whether the results hold for different executive level positions: CEOs only, the top 3 executives other than CEOs, and all other executives. The results are generally similar to the results from Model 4 in which we include all executives, but with two major exceptions. First, in the CEOs only regression (Model 5) gender and the interaction term between gender and F1 are insignificant while the interaction terms between gender and F2 and F3 remain significantly positive. Thus, once we include cultural norms, there is no general gender pay gap at the CEO level. This finding of no gender compensation gap for CEOs could be a reflection of the greater transparency and attention directed toward CEO



compensation. The lack of significance of the interaction between Gender and F1 suggests that cultural traits that are related to inequities, such as Corruption or Violence, do not directly affect the differences between men and women in CEO compensation. Again a potential explanation is a spotlight on the CEO role, which may decrease discrimination from beliefs and attitudes based on inequities. Additionally, a labor market rate for CEOs (as compared to peer companies) exists, leading to less discrepancy in setting pay. However, F1 has a particularly negative association with compensation for other executives.

Taken together the results suggest that cultural norms are related to total compensation for both men and women executives, but importantly, these norms are also associated with compensation differences between genders. We find a significant gender gap across all executive roles, and once we include cultural values, we do not find a gender gap at the CEO level. Both men and women receive less compensation and the gender compensation gap is larger when societies are more accepting of corruption, intolerance and dogmatic religion. Men and women receive greater compensation and there is less of a gender pay gap in societies that believe in equal education for men and women, where women are more accepted in the workplace, hard work and individualism are more valued and people are more trusting.

### *C. Executive Age and Child-Rearing Interruptions*

A question about our results is whether child-rearing affects the executive gender pay gap and, in particular, whether there exists a lower likelihood of women being in higher-level positions and receiving higher wages. For example, Moen and Smith (1986) show that many women drop out of the full-time workforce in their childbearing ages, and Gayle, Golan and Miller (2012) find a higher exit rate for women executives. Absence from the workforce for a period would not only affect the likelihood of women being in executive positions, but would also affect women's tenure, where our measure of tenure is relative to the person's start date at the firm as opposed to their start date in a specific position. However, if the average age of top executives is beyond average childbearing age any negative effects of new children are less likely to affect women in this

population.<sup>30</sup> Pregnancy and childbirth always, and child-rearing usually, fall more on women. Research has found that women who have children (or proxied by the experience of women of child-bearing age) tend to be disproportionately affected in their career performance than are men with children (or of the same age).<sup>31</sup> Bertrand, Goldin and Katz (2010) study the careers of MBAs from a top U.S. business school and find that gender pay gap increases over time, with evidence that differences in career interruptions and lower working hours due to motherhood are significant factors in the pay gap. Similarly, Keloharju, Knupfer and Tag (2019) follow the career progression of cohorts of business, economics, and engineering graduates in Sweden. They find that the gender gap arises within the five years of the first child, when women are more likely to work shorter hours and be absent from work more often. Their data indicates that this gender gap remains throughout their careers and thus, contributes to the lack of women at the executive level. They also find that women who make it to the executive level tend to have more observable qualifications than men. Our data focuses on women who have achieved that executive level. Because these female executives are positively selected, we would not expect childbirth to have had as negative an effect on this set of women as for the average working woman.

To estimate whether child-rearing affects our results, we estimate the age at which the women executives may have had children. We do not have data on when the executives in our sample start families, or even if they have families, so our estimate depends on the executive's age, adjusted by the average age at first birth in the country (admittedly a very rough proxy). We collect mean age at first birth by country from the OECD and calculate age minus average age at first birth.<sup>32</sup> When adjusted age is further from zero, it will be less likely that the person is just starting a family. We include adjusted age instead of age in the regressions and present the results

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<sup>30</sup> For example, in their study of married working women in the U.S., Juhn and McCue (2016) find that the wage gap for married women with young children is 35 percent lower than married women without children and 15 percent lower than married women with school aged children.

<sup>31</sup> See, for example, the experience of finance and economics academics (Adams and Lowry, 2021 and CSWEP annual reports, <https://www.aeaweb.org/about-aea/committees/cswep/about/survey/annual-reports>), and particularly during the COVID-19 pandemic, e.g., Kruger, Maturana and Nickerson (2020), Barber, Jiang, Morse, Puri, Tookes and Werner (2021), and Deryugina, Shurchkov and Stearns (2021).

<sup>32</sup> See <http://www.oecd.org/els/family/database.htm>

in Panel B of Table 6. We also include the interaction of adjusted age and the female indicator. The coefficients on adjusted age are significantly positive, as are the interactions. This suggests that the pay gap decreases in countries where women have children later in their careers. Focusing on the factor analysis, we find that results hold with this alternate estimation.

### **4.3 Oaxaca-Blinder Decomposition of Compensation**

In order to understand how much of the gender gap is explained by the cultural and other characteristic variables, we perform an Oaxaca-Blinder decomposition analysis on our full sample of executive years (Oaxaca, 1973; Blinder 1973). This method allows us to decompose the overall gender pay gap into a portion that is due to observable differences based on the control variables (the Endowment effect), and a part that is unexplained (Discrimination effect), with the simplifying assumption that the male wage structure is the true wage structure. The Oaxaca-Blinder decomposition analyzes wage differentials between males and females by explaining whether differences in wages according to gender are due to variations in observable, measurable characteristics or alternatively due to discrimination. The compensation gap is decomposed into group differences due to gaps in characteristics (the explanatory variables), the effects of those characteristics (the betas), and their interaction. Generally, in gender-pay research the estimations of the gender pay gap are explained by covariates that do not include cultural norms, with the unexplained portion of the gender compensation gap considered as indicating discrimination. This unexplained portion can either be due to unmeasured differences (like hours worked) or may be due to discrimination.

In conducting the Oaxaca-Blinder decomposition, we first find the difference in log pay between men and women, i.e., the log pay gap. We next add the covariates of Table 4 Model 2 that do not include country or culture. The included covariates are the gender indicator, executive role indicators, firm characteristics, age, tenure, female labor force participation, ADRI, year, and industry fixed effects. Finally, we add the cultural factors, and the individual cultural characteristics to incrementally show how much each contributes to explaining the gender pay gap.

We present the results of the Oaxaca-Blinder decomposition in Table 7. The log of the pay difference between men and women is 0.535 and can basically be considered a univariate difference across all executives in our sample. The results in the first row of Table 7 use the baseline model without country or cultural controls (but includes other covariates). Using the distribution of the male executives as the reference distribution, the decomposition shows that the basic covariates explain 82.4% of the log pay gap, while the log of the unexplained part is equal to 0.094. This leaves 17.6% of the log gap unexplained (equals 0.094 divided by 0.535). Most of the log differences in the gender gap can be attributed to our control variables. The other part of the log wage difference is unexplained.

We further the analysis adding country and cultural variables to determine their contribution to the log pay gap, and reduction in the unexplained differences. When we include country indicators, the log unexplained gap reduces to 0.06. Next, we include the cultural factors. Recall that *F1* loads on the cultural variables *Religion, Intolerance, Violence, Corruption*; *F2* loads on *Gender\_education* and *Gender\_work*; and *F3* loads on *Hardwork, Individualism, and Trust*. Including the three cultural factors, the log unexplained portion of the total compensation gap drops to 0.028 (leaving only 5.2% of the wage gap unexplained due to discrimination). This unexplained portion is no longer statistically significant. The results show that cultural attitudes towards women can explain a significant part of the gender compensation gap. Thus, cultural norms appear to affect compensation even amongst highly skilled executives in what are presumably competitive markets.

We re-run the Oaxaca-Blinder decomposition separately for the CEOs, Top 3 executives, and other executives, and present the results in Panel B of Table 7. The log pay gap of CEOs, Top 3, and other executives to be 0.243, 0.465, and 0.689, respectively. Using just the base estimation, without controlling for country or culture, the proportions of each gender gap that are unexplained are 58% for CEOs, 48% for top executives and 49.2% for other executives.<sup>33</sup> These unexplained

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<sup>33</sup> Calculated as Unexplained divided by total gap: 0.141 divided by .243 for CEOs; 0.224 divided by .465 for Top 3; and 0.339 divided by 0.689 for other executives.

portions of the gap act as our baseline so we can better understand how specific cultural attributes help to reduce the pay differential driven by discrimination (i.e., reduce the unexplained portion of the gap). To get a clearer understanding of how much each of the cultural variables contributes to explaining the (unconditional) unexplained pay gap, we conduct the Oaxaca-Blinder decomposition analysis by including each cultural measure separately and report the percent of the gap that is unexplained. We also do this using all three factors together.

When including the culture measures individually, we find that *Gender\_education* and *Gender\_work* have high explanatory power for CEOs and other executives. Including *Gender\_education*, the unexplained portion of the gap drops from 58% to 34% for CEOs. Similarly, the inclusion of *Gender\_work* reduces the unexplained portion of the gap from 58% to 33% for CEOs. These results suggest that in societies where women's education and careers are promoted, the pay differentials due to discrimination are smaller. Further, we find that when we use the three factors from the factor analysis, the unexplained portions reduce from 58% to 7.4% for CEOs, 48% to 21.7% for the Top 3 Executives, and 49.2% to 39.1% for the Other Executives.

As in Table 4, the strongest explanatory power derives from the cultural measure, *Violence*, and it has stronger power than the combined factors. This may pick up an attitude that a woman is considered less of a person than a man. In this way, *Violence* is itself a summary factor which provides stronger evidence that tastes can affect the gender-pay gap. We also find that when controlling for religion or intolerance, the unexplained portion of the pay gap increases for CEOs. In other words, in cultures that have high trust, high intolerance, or strong religious beliefs, there are more unexplained pay differences. These findings also show that culture does not unilaterally affect all groups and levels of executives in the same way. For instance, aside from attitudes towards violence, the cultural attitudes towards trust, and gender equality in the workplace reduces the portion of unexplained pay for the other executive and the top 3 executive groups. The evidence shows that the cultural variables explain much of the gender gap that is not explained by other variables.

## **5. Quasi-Natural Experiments – Changes in Social Policies (Paternity Leave Laws and Board Diversity Laws)**

In an effort to achieve better identification to test our hypotheses, we conduct two quasi-natural experiments by examining changes around the introduction of new policies affecting gender issues, specifically through legislative changes.<sup>34</sup> The two major types of legislation that have addressed gender issues are paternity leave laws and board diversity laws.

Many countries have adopted laws regulating work and compensation after childbirth for men and women. These “paternity laws” affect the entire labor force. In a competitive market for labor, firms may find it useful to reduce the opportunity cost associated with nonmarket activities more prevalent for women, such as child rearing, to increase the supply of women to this skilled part of the labor force. Thus, we use the introduction of paternity laws to generate exogenous variation in the composition of the workforce and views towards women in the workforce. The laws likely affect the gender makeup of the labor force and provide an incentive for men to help with child-rearing (or partially compensate men for costs associated with choosing to be involved in child-rearing). These changes in family-friendly laws may affect or reflect changes in cultural norms and attitudes. The invocation of paternity leave laws reduces the opportunity costs for women by freeing up men who have nonmarket abilities. We expect these laws will positively affect female wages if their initiation increases women’s ability to work full time, reduces the stigma of maternity leave, and increases the supply of female candidates for management positions. Alternatively, women’s pay should increase with their additional experience.

Beyond the paternity leave laws, some governments have begun to take actions that more directly influence decision making at the top of the firm through laws focused on achieving gender diversity on corporate boards. Generally, these laws require that firms appoint a specified fraction of women to their boards or have a target to do so. For example, Spain’s Equality law requires

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<sup>34</sup> We recognize that we are unable to control for all endogeneity because people’s behavior is shaped by their own as well as others’ attitude towards their behavior. Attitudes can be shaped by a new social consensus (Flood and Peese, 2006). Thus, changes in attitudes result in new laws.

board representation of a minimum of 40% and maximum of 60% of women, while Poland's law targets that 30% of a board be composed of female directors. The increase in women on boards mandated by law can have an uncertain effect on compensation depending on the requirements of the law. We assume in general the laws would imply that women be paid as much as men in the same position but, in any event, increase the supply of women board members (and the incentive of women to work for a board position) so we hypothesize these laws would reduce the gender compensation gap.

We use the first proposal date of the laws (even if they have still not been implemented). The fact that they are proposed is an indication of a possible shift in attitudes toward women's role in the workforce and corporate leadership. We test for effects by regressing compensation on an indicator variable equal to one if the observation is at least one year after the introduction of paternity leave labor laws (*Paternity Leave*) or the introduction of board diversity laws (*Board diversity*). We also include an interaction term between *Gender* and *Paternity* or *Board diversity*. Regressions include year-industry, and country fixed effects with standard errors clustered by firm.<sup>35</sup>

Table 8 presents the regression results for paternity leave laws alone. We focus on the developed countries in our sample because with the exception of Taiwan and India, none of the developing countries represented in our sample have paternity leave laws to date. Model 1 reports the results for the full sample of developed countries (even those countries that have not yet introduced paternity leave laws).<sup>36</sup> In this sample, the coefficient on *Gender* is significantly negative, thus, the executive gender pay gap exists in general for these countries, while the coefficient on the interaction term between *Gender* and *Paternity Leave* is positive and significant. We separate the sample based on countries where mothers delay childbirth as proxied by the

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<sup>35</sup> Spamann (2020) show that clustering of treatment firms at the state or country level leads to over-rejection of the null-hypothesis. To ensure that our results and conclusions are not driven by these clustering issues, we cluster at the firm level.

<sup>36</sup> Countries that did not introduce paternity laws within our sample include Canada, Germany, Japan, Switzerland, and the US.

median age at first birth (Model 3).<sup>37</sup> When women delay childbirth, they may spend more time in the labor market improving their skills, which could make returning to the labor market less costly. Consistent with this conjecture, the interaction term between Post-paternity leave law and the gender indicator is negative and significant when women bear children at an age below the median age in this sample, and positive and significant where women bear children later. These results are consistent with the idea that in those cases in which women delay childbirth, they may have climbed the corporate ladder higher prior to the birth, and thus, find it less costly to return to work because they will be more skilled. In addition, we estimate the regressions on the subsample of countries that propose paternity laws during our sample period (Models, 4, 5, and 6) to be sure the results are not due to developed countries in which paternity leave laws have not been proposed. The results remain consistent.

We present results for board diversity laws and the compensation gap in Table 9.<sup>38</sup> Model 1 estimates the determinants of compensation including an indicator variable for the proposal of a board diversity law. The gender gap exists and total executive compensation is lower after the proposal of a board diversity law. In Model 2, we add an interaction variable for gender and board diversity laws. The results in Model 2 show that the coefficient on the interaction variable is positive and significant suggesting that the proposal of the law reduces the gender compensation gap. These results are consistent with Matsa and Miller (2011) and Carter, Franco, and Gine (2017) who show a reduction in the executive wage gap when more women are on the board of directors.

## 6. Conclusion

Despite changes in laws and the global commitments to reduce pay differentials between men and women, the narrowing of the gender pay gap has leveled off since the mid-1990s (Blau

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<sup>37</sup> We find the median age of first birth across all countries and then split the sample by whether a country is above or below the median.

<sup>38</sup> There exists a large literature of the causes and effects of women on boards, both mandated and non-mandated. See, for example,...



and Kahn (2017) provide a survey of the evidence and their own results).<sup>39</sup> Blau and Kahn (2017) suggest reasons for cross-sectional and time-series gender pay gap. In this research, we examine a cross-country sample of top executives' compensation to understand the role of culture in explaining the gender wage gap. This market includes highly skilled people and is a competitive market, where potentially competition should reduce the gender compensation gap. In testing for the determinants of compensation, we find that the compensation gap is both country and role specific and that a country's cultural attributes are important in explaining the gap. Across all countries and roles, women are generally compensated less than men, but the difference appears to be smaller at the highest executive level (women and men CEOs are compensated very much the same). We find that executive compensation in general as well as the gender pay gap are related to a society's cultural attributes. In particular, the gender pay gap appears to be larger in populations that have greater acceptance of corruption and intolerance, importance of religious beliefs, and acceptance of violence toward women. The gap appears to be smaller in societies with more positive views on women's education, attitudes about women working, attitudes regarding the value of hard work, individualism and the degree of trust in the society. Thus, our empirical results suggest that although certain misogynistic attitudes, e.g., acceptance of violence against women and other intolerant beliefs are related to a larger compensation gap, the gap decreases as positive views of hard work and women arise. When we include cultural attitudes, and after accounting for other factors such as role, tenure and firm characteristics, we increase the explanation of the gender compensation gap from 44% to 95%. We also show that if there is an exogenous shock to the workforce that changes (or reflects changes in) cultural attitudes towards a woman's role, women's compensation increases.

Understanding why compensation differences exist and determining prescriptions to remedy the compensation gap not only benefit women but also benefit the companies and the

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<sup>39</sup> See, for example, the 2030 UN Agenda for Sustainable Development highlights the goal by world leaders to "achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value" (Sustainable Development Goal (SDG) 8, target 8.5.) and "to achieve gender equality and empower all women and girls". <http://indicators.report/targets/8-5/>. Accessed December 5, 2018.

societies in which they work. The findings from this study help toward a better understanding of how cultural norms are related to compensation and a compensation gender gap in the highest levels of the labor market.

## References

- Adams, Renee, Brad M. Barber, and Terrance Odean. 2019. "The Math Gender Gap, and Women's Career Outcomes." Working Paper, Said Business School, University of Oxford.
- Adams, Renee, Amir N. Licht and Lilach Sagiv. 2011. "Shareholders and Stakeholders: How do Directors Decide? Strategic Management. *Journal* 32 (12): 1331–1355.
- Adams, Renee and Michelle Lowry. 2021. "What's Good for Women Is Good for Science." Working Paper, Oxford University and Villanova University.
- Adams, Renee and Patricia Funk. 2021. "Beyond the Glass Ceiling: Does Gender Matter?" *Management Science* 58 (2): 219-235.
- Ahern, Kenneth R., Daniele Daminelli, and Cesare Fracassi. 2015. "Lost in Translation? The Effect of Cultural Values on Mergers Around the World. *Journal of Financial Economics* 117 (1): 165–189.
- Aizer, Anna. 2010. "The Gender Wage Gap and Domestic Violence." *American Economic Review* 100 (4): 1847-1859.
- Arrow, Kenneth J. 1973. "The Theory of Discrimination." In Ashenfelter, Orley, Rees, Albert, eds., *Discrimination in Labor Markets*. Princeton: Princeton University Press, pp. 3–33.
- Azmat, Ghazala, and Rosa Ferrer. 2017. "Gender Gaps in Performance: Evidence from Young Lawyers." *Journal of Political Economy* 125 (5): 1306-1355.
- Barber, Brad, Wei Jiang, Adair Morse, Manju Puri, Heather Tookes, and Ingrid M. Werner. 2021. "What Explains Differences in Finance Research Productivity During the Pandemic? *Journal of Finance* 76 (4): 1655-1697.
- Becker, Gary S. 1957. *The Economics of Discrimination* Chicago. University of Chicago.
- Bertrand, Marianne, Dolly Chugh and Sendhil Mullainathan. 2005. "Implicit Discrimination." *American Economic Review* 95 (2): 94-98.
- Bertrand, Marianne and Kevin F. Hallock. 2001. "The Gender Gap in Top Corporate Jobs." *ILR Review* 55 (1): .3-21.
- Bertrand, Marianne, Claudia Goldin, and Lawrence F. Katz. 2010. "Dynamics of the Gender Gap for Young Professionals in the Financial and Corporate Sectors," *American Economic Journal: Applied Economics* 2 (3): 228-255.
- Black, Dan A. 1995. "Discrimination in an Equilibrium Search Model." *Journal of Labor Economics* 13 (2): 309-334.

- Blau, Francine D. and Lawrence M. Kahn. 1992. "The Gender Earnings Gap: Learning from International Comparisons." *American Economic Review* 82, 533-538.
- Blau, Francine D. and Lawrence M. Kahn. 1996. "International Differences in Male Wage Inequality: Institutions Versus Market Forces." *Journal of Political Economy* 104, 791-837.
- Blau, Francine D. and Lawrence M. Kahn. 1997. Swimming Upstream: Trends in the Gender Wage Differential in the 1980s." *Journal of Labor Economics* 15, 1-42.
- Blau, Francine D. and Lawrence M. Kahn. 2000. "Gender Differences in Pay." *Journal of Economic Perspectives* 14, 75-99.
- Blau, Francine D. and Lawrence M. Kahn. 2003. "Understanding International Differences in the Gender Pay Gap." *Journal of Labor Economics* 21, 106-144.
- Blau, Francine D. and Lawrence M. Kahn. 2013. "Female Labor Supply: Why is the United States Falling Behind? *American Economic Review* 103, 251-56.
- Blau, Francine D. and Lawrence M. Kahn. 2017. "The Gender Wage Gap: Extent, Trends, and Explanations". *Journal of Economic Literature* 55, 789-865.
- Blau, Francine D. Marianne A. Ferber, and Anne E. Winkler. 2010. "Differences in Occupations and Earnings: The role of Labor Market Discrimination. *The Economics of Women, Men and Work*. New Jersey: Prentice-Hall, 228-279.
- Blinder, Alan S. 1973. "Wage Discrimination: Reduced Form and Structural Estimates." *The Journal of Human Resources* 8 (4), 436-455.
- Burns, Natasha, Kristina Minnick, and Laura Starks. 2017. "CEO Tournaments: A Cross-Country Analysis of Causes, Cultural Influences, and Consequences." *Journal of Financial and Quantitative Analysis*, 52, 519-551.
- Carter, Mary Ellen, Francesca Franco, and Mireia Gine. 2016 "Executive Gender Pay Gaps: The Roles of Female Risk Aversion and Board Representation." *Contemporary Accounting Research* 34 (2), 1232-1264.
- Cho, Yonjoo, Rajashi Ghosh, Judy Y. Sun, Gary N. McLean. 2017 *Current Perspectives on Asian Women in Leadership: A Cross-Cultural Analysis*. Springer.
- Coffee Jr., John C. 1999. "The Future as History: The Prospects for Global Convergence in Corporate Governance and its Implications. *Northwestern University Law Review* 93, 641-708.
- Coffee Jr., John C. 2000. Do Norms Matter? A Cross-Country Evaluation. *University of Pennsylvania Law Review* 149, 2151-2177.

- Deryugina, Tatyana, Olga Shurchkov and Jenna Stearns. 2021. "COVID-19 Disruptions Disproportionately Affect Female Academics." *AEA Papers and Proceedings* 111: 164-168.
- Flood, Michael and Bob Pease. 2006. *The Factors Influencing Community Attitudes in Relation to Violence Against Women: A Critical Review of the Literature*. Melbourne, Australia: Victorian Health Promotion Foundation.
- Flory, Jeffrey A., Uri Gneezy, Kenneth L. Leonard, and John A. List, 2018, "Gender, Age, and Competition: A Disappearing Gap?" *Journal of Economic Behavior and Organization*
- Flory, Jeffrey A., Andreas Leibbrandt, John A. List. 2015. "Do Competitive Workplaces Deter Female Workers? A Large-Scale Natural Field Experiment on Job Entry Decisions" *The Review of Economic Studies* 82 (1): 122-155.
- Fortin, Nicole M. 2005. "Gender Role Attitudes and the Labour-market Outcomes of Women across OECD Countries." *Oxford Review of Economic Policy* 21, 416-438.
- Gayle, George-Levi, Limor Golan, and Robert A. Miller. 2012. "Gender Differences in Executive Compensation and Job Mobility." *Journal of Labor Economics* 30 (4), 829-872.
- Gneezy, Uri, Muriel Niederle, and Aldo Rustichini. 2003. "Performance in Competitive Environments: Gender Differences." *Quarterly Journal of Economics* 118, 1049-1074.
- Gneezy, Uri, Kenneth L. Leonard and John A. List. 2009. "Gender Differences in Competition: Evidence from a Matrilineal and a Patriarchal Society." *Econometrica* 77 (5), 1637-1664
- Goldin, Claudia. 2014. "A Grand Gender Convergence: Its Last Chapter." *American Economic Review* 104, 1091-1119.
- Goldin, Claudia., Sari Pekkala Kerr, Claudia Olivetti, and Erling Barth. 2017. "The Expanding Gender Earnings Gap: Evidence from the LEHD-2000 Census," *American Economic Review: Papers & Proceedings*, 107 (5): 110-114.
- Granato, Jim, Ronald Inglehart, and David Leblang. 1996. "The Effect of Cultural Values on Economic Development: Theory, Hypotheses, and Some Empirical Tests." *American Journal of Political Science* 40, 607-631.
- Guiso, Luigi, Ferdinando Monte, Paola Sapienza, and Luigi Zingales. 2008. "Culture, Gender and Math." *Science* 320 (5880), 1164-1165.
- Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2003. "People's Opium? Religion and Economic Attitudes." *Journal of Monetary Economics* 50, 225-82.
- Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2004. "The Role of Social Capital in Financial Development." *American Economic Review* 94, 526-56.

- Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2006. "Does Culture Affect Economic Outcomes?" *Journal of Economic Perspectives* 20, 23-48.
- Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2008. "Trusting the Stock Market." *Journal of Finance* 63, 2557-2600.
- Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2009. "Cultural Biases in Economic Exchange?" *Quarterly Journal of Economics* 124, 1095-1131.
- Guiso, Luigi, Paola Sapienza, and Luigi Zingales. 2015. "Corporate Culture, Societal Culture, and Institutions." *American Economic Review* 105, 336-339.
- Gupta, V.K., Mortal, S.C., Guo, X., 2018. Revisiting the gender gap in CEO compensation: Replication and extension of Hill, Upadhyay, and Beekun's (2015) work on CEO gender pay gap. *Strategic Management Journal* 39: 2036-2050.
- Guvenen, Faith., Greg Kaplan, and Jae Song. 2020. "The Glass Ceiling and The Paper Floor: Changing Gender Composition of Top Earners Since the 1980s." *NBER Macroeconomics Annual* 35: 309-373.
- Hill, Aaron.D., Arun D. Upadhyay, and Rafik I. Beekun. 2015. "Do Female and Ethnically Diverse Executives Endure Inequity in the CEO Position or Do They Benefit from Their Minority Status? An Empirical Examination." *Strategic Management Journal* 36, 1115-1134.
- Inglehart, R., Haerpfer, C., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., Lagos, M., Norris, P., Ponarin, E., and Puranen, B., et al. (eds.). 2014. World Values Survey: Round Six - Country-Pooled Datafile. Madrid: JD Systems Institute.
- Juhn, Chinhui, Kristin McCue. 2016. "Evolution of the Marriage Earnings Gap for Women." *American Economic Review: Papers & Proceedings*, 106(5): 252-256.
- Kahn, Lawrence M. 2014. "New Evidence on Gender and the Labor market: A Symposium." *ILR Review* 6 (2): 283-286.
- Keloharju, Matti, Samuli Knupfer, and Joacim Tag. 2019. "What Prevents Women from Reaching the Top?" IFN Working Paper.
- Kosteas, Vasilios D. 2013. "Gender Role Attitudes, Labor Supply, and Human Capital Formation. *Industrial Relations: A Journal of Economy and Society* 52 (4): 915-940.
- Kruger, Samuel, Gonzalo Maturana, and Jordan Nickerson. 2020. How has COVID-19 Impacted Research Productivity in Economics and Finance? Working Paper. University of Texas
- La Porta, Rafael L., Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny. 1997. "Legal Determinants of External Finance." *The Journal of Finance* 52 (3): 1131-1150.

- La Porta, Rafael L., Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny. 1998. "Law and Finance." *Journal of Political Economy* 106 (5): 1113-1155.
- La Porta, Rafael L., Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny. 1996. "Trust in Large Organizations." *American Economic Review Papers and Proceedings* 87 (2): 333-338.
- Lang, Kevin, Michael Manove, and William T. Dickens. 2005. Racial Discrimination in Labor Markets with Posted Wage Offers. *American Economic Review* 95 (4): 1327-1340.
- Lazear, Edward P. and Sherwin Rosen. 1990. "Male-female Wage Differentials in Job Ladders." *Journal of Labor Economics* 8 (1): 106-123.
- Licht, Amir and Renee Adams. 2020. "Shareholders and Stakeholders around the World: The Role of Values, Culture, and Law in Directors' Decisions." Working Paper.
- Maasoumi, Esfandiar, and Le Wang. 2019. "The Gender Gap between Earnings Distributions." *Journal of Political Economy*, 127 (5): 2438-2504.
- Matsa, David and Amy Miller. 2011. "Chipping Away at the Glass Ceiling: Gender Spillovers in Corporate Leadership." *American Economic Review: Papers and Proceedings* 101 (3): 635-639.
- Niederle, Muriel and Lise Vesterlund. 2007. "Do Women Shy Away from Competition? Do Men Compete Too Much?" *Quarterly Journal of Economics* 122 (3): 1067-1101.
- O'Neill, June. 2003. "The Gender Gap in Wages, Circa 2000." *American Economic Review* 93 (2): 309-314.
- O'Neill, June and Solomon Polachek. 1993. "Why the Gender Gap in Wages Narrowed in the 1980s." *Journal of Labor Economics* 11 (1): 205-228.
- Oaxaca, Ronald. 1973. Male-Female Wage Differentials in Urban Labor Markets." *International Economic Review* 14 (3), 693-709.
- Olivetti, C., and B.Petrongolo. 2008. "Unequal Pay or Unequal Employment? A Cross-Country Analysis of Gender Gaps." *Journal of Labor Economics* 26 :621-653.
- Ortiz-Ospina, Esteban., Sandra Tzvetkova, and Max Roser. 2018. "Women's Employment." Retrieved from: '<https://ourworldindata.org/female-labor-supply>'
- Pagano, Marco, and Paolo Volpin. 2005. "The Political Economy of Corporate Governance." *American Economic Review* 95 (4): 1005-1030.
- Passarelli, Francesco and Guido Tabellini. 2017. "Emotions and Political Unrest." *Journal of Political Economy* 125 (3): 903-946.

- Ryan Jr, Harley E., and Roy A. Wiggins III. 2001. "The Influence of Firm- and Manager-Specific Characteristics on the Structure of Executive Compensation." *Journal of Corporate Finance* 7 (2): 101-123.
- Sapienza, Paola. 2020. Comment on "The Glass Ceiling and The Paper Floor: Changing Gender Composition of Top Earners Since the 1980s." *NBER Macroeconomics Annual* 35: 374-380.
- Sarsons, Heather, Klarita Gerxhani, Ernesto Reuben, and Arthur Schram. 2021. "Gender Differences in Recognition for Group Work." *Journal of Political Economy* 129 (1): 101-147.
- Shleifer, Andrei, and Robert W. Vishny. 1997. "A Survey of Corporate Governance." *The Journal of Finance* 52 (2) : 737-783.
- Spamann, Holger. 2010. "The 'Antidirector Rights Index' Revisited." *Review of Financial Studies* 23, 467-486.
- Spamann, Holger. 2020. "On Inference When Using State Corporate Laws for Identification." Harvard Law School John M. Olin Center Discussion Paper No. 1024.
- Weber, Max, 1905. *The Protestant Ethic and the Spirit of Capitalism*. Translated 1930 by Talcott Parsons, Anthon Giddens. Unwin Hyman, London & Boston, 1930.
- White, Bradley H., and Sharon E. Robinson Kurpius. 2002. "Effects of Victim Sex and Sexual Orientation on Perceptions of Rape." *Sex Roles*, 46(5/6): 191-200.
- Wiswall, Matthew and Basit Zafar. 2018. "Preference for the Workplace, Investment in Human Capital, and Gender." *Quarterly Journal of Economics* 133 (1), 457-507.
- Zingales, Luigi. 2015. "The Cultural Revolution in Finance." *Journal of Financial Economics* 117 (1): 1-4.



**Table 1: Country Cultural Norm Measures**

This table presents the country averages for the cultural norm measures, which are derived from responses to the World Values Survey as described in Appendix A. The variables measure the degree to which the following hold: Gender\_educ: education important for women; Gender\_work: acceptance of women working; Religion: influence; Intolerance: acceptance; Corruption: acceptance; Violence: acceptance; Hard work: importance; Individualism: importance of the individual versus the collective. Trust: people can be trusted. Light colored cells are lowest five scores, dark colored cells are highest five scores (and include ties).

Country	Gender_educ	Gender_work	Religion	Intol.	Corrup	Violence	Hard work	Indivi	Trust
Australia	0.42	0.38	0.35	0.78	0.05	0.05	0.59	0.64	0.47
Belgium	0.39	0.38	0.26	0.47	0.09	0.05	0.58	0.34	0.43
Canada	0.27	0.58	0.47	0.20	0.06	0.17	0.52	0.57	0.67
China	0.21	0.35	0.39	0.80	0.14	0.26	0.66	0.39	0.44
Denmark	0.34	0.40	0.43	0.47	0.05	0.26	0.62	0.45	0.51
Finland	0.38	0.59	0.33	0.28	0.05	0.26	0.61	0.57	0.38
France	0.22	0.40	0.33	0.47	0.12	0.11	0.60	0.56	0.43
Germany	0.29	0.35	0.40	0.57	0.07	0.07	0.61	0.48	0.30
Hong Kong	0.27	0.36	0.33	0.91	0.08	0.18	0.59	0.49	0.37
India	0.14	0.37	0.36	0.63	0.16	0.15	0.59	0.44	0.35
Ireland	0.23	0.49	0.40	0.50	0.07	0.15	0.78	0.33	0.40
Israel	0.29	0.31	0.54	0.90	0.08	0.19	0.62	0.40	0.50
Italy	0.26	0.50	0.82	0.47	0.14	0.20	0.44	0.49	0.40
Japan	0.50	0.35	0.26	0.73	0.06	0.05	0.66	0.50	0.20
Luxembourg	0.13	0.35	0.27	0.77	0.09	0.07	0.57	0.41	0.37
Malaysia	0.18	0.46	0.46	0.63	0.24	0.17	0.66	0.40	0.43
Netherlands	0.42	0.41	0.68	0.46	0.06	0.07	0.53	0.48	0.38
New Zealand	0.26	0.53	0.34	0.20	0.05	0.05	0.72	0.54	0.60
Norway	0.42	0.44	0.35	0.81	0.04	0.05	0.65	0.39	0.44
Poland	0.37	0.37	0.40	0.57	0.05	0.06	0.48	0.37	0.24
Portugal	0.18	0.45	0.86	0.53	0.15	0.05	0.47	0.56	0.44
Singapore	0.31	0.35	0.33	0.45	0.08	0.27	0.68	0.48	0.50
South Africa	0.16	0.35	0.53	0.83	0.11	0.37	0.52	0.41	0.34
Spain	0.18	0.47	0.83	0.57	0.15	0.05	0.33	0.41	0.33
Sweden	0.39	0.37	0.36	0.20	0.07	0.05	0.57	0.45	0.66
Switzerland	0.24	0.37	0.41	0.19	0.07	0.05	0.69	0.40	0.60
Taiwan	0.19	0.37	0.49	0.66	0.06	0.26	0.62	0.43	0.45
Thailand	0.16	0.39	0.50	0.80	0.20	0.10	0.44	0.40	0.32
Ukraine	0.12	0.37	0.47	0.84	0.37	0.11	0.48	0.35	0.40
United Kingdom	0.37	0.36	0.44	0.87	0.07	0.07	0.75	0.59	0.54
United States	0.37	0.37	0.59	0.87	0.06	0.07	0.64	0.48	0.35
Average	0.3	0.4	0.5	0.6	0.1	0.1	0.6	0.5	0.4
Median	0.3	0.4	0.4	0.6	0.1	0.1	0.6	0.5	0.4

**Table 2: Correlations across Country Institutional and Cultural Norm Variables**

This table presents the correlations for the cultural norm measures, which are derived from responses to the World Values Survey as described in Appendix A and the country institutional measures, ADRI and %female labor participation. The variables measure the degree to which the following hold: Gender\_educ: education important for women; Gender\_work: acceptance of women working; Religion: influence; Intolerance: acceptance; Corruption: acceptance; Violence: acceptance; Hard work: importance; Individualism: importance of the individual versus the collective. Trust: people can be trusted.

	ADRI	%Female Partic	Corrup.	Gender Educ.	Gender Work	Hard work	Indivi	Intol	Religion	Trust	Violence
ADRI	1.00										
%Female Labor Participation	-0.08	1.00									
Corruption	-0.03	-0.33	1.00								
Gender_Education	-0.18	-0.36	0.71	1.00							
Gender_Work	-0.36	-0.33	0.55	0.82	1.00						
Hard work	-0.31	-0.21	0.66	0.83	0.70	1.00					
Individualism	-0.25	-0.15	0.61	0.84	0.57	0.86	1.00				
Intolerance	-0.42	-0.21	0.60	0.83	0.69	0.81	0.84	1.00			
Religion	-0.47	-0.26	0.65	0.85	0.73	0.86	0.83	0.78	1.00		
Trust	-0.29	-0.38	0.27	0.38	0.39	0.38	0.38	0.42	0.46	1.00	
Violence	0.46	-0.24	0.45	0.26	0.17	0.04	0.01	-0.01	0.01	-0.23	1

**Table 3: Distribution of executives and their average compensation by country**

This table shows the distribution of the executives and their compensation for each country in the sample. The sample only includes countries with at least 100 observations over the 2004 -2016 sample period. Panel A shows the distribution of the executives by country and title, as well as the percent of women who hold the titled roles. Roles reported are for the top 5 executive positions (CEO, President, CFO, CDO, and SVP). Panel B shows the distribution of firm sizes (measured as total assets) executive compensation by country for CEOs and the other top three executives (President, COO, CFO) divided by gender. The table also reports the significance level for *t*-tests of the difference between the compensation for men versus women where \*\*\*, \*\*, \* denote significance at the 1, 5, and 10 percent levels.

**Panel A: Distribution of Female Executives in Each Country by Title**

Country	CEO		President		CFO		COO		SVP	
	Total #	% Female	Total	% Female	Total	% Female	Total	% Female	Total	% Female
Australia	55,343	0.012	19300	0.12	310	0.05	13287	0.04	5067	0.02
Belgium	2,464	0.023	1540	0.02	98	0.03	274	0.02	124	0.01
Canada	103,707	0.020	37721	0.03	10066	0.08	33318	0.02	6890	0.02
China	45,578	0.036	16729	0.05	3756	0.18	10453	0.09	1141	0.02
Denmark	1,262	0.023	659	0.00	58	0.02	306	0.03	77	0.00
Finland	1,903	0.007	1250	0.01	142	0.08	194	0.22	36	0.02
France	11,728	0.028	6728	0.06	719	0.10	1633	0.01	745	0.04
Germany	9,509	0.011	4084	0.01	105	0.01	2670	0.01	952	0.01
Hong Kong	22,842	0.049	13007	0.05	1197	0.09	4052	0.09	1393	0.09
India	50,909	0.024	27138	0.02	2056	0.03	8933	0.01	2285	0.02
Ireland	3,304	0.030	1199	0.04	131	0.02	860	0.05	254	0.01
Israel	12,032	0.037	4790	0.08	490	0.12	2886	0.05	694	0.04
Italy	5,297	0.028	3650	0.04	447	0.06	545	0.05	200	0.09
Japan	2,032	0.001	1487	0.00	172	0.00	88	0.00	39	0.01
Luxembourg	468	0.000	217	0.00	25	0.03	115	0.00	31	0.00
Malaysia	2,396	0.020	1467	0.02	57	0.17	328	0.03	176	0.03
Netherlands	4,193	0.010	1864	0.01	95	0.03	1300	0.00	340	0.02
New Zealand	1,392	0.015	980	0.00	18	0.00	164	0.00	59	0.00
Norway	6,615	0.029	2338	0.06	472	0.07	1677	0.04	502	0.02
Poland	8,074	0.039	3943	0.05	475	0.12	1320	0.01	252	0.00
Portugal	484	0.029	240	0.00	16	0.00	128	0.00	21	0.19

**Table 3 Panel A (continued)**

Country	CEO		President		CFO		COO		SVP	
	Total #	% Female	Total	% Female	Total	% Female	Total	% Female	Total	% Female
Singapore	2,827	0.041	1529	0.03	91	0.11	420	0.09	241	0.01
South Africa	10,161	0.019	3952	0.00	64	0.06	3218	0.04	731	0.03
Spain	1,267	0.007	740	0.05	170	0.00	71	0.00	35	0.00
Sweden	4,627	0.026	3777	0.05	171	0.05	318	0.09	69	0.05
Switzerland	4,665	0.015	2523	0.02	330	0.01	664	0.03	149	0.00
Taiwan	509	0.093	258	0.08	113	0.09	47	0.09	11	0.09
Thailand	6,879	0.062	3689	0.16	799	0.31	899	0.11	509	0.02
Ukraine	111	0.037	54	0.00	0	0.26	23	0.44	27	0.00
United Kingdom	40,082	0.014	17358	0.02	518	0.03	13702	0.02	2865	0.02
United States	253,186	0.020	83272	0.03	28208	0.05	65075	0.03	18986	0.02
Total	675,846	0.023	267483	0.04	51369	0.07	168968	0.03	44901	0.02

**Table 3 Panel B Distribution of Firm Size and Compensation**

Country	Average Firm Size (Total Assets)			Total Compensation for CEOs			Total Compensation for President, COO, CFO		
	Men	Women	Sig Diff	Men	Women	Sig Diff	Men	Women	Sig Diff
Australia	11,054	12,879	*	1,042,340	1,055,649		503,977	461,570	*
Belgium	54,733	19,673	***	974,031	571,399	***	341,264	6,579	***
Canada	9,761	4,065	**	674,890	600,392	***	400,782	225,901	***
China	55,633	29,786	***	217,944	196,178	***	142,888	101,977	**
Denmark	42,070	13,420	***	917,380	1,035,575	***	760,385	417,603	***
Finland	7,920	3,140	*	756,832	521,087	***	458,848	132,405	***
France	65,748	24,131	***	952,575	294,058	***	567,710	397,434	**
Germany	83,086	22,668	***	1,595,598	526,784	***	1,017,351	756,362	**
Hong Kong	8,887	3,219	*	686,860	483,908	***	416,777	317,991	**
India	5,597	14,587	**	180,516	246,863	***	99,407	53,101	***
Ireland	10,888	5,993	**	4,198,412	505,671	***	1,800,178	2,216,262	**
Israel	7,377	14,634	**	621,047	505,558	***	323,822	243,729	**
Italy	40,557	2,429	***	1,108,230	830,285	***	768,459	527,528	***
Japan	92,931	8,725	***	1,765,187	1,038,185	***	1,622,148		
Luxembourg	5,712	1,385	**	1,560,396	na			716,887	***
Malaysia	12,572	5,133	***	323,752	466,564	***	224,443	63,390	***

**Table 3 Panel B (continued)**

Country	Average Firm Size (Total Assets)			Total Compensation for CEOs			Total Compensation for President, COO, CFO		
	Men	Women	Sig Diff	Men	Women	Sig Diff	Men	Women	Sig Diff
Netherlands	69,748	8,801	***	3,143,927	3,766,052	***	1,104,171	848,926	***
New Zealand	1,175	1,312		469,661	145,449	***	326,440		
Norway	12,766	26,373	***	577,486	591,354		361,406	266,209	**
Poland	10,761	13,203	***	256,284	257,713		248,100	106,878	***
Portugal	14,535	1,114	***	731,055	262,878	***	560,952		
Singapore	8,182	10,216	*	1,201,987	600,710		649,698	324,124	***
South Africa	7,199	7,254		761,437	657,134	**	437,457	348,085	**
Spain	79,750	17,547	***	1,340,969	945,629	***	940,460	194,214	***
Sweden	21,311	81,665	***	581,847	600,785		316,407	70,377	***
Switzerland	79,729	39,433	***	2,196,239	745,366	***	1,250,241	136,440	***
Taiwan	8,665	14,008	***	303,055	204,227	***	168,150	297,306	***
Thailand	14,513	14,899		20,077	16,819	**	15,759	12,968	**
Ukraine	140	139		270,217	165,123	***	355,208	166,582	***
United Kingdom	22,555	4,776	***	1,448,439	2,124,958	***	808,065	1,116,859	**
United States	10,753	10,727		4,104,529	3,755,590	*	2,267,151	2,401,140	*
Total	9,159	6407	***	1,808,296	1,409,676		1,021,062	989,313	

**Table 4 Relation of Executive Compensation to Gender and Cultural Norms**

This table reports the results of an OLS regression of total compensation, defined as  $\ln(\text{compensation})$ , on the gender indicator and country institution and the cultural variables individually. Panel A includes the variables hardwork, individualism, gender\_education, and gender\_work. Panel B includes intolerance, religion, violence, corruption and trust. For each variable, the coefficient is reported on the first line with the p-value in parentheses. The regression also includes controls for each of the executive roles, executive's age and tenure, firm size, EBITDA/assets, debt/assets, institutional ownership, and total returns, and industry, year and country fixed effects as indicated. The robust standard errors are clustered by country. \*\*\*, \*\*, \* denote significance at the 1%, 5% and 10% levels, respectively.

<b>Panel A.</b>						
	(1)	(2)	(3)	(4)	(5)	(6)
Gender	-0.166*** (0.00)	-0.156*** (0.00)	-0.251*** (0.00)	-0.141*** (0.00)	-0.206*** (0.00)	-0.329*** (0.00)
% Female Labor Participation		1.440*** (0.00)	1.201*** (0.00)	1.153*** (0.00)	-1.155*** (0.00)	-0.378*** (0.00)
ADRI		-0.562*** (0.00)	-0.575*** (0.00)	-0.573*** (0.00)	-0.580*** (0.00)	-0.630*** (0.00)
Hardwork			0.247*** (0.00)			
Gender*Hardwork			0.253*** (0.00)			
Individualism				0.403*** (0.00)		
Gender*Individualism				0.363*** (0.00)		
Gender_Education					3.244*** (0.00)	
Gender*Gender_Education					0.212** (0.05)	
Gender Work						-1.291*** (0.00)
Gender*Gender Work						0.245*** (0.01)
Observations	675,846	675,846	675,846	675,846	675,846	675,846
Adjusted R-squared	0.187	0.208	0.209	0.209	0.216	0.212
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Year Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	No	No	No	No	No
SE clustered by country	Yes	Yes	Yes	Yes	Yes	Yes

**Table 4 Panel B**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Gender	-0.166*** (0.00)	-0.156*** (0.00)	-0.082* (0.06)	-0.158*** (0.00)	-0.089** (0.01)	-0.206*** (0.00)	-0.118** (0.01)
% Female Labor Participation		1.440*** (0.00)	0.157*** (0.00)	0.881*** (0.00)	0.763*** (0.00)	0.830*** (0.00)	1.362*** (0.00)
ADRI		-0.562*** (0.00)	-0.636*** (0.00)	-0.594*** (0.00)	-0.422*** (0.00)	-0.555*** (0.00)	-0.565*** (0.00)
Intolerance			-0.947*** (0.00)				
Gender*Intolerance			-0.062** (0.04)				
Religion				-0.470*** (0.00)			
Gender*Religion				-0.028* (0.09)			
Violence					-5.069*** (0.00)		
Gender*Violence					-1.409*** (0.00)		
Corruption						-3.255*** (0.00)	
Gender*Corruption						-0.025 (0.92)	
Trust							1.129*** (0.01)
Gender*Trust							-0.228* (0.07)
Observations	675,846	675,846	675,846	675,846	675,846	675,846	675,846
Adjusted R-squared	0.187	0.208	0.212	0.209	0.215	0.210	0.208
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	No	No	No	No	No	No
SE clustered by country	Yes	Yes	Yes	Yes	Yes	Yes	Yes



**Table 5 Compensation and Cultural Norms**

Factors are estimated by performing a varimax-rotated factor analysis with the culture measures described in Appendix A. F1 loads on Intolerance, Religion, Violence, Corruption; F2 loads on Gender\_education, Gender\_work; F3 loads on Hardwork, Individualism, and Trust

**Panel A Factor Loadings**

Variable	Factor1	Factor2	Factor3
Hardwork	0.2211	0.2105	0.7145
Individualism	-0.2705	0.0027	0.7566
Gender_education	0.407	0.6979	0.2603
Gender_work	-0.1217	0.7848	0.3092
Intolerance	0.7803	0.2709	-0.1458
Religion	0.7234	0.214	0.4026
Violence	0.801	0.2439	0.0865
Corruption	0.8855	-0.1324	-0.0486
Trust	0.4395	0.0193	0.7829

**Table 6. Relation of Executive Compensation to Gender and Cultural Factors**

This table shows the results of an OLS regression of total compensation, defined as  $\ln(\text{compensation})$ , on the gender indicator and country institution against the cultural variable factors from Table 5. The regression also includes controls for each of the executive roles, executive's age and tenure, firm size, EBITDA/assets, debt/assets, institutional ownership, and total returns, and industry, year and country fixed effects as indicated. The robust standard errors are clustered by country. \*\*\*, \*\*, \* denote significance at the 1%, 5% and 10% levels, respectively. In Panel B we adjust for age.

	All Roles				CEOs	Top 3	Other Execs
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Gender	-0.123*** (0.00)	-0.106*** (0.00)	-0.159*** (0.00)	-0.126*** (0.00)	-0.056 (0.24)	-0.143*** (0.00)	-0.390*** (0.00)
F1	-0.531*** (0.00)			-0.340*** (0.00)	-0.284*** (0.00)	-0.361*** (0.00)	-0.380*** (0.00)
Gender*F1	-0.020*** (0.00)			-0.018 (0.56)	-0.016 (0.77)	0.097** (0.04)	-0.136*** (0.01)
F2		0.815*** (0.00)		0.630*** (0.00)	0.815*** (0.00)	0.590*** (0.00)	0.461*** (0.00)
Gender*F2		0.030*** (0.00)		0.068** (0.02)	0.011** (0.05)	0.280*** (0.00)	0.127* (0.06)
F3			0.269*** (0.00)	0.071*** (0.00)	0.149*** (0.00)	0.061*** (0.00)	0.072** (0.03)
Gender*F3			0.277*** (0.00)	0.091* (0.09)	0.170** (0.03)	0.091* (0.09)	0.024** (0.02)
Constant	11.096*** (0.00)	9.408*** (0.00)	10.430*** (0.00)	10.094*** (0.00)	10.065*** (0.00)	10.480*** (0.00)	9.259*** (0.00)
Observations	675,846	675,846	675,846	675,846	267,483	265,238	143,125
R-squared	0.163	0.169	0.157	0.170	0.179	0.166	0.115
Include Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year and Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	No	No	No	No	No	No	No
SE clustered by country	Yes	Yes	Yes	Yes	Yes	Yes	Yes

<b>Table 6 Panel B</b>							
	All Roles				CEOs	Top 3	Other Execs
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Female	-0.147*** (0.00)	-0.135*** (0.00)	-0.184*** (0.00)	-0.155*** (0.00)	-0.090* (0.07)	-0.152*** (0.00)	-0.405*** (0.00)
Female*Adj Age	0.001*** (0.01)	0.001*** (0.00)	0.001*** (0.01)	0.001*** (0.00)	0.001** (0.02)	0.001 (0.78)	0.001 (0.51)
Adjusted Age	0.001*** (0.00)	0.001*** (0.00)	0.001*** (0.00)	0.001*** (0.00)	0.001*** (0.00)	0.001*** (0.00)	0.002*** (0.00)
F1	-0.531*** (0.00)			-0.340*** (0.00)	-0.283*** (0.00)	-0.361*** (0.00)	-0.381*** (0.00)
Female*F1	-0.021*** (0.00)			-0.073** (0.01)	-0.225*** (0.00)	0.097** (0.04)	-0.137*** (0.01)
F2		0.815*** (0.00)		0.630*** (0.00)	0.815*** (0.00)	0.590*** (0.00)	0.462*** (0.00)
Female*F2		0.028** (0.01)		0.065* (0.07)	0.014* (0.06)	0.279*** (0.00)	0.128* (0.06)
F3			0.269*** (0.00)	0.071*** (0.00)	0.149*** (0.00)	0.008 (0.69)	0.071** (0.03)
Female*F3			0.027*** (0.00)	0.091* (0.09)	0.091** (0.03)	0.171** (0.03)	0.024** (0.02)
Constant	11.117*** (0.00)	9.420*** (0.00)	10.453*** (0.00)	10.107*** (0.00)	10.083*** (0.00)	10.480*** (0.00)	9.305*** (0.00)
Observations	675,846	675,846	675,846	675,846	267483	265238	143,125
R-squared	0.211	0.212	0.204	0.215	0.198	0.222	0.197
Year Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	No	No	No	No	No	No	No
SE clustered by country	Yes	Yes	Yes	Yes	Yes	Yes	Yes

**Table 7 Oaxaca-Blinder Decomposition**

This table reports the decomposition analysis of compensation for our sample of top earning executives. The dependent variable is the log transformations of total compensation. We decomposed the total pay gap assuming that the male wage structure is the true wage structure. Panel A uses the whole sample and includes indicator for roles. Panel B looks at each cultural characteristic separately and divides the estimations by roles.

Panel A: Pooled Executives					
	Total Gap	Explained Gap	Unexplained Gap	% Unexplained	% Explained
Regression without the factors	0.535	0.441***	0.094***	0.176	0.824
Regression controlling for country	0.535	0.475***	0.060***	0.112	0.888
Regression with F1 F2 F3	0.535	0.507***	0.028	0.052	0.948

  

Panel B: Executive Roles						
	(1) CEO		(2) Top 3		(3) Others	
Total Gap	0.243***		0.465***		0.689***	
	Unexplained gap	% Unexplained	Unexplained gap	% Unexplained	Unexplained gap	% Unexplained
No Cultural Explanation	0.141***	58%	0.224***	48%	0.339***	49%
Corruption	0.122***	50%	0.219***	47%	0.336***	49%
Gender_education	0.083***	34%	0.208***	45%	0.303***	44%
Violence	0.016**	7%	0.094***	20%	0.265***	38%
Gender_work	0.082***	34%	0.201***	43%	0.301***	44%
Hardwork	0.131***	54%	0.221***	48%	0.305***	44%
Intolerance	0.155***	64%	0.220***	47%	0.309***	45%
Individualism	0.123***	51%	0.223***	48%	0.337***	48%
Religion	0.142***	58%	0.191***	41%	0.323***	47%
Trust	0.140***	58%	0.188***	40%	0.303***	44%
Factors	0.018	7%	0.101***	22%	0.270***	39%

**Table 8 Paternity Leave Laws**

This table reports the results of an OLS regression of total compensation, defined as  $\ln(\text{compensation})$ , on the gender indicator, an indicator variable with a value of one if the country has passed a law that mandates paternity leave, and zero otherwise and an interaction term between gender and the paternity law indicator. For each variable, the coefficient is reported on the first line with the p-value in parentheses. There are controls for as well as country, industry and year fixed effects as indicated. The robust standard errors are clustered by country. \*\*\*, \*\*, \* denote significance at the 1%, 5% and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	Developed			Eventually have paternity leave		
	Full Sample	below median age first birth	at or above age first birth	Full Sample	below median age first birth	at or above age first birth
Gender	-0.017* (0.05)	-0.186*** (0.00)	-0.114** (0.04)	-0.056*** (0.01)	-0.031** (0.03)	-0.229*** (0.00)
Post Paternity Leave	-0.004*** (0.00)	-0.538*** (0.00)	-0.013* (0.07)	-0.518*** (0.00)	-0.505*** (0.00)	-0.6045*** (0.00)
Gender*Post Paternity Leave	0.406*** (0.00)	-0.451*** (0.00)	0.197** (0.02)	0.020*** (0.00)	-0.068** (0.02)	0.185*** (0.00)
Constant	8.303*** (0.00)	7.212*** (0.00)	10.184*** (0.00)	10.928*** (0.00)	22.148*** (0.00)	11.092*** (0.00)
Observations	559,812	279906	279906	664,160	332080	332080
Adjusted R-squared	0.245	0.307	0.307	0.236	0.307	0.1158
Year Industry FE	Yes		Yes	Yes	Yes	Yes
Country FE	Yes		Yes	Yes	Yes	Yes
SE clustered by country	Yes		Yes	Yes	Yes	Yes

**Table 9 Board Diversity Laws**

This table reports the results of an OLS regression of total compensation, defined as  $\ln(\text{compensation})$ , on the gender indicator, an indicator variable that is equal to one if the country has passed a law that mandates women on the board, and zero otherwise, and an interaction term between gender and the board diversity law indicator. For each variable, the coefficient is reported on the first line with the p-value in parentheses. There are controls for as well as country, industry and year fixed effects as indicated. The robust standard errors are clustered by country. \*\*\*, \*\*, \* denote significance at the 1%, 5% and 10% levels, respectively.

	(1)	(2)
Gender	-0.066*** (0.00)	-0.004*** (0.87)
Post-board gender diversity law	-0.024*** (0.00)	-0.016*** (0.00)
Gender*Post board gender diversity law		0.155*** (0.00)
Constant	9.670*** (0.00)	9.672*** (0.00)
Observations	675,846	675,846
Adjusted R-squared	0.255	0.255
Year Industry FE	Yes	Yes
Country FE	Yes	No
SE clustered by country	Yes	Yes