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MASCULINITY AROUND THE WORLD

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JEL Classification: D91, I12, J16, J24, Z13

Keywords: N/A

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Masculinity Around the World*

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Abstract

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Keywords: Masculinity; gender norms; gender gaps; occupational sorting; populism

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1 Introduction

In recent debates about US trade policy, protectionism has been framed not only as an economic strategy, but also as a defense of traditional masculinity.[1] Proponents of tariffs to revive manufacturing industries have invoked a narrative in which factory work represents "real manhood" while portraying service sector employment as emasculating. This gendered framing of trade debates reveals deeper anxieties about men's status in post-industrial economies where traditional markers of male identity have been eroded. Drawing on new data from 70 countries spanning all continents, we demonstrate that this phenomenon extends far beyond America: men's adherence to dominance masculinity norms consistently predicts their opposition to market liberalization, support for strongman leadership, as well as labor supply and occupational preferences.

Until now, scholarship in economics has mostly focused on gender norms that define women's and men's respective socio-economic roles. Research has shown how such gender role norms restrict women's choices and outcomes across multiple domains, from sexual and reproductive health (Jayachandran, 2015; Becker, 2024) and domestic responsibilities (Bertrand et al., 2015), to participation in the labor market (Alesina et al., 2013; Grosjean and Khattar, 2019; Jayachandran, 2021) and educational, occupational, and political aspirations (Beaman et al., 2009; Alesina et al., 2013; Blau and Kahn, 2017).[2] These documented impacts have drawn considerable attention from scholars and media, informing numerous policies aimed at promoting gender equality.

This paper focuses instead on masculinity norms—social expectations about the appropriate attitudes and behavior for men— and how they restrict and predict males' choices and outcomes. We provide the first large-scale cross-cultural evidence on individuals' adherence to masculinity norms across 70 countries. We show that masculinity norms, particularly those

[1] E.g., The Guardian (08-04-2025).

[2] We define gender role norms as the socially accepted relative roles of women and men in different spheres of influence, including professional, political, and domestic domains. See also Oakley (1972). For a comprehensive review, see Giuliano (2020); for recent global evidence on (perceptions of) gender role norms, see Bursztyn et al. (2023).

centered on male dominance, significantly influence economic decisions, political preferences, and health outcomes in ways distinct from gender role attitudes. By accounting for these masculinity norms, we not only deepen our understanding of economic, social, and political decision-making but also reveal previously overlooked drivers of persistent gender inequality that operate independently from attitudes about women's roles in society.

We measure masculinity norms through survey questions that capture attitudes and behaviors identified as characteristic of male behavior (Pleck, 1995; Levant et al., 2007). We focus on 'dominance masculinity': behaviors that assert male authority in society and reinforce the subordination of both women and non-conforming men.[3] To do so, we use questions from the Conformity to Masculinity Norms Inventory (CMNI) (Mahalik et al. 2003), a standard measure in the social sciences literature. We focus on five core dimensions of masculinity: importance of winning, violence, help avoidance, control over women, and disdain for homosexuals. We integrate the CMNI questions that capture these dimensions into the 2022–23 Life in Transition Survey (LiTS). The LiTS is a nationally representative face-to-face survey conducted by the European Bank for Reconstruction and Development (EBRD) and the World Bank across 44 countries in Europe, Asia, the Middle East, and Sub-Saharan Africa. Besides our masculinity module, it includes rich sections on socio-demographics, economic conditions, and political attitudes.

We supplement these face-to-face survey data with large-scale online surveys in 32 countries in the Americas, Australasia, South and East Asia, Western Europe, and Southern Africa. Altogether, the resulting Global Masculinity Survey (GMS) includes data from 87,359 respondents in 70 countries across all continents, accounting for almost 70% of the world's population and 80% of the world's GDP.[4] The online component provides a concise data collection tool to replicate the LiTS-based analysis in a global sample and to collect additional measures that

[3]Dominance masculinity is also referred to as hegemonic masculinity (Thompson Jr and Pleck, 1986; Connell, 1987, 2020; Wedgwood et al., 2023). Since its initial examination in an ethnographic study of male hierarchies in an Australian high school (Connell et al., 1982), the study of dominance masculinity has gained prominence in fields such as sociology, psychology, and medicine.

[4]To compare survey answers in nationally representative, face-to-face surveys vs. online samples, we implemented both survey types in six countries. See Section 3.1.3 for a discussion.

deepen our understanding of the patterns uncovered in the nationally representative sample.

We begin by examining global variation in men's adherence to masculinity norms, revealing some surprising patterns. First, although Western countries demonstrate more egalitarian gender role norms compared with the rest of the world, this pattern does not extend to dominance masculinity. Western countries show less adherence to dominance masculinity than regions such as the Middle East, Africa, and Asia, yet their levels remain comparable to those in former socialist European countries. Second, we observe greater within-region variation in dominance masculinity compared to gender role norms. Third, perhaps most striking, we find an asymmetric relationship with economic development: while gender role norms become more egalitarian as economies develop—consistent with a positive feedback between economic growth and female empowerment (Duflo, 2012; Jayachandran, 2015)—adherence to dominance masculinity norms actually correlates positively with development. These cross-country patterns are consistent in the nationally representative LiTS subsample (see De Haas ⓡ al. (2024)).

Turning our analysis to individual men, we first discuss respondent-level covariates of adherence to masculinity norms. We find that education, urbanity, religion, and religiosity—all strong predictors of gender role norms—show no consistent relationship with masculinity norms. While more educated, urban, and less religious men have significantly more egalitarian gender views, these same characteristics do not predict men's adherence to masculinity norms. Most strikingly, the age gradients for these two measures run in opposite directions: younger men tend to hold more egalitarian gender role norms but simultaneously demonstrate much stronger adherence to dominance masculinity norms than their older counterparts.

We then explore how adherence to masculinity norms predicts individual behaviors and attitudes in three important domains. First, in the economic decision-making realm, we find that men who adhere more strongly to masculinity norms supply more labor at the intensive margin and are more competitive. While stronger adherence to masculinity norms may foster economic growth, they can also perpetuate gender gaps in labor markets. After all, gender differences in competitiveness and willingness to work long and inflexible hours are established

drivers of gender pay gaps (Niederle and Vesterlund, 2011; Goldin, 2014, 2021). When we compare men with women, our decomposition analysis reveals that gender differences in adherence to masculinity norms explain nearly 16% of the competitiveness gap and 34% of the gap in willingness to supply longer working hours between men and women. In contrast, attitudes toward gender roles show no systematic association with these economic outcomes. We also find that masculinity norms tend to confine men to traditionally masculine sectors, consistent with a broader literature linking gender norms to occupational sorting (Akerlof and Kranton, 2000, 2010; Baranov et al., 2023; Delfino, 2024). This relationship holds universally across our sample and implies potential labor market frictions resulting in lower male employment in economies with limited demand in traditionally male sectors.

Second, we document unambiguously negative associations between dominance masculinity and male health and well-being. Key expressions of dominance masculinity—such as emotional restraint, help avoidance, excessive risk taking, and aggression—have been hypothesized to drive gender health gaps (WHO, 2013; Schanzenbach et al., 2016), as these behaviors increase the risk of suicide, substance abuse, morbidity, and mortality among men (Case and Paxson, 2005; IHME, 2010; Baker et al., 2014). Our analysis indeed reveals that stronger adherence to dominance masculinity norms is associated with increased risk taking—measured through both revealed and stated preferences—and poorer mental health, as measured by the PHQ-4 scale. Our results suggest that men's reluctance to seek mental health help partially explains the connection to depression. In contrast, gender role norms show no consistent link to men's risk preferences or mental health outcomes. Again, these patterns hold in nearly every country in our sample. Furthermore, when comparing men with women, we find that gender differences in adherence to masculinity norms explain more than 25% of the gender gap in risk aversion in our sample.

Third, consistent with commentary discussing potential links between masculinity and strongman populism and democratic backsliding,[5] we show that men adhering more strongly

[5] E.g., Blais and Dupuis-Déri (2012); Lombardo et al. (2021); Roose et al. (2022) and Washington Post, 20-06-2022.

to dominance masculinity norms are, indeed, less supportive of democracy, more supportive of strongman leadership (including by the army) and more opposed to a liberal market economy. As such, our results speak to the widening gender gaps in support for liberal democratic values observed globally, with men turning away from democratic values and showing greater support for strongman leadership.[6] We show that gender differences in adherence to dominance masculinity norms account for one-half of the gender gap in democratic attitudes, two-thirds of the gap in support for strongman leadership, and three-fifths of the gap in support for military rule.

Finally, we discuss the potential differences between the roles of personal preferences and social norms in driving our results. Adherence to masculinity norms could reflect either preferences (how men *like* to behave), which may include internalized norms, or social norms (beliefs about how men *should* behave) (Bicchieri, 2017; Gelfand et al., 2024). We find that both preferences and social norms matter, but to different extents across domains. For example, preferences are more predictive of competitiveness and risk taking, while social norms are more predictive of political attitudes.

We contribute to a rich literature on how social norms shape individual behavior and aggregate outcomes.[7] An extensive literature has established how gender roles norms — for example norms that define women's household responsibilities or limit their participation in market work — constrain women's decision-making and shape gender inequities (see Alesina et al. (2013) for an early contribution, Bursztyn et al. (2023) for a recent contribution, and Giuliano (2020) and Lundberg (2024) for reviews). We instead explore the role of masculinity norms.[8] We demonstrate how dominance masculinity predicts decision-making and influences socioe-

[6] E.g., Financial Times (26-01-2024) and Wall Street Journal (29-07-2024).

[7] See Nunn (2012) and Alesina and Giuliano (2015) for reviews.

[8] At the time of writing, we are only aware of a handful of studies in economics that rely on measures of masculinity norms. For example, Baranov et al. (2023) examine how historically determined variation in competition among men affects socioeconomic outcomes in Australia through the channel of masculinity norms. Matavelli (2024) studies how limited communication among adolescents in Rio de Janeiro creates misperceptions about appropriate male behavior. We expand on this literature by collecting more systematic measures of masculinity norms, establishing their connection to a wider set of behavioral outcomes,and providing systematic evidence in representative and global samples.

conomic, health, and political outcomes, and does so in a distinct, and often more robust, way than gender role norms.

Our findings also contribute to a large literature on gender gaps. Previous work documents persistent gender gaps in labor force participation (Fernández 2013; Goldin 2021), competitiveness (Niederle and Vesterlund 2011), risk preferences (Croson and Gneezy 2009), and health outcomes (Case and Paxson 2005). Recent data also highlights widening gender gaps in political values.[9] Yet, a large share of these gender gaps remain unexplained after accounting for standard variables (e.g. human capital, Goldin (2024)). Our findings show that masculinity norms are an important mediator of gender gaps across these domains. Related literature has explored the role of gender identity in either attenuating or increasing gender gaps in economic preferences and decision-making (D'Acunto, 2019; Brenøe et al., 2022; Banan et al., 2023; Ayyar et al., 2024; Brenøe et al., 2024). For example, D'Acunto (2019) finds that priming gender identity increases male risk-taking among US-based mTurkers. Brenøe et al. (2022) and Brenøe et al. (2024) show that self-perceived gender identity predicts gender gaps beyond the influence of binary gender. Gender identity and gender norms are different concepts — in particular, most relevant in our context, gender identity does not have a normative cast—, but they are related in the sense that individuals with a more fluid gender identity may adhere less strongly to gender norms (including gender role norms, masculinity norms, or femininity norms).

Finally, our work provides the first cross-cultural evidence on dominance masculinity norms and how they systematically relate to economic, health, and political outcomes across the world.[10] A secondary contribution is thus to expand the cross-cultural measurement of gender norms. Existing representative surveys—such as the General Social Survey, World Values Survey, Demographic and Health Surveys, and previous rounds of LiTS— routinely assess atti-

[9] See, for example, "A new global gender divide is emerging", Financial Times, 25 Jan. 2024.

[10] Doing so also validates the CMNI scale as a meaningful measure of masculinity norms across cultures and advances the literature on masculinity norms in other disciplines, which has so far relied on small Western samples. Among 78 masculinity studies in psychology, 65 were conducted in the US, four in Australia, and three in Canada (Wong et al., 2017). While Vandello et al. (2023) recently studied precarious manhood beliefs across 62 countries, their sample was limited to college students in an online survey, similar to earlier cross-cultural studies from the 1990s (Williams and Best, 1990).

tudes about gender roles norms, and particularly *women*'s social roles. We add to these with the first cross-cultural measure of norms of masculinity and thereby answer calls for international surveys to explicitly focus on men, too (OECD, 2021).

We proceed as follows. Section 2 provides more conceptual background on masculinity norms, after which Section 3 describes our Global Masculinity Survey. Section 4 then discusses descriptive statistics and global patterns. Section 5 presents our individual-level results on the explanatory power of dominance masculinity norms for economic, health, and political outcomes. Section 6 concludes.

2 Conceptual Background

Masculinity norms can be defined as the attitudes and behaviors that society considers appropriate or ideal for men and boys. These norms may vary between social domains. For example, idealized masculinity in a sports field may encompass different attitudes than idealized masculinity in the political arena. Yet, while expressions of masculinity may differ across contexts, they share a common connection to social hierarchy, particularly in how they establish, justify, and maintain male dominance (Connell, 2020). In fact, masculinity norms can be more specifically understood as the set of attributes and behaviors that justify the subordination of less respected social groups, including women and men who do not conform to idealized masculinity. When these norms are used to maintain male-dominated power structures in society, they are often referred to as dominance or hegemonic masculinity (Wedgwood et al., 2023).

The transmission and persistence of cultural norms operate through the conjoint roles of imitation (either within the same generation, through so-called horizontal transmission, or across generations, through so-called oblique transmission) and direct inculcation (namely through vertical transmission from parents to children) (Bisin and Verdier, 2001; Hauk and Saez-Marti, 2002). The transmission and persistence of norms are also shaped by their relationship to social power structures. In particular, cultural norms associated with dominant individuals spread

more easily for three main reasons.

First, through an evolution-like process, the norms of successful individuals are more likely to be imitated (Giuliano and Nunn, 2021). Second, dominant individuals in social groups are more effective in imposing their preferences on others (Gelfand et al., 2024). Third, there exist important complementarities between institutions and cultural norms.[11] Complementarities between formal institutions (such as political systems and corporations) and masculine values (such as competitiveness and self-reliance) accelerate the spread of these traits throughout society. As a result, masculinity norms extend beyond men at the top of social hierarchies to become widely embedded and upheld across social strata.

We use a modified version of the Conformity to Masculinity Norms Inventory (CMNI) to gauge individuals' adherence to dominance masculinity norms. The CMNI is the most widely used measure of masculinity norms in psychology and public health research.[12] It asks respondents to rate their agreement with masculinity norms based on their "actions, feelings, and beliefs". Responses may therefore capture both social norms and personal preferences. Following Bicchieri (2017), the key distinction between preferences and social norms is conditionality. Preferences operate independently of others' opinions or behaviors (e.g., "I avoid asking for help because I dislike talking to people") while social norms depend on perceptions of others' actions and expectations (e.g., "I avoid asking for help because I believe others would disapprove").[13] While the CMNI may capture both preferences and social norms, the relative contribution of each factor remains unclear. We therefore supplement our online survey with additional questions specifically designed to differentiate between preferences and social norms, and discuss their respective roles in shaping behavior and attitudes.

[11] Bisin and Verdier (2023) (p. 80) explain this relationship succinctly: "The more a trait is dominant, the more favorable to members of this group is the institutional equilibrium, and the more favorable the equilibrium to one group, the faster the spread of this group's trait in the population". See also Belloc and Bowles (2013).

[12] We discuss the CMNI in more detail in Section 3.2.

[13] Preferences and social norms are not entirely separate concepts. As Postlewaite (2011) (p. 36) notes, "Preferences are to some degree socially determined in the sense that agents internalize preferences in some domains that reflect those of the society they inhabit." Preferences can be shaped by religious teachings, parental guidance, or historical events that resonate across generations. Nevertheless, these internalized norms differ from social norms because they influence behavior regardless of one's expectations about others' actions or judgments.

3 The Global Masculinity Survey

This section provides information on our Global Masculinity Survey (GMS) and the measurement of masculinity norms and norms about gender roles. The GMS is a unique dataset that combines nationally representative face-to-face surveys (LiTS) with large online surveys. This combination overcomes some of the limitations of online surveys in terms of representativeness of the underlying populations, while at the same time leveraging the flexibility of online surveys to hone in on specific dimensions of interest.

3.1 Nationally Representative and Online Samples

3.1.1 The Life in Transition Survey (LiTS)

The LiTS is a nationally representative survey of adults' sociodemographics and political and social attitudes. It has been conducted, as a repeated cross-section, by the European Bank for Reconstruction and Development and the World Bank every four years since 2006.[14] Respondents are drawn randomly, using two-stage sampling, with census enumeration areas as primary sampling units and households as secondary sampling units.[15] At its inception, the LiTS focused on former Communist Europe and the former USSR, with a handful of Western European comparator countries. It has since expanded to North Africa, the Middle East, and Sub-Saharan Africa. Table C1 in Online Appendix C lists all 44 included countries and national sample sizes in the latest 2022-2023 wave used in this paper. Section A1.2.1 provides more details on the implementation of the LiTS survey.

3.1.2 Online Surveys

Although LiTS offers strong population representativeness, it has two limitations: restricted geographic coverage (confined to EBRD countries of operation) and limitations on survey length

[14] IPSOS implemented the LiTS wave used in this paper following a competitive bidding process.
[15] Primary sampling units were drawn randomly, with probability proportional to size.

due to organizational priorities and concerns about respondent fatigue. Additionally, due to lack of pre-validation and cost constraints, the masculinity measures were administered only to male respondents. To overcome these limitations, we supplement the LiTS sample with online surveys targeting regions with limited or no LiTS coverage, primarily in the Americas, South and Southeast Asia, and Western Europe.

The online surveys are concise and focus on questions about basic sociodemographic traits (such as age, education, urban status, religion), about gender norms, and the same outcome variables measured in LiTS and presented in De Haas ⓡ al. (2024).[16] The analysis of the online sample thereby provides a replication and validation of the results based on the representative samples and discussed in De Haas ⓡ al. (2024). Moreover, in the online surveys, we administered the CMNI-5 module to both men and women, allowing direct gender comparisons of masculinity norms and allowing us to analyze how gender differences in these norms contribute to observed gender gaps in various outcomes.

The online surveys were conducted in November and December 2024 among 42,761 respondents in 32 countries by the survey company *Bilendi* or its local partners. *Bilendi* targeted participants aged 18-64 years, aiming to match a representative sample on gender, age, and income.[17] Appendix Table C1 shows the list of countries and sample sizes. Six countries were included in both LiTS and the online survey, allowing us to compare responses in representative face-to-face and online surveys. We refer to the combined LiTS and online sample of 87,359 individuals in 70 countries as the Global Masculinity Survey (GMS).

3.1.3 Comparing the LiTS and Online Samples

Table C2 reports summary statistics for demographic characteristics in the entire sample of the Global Masculinity Survey. Respondents average 43 years of age. Religious affiliations show equal proportions of Catholics and Muslims (23% each), while 85% of the respondents have

[16] An attention check question was included, too, and failure to complete it triggered exclusion from the sample.

[17] Some demographic variations remain in certain countries despite the use of quota sampling, as discussed in Section 3.1.3. Appendix Section A1.2.2 provides further details on the implementation of the online surveys.

completed secondary education or higher. Nearly three-quarters (72%) reside in urban areas. Men and women are very similar in these characteristics.

Despite aiming for representative sampling based on gender, age, and income demographics, our online survey sample diverges along a number of dimensions from the overall population distributions in ways that is typical of internet-based research.[18] Figure A2 compares average covariates in LiTS and the online surveys for the six countries that were covered by both. Men, younger individuals, those living in urban centers, the employed, and the more educated are overrepresented in the online sample. The respondents in the online surveys also tend to score somewhat lower on the CMNI-5. Importantly, the cross-country and within-country patterns we document in this paper are not driven by the online sample only. Our earlier working paper, in which we use the nationally representative LiTS data only, shows remarkably consistent results (De Haas ⓡ al., 2024).

3.2 Masculinity Norms in the GMS

3.2.1 The CMNI-5

The integration of CMNI masculinity measures into LiTS yields two key innovations. First, it allows us to provide the first nationally representative cross-country evidence using thoroughly validated masculinity norms questions. Second, we expand the set of economic, social, and political behaviors that we can link to individual measures of masculinity norms.

The original CMNI includes 22 questions that capture 11 distinct masculinity norms: importance of winning; emotional control; risk-taking; violence; dominance; playboy; self-reliance; primacy of work; power over women; disdain for homosexuals; and pursuit of status.[19] Cost

[18] Online samples may not fully represent the general population, particularly in countries with low internet penetration. According to 2023 statistics, the share of population using the internet in the last three months is 67.4% on average, ranging from 36.7% in Sub-Saharan Africa to 97.8% in North America. Among the largest economies in the online sample, internet use is high in Brazil (84.2%) and China (77.5%), but very low in India (43.4% according to 2020 statistics). Source: World Bank (2025) https://databank.worldbank.org/metadataglossary/world-development-indicators/series/IT.NET.USER.ZS. Survey firms in middle- and low-income countries often rely on external partners rather than proprietary panels, potentially limiting sample representativeness further.

[19] *Importance of winning* relates to wanting to be admired and respected, to be seen as successful, powerful, and

and length constraints required us to include only essential masculinity questions in LiTS, administered exclusively to male respondents (whereas our online surveys included CMNI questions for both men and women).[20] The resulting CMNI-5 module assesses five core masculinity dimensions through agreement with the following statements:

1. "*Winning is the most important thing*" (Importance of winning)
2. "*Sometimes violent action is necessary*" (Violence)
3. "*It bothers me when I have to ask for help*" (Help avoidance)
4. "*I love it when men are in charge of women*" (Control over women)
5. "*It is important to me that people think I am heterosexual*" (Disdain for homosexuals)

Answers were provided on a four-point Likert scale, from 1 ("Strongly disagree") to 4 ("Strongly agree"), with the possibility of refusing to answer or answering "Don't know". To calculate the CMNI, we take the average across the five domains, creating a score ranging from one to four. We only average over non-missing answers and create dummy variables that indicate, for each question, whether the respondent provided an answer. A higher score indicates stronger adherence to dominance masculinity norms (that is, more help avoidance, more importance of winning, more justification of violence, more control over women, and a stronger disdain for homosexuals). Appendix A1.1 discusses the validation procedures for the CMNI and how we selected these 5 items.

competitive, to performing competently, and to being physically adequate; *Emotional control* concerns measures of emotional restriction; *Risk-taking* relates to toughness and adventure; *Violence* relates to toughness and violence; *Power over women* relates to anti-femininity and the subordination of women; *Dominance* relates to wanting to be admired and respected, to be seen as tough, successful, powerful, and competitive, and to subordinating women; *Playboy* relates to adventure, anti-femininity, concealing emotions, and subordinating women; *Self-reliance* relates to disconnecting emotionally from others; *Primacy of work* relates to being a breadwinner, enduring work like a machine, pursuing success, and experiencing conflict between work and family/school obligations; *Disdain for homosexuals* relates to anti-femininity and restricting one's affectionate behavior with other men; *Pursuit of status* relates to being a breadwinner, admired and respected, being seen as successful, powerful, and competitive, and performing well (Mahalik et al., 2003, p.14)).

[20] Appendix A describes our question selection and validation procedures and the scale's internal consistency.

3.3 Norms about Gender Roles and Gender Equality

In both the face-to-face and online components of the GMS, we also included commonly used survey questions on norms and attitudes toward women's social and economic roles and spheres of competence. These questions cover various domains, from household labor and childcare allocation, to labor force participation and representation in politics. The questions were taken from established questionnaires (such as the World Values Survey) and previous rounds of LiTS. Appendix A1.5 provides the six questions we use. The summary *Traditional Gender Role Norms Index* (hereafter, TGRI) is the mean of these variables over the six questions, normalized on a 1-4 scale to ensure direct comparability with the CMNI. Higher values indicate more unequal views about gender roles and more negative views about women's ability to be competent business or political leaders.

3.4 Correlations between Measures and Validation

Figure 1 (Panel A) shows the pairwise correlation matrix between CMNI-5, TGRI and their respective individual items. The correlation coefficients range from -0.24 to 0.68, with warmer shades indicating stronger positive correlations. We find that the CMNI-5 correlates only moderately with the TGRI ($\rho = 0.38$). In contrast to this low overall correlation between both indices, the individual dimensions of the CMNI-5 and the TGRI correlate reasonably strongly *within* their respective index. The Cronbach's alpha, a measure of reliability and consistency of the items in a scale, is 0.74 for the CMNI-5 and 0.59 for the TGRI. These alphas reflect acceptable reliability, meaning that the items within each index consistently measure the underlying construct. The CMNI-5 is also more cohesive, as indicated by the higher average inter-item correlation 0.29, compared to 0.16 for the TGRI. Overall, these statistics suggest that the main indices used in our analysis are internally consistent and capture different constructs.

4 Masculinity and Gender Roles Norms across the World

This section provides an overview of the global patterns emerging from our data.

4.1 Descriptive Statistics

The CMNI-5 questions were administered to all online respondents ($N = 42,761$) but only to males in LiTS ($N = 18,810$) due to pre-validation limitations and cost constraints. The mean CMNI-5 among all male respondents of the GMS is 2.46 and its standard deviation is 0.62. The dimension of the CMNI-5 with the highest endorsement *Help Avoidance* (2.64) and the one with the lowest is *Violence* (1.71)—see Table C3. The mean in the LiTS sample is slightly higher compared with the online component, at 2.52 vs. 2.40.

The (more usual) TGRI questions were asked of everyone across both GMS components ($N = 87,359$). We elicited all gender norm measures from both men and women in the online GMS component to assess gender gaps. Women's CMNI-5 and TGRI scores are on average 0.4 sd lower ($p < 0.001$) than men's, with the largest gaps in the *Violence* and *Disdain For Homosexuals* CMNI dimensions. Appendix Figure B1 presents the CMNI-5 gender gap in each of the 32 countries that participated in the online part of the GMS. For each individual country, this gap is estimated by regressing the standardized CMNI-5 scores on a female dummy. Although the gender gap is consistently negative—indicating, as expected, much higher adherence to masculinity norms among men than among women—the magnitude varies substantially across countries. The gap is the largest in India, where men's CMNI-5 scores exceed women's by more than 0.6 standard deviations. In contrast, Malaysia and China exhibit smaller gaps, suggesting more muted gender differences in these samples.

4.2 Cross-Country Patterns

We now examine key global patterns in adherence to masculinity norms. The GMS incorporates both nationally representative face-to-face surveys and online samples. To ensure robust

cross-country comparisons, we address representativeness by re-weighting the online sample to match country demographics along dimensions of gender, age, education, employment status, and urban residence, using the latest Gallup data. Appendix A1.2 details how we leverage the representative LiTS component to validate inferences from the online samples.

Figure 2 maps the z-scores of the CMNI-5, and for comparison the TGRI, across countries. Adherence to dominance masculinity norms is strongest in Sub-Saharan Africa and in South and South East Asia. The countries with the highest CMNI-5 scores are Benin (3.11), Tunisia (2.90), West Bank & Gaza (2.89), and Algeria (2.80). These regions also exhibit the most traditional attitudes toward gender equality.

Figure 3 presents country-level means for both masculinity norms (CMNI-5) and gender role attitudes (TGRI). The data reveal striking heterogeneity both across and within regions. Although regional patterns are discernible, with Sub-Saharan Africa, Middle East and North Africa (MENA), and South Asia generally scoring higher on both measures, individual countries within regions often diverge significantly. For example, Benin shows the highest masculinity score in our sample, yet gender role norms are, on average, more egalitarian in Benin than in several other African nations. India stands out with the most traditional gender role attitudes globally, yet its masculinity score falls closer to the middle range of our sample. Western Europe and its offshoots (US, Canada, Australia) clearly stand out from the rest of the world in terms of their positive attitudes towards gender equality. However, this is not the case for masculinity norms. The most striking example is the US, which exhibits the highest masculinity score among Western nations, comparable to Russia's level (itself among the most masculine in the former socialist bloc). This American exceptionalism in masculinity norms suggests that progressive attitudes toward women's equality can coexist with strong adherence to dominance masculinity norms.

Figure 4 explores further how the CMNI and TGRI co-vary across countries. The scatterplot reveals four distinct country clusters: (1) Sub-Saharan Africa, MENA, and South/Southeast Asia in the upper right (high masculinity, unequal gender norms); (2) Western Europe, for-

mer socialist Europe, and Latin America in the lower left (low masculinity, egalitarian gender norms); (3) Central Asia and the Caucasus in the upper left (low masculinity, unequal gender norms); and (4) Canada and the US—particularly the latter—in the lower right (high masculinity, egalitarian gender norms).

Lastly, our data also reveal a strikingly asymmetric pattern in how masculinity norms and gender norms correlate with economic development. The literature has long highlighted a negative feedback between unequal gender role norms and economic development (see, for example, Duflo (2012)). The right panels of Figures 5 and 6 confirm the presence of a strong, negative correlation between economic development, either proxied by GDP per capita (PPP-adjusted) or the share of services in overall employment, and unequal norms about gender roles.[21] By contrast, the correlation between both measures of economic development and dominance masculinity norms is *positive*. This pattern was consistent in the LiTS-only sample (De Haas ⓡ al., 2024) and is thus replicated in the GMS. In the next section, we present individual-level evidence that helps explain this relationship between masculinity norms and economic development.

5 Individual-level Evidence

We now examine how individual adherence to masculinity norms correlates with economic outcomes, health and well-being, and political preferences within countries. We again focus primarily on men, but we explore in Section 5.6 how gender differences in adherence to masculinity norms help explain significant portions of observed gender gaps across these domains.

[21] We show scatter plots of the relationship between proxies of economic development and either dominance masculinity norms (left) or norms about gender roles (right), partialling out the relationship with the other set of norms, controlling for continent fixed effects, and using population size weights.

5.1 Empirical Specification

In what follows, we discuss the results of estimating the following equation:

$$Y_{ic} = \alpha + \beta CMNI_{ic} + \Gamma' X_{ic} + \delta_c + \varepsilon_{ic} \tag{1}$$

where Y_{ic} are economic, health, and political outcomes for respondent i in country c; $CMNI_{ic}$ is i' CMNI-5 score; X_{ic} is a vector of individual characteristics; and δ_c are country fixed effects.[22] Standard errors are heteroskedasticity-robust and clustered at the country level.

Age and life stages likely shape adherence to dominance masculinity norms (Connell, 2020). The strength of masculinity norms overall, as well as the relative importance of particular dimensions of masculinity, can also systematically vary across urban and rural areas due to differences in local social structures (Silva, 2022). We therefore control for age and urban vs. rural location of respondents in all specifications. Education, religion, and religiosity are other important potential correlates of masculinity norms and of our outcomes of interest, especially in our religiously heterogeneous sample (Connell, 1989). In addition to our baseline estimates with age and location as controls, we therefore also show specifications that include education (primary, secondary, tertiary undergraduate level, tertiary graduate level) as well as religious denomination and religiosity in our extended set of controls. Lastly, to account for non-responses on some of the CMNI-5 subitems and for potential unobserved heterogeneity across respondents who do not answer specific items, we include in all specifications a set of dummy variables that indicate whether the respondent answered each item or not.

To compare the relative magnitudes of masculinity norms and gender role norms in predicting outcomes of interest, we discuss estimations that regress outcomes on (i) masculinity norms alone; (ii) norms about gender roles alone; and (iii) masculinity norms while controlling for norms about gender roles.

[22] Table C4 defines all outcomes and Table C5 presents summary statistics for all outcomes and control variables.

5.2 Correlates of Masculinity and Gender Role Norms

We start by discussing the roles of individual covariates as predictors of adherence to masculinity norms. Figure 7 plots coefficient estimates from linear regressions of either the CMNI-5, or, for comparison, the TGRI index, on a range of demographic and socioeconomic characteristics and country fixed effects.

Age emerges as a significant predictor of adherence to masculinity norms. Younger men exhibit significantly stronger adherence to masculinity norms than older men, while simultaneously holding somewhat more egalitarian gender role attitudes than their older counterparts. Other covariates, such as education, urbanity, religion, or even religiosity, are not statistical predictors of men's adherence to masculinity norms. Again, this contrasts with attitudes towards gender norms, for which each of these covariates holds a significant and quantitatively large predictive power, with more educated, urban, and less religious individuals systematically holding more gender-equal norms, and large difference across religions, with Muslim men holding less gender equal views.

5.3 Economic Outcomes

Labor supply and occupational choice. A recent sociological literature describes work as an arena of "masculinity contests", emphasizing how a strive for dominance and winning may create hostile and excessively competitive work environments that normalize extreme working hours.[23] A prediction following from this literature is that individual men's adherence to masculinity norms correlates positively with their labor supply at the intensive margin. Separately, an economics literature has stressed how gender identity influences occupation and industry choice (Akerlof and Kranton, 2010), with masculinity norms contributing to male specialization in sectors such as agriculture, construction, and manufacturing (Baranov et al., 2023). Such specialization can become a driver of unemployment when male-dominated industries are dis-

[23] Berdahl et al. (2018) describe how dominance masculinity norms are pervasive in a wide range of leading companies, such as Uber, Fox News, the Weinstein Company, as well as in Silicon Valley.

placed or suffer negative economic shocks (Katz, 2014; Autor et al., 2019), implying an overall ambiguous relationship between masculinity norms and employment status.

To assess the relationship between individual adherence to masculinity norms and the supply of labor at the intensive margin, we estimate Equation (1), using as the dependent variable answers to a question on whether the respondent would like to work more in his current job.[24] Results are displayed in columns 1 (baseline controls) and 2 (extended controls) of Table 1 (Panel A). The question on willingness to work more is only asked of individuals that are currently employed, explaining why the number of observations is lower in these specifications. The results show a positive, robust, and statistically significant (at the 1% level) relationship between individual labor supply at the intensive margin and CMNI-5 scores (Panel A). Panel C confirms that this relationship remains robust and unchanged in magnitude after controlling for norms about gender roles. The results further show that, quantitatively, the relationship between labor supply and CMNI-5 is about two and a half times as large as the relationship between labor supply and TGRI. A one standard deviation increase in the CMNI-5 is associated with a 4% increase in the desire to work more at one's current job.

Following gender identity theories of occupational choice, columns 3 and 4 of Table 1 show that men who adhere more to dominance masculinity norms are significantly more likely to be employed in a masculine sector (agriculture, forestry and fishing; mining; construction; manufacturing; transportation and public utilities). While a respondent's views about gender roles also correlate significantly with being employed in these sectors (Panel B), with a magnitude that tends to be slightly larger than the correlation with the CMNI, the association between conformity to masculinity norms and employment in a masculine sector remains statistically significant when controlling for norms about gender roles (Panel C).

We examine the relationship between adherence to masculinity norms and employment at the extensive margin in columns 5 and 6. On average, the relationship between a respondent's CMNI-5 score and employment status is close to zero and insignificant. The prediction here is

[24] Appendix Table C4 includes details on each variable used in the analysis.

that one would expect a positive coefficient when demand in traditionally masculine sectors is high, and a negative coefficient when that demand is low. The evidence shown in Figure B2 is consistent with this. Here, we report CMNI-5 coefficients from individual-level regressions run separately for each country (using our baseline controls). We find that in countries relatively specialized in the tertiary sector (such as Austria and Singapore) stronger adherence to masculinity norms is associated with a lower probability of being employed at the extensive margin, a result that is statistically significant at the 1 to 5% level. By contrast, the association between adherence to masculinity norms and employment is positive and statistically significant in resource-rich economies specialized in—traditionally masculine—primary and secondary sectors (such as Ghana, Nigeria, and Uzbekistan).

Competitiveness. An ample literature in economics points to the gender gap in competitiveness as an important driver of gender disparities in education, occupational choice, and labor earnings.[25] We test the relationship between adherence to dominance masculinity norms and competitiveness using a question that asks respondents "*how competitive* [they] *consider themselves to be*", with answers on a 1 to 10 scale. Answers to this question have been shown to robustly predict actual competitive choices in incentivized tasks (Dohmen et al. 2011; Buser et al. 2014).

The results in columns 7 and 8 of Table 1 provide strong evidence that men who adhere more firmly to dominance masculinity norms are more competitive. Moreover, Panels B and C show that gender roles norms are, comparatively, marginal drivers of competitiveness. The relationship between masculinity and competitiveness is also robust and stable in magnitude when individual attitudes towards gender roles norms are included as additional covariates.

Figure B2 shows that the positive association between CMNI-5 and competitiveness holds in most countries in our sample. The results in Table C6 furthermore show that every dimension of the CMNI-5 plays a significant role in explaining economic outcomes, with "Importance

[25] See Bertrand (2011) and Niederle and Vesterlund (2011) for reviews and Reuben et al. (2017) and Cortés et al. (2023) for recent contributions.

of winning" and "Control over women" being the most robust and quantitatively impactful masculinity norms.

5.4 Risk-taking, Health Behaviors, and Mental Health

Dominance masculinity has been singled out as an important driver of excessive risk-taking, emotional restraint, and help avoidance behavior among men. Emotional restraint and help avoidance contribute to depression and poor mental health, while risk taking and help avoidance are associated with lower take-up of preventive health measures, including routine doctor visits (Dell et al., 1989; Springer and Mouzon, 2011; Baranov et al., 2023).

We measure risk-taking in the GMS through both stated and revealed preferences. We assess respondents' self-reported risk preferences with a standard question that has been shown to correlate positively with risk-taking behavior in incentivized tasks and real-world settings (Eckel, 2019).[26] We also gauge revealed risk-taking by asking whether respondents usually wear a seatbelt in the car.[27]

We assess mental health through a slightly modified version of the PHQ4, a valid ultra-brief tool for detecting anxiety and depressive disorders. These questions ask how often (from 1: never to 5: daily) respondents feel: (i) "anxious, nervous, or worried", (ii) "very sad", (iii) "depressed", and (iv) how often they have "little interest or pleasure doing things". We build a *Depression score* index as the sum of the responses to these questions. The mean is 2.28 (s.d.: 1.06). Average rates of mental distress are highest in the Middle East and North Africa (highest country-level average in Lebanon: 3.47) and lowest in Central Europe (lowest country-level average in Slovenia: 1.57).

Finally, in the online component, we assess the willingness to seek help from a mental health professional in case of a "personal or emotional problem" as a potential channel explaining the

[26] The question (which is also part of the *German Socioeconomic Panel*) asks "*Please rate your willingness to take risks, in general, on a scale from 1 to 10, where 1 means that you are not willing to take risks at all, and 10 means that you are very much willing to take risks.*" The average among men is 5.39 (s.d.: 2.91) and among women 4.64 (s.d.: 2.90).

[27] We assess seatbelt wearing by whether respondents usually wear a seatbelt, either as a driver (83%), passenger in the front seat (78%), or passenger in the back seat (51%) – see Table C5.

relationship between adherence to dominance masculinity norms and mental health outcomes.

Table 2 shows that men's adherence to dominance masculinity norms is positively, significantly, and robustly associated with the (normalized) measures of revealed and stated risk-taking (columns 1 to 4), depression (columns 5 and 6), and healthcare avoidance (columns 7 and 8). These associations are also quantitatively meaningful. A one s.d. increase in the CMNI-5 is associated with a nearly 0.10 s.d. increase in stated risk taking and a 0.15 s.d. increase in depressive symptoms. Panels B and C reveal a much weaker relationship—sometimes insignificant, sometimes reversed—of these outcomes with gender role norms.

Table C7 shows that all dimensions of CMNI-5 contribute to these results, although to different degrees. "Importance of winning" emerges as the most quantitatively meaningful predictor of risk seeking, while "help avoidance" and "primacy of violence" are the most quantitatively meaningful correlates of depression and anxiety symptoms.

Figure B3 displays the estimated coefficients for each individual sample country. We find that the positive association between, on the one hand, masculinity norms and, on the other hand, risk taking, avoidance of medical help, and depression and anxiety symptoms are robust and universal patterns.

5.5 Politics

The GMS includes an extensive set of questions about individual support for democratic values, for a market economy, and for various dimensions of authoritarian leadership, including by the army (see Table C4 for variable descriptions). This type of leadership often goes hand in hand with performative masculinity as displayed by populist leaders or embodied by the military (Lombardo et al., 2021).

Panel A of Table 3 reveals clear negative relationships between adherence to dominance masculinity and men's support for liberal political and economic systems. Columns 1 to 4 show that men who adhere more to dominance masculinity are much less supportive of a democratic system and a market economy. Instead, they are more supportive of strongman leadership and

army rule (columns 5 to 8). All these results are statistically significant at the 1% level. The magnitudes are large, with a one standard deviation increase in adherence to the CMNI-5 being associated with a 2–3 percentage point (pp) decrease in the support for a democratic regime, a 5–6 pp decrease in the support for a market economy, and a 5–8 pp increase in support for strongman leadership and army rule.

When considering the role of gender role norms, either in isolation in Panel B or together with dominance masculinity norms in Panel C, we confirm previous scholarship and commentary discussing the political role of attitudes towards gender equality. Our results reveal clearly that both negative attitudes towards gender equality and adherence to dominance masculinity play a role in explaining anti-democratic attitudes and support for strongman leaders.

Highlighting the most relevant dimensions of masculinity, Table C8 shows that "importance of winning", "violence", "control over women", and "homosexuality avoidance" are all important CMNI-5 dimensions that drive weaker support for democracy and a market-based economy as well as stronger support for strongman leadership and army rule.

Figure B4 again shows the estimated coefficients separately for each country. It clearly reveals the universal nature of the negative association between masculinity norms and liberal political and economic systems, as well as that of the positive association between masculinity norms and support for strongman leadership. Furthermore, these patterns are even stronger in more developed countries in the sample.

5.6 Gender Gaps

While our analysis so far has focused on men, our online GMS component includes the CMNI-5 questions for both men and women, allowing us to directly measure gender differences in adherence to dominance masculinity norms. In this section, we examine whether these gender differences can help explain persistent gender gaps in economic, health, and political outcomes.

We start by investigating gender disparities in adherence to dominance masculinity norms as well as gender role norms. Figure B5 shows results from separate regressions where each

variable on the y-axis is regressed on a female dummy and country fixed effects. We find consistent gender differences across various measures of masculinity norms and gender role attitudes, with women systematically scoring lower than men on these measures (with the exception of the norm related to help avoidance). Gender differences are larger for most dimensions of masculinity norms compared to gender role norms.

Next, we analyze whether adherence to dominance masculinity norms is also predictive of outcomes among female respondents. The results in Table C17 show that adherence to these norms also predicts economic, health, and political outcomes among women. However, apart from the willingness to work more and being pro-market, all associations between the CMNI-5 and outcomes are attenuated, by about 10%, for women compared to men.

Having established that the CMNI-5 has predictive power for both men and women, though with differing magnitudes, we now turn to a more systematic analysis of gender gaps in our outcomes of interest and the extent to which gender differences in adherence to masculinity norms can explain these gaps. Using the online GMS sample, which includes both men and women, we start by documenting the gender gaps in our outcomes by regressing the outcome on an F_{ic} dummy equal to 1 (0) if respondent i is female (male), controlling for urban, age, and country c fixed effects (Equation 2). The estimated coefficient on this dummy indicates the gender gap in the outcome of interest.[28]

Next, we assess the extent to which adherence to dominance masculinity and traditional gender role norms can explain these observed differences. We follow the decomposition approach of Gelbach (2016), which nests the Kitagawa-Oaxaca-Blinder decomposition, and calculate the share of the gender gap that is explained by the CMNI, TGRI, or remains unexplained.[29] The procedure effectively includes our mediating variables of interest W_{ic}, the CMNI and TGRI, in the equation estimating the gender gap (Equation 3) and backs out the mediating effects of the CMNI and TGRI using the omitted variable bias formula. A benefit of this type of de-

[28] All outcomes are standardized (including the binary ones) such that the gender gap is in standard deviations.

[29] See Allcott et al. (2019), Bandiera et al. (2020), and Cook et al. (2020) for recent applications of the Gelbach decomposition.

composition, compared to simply adding covariates sequentially, is that it does not depend on the order in which the mediating variables are added. Nevertheless, the decomposition is still based on correlations; that is, we are not assuming that $E[\eta|W, X = 0]$, and the difference between β^{base} and β^{full} should not be interpreted as the causal effect of various gender norms on the gender gaps.

$$Y_{ic} = \alpha + \beta^{base} F_i + \Gamma' X_{ic} + \delta_c + \varepsilon_{ic} \tag{2}$$

$$Y_{ic} = \alpha + \beta^{full} F_i + \Gamma'_W W_{ic} + \Gamma' X_{ic} + \delta_c + \eta_{ic} \tag{3}$$

In our case, both the CMNI and TGRI are indices made up of multiple questions. Instead of using the overall composite scores, we might consider including each individual question as a separate predictor, then grouping the explanatory power of all questions associated with each index. The effect of each mediating variable (or group of variables) on the gender gap can then be estimated using the omitted variable bias formula:

$$\begin{aligned} \beta^{base} - \beta^{full} &= (F'F)^{-1}(F'W)\Gamma_W \\ &= \Lambda\Gamma_W \\ &= \sum_k \Lambda^{W_k}\Gamma_{W_k} \end{aligned}$$

where $\Lambda^{W_k}\Gamma_{W_k}$ is the change in the coefficient on the female indicator due to the mediation of each group $k \in$ CMNI, TGRI. The parameters represent the mean female–male gap in CMNI or TGRI variables Λ^{W_k}, scaled by each covariate's outcome-equation impact Γ_{W_k}, and then summed within each group k.

Figure 8 presents the decomposition of gender gaps following this approach. For each outcome, we first plot the gender gap (as women minus men) in Panel A and then the parts of the gender gap that can be explained by the CMNI-5 (blue) and TGRI (red) in Panel B.The results confirm the existence of substantial gender gaps in terms of competitiveness, willingness to take risk, willingness to work more hours, and masculine sector of employment (Panel

A). These differences have all been highlighted as major and persistent drivers of economic inequality between women and men.[30] Importantly, the decomposition in Panel B shows that gender disparities in adherence to masculinity norms can account for nearly 16% of the gender gap in competitiveness, 25% of the gender gap in stated risk taking, and almost 34% of the gender gap in intensive labor supply. In contrast, gender differences in gender roles norms play a smaller role in explaining the gender gap. Both sets of norms explain relatively little of the gender gap in sector of employment, with masculinity norms explaining a little over 4%. Yet, the mediating effect of CMNI scores on the gender gap is always statistically significant.

The gender gaps in health and help-seeking are more nuanced. Women are more willing to seek help and use seatbelts, with adherence to masculinity norms explaining 6% and 46% of the gender gap, respectively. However, women also report more symptoms of depression and anxiety, and masculinity norms are not significantly related to the depression gender gap. If anything, the decomposition in Panel B suggests that equalizing gender norms—particularly traditional gender roles norms—could actually widen the gender gap in depression scores. The gender gap in depression and its decomposition align with prior research indicating that men tend to under-report symptoms of depression, a pattern frequently linked to masculinity norms (Seidler et al., 2016).[31]

Recent commentary has also highlighted increasing gender divides in political values and, in particular, in support for democratic values.[32] The results in Figure 8 (Panel A) confirm that women are, on average, more pro-democracy, more pro-market, and more opposed to strongman leadership and to army rule compared to men.[33] Panel B of Figure 8 shows that gender differences in adherence to dominance masculinity norms explain a substantial part

[30] See, for example, van Huizen and Alessie (2019); Niederle and Vesterlund (2011); Goldin (2014); Falk et al. (2018); Goldin (2021).

[31] If men who more strongly endorse dominance masculinity norms are less likely to report symptoms of depression, this implies that the associations presented in Table 2 may underestimate the true relationship between CMNI and actual experiences of depression.

[32] See, for example, "A new global gender divide is emerging", Financial Times, 25 Jan. 2024.

[33] Our data also show that these gender divides are particularly salient among younger generations. Among younger individuals (40 years old or below), women are 5 pp more likely than men to support a democratic regime, and 8 pp less likely to support army rule, while there is no such gender gap among those older than 40.

of this gender political divide: 51% of the gender gap in pro-democratic attitudes, 58% of the gender gap in support for army rule, and 67% of the gender gap in support for a strong leader. Gender differences in attitudes towards gender roles also contribute significantly to political gender gaps, to a roughly similar, or slightly lower, extent than masculinity norms.

5.7 Robustness and Extensions

We now discuss several robustness tests to establish the internal and external validity of our findings. In particular, we leverage the unique, dual nature of the GMS to deal with potential limitations arising from the non-representativeness of the online sample (sample selection bias) or from face-to-face interviews (social desirability bias). We also discuss the contributions of preferences and social norms to explain our results.

Sample Selection Bias. We examine potential biases arising from sample selection as well as patterns of survey and item non-response in Appendix Section A1.3. Based on comparison with the World Values Survey, we find no evidence that the selection of countries included in LiTS and in the GMS may influence our results. However, demographic analysis based on the countries where both LiTS and the online survey were collected reveals some differences between the online and nationally representative samples, warranting caution when making cross-country comparisons. To mitigate the non-representativeness of the online sample, we employ survey weights to match the demographics in the latest Gallup World Poll for all cross-country comparisons. Additionally, all cross-country patterns are robust to restricting the analysis to the nationally representative LiTS data only (as in our initial working paper De Haas ⓡ al. (2024)).

Selection into online samples could also bias our within-country analysis to the extent that the relationships between the CMNI-5 and our outcomes of interest may systematically differ for respondents who select into online panels compared to representative samples. To assess the extent to which this potential bias influences our results, we again show that the within-

country results are very similar when using the nationally representative LiTS subsample.[34] For a more detailed description of these results, we refer the reader to an initial working paper based only on the LiTS sample (De Haas ⓡ al., 2024).

Social Desirability Bias. Face-to-face interviews may introduce social desirability bias in CMNI-5 and TGRI reporting, while this concern is substantially reduced in our online survey component (see, e.g., Young 2025). We investigate the role of social desirability bias in our face-to-face surveys by looking at how responses may have been affected by the gender of the interviewer. For the CMNI-5, interviewer gender does not significantly predict the overall score, however, men report significantly less agreement to the 'violence' sub-item with a female interviewer (Table C9). Meanwhile, for TGRI, female interviewer gender predicts a lower TGRI score by about 0.1 standard deviations, with the 'political leaders' and 'household chore' sub-items driving the effect. Overall, this suggests that social desirability bias may be more of a concern for the TGRI. Importantly, all our results are robust to including interviewer gender as an additional control, substantially mitigating any lingering concerns about desirability bias (Tables C11-C13).

CMNI's Explanatory Power Beyond Risk and Competitiveness. Another potential criticism of our analysis, particularly in light of a large literature showing the importance of competitiveness and risk aversion preferences for a wide range of outcomes, is that our masculinity measures may simply capture competitiveness and risk aversion. We show that this is not the case. To do so, we re-estimate Equation 1 with the competitiveness and risk-taking questions in the set of controls (instead of as outcomes). Tables C14-C16 show that, although competitiveness and risk aversion are themselves statistically significant predictors in many cases, the CMNI-5 is still a very robust predictor of all other outcomes of interest. Moreover, apart from seatbelt use, the coefficients associated with the CMNI-5 remain stable in magnitude. This in-

[34]The only difference between LiTS- and online-based results consists in the relationship between age and CMNI-5. While we do not find a strong gradient for age as a determinant of the CMNI-5 in LiTS, younger male respondents in the online survey systematically score higher on the CMNI-5.

dicates that CMNI-5 masculinity measures capture much more than competitiveness and risk aversion preferences alone (Tables C14-C16).

Preferences versus Social Norms. The online GMS component also elicits normative beliefs about masculinity norms (that is, beliefs about how men should behave) in the following core dimensions of masculinity: *Help Avoidance* ("Men should figure out their personal problems on their own without asking others for help"); *Importance of Winning* ("Men should be aggressive and competitive to get ahead"); *Risk-Taking* ("It is important for a man to take risks, even if he might get hurt"); *Violence* ("Men should use violence to get respect if necessary"); and *Emotional Control* ("Men should act strong even if they feel scared or nervous inside"). Appendix A1.6.1 includes the complete list of questions, references, and details on how we calculate the Normative Masculinity Index. While the CMNI-5 measures individuals' personal adherence to masculinity norms through their own behaviors and preferences, the Normative Masculinity Index captures their beliefs about how men should behave in society more broadly, introducing a distinction between, on the one hand, personal preferences and internalized norms and, on the other hand, perceived social expectations.

The mean Normative Masculinity Index among all male respondents in the online component of the GMS is 2.36. The Normative Masculinity Index is also highly internally consistent, with a Cronbach's alpha of 0.88. Figure B6 shows that the individual-level correlation between the CMNI-5 and the Normative Masculinity Index is only moderate ($\rho = 0.44$), ranging from 0.08 to 0.68 for their individual items. At the country level, Figure B7 also illustrates there is variation in how personal adherence to masculinity norms (CMNI-5) relates to beliefs about what men should do (Normative Masculinity Index). Countries like South Korea appear above the fitted line, indicating that men's personal adherence to masculinity norms is higher than would be predicted based on their beliefs about what men should do. Conversely, countries like Spain and Portugal fall below the fitted line, suggesting that in these societies, men's personal adherence to masculinity norms is lower than predicted by their beliefs about what men should do. We tentatively gauge the relative contributions of preferences and social norms by

estimating Equation 1 including the Normative Masculinity Index as control, together with the CMNI-5. The interpretation is that, *conditional on these normative masculinity norms*, the coefficient on the CMNI-5 reflects preferences and internalized norms.

Table C18 presents the estimates. For labor supply at the intensive margin, the CMNI-5 continues to be a significant predictor. The CMNI-5 also remains significantly associated with competitiveness, and the degree of association is greater than that of the association between normative masculinity norms and these outcomes, suggesting a substantial role played by preferences and internalized norms as drivers of male competitiveness. For sector of employment, however, we find that controlling for normative masculinity norms attenuates the association between CMNI-5 and employment in a masculine sector, suggesting that male-stereotypical occupational choice may be driven by social expectations of masculinity more than personal preferences. We continue to find no association between CMNI-5 and labor supply at the extensive margin, on average, while the Normative Masculinity Index shows a small but significant negative relationship. This negative relationship may reflect the phenomenon of retrospective wait unemployment in high-income countries, where individuals with strong normative masculine norms may remain unemployed longer while waiting for positions that align with their perceived masculine identity rather than accepting available employment in non-traditional sectors.

For depression/anxiety, the coefficient on the CMNI-5 remains statistically significant, while the coefficient on normative masculinity norms is neither economically nor statistically significant. This suggests that the association between masculinity and mental health mostly operates through preferences and internalized norms. This may represent a significant challenge for male public health interventions, as such deep-rooted preferences may be less malleable than social expectations.[35]

Lastly, for political attitudes, we find that the Normative Mascilinity Index is a slightly

[35]Recent policy efforts have concentrated on information provision as a tool for behavioral change (e.g., Bursztyn et al. 2020). Preferences and internalized norms may be less responsive (compared to social norms) to interventions involving information provision to correct misperceptions.

stronger predictor than the CMNI-5, with coefficients approximately 50% larger than those on the CMNI-5 (although the latter remains a statistically significant predictor, too). This indicates that support for strongman leadership may respond to collective masculine identity and perceived social expectations more than to individual preferences. As such, this result can help explain populist movements' success in mobilizing around perceived masculine imperatives rather than just appealing to men who personally identify with dominance masculine attitudes.

6 Conclusions

Drawing on new data from 70 countries across all continents, this study has demonstrated how men's adherence to dominance masculinity norms shapes various important economic, health, and political outcomes. By integrating the Conformity to Masculinity Norms Inventory (CMNI) into our survey, we have also created a reliable tool to measure the adherence to dominance masculinity norms across societies. While prior studies have predominantly focused on selective Western samples, our analysis extends the understanding of dominance masculinity to a much broader context—demonstrating consistent relationships between masculinity norms and a battery of economic, health, and political outcomes. Our country-level analysis reveals a striking contrast: while Western nations display more progressive attitudes toward women than other regions, their male populations exhibit dominance masculinity norms comparable to those in much less economically developed countries.

At the level of individuals, our results indicate that adherence to dominance masculinity norms shapes men's health and risk-taking behaviors; their supply of labor at the intensive margin and in specific industries; as well as their support for strongman political leadership and opposition to liberal values. Overall, our analysis suggests contrasting implications of adherence to dominance masculinity norms. While there may be positive effects on economic growth through increased labor supply, the health and political implications appear unam-

biguously negative.

The strong link we find between men's adherence to dominance masculinity norms and their support for populist, anti-democratic leadership has important policy implications. As societies grapple with rising populism and democratic backsliding, our results suggest that understanding the role of dominance masculinity norms could be crucial for preserving democratic institutions. This is particularly relevant given that populist leaders often deliberately appeal to and reinforce masculinity norms.

Future research could explore several promising directions. First, investigating how dominance masculinity norms are transmitted within and across generations could inform interventions to address potential frictions in the labor market due to the mismatch between masculinity norms and expanding economic opportunities in so-called pink collar jobs. Second, analyzing how these norms interact with economic shocks and technological change could help shed light on the drivers of rising support for populism and strongman politics. Finally, experimental studies could test whether making the costs of dominance masculinity more salient—particularly its health consequences—might reduce men's adherence to these norms.

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Table 1: Dominance Masculinity (CMNI-5) and Gender Role Norms – Economics

	Would Work More		Masculine Sector		Working		Competitiveness	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Masculinity Norms								
CMNI-5 Score	0.047***	0.047***	0.022***	0.021***	-0.005	-0.004	0.091***	0.092***
	(0.007)	(0.007)	(0.005)	(0.005)	(0.004)	(0.004)	(0.013)	(0.012)
Mean of outcome	0.28	0.28	0.36	0.36	0.76	0.76	-0.02	-0.02
R-squared	0.14	0.14	0.06	0.09	0.19	0.21	0.20	0.21
Observations	31,320	31,320	31,338	31,338	41,170	41,170	41,170	41,170
Panel B: Gender Roles Norms								
TGRI Score	0.032***	0.032***	0.032***	0.028***	-0.004	-0.002	0.023*	0.029**
	(0.006)	(0.006)	(0.004)	(0.004)	(0.004)	(0.004)	(0.014)	(0.013)
Mean of outcome	0.28	0.28	0.36	0.36	0.76	0.76	-0.02	-0.02
R-squared	0.13	0.13	0.06	0.09	0.19	0.21	0.19	0.20
Observations	31,613	31,613	31,631	31,631	41,671	41,671	41,671	41,671
Panel C: Masculinity and Gender Roles Norms								
CMNI-5 Score	0.041***	0.041***	0.012***	0.013***	-0.004	-0.004	0.094***	0.093***
	(0.007)	(0.007)	(0.004)	(0.004)	(0.004)	(0.004)	(0.012)	(0.011)
TGRI Score	0.017***	0.017***	0.027***	0.022***	-0.002	0.001	-0.009	-0.003
	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.011)	(0.011)
Mean of outcome	0.28	0.28	0.36	0.36	0.76	0.76	-0.01	-0.01
R-squared	0.14	0.14	0.06	0.09	0.19	0.21	0.20	0.21
Observations	31,281	31,281	31,299	31,299	41,081	41,081	41,081	41,081
Survey × country FEs	×	×	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×		×

Notes: OLS regressions. An observation is an individual GMS respondent. The dependent variables *Working* (columns 1-2), *Would Work More* (columns 3-4), and *Masculine Sector* (columns 5-6) are defined as dummies equal 1 if the individual was working, would like to work more hours, and was employed in a masculine sector, respectively. *Competitiveness* (columns 7-8) was measured on a scale from 0 – "not competitive at all" to 10 – "very competitive", and is standardized. For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: GMS (LiTS and online surveys).

Table 2: Dominance Masculinity (CMNI-5) and Gender Role Norms – Risk and Health

	Risk Taking		Uses Seatbelt		Unlikely to Seek Help		Depression Score	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Masculinity Norms								
CMNI-5 Score	0.092***	0.093***	-0.060***	-0.060***	0.065***	0.065***	0.164***	0.164***
	(0.012)	(0.012)	(0.008)	(0.008)	(0.005)	(0.005)	(0.012)	(0.012)
Mean of outcome	0.00	0.00	0.00	0.00	0.46	0.46	0.00	0.00
R-squared	0.15	0.15	0.17	0.18	0.03	0.03	0.16	0.16
Observations	41,077	41,077	40,585	40,585	22,951	22,951	40,922	40,922
Panel B: Gender Roles Norms								
TGRI Score	0.035***	0.039***	-0.052***	-0.051***	0.017	0.016	0.089***	0.087***
	(0.013)	(0.013)	(0.009)	(0.009)	(0.011)	(0.010)	(0.011)	(0.011)
Mean of outcome	-0.00	-0.00	0.00	0.00	0.46	0.46	0.00	0.00
R-squared	0.14	0.15	0.17	0.17	0.02	0.02	0.14	0.15
Observations	41,574	41,574	41,067	41,067	23,075	23,075	41,391	41,391
Panel C: Masculinity and Gender Roles Norms								
CMNI-5 Score	0.091***	0.090***	-0.049***	-0.050***	0.074***	0.074***	0.152***	0.152***
	(0.011)	(0.011)	(0.009)	(0.009)	(0.005)	(0.005)	(0.012)	(0.012)
TGRI Score	0.004	0.008	-0.036***	-0.034***	-0.020*	-0.020*	0.034***	0.032***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.011)	(0.010)	(0.010)	(0.010)
Mean of outcome	0.00	0.00	0.00	0.00	0.46	0.46	0.00	0.00
R-squared	0.15	0.15	0.18	0.18	0.04	0.04	0.16	0.16
Observations	40,993	40,993	40,500	40,500	22,951	22,951	40,851	40,851
Survey × country FEs	×	×	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×		×

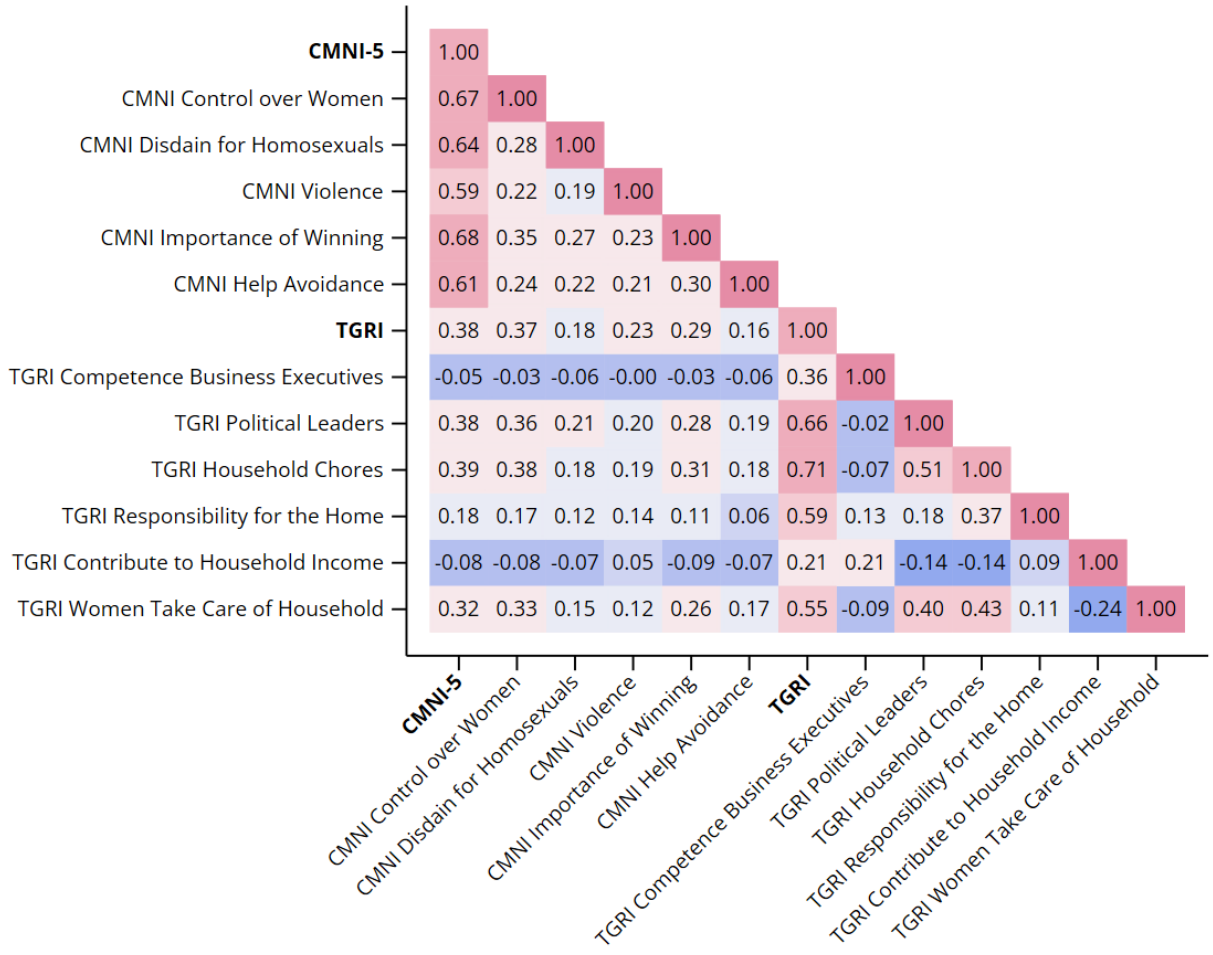
Notes: OLS regressions. An observation is an individual GMS respondent. The dependent variable *Skip Visit to Doctor* (columns 5-6) is defined as a dummy equals 1 if the respondent answered they skipped a doctor's visit in case of a negative shock. The other outcome variables are standardized: *Risk Taking* (columns 1-2) was measured on a scale from 1 – "Not willing to take risk at all" to 10 – "Very much willing to take risk", *Uses Seatbelt* (columns 3-4) encompass the mean across three questions on whether the respondent uses seatbelt, and *Depression Score* (columns 7-8) encompass four questions that measure frequency of depression and anxiety symptoms. For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Sample of male respondents only. Source: GMS (LiTS and online surveys).

Table 3: Dominance Masculinity (CMNI-5) and Gender Role Norms – Politics

	Pro Democracy		Pro Market		Support for Strong Leader		Support for Army	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Masculinity Norms								
CMNI-5 Score	-0.035***	-0.035***	-0.065***	-0.064***	0.085***	0.084***	0.064***	0.063***
	(0.006)	(0.006)	(0.007)	(0.007)	(0.008)	(0.009)	(0.006)	(0.007)
Mean of outcome	0.73	0.73	0.57	0.57	0.48	0.48	0.36	0.36
R-squared	0.09	0.10	0.09	0.09	0.13	0.13	0.16	0.17
Observations	39,317	39,317	36,019	36,019	38,724	38,724	38,639	38,639
Panel B: Gender Roles Norms								
TGRI Score	-0.045***	-0.044***	-0.057***	-0.055***	0.086***	0.084***	0.065***	0.062***
	(0.004)	(0.004)	(0.008)	(0.008)	(0.008)	(0.009)	(0.006)	(0.007)
Mean of outcome	0.73	0.73	0.57	0.57	0.48	0.48	0.37	0.37
R-squared	0.10	0.10	0.08	0.09	0.13	0.13	0.17	0.17
Observations	39,720	39,720	36,366	36,366	39,131	39,131	39,050	39,050
Panel C: Masculinity and Gender Roles Norms								
CMNI-5 Score	-0.022***	-0.023***	-0.052***	-0.052***	0.064***	0.064***	0.047***	0.047***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.005)	(0.005)
TGRI Score	-0.037***	-0.036***	-0.037***	-0.036***	0.062***	0.061***	0.048***	0.045***
	(0.003)	(0.003)	(0.007)	(0.007)	(0.006)	(0.006)	(0.005)	(0.005)
Mean of outcome	0.73	0.73	0.57	0.57	0.48	0.48	0.36	0.36
R-squared	0.10	0.10	0.09	0.10	0.14	0.14	0.17	0.18
Observations	39,267	39,267	35,959	35,959	38,672	38,672	38,587	38,587
Survey × country FEs	×	×	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×		×

Notes: OLS regressions. An observation is an individual GMS respondent. All dependent variables are defined as dummies equal to 1 if the respondent agrees that democracy is preferable to any other political system (columns 1-2), if he agrees that a market economy is preferable to any other economic system (column 3-4), if he thinks that having a strong leader in power is fairly or very good (column 5-6), or if he thinks that having the army rule is fairly or very good (columns 7-8). For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: GMS (LiTS and online surveys).

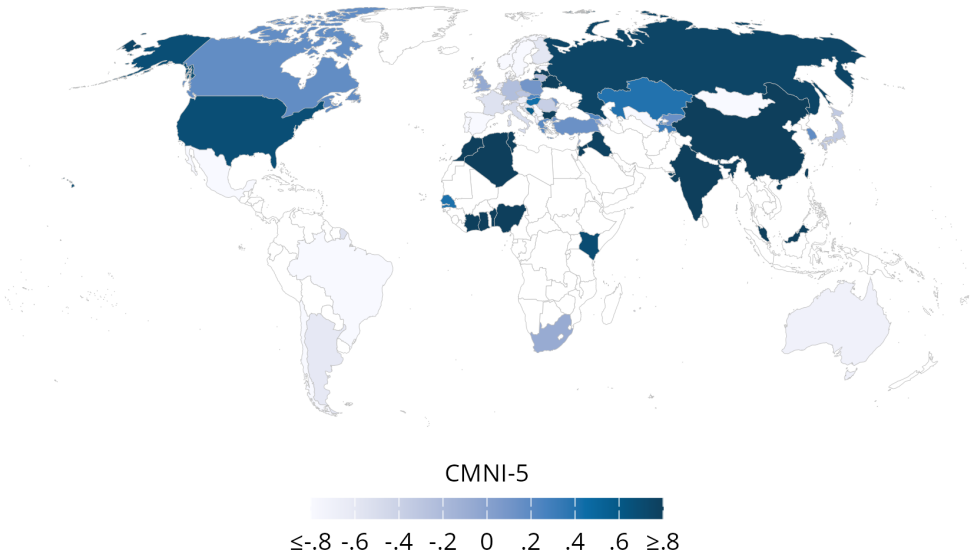
Figure 1: Correlation Matrix Between Dominance Masculinity and Gender Role Norms



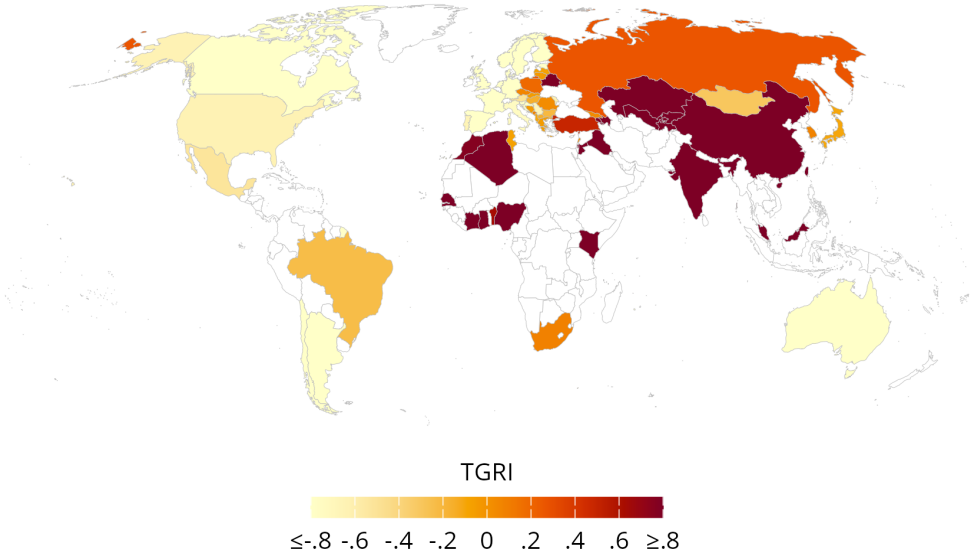
Notes: This figure displays the pair-wise individual correlation matrix between the five-item Conformity to Masculinity index (CMNI-5) and the Traditional Gender Roles Index (TGRI). Sample of male respondents only. Warmer colors indicate stronger positive correlations. Source: GMS (LiTS and online surveys).

Figure 2: Dominance Masculinity Norms and Norms about Gender Roles Around the World

Panel A: Masculinity Norms

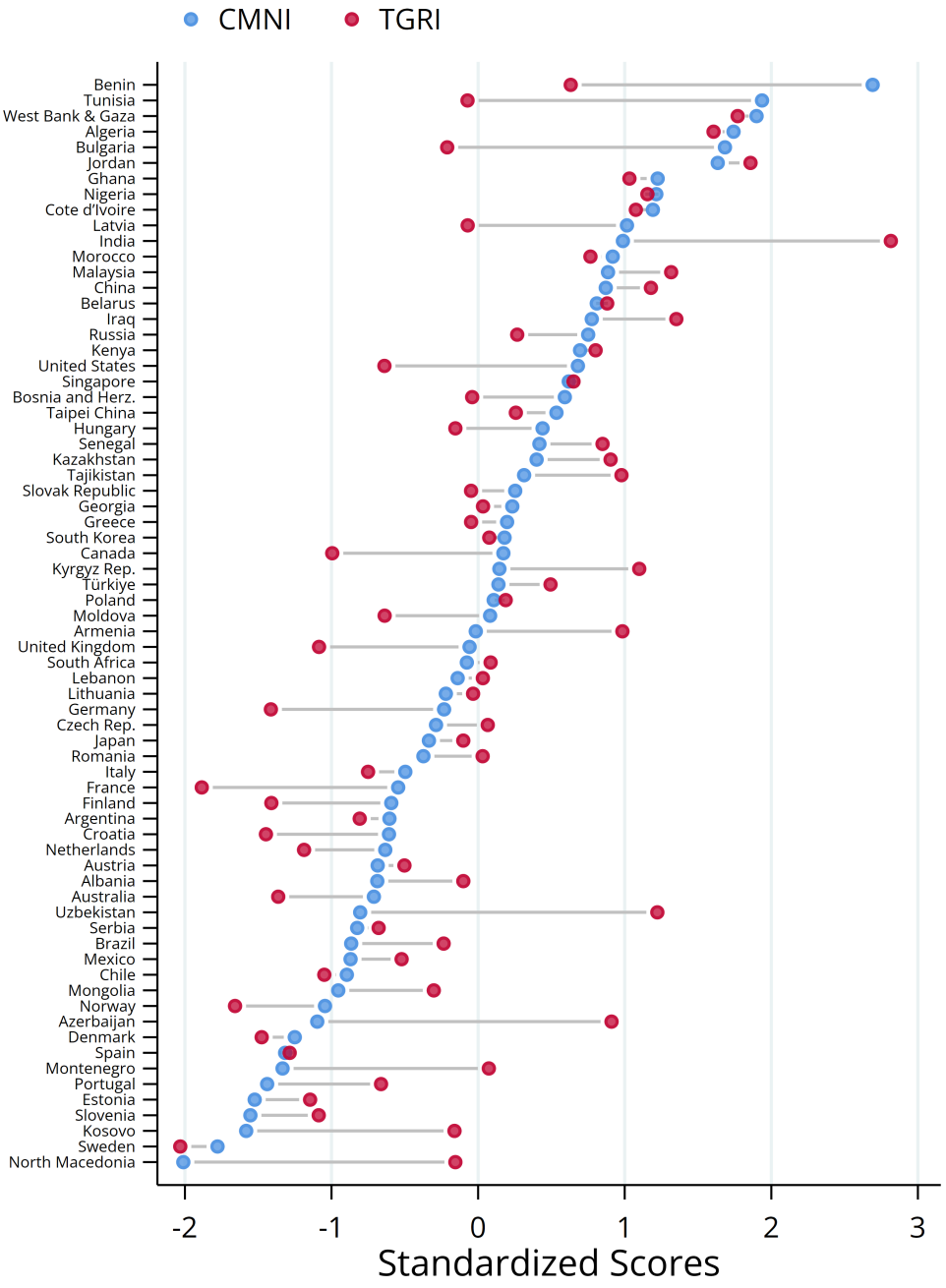


Panel B: Norms about Gender Roles



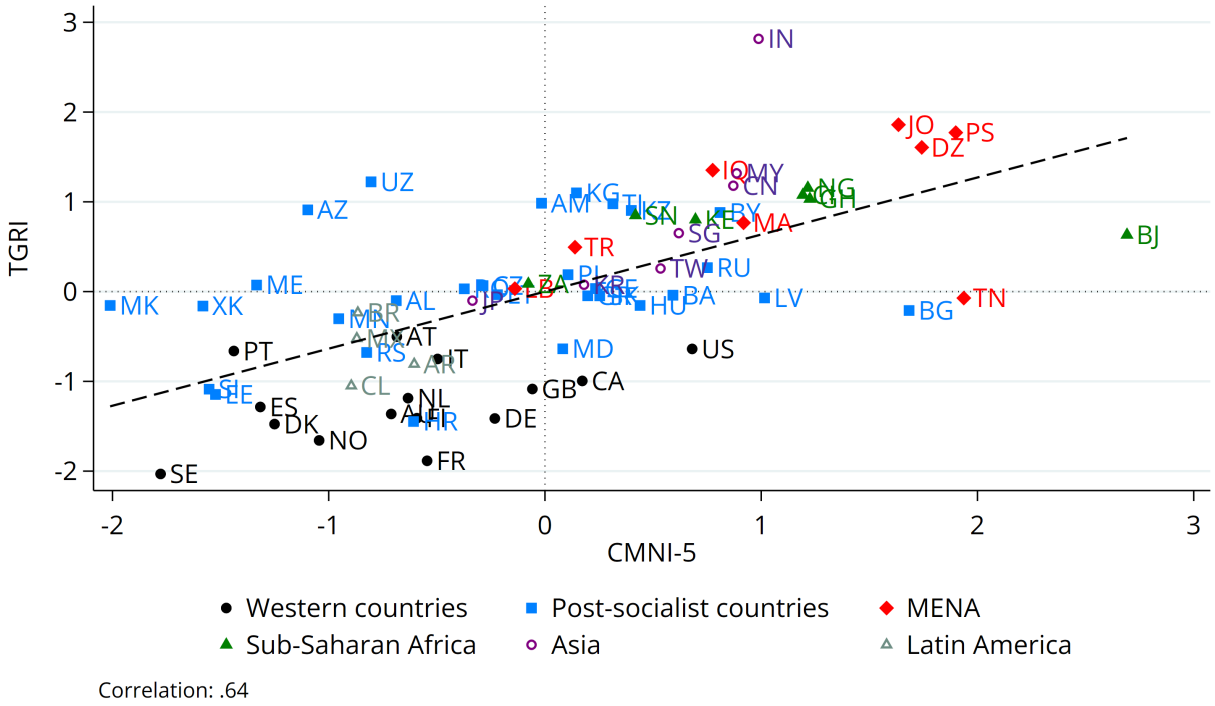
Notes: Panel A shows a map of the average standardized five-item Conformity to Masculinity Norms Index (CMNI-5) across countries. A higher number indicates more conservative masculinity norms. Panel B shows a map of the average standardized six-item Traditional gender role norms Index (TGRI) across countries. A higher number indicates more conservative gender role norms. Sample of male respondents only. Source: GMS (LiTS and online surveys).

Figure 3: Dominance Masculinity Norms and Norms about Gender Roles Across Countries



Notes: This figure displays the mean values of the Conformity to Masculinity Norms Index (CMNI-5) and the Traditional Gender Roles Index (TGRI) across countries. Higher scores indicate more conservative norms. Sample of male respondents only. Source: GMS (LiTS and online surveys).

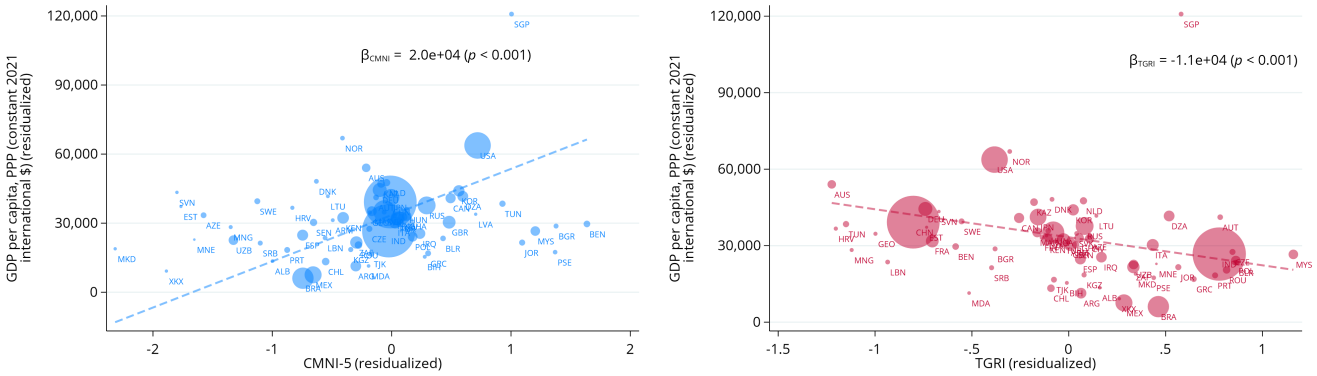
Figure 4: Cross-country Correlation Between Masculinity and Gender Role Norms



Correlation: .64

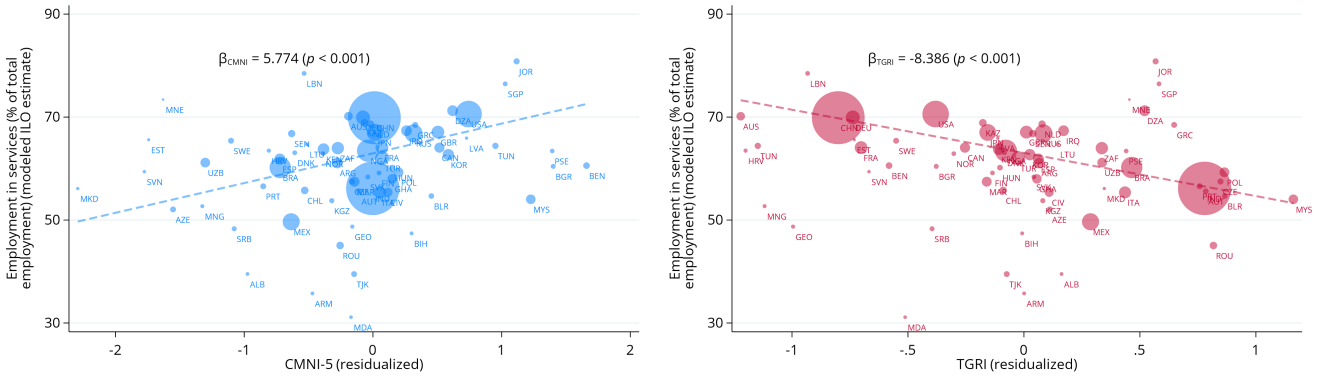
Notes: This figure displays a scatter plot and fitted linear regression of the five-item Conformity to Masculinity index (CMNI-5) and the Traditional Gender Roles Index (TGRI) across countries. Sample of male respondents only. Source: GMS (LiTS and online surveys).

Figure 5: Dominance Masculinity Norms, Norms about Gender Roles, and GDP Per Capita



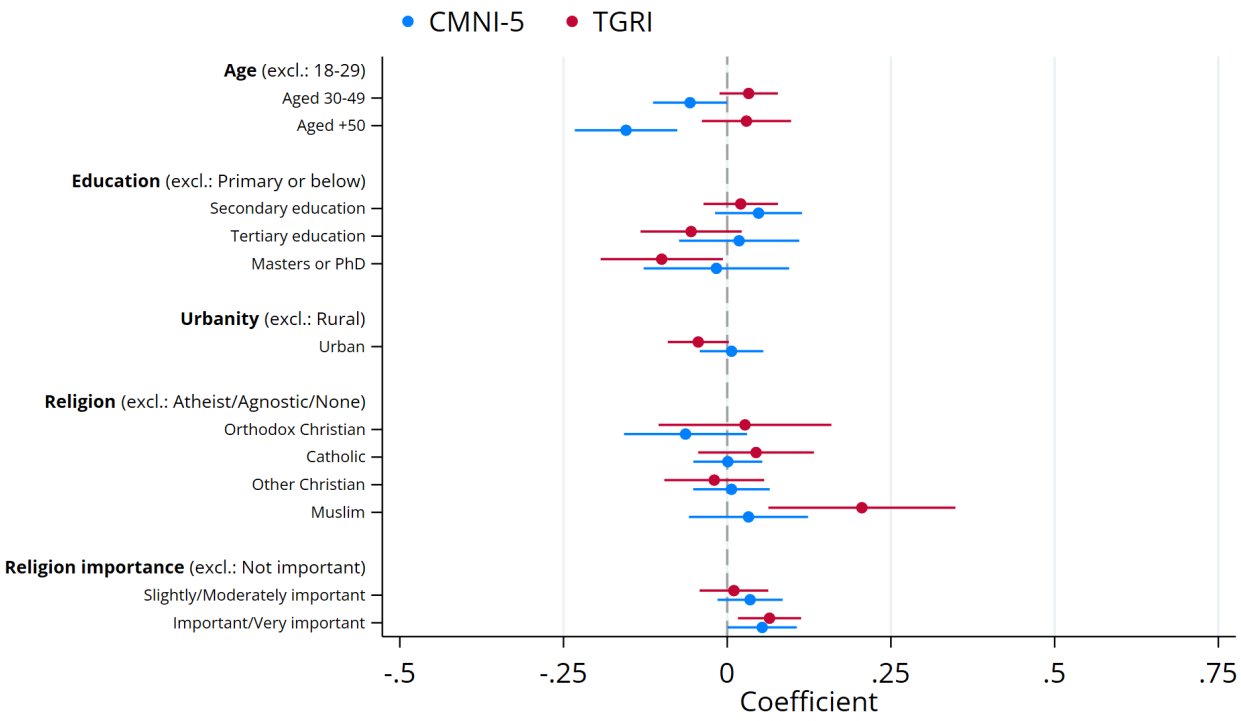
Notes: The left panel shows a binscatter plot of the country-level relationship between the latest available data point for PPP-adjusted GDP per capita and the standardized Conformity to Masculinity Norms Index (CMNI-5) once the influence of the Traditional Gender Roles Index (TGRI) is accounted for. The right panel shows the same for the TGRI after partialling out the CMNI-5. Both scatters account for the influence of continent fixed effects (Africa, Americas, Asia-Pacific, and Europe), population size, and a dummy for survey type (online/LiTS), and are weighted by population size. Sample of male respondents only. Source: World Bank WDIs, GMS (LiTS and online surveys).

Figure 6: Dominance Masculinity Norms, Norms about Gender Roles, and Employment in Services



Notes: The left panel shows a binscatter plot of the country-level relationship between the latest available data point for employment in services as a share of total employment and the standardized Conformity to Masculinity Norms Index (CMNI-5) once the influence of the Traditional Gender Roles Index (TGRI) is accounted for. The right panel shows the same for the TGRI after partialling out the CMNI-5. Both scatters account for the influence of continent fixed effects (Africa, Americas, Asia-Pacific, and Europe), population size, and a dummy for survey type (Online or LiTS or both), and are weighted by population size. Sample of male respondents only. Source: World Bank WDIs, GMS (LiTS and online surveys).

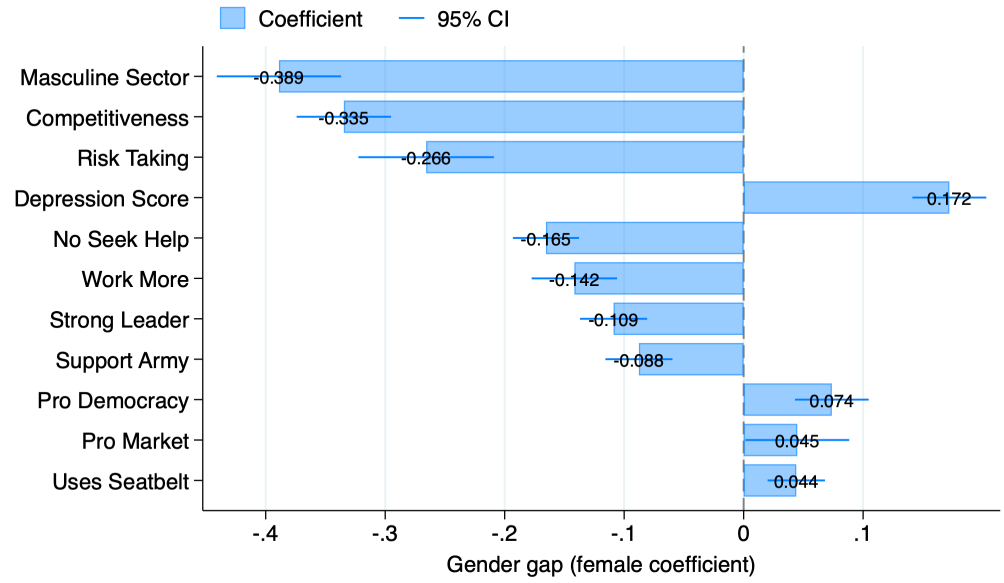
Figure 7: Individual Correlates of Dominance Masculinity and Gender Role Norms



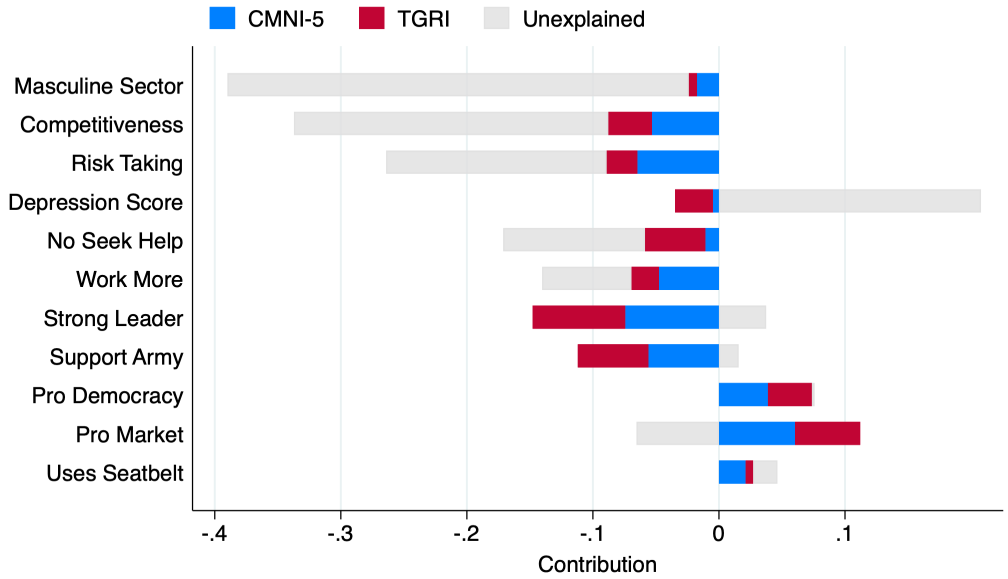
Notes: This figure displays a coefficient plot showing the results from OLS regressions of the five-item Conformity to Masculinity Norms Index (CMNI-5) or the Traditional Gender Roles Index (TGRI) on a range of covariates including age group, gender, level of education, urbanity, religion, religiosity, and country fixed effects. All coefficients are standardized. Spikes show 95% confidence intervals based on standard errors clustered at the country level. Sample of male respondents only. Source: GMS (LiTS and online surveys).

Figure 8: Decomposing Gender Gaps Into Dominance Masculinity Norms and TGRI

Panel A: Raw gender gaps



Panel B: Gelbach decomposition



Notes: Panel A displays the gender gap in each outcome, calculated as the coefficient on the female dummy from a regression of each standardized outcome on gender (female dummy), controlling for age, urban residence, and country fixed effects. All outcomes are standardized (including the binary ones) such that the gender gap is expressed in standard deviations. Seatbelt use is only as the front passenger, rather than also in the back seat, because the gender gap (that men use seatbelt less) is only evident for the front seat. Panel B shows the share of the gender gap that is explained by the CMNI-5, TGRI, or remains unexplained, using the Gelbach (2016) decomposition method. Source: GMS (online survey).

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Online Appendix A: Additional Information on the CMNI-5

A1.1 Selection and Validation of the CMNI-5

The CMNI was developed through a qualitative and quantitative process to identify the most prevalent norms and expectations characteristic of male behavior (see Section 3.2) and is widely used in clinical and social psychology, and public health. Although CMNI scores consistently predict male behavior, particularly in the physical and mental health domains (Mahalik and Rochlen, 2006; Wong et al., 2017), and correlate highly with normative measures of masculinity (Mahalik et al., 2003; Levant et al., 2010), most of this evidence comes from small-scale laboratory studies in developed countries. Until recently, the CMNI had remained mostly a clinical or research tool used in small, non-representative samples from Western countries.[36] A first breakthrough came with the implementation of the CMNI in a nationally representative Australian survey of boys and men: *The Australian Longitudinal Study on Male Health*, known as *Ten to Men*.[37] The *Ten to Men* survey also includes individual-level data on health behaviors, physical and mental health outcomes, suicidal ideation and suicide attempts, and experiences of violence, including as perpetrators. This allowed for further validation of the CMNI with behavioral outcomes related to violence, risk taking, unhealthy behavior, suicidal tendencies, and help avoidance in a nationally representative sample. Table A1 below provides correlations between the overall CMNI-22 index, its 22 sub-dimensions, and health and violence outcomes (all based on the *Ten to Men* data). These correlations in the raw data confirm positive and significant relationships between individual CMNI scores and depression, suicide attempts, and perpetrating domestic and sexual violence. Given the health focus of the clinical and psychology literature using the CMNI, existing studies include only limited or no measures of economic or political behaviors or values.

Due to institutional constraints and cost considerations, we chose to focus on five out of the 22 CMNI items for inclusion in LiTS. We picked the five questions (henceforth, CMNI-5) that correlated most strongly with the overall CMNI in the *Ten to Men* survey. As shown in Table A1, in *Ten to Men* data, the resulting CMNI-5 subscore has a correlation with the overall CMNI score of 0.75. It alone explains 57% of the variation in the total CMNI score. The raw correlations of the CMNI-5 subscore with willingness to work more, masculine employment sector, suicide attempts and intimate partner violence are all statistically significant at the 1% level and similar in magnitude to the correlations of the overall CMNI scores and these outcomes.

The resulting module elicits men's adherence to dominance masculinity norms with the following questions: "*Thinking about your own actions, feelings and beliefs, how much do you personally agree or disagree with each statement? There are no right or wrong answers—you should just give the responses that most accurately describe your personal actions, feelings and beliefs. It is best if you respond with your first impression when answering.*"

1. "*Winning is the most important thing*" (Importance of winning)
2. "*Sometimes violent action is necessary*" (Violence)

[36] The CMNI is most widely used in the United States but has also been validated in countries like Canada (Jbilou et al., 2021), Australia (Pirkis et al., 2016), and Germany (Komlenac et al., 2023).

[37] See https://aifs.gov.au/research_programs/ten-men.

3. "*It bothers me when I have to ask for help*" (Help avoidance)
4. "*I love it when men are in charge of women*" (Control over women)
5. "*It is important to me that people think I am heterosexual*" (Disdain for homosexuals)

Table A1: Correlations between CMNI and Outcome Variables from Ten to Men Survey

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Dep. Var.	CMNI-22	CMNI-5	Control over women	Disdain for homosexuals	Violence	Importance of winning	Help avoidance	Working	Would work more	Gendered sector	Masculine sector	Depression score	Major depression	Suicide attempt	Doctor's visit pushed	IPV	Rape
CMNI-22	1.00																
CMNI-5	0.75*	1.00															
Control over women	0.47*	0.59*	1.00														
Disdain for homosexuals	0.39*	0.59*	0.24*	1.00													
Violence	0.41*	0.55*	0.14*	0.06*	1.00												
Importance of winning	0.49*	0.53*	0.24*	0.15*	0.09*	1.00											
Help avoidance	0.35*	0.49*	0.09*	0.08*	0.11*	0.14*	1.00										
Working	-0.00	-0.01	0.01	-0.01	-0.04*	0.02	-0.00	1.00									
Would work more (=1)	0.08*	0.08*	0.04*	0.01	0.06*	0.04*	0.07*	-0.07*	1.00								
Gendered sector	0.09*	0.08*	0.06*	0.06*	0.01	0.04*	0.06*	0.01	-0.01	1.00							
Masculine sector	0.05*	0.07*	0.05*	0.07*	0.00	0.01	0.05*	0.00	-0.02	0.89*	1.00						
Depression score	0.10*	0.14*	0.01	0.01	0.08*	-0.01	0.30*	-0.03*	0.12*	0.02	0.01	1.00					
Major depression	0.04*	0.08*	-0.01	0.00	0.05*	-0.03*	0.19*	-0.04*	0.08*	0.01	-0.00	0.69*	1.00				
Suicide attempt	0.03*	0.05*	0.00	0.02	0.03*	-0.01	0.09*	-0.02	0.08*	0.01	0.01	0.25*	0.21*	1.00			
Doctor's visit pushed	0.16*	0.12*	0.05*	0.03*	0.04*	0.06*	0.16*	-0.00	0.04*	0.04*	0.02	0.15*	0.09*	0.03*	1.00		
IPV	-0.00	-0.01	0.02	-0.06*	0.01	-0.01	0.02	-0.01	0.00	-0.01	-0.00	0.04*	0.01	0.05*	0.00	1.00	
Rape	0.06*	0.07*	0.05*	0.02	0.04*	0.02	0.05*	-0.01	0.03*	0.01	0.01	0.05*	0.03*	0.05*	0.02	0.13*	1.00

Notes: This table presents correlations between the CMNI-22, the CMNI-5 and each of its five subitems, as well as outcomes from the *Ten to Men* survey. *** p<0.01, ** p<0.05, * p<0.1. Source: *Ten to Men*.

A1.2 Data And Quality Checks

A1.2.1 Translation

All questions in LiTS and in the online surveys were back-translated,[38] validated by the contracted survey firm (IPSOS or *Bilendi*), their local in-country representatives, as well as EBRD local representatives in each country, and piloted in every country prior to survey implementation. Since the CMNI was developed in a Western country context, the question arises as to whether the scale is valid in the diverse group of countries we study. Piloting revealed that only in two cases, Algeria and West Bank & Gaza, one of the questions on the CMNI, the one related to homosexuality, was too sensitive. In these cases, it was dropped from the survey.

A1.2.2 Online Surveys

How the panels work. The survey company *Bilendi* or its partners recruits participants from a pool of respondents who have previously expressed a willingness to take part in research studies. Recruitment into these panels happens via multiple affiliate networks, advertising channels (including Facebook and Google AdWords), address databases, referrals, and other outreach methods. New participants join these panels on a rolling basis, ensuring a constantly refreshed set of respondents. When it is time to field a survey, *Bilendi* or its local partner sends an invitation (often via email) to panel members. The invitation includes key details such as the estimated time to complete the questionnaire and the nature of the compensation. However, it usually does not reveal the specific topic of the survey to avoid skewing responses. Clicking on the link in the invitation directs prospective respondents to the survey landing page, where they must read the consent form and confirm their eligibility. For example, if the survey targets individuals aged 18–64 and a respondent turns out to be 15, the system will automatically drop them from the survey. Panels often overrepresent individuals who frequently participate in online surveys; they also differ systematically from the broader population in attitudes, behaviors, or socio-demographic background.

AI tools for data quality. *Bilendi* implemented AI-based tools to detect individuals who rush through surveys ("speeders") or exhibit other problematic response patterns. These tools help improve data quality by flagging or excluding respondents, which explains why sample sizes vary across countries. They oversample and then automatically exclude respondents who provide problematic answers, either by completing the survey unreasonably quickly or by spending an excessively long time on each question in a suspicious manner.

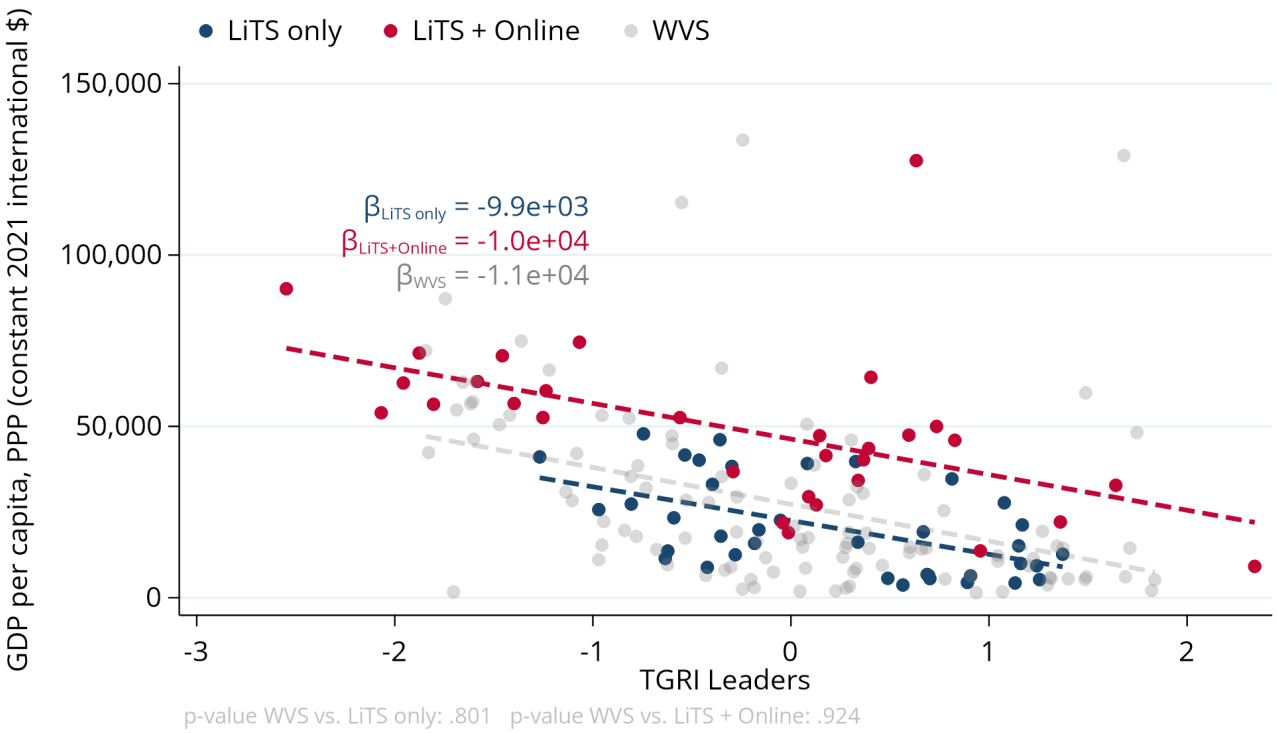
Compensation and incentives. Respondents who complete a survey are compensated with cash, vouchers, or reward points that they can redeem for goods or donate to charitable organizations. This keeps respondents engaged and encourages them to remain in the panel for future projects.

[38] Translations underwent a multi-stage quality control process: professional translators produced initial versions, which were then verified, reviewed by IPSOS and local country managers, and checked by EBRD. All translations were field-tested during training sessions and pilot studies before deployment.

A1.3 Sample Selection at the Country Level

We investigate the degree to which cross-country comparisons may be biased due to non-random selection into our study. To do so, we assess whether the correlation between gender roles attitudes and country-level indicators differs across the 70 countries in the GMS and the global population, as approximated by the World Values Survey (WVS). To make this comparison, we rely on the TGRI Leaders Index, which is common across GMS and the WVS. For the WVS analysis, we use each country's most recent available data point, matching country-level outcomes to the specific survey year.[39] Figure A1 displays correlations between the TGRI Leaders Index and GDP per capita, showing consistent patterns across the two samples, with no statistically significant differences in the slope coefficients. This similarity across samples suggests that cross-country patterns documented with the GMS are unlikely to be driven by the specific composition of countries in our survey.

Figure A1: Sample Representativeness at the Country Level: Relationship Between GDP and TGRI in the GMS (LiTS plus online) Versus WVS Countries



Notes: This figure is absed on cross-country regressions of GDP per capita on the country-level mean of the TGRI leaders index based on two questions (women as politicians, and women as CEOs) using the WVS data only, using the following country samples: all WVS countries, LiTS only countries, and LiTS+online survey countries. Source: GMS (LiTS and online surveys) and WVS.

[39] The timing of the latest WVS waves for which the TGRI questions are available varies across countries, with 60% of country-year observations from 2016 or later.

A1.4 Sample Selection within Countries

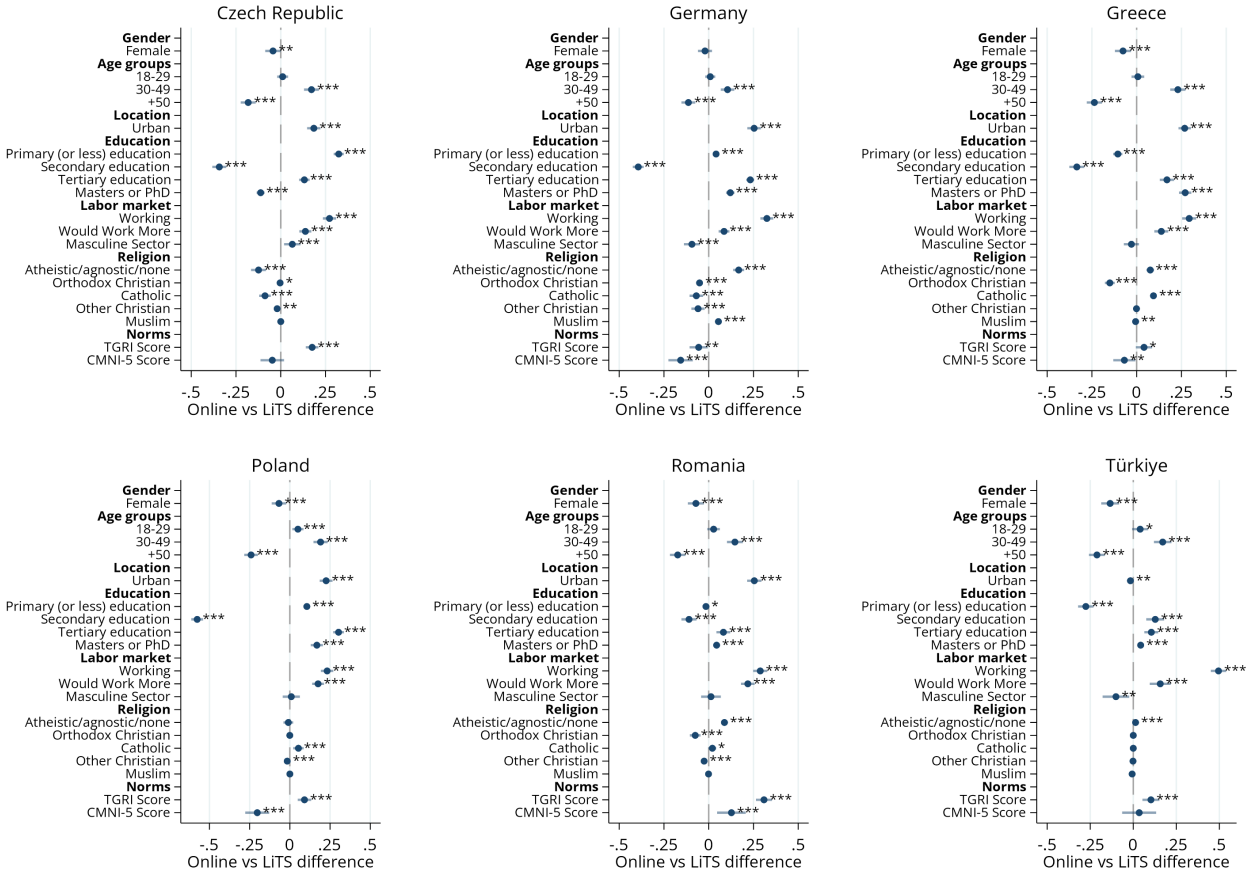
A1.4.1 Representativeness

While the LiTS component of the GMS was designed to be nationally representative, the online component was not. While *Bilendi* aims to gather samples representative of the population by age, sex, and income, there are inherent limitations. Because the survey is conducted on a computer, smartphone or tablet, people who lack easy access to these devices or a stable internet connection are underrepresented. In certain countries, the panels skew toward more educated or more tech-savvy populations, as discussed in Section 3.1.3. This issue of representativeness persists despite quota designs. So, while these surveys can reveal useful insights, it is important to keep potential sample biases (certain populations, e.g., older adults, rural residents, low-income groups, are typically undersampled) in mind when drawing conclusions, particularly in countries or regions with lower internet penetration. In addition, online surveys are typically self-administered, so clarifications or follow-up discussions are not as immediate compared to in-person or phone interviews.

Figure A2 and Table A2 compare average covariates in LiTS and the online surveys for the six countries where we conducted both (Czech Republic, Germany, Greece, Poland, Romania, and Türkiye). Men, younger individuals, those living in urban areas, the employed and the more educated are overrepresented in the online sample. However, if anything, respondents in online surveys tend to score lower on the CMNI-5.

Tables A3 and A4 compare covariates and norms measured across different surveys: LiTS, Online, Gallup, and WVS, with the Gallup and WVS being split into countries where the LiTS was conducted (Gallup-LiTS, WVS-LiTS) and where the Online component was conducted (Gallup-Online, WVS-Online). We do this with both Gallup and WVS because Gallup overlaps more with the countries in the GMS (41 LiTS, 32 Online), but does not contain norms data, while the WVS country overlap is much smaller (20 LiTS, 20 Online), but does have some TGRI questions. The Gallup World Poll (wave years 2021-2022) corresponds better to the LiTS data collection in 2022-2023. In Table A3, comparing demographics between the Online vs Gallup surveys of the same countries (columns 2 and 4), we see quite marked standardized mean differences ranging from 0.01 to 0.81 standard deviations in magnitude (column 6) with an average of 0.34 SD. The online survey participants are younger, more male, more educated, and more likely to be working. However, there are also differences between the two nationally representative surveys as well: LiTS participants are older, more educated, but less likely to be working compared to Gallup participants in the same countries. We see standardized mean differences ranging from 0.01 to 0.50 SD in magnitude, with an average of 0.18 SD, which is significant but considerably lower than the difference between the non-representative online survey and the Gallup.

Figure A2: Sample Representativeness: LiTS vs. Online Survey Comparison



Notes: Each row represents a separate regression at the individual level for each country sampled in both LiTS and the online surveys. We regress the variable on the y-axis on a dummy equal to 1 (0) if the observation comes from the online (LiTS) survey. Female responses to the CMNI-5 in the online survey are excluded. Spikes show 95% confidence intervals based on standard errors clustered at the country level. Source: GMS (LiTS and online surveys).

Table A2: Comparison of Characteristics Between Overlapping Countries in LiTS (In-Person) and Online Surveys

	(1) LiTS	(2) Online	(3) Difference (2)-(1)
Demographics			
Female	0.515	0.455	-0.120***
18-29	0.175	0.189	0.038**
30-49	0.366	0.523	0.325***
+50	0.460	0.289	-0.343***
Urban	0.656	0.820	0.345***
Primary (or less) education	0.095	0.100	0.016
Secondary education	0.688	0.423	-0.572***
Tertiary education	0.134	0.301	0.490***
Masters or PhD	0.083	0.176	0.339***
Indices			
CMNI-5 Score (1-4)	2.482	2.300	-0.298***
Traditional Gender Norms Index (TGRI) (1-4)	2.093	2.131	0.067***
Outcomes			
Would Work More (=1)	0.092	0.229	0.475***
Masculine Sector (=1)	0.322	0.285	-0.079***
Working (=1)	0.543	0.869	0.653***
Competitive Self-Assessment (1-10)	5.901	5.023	-0.386***
Risk-Taking (1-10)	4.858	5.958	0.453***
Uses Seatbelt (=1)	0.822	0.668	-0.618***
Depression Score (1-5)	2.032	2.438	0.394***
Pro Democracy (=1)	0.841	0.745	-0.264***
Pro Market (=1)	0.459	0.680	0.444***
Support for Strong Leader (=1)	0.299	0.431	0.288***
Support for Army (=1)	0.196	0.312	0.292***
Observations	6,111	8,172	
Countries	6	6	

Notes: Differences are reported as standardized mean differences relative to the LiTS benchmark using the six countries where both LiTS and online surveys were conducted (Czech Republic, Germany, Greece, Poland, Romania, and Türkiye). Source: GMS (LiTS and online surveys).

Table A3: Comparison of Demographic Characteristics Between Gallup, LiTS and Online Surveys

	(1) LiTS Sample	(2) Online Sample	(3) Gallup (LiTS Countries)	(4) Gallup (Online Countries)	(5) Difference (1)-(3)	(6) Difference (2)-(4)
Age	44.21	41.25	43.76	45.97	0.03***	-0.26***
Female (=1)	0.53	0.46	0.52	0.51	0.01	-0.09***
Tertiary Education (=1)	0.24	0.55	0.17	0.21	0.18***	0.81***
Secondary Education (=1)	0.62	0.29	0.55	0.56	0.14***	-0.53***
Primary Education (=1)	0.14	0.16	0.28	0.23	-0.31***	-0.16***
Urban (=1)	0.58	0.83	0.79	0.83	-0.50***	-0.01
Working (=1)	0.49	0.86	0.55	0.60	-0.12***	0.54***
Observations	41,578	42,761	72,079	63,826		
Countries	41	32	41	32		

Notes: The number of observations reflects the number of cases with non-missing responses for all variables depicted in the table. The Gallup (LiTS countries) sample only includes Gallup data in LiTS countries and the Gallup (Online countries) sample only includes Gallup data for Online countries. Differences are reported as standardized mean differences relative to the Gallup benchmark. Source: Gallup World Poll (wave years 2021-2022) and GMS (LiTS and online surveys).

Table A4: Comparison of Traditional Gender Role Index Subitems Between WVS, LiTS and Online Surveys

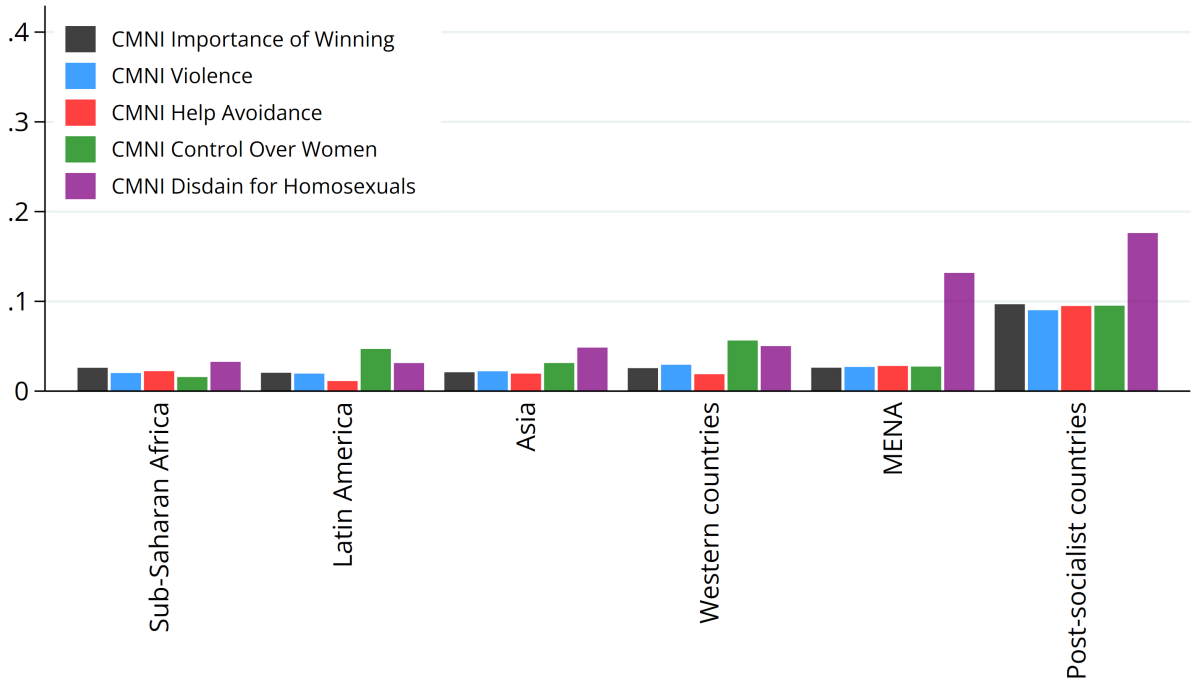
	(1) LiTS Sample	(2) Online Sample	(3) WVS (LiTS Countries)	(4) WVS (Online Countries)	(5) Difference (1)-(3)	(6) Difference (2)-(4)
Panel A: Males						
TGRI Competence Business Executives	1.97	2.20	2.61	2.13	-0.66***	0.08***
TGRI Political Leaders	2.77	2.28	2.73	2.20	0.04***	0.10***
Panel B: Females						
TGRI Competence Business Executives	1.74	2.26	2.27	1.82	-0.54***	0.56***
TGRI Political Leaders	2.57	1.89	2.43	1.93	0.15***	-0.05***
Observations	19,244	26,324	25,710	34,626		
Countries	20	20	20	20		

Notes: The number of observations reflects the number of cases with non-missing responses for all variables depicted in the table. *TGRI Competence Business Executives* is the average level of agreement, from Strongly Agree (1) to Strongly Disagree (4), with the statement "Women are as competent as men to be business executives". *TGRI Political Leaders* is the average level of agreement, from Strongly Disagree (1) to Strongly Agree (1), with the statement "On the whole, men make better political leaders than women do". The WVS (LiTS countries) is the WVS sample restricted to LiTS countries and the WVS (Online countries) in the WVS sample for the subset of Online countries. Differences are reported as standardized mean differences relative to the WVS benchmark. Source: WVS (wave years 2017-2022) and GMS (LiTS and online surveys).

A1.4.2 Item Non-Response

More generally, one way to gauge the extent to which questions challenged respondents is to examine non-response rates. Appendix Figure A3 provides non-response rates for each question across regions. The CMNI-5 question with the highest response rate is the one related to help-seeking behavior. As documented by Baranov et al. (2023), this is also the most predictive question, across all CMNI-5 questions, of overall masculinity norms and of related behavioral outcomes. Non-response rates for this question are 7.69% on average across countries.

Figure A3: Non-Response Rates across Regions: CMNI-5 Questions



Notes: This figure displays the proportion of male respondents across regions who refused to answer or answer they do not know to each item of the Conformity to Masculinity Norms Index (CMNI-5). Source: GMS (LiTS and online surveys).

A1.5 Survey Questions about Gender Roles and Attitudes Towards Women

Table A5 presents the questions about gender role norms and attitudes towards women's roles (column 1) included in both components of the GMS, their dimensions (column 2), and sources (column 3). We followed the same approach as used to elicit the CMNI questions, and participants provided answers on a four-point Likert scale from 1 ("Strongly disagree") to 4 ("Strongly agree"). We again recode answers so that a higher value indicates more unequal views about gender roles and stronger beliefs that women are not equal to men as political or business leaders. We build a summary *Traditional Gender Role Norms Index* (hereafter, TGRI) as the mean of these variables over the six questions, and calculate a z-score as our main measure. In the online component of the GMS, we randomized the order of the statements.

Table A5: Traditional Gender Roles Index

Statement	Dimension	Source
A woman should do most of the household chores even if the husband is not working	Division of Household Chores	Multiple (e.g., HILDA)
Men should take as much responsibility as women for the home and children (reversed)	Responsibility for the Home	Multiple (e.g., European Social Survey)
It is better for everyone involved if the man earns the money and the woman takes care of the home and children	Women Take Care of Household	Multiple (e.g., General Social Survey)
Both the man and woman should contribute to household income (reversed)	Contribute to Household Income	Multiple (e.g., General Social Survey)
On the whole, men make better political leaders than women do	Political Leaders	Multiple (e.g., World Values Survey)
Women are as competent as men to be business executives (reversed)	Competence Business Executive	Multiple (e.g., World Values Survey)

A1.6 Online Surveys

A1.6.1 The Normative Masculinity Index

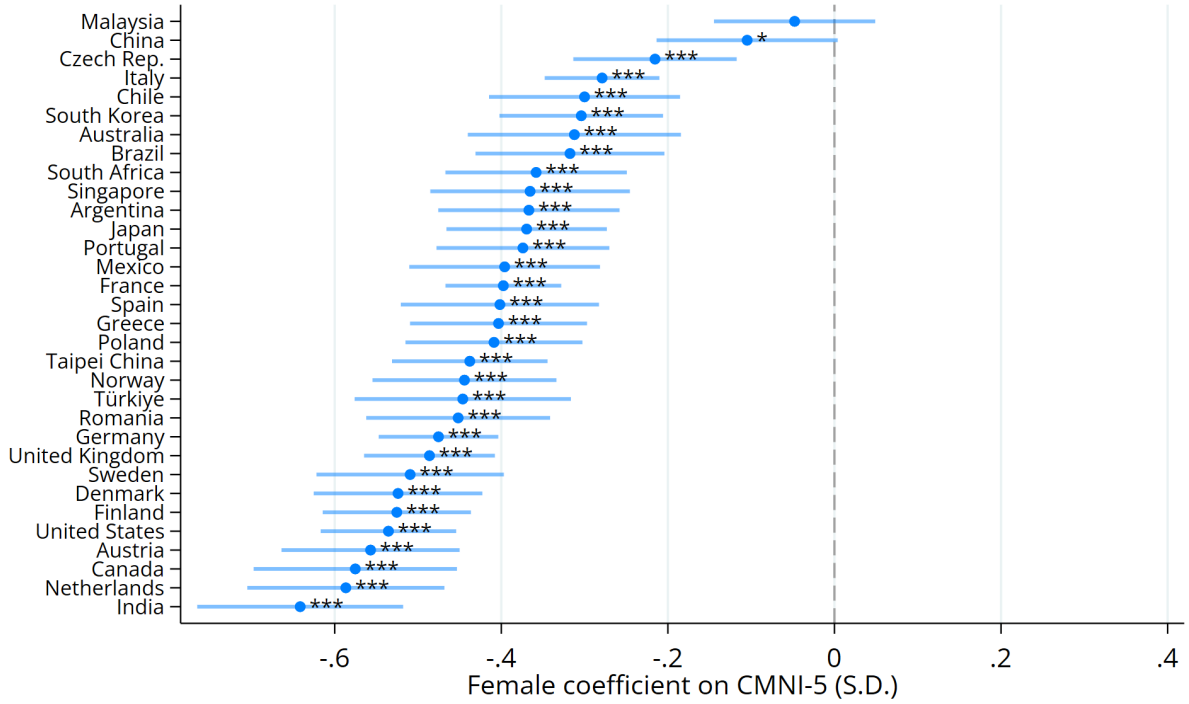
Table A6 presents the each individual item (column 1) included in the Normative Masculinity Index and their respective masculinity dimensions (column 2) and sources (column 3). Respondents read the same instructions as for the CMNI-5 and provided answers on a four-point Likert scale, from 1 ("Strongly disagree") to 4 ("Strongly agree"), for the Normative Masculinity Index (Panel A). For the index, we take the average across the domains, and calculate a z-score. A higher score indicates a stronger adherence to dominance masculinity norms in the normative and descriptive measures, and a weaker adherence to dominance masculinity norms in the non-dominance measure. We asked these questions at the end of the survey, to avoid potential priming concerns when asking our outcomes of interest. We also randomized the order of the statements.

Table A6: Normative Masculinity Index

Statement	Dimension	Source
Men should figure out their personal problems on their own without asking others for help	Help Avoidance	Man Box (Hill et al., 2020)
Men should be aggressive and competitive to get ahead	Pursuit of Status	Multicultural Masculinity Ideology Scale, adapted (Doss and Hopkins, 1998)
It is important for a man to take risks, even if he might get hurt	Risk-Taking	Male Role Norms Inventory (Levant et al., 2013)
Men should use violence to get respect if necessary	Violence	Man Box (Hill et al., 2020)
Men should act strong even if they feel scared or nervous inside	Emotional Control	Man Box (Hill et al., 2020)

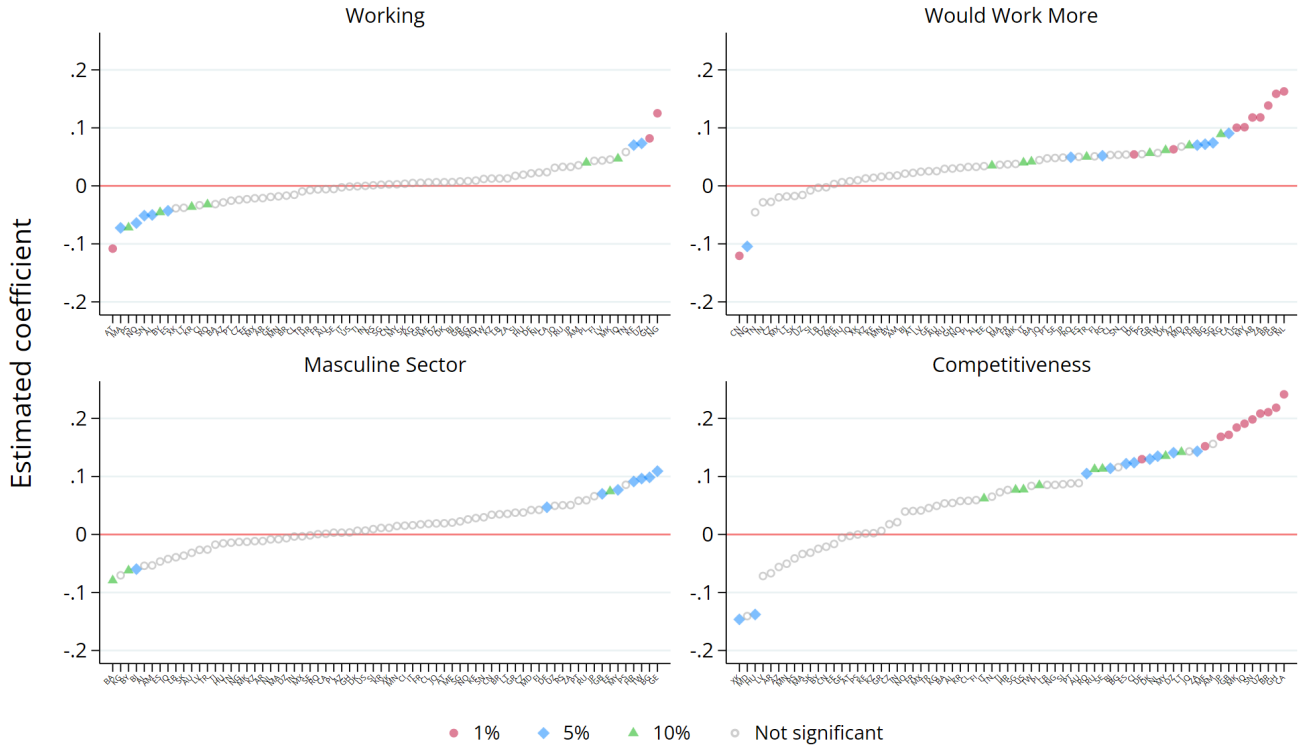
Online Appendix B: Supplementary Figures

Figure B1: Gender Gaps in CMNI-5 By Country



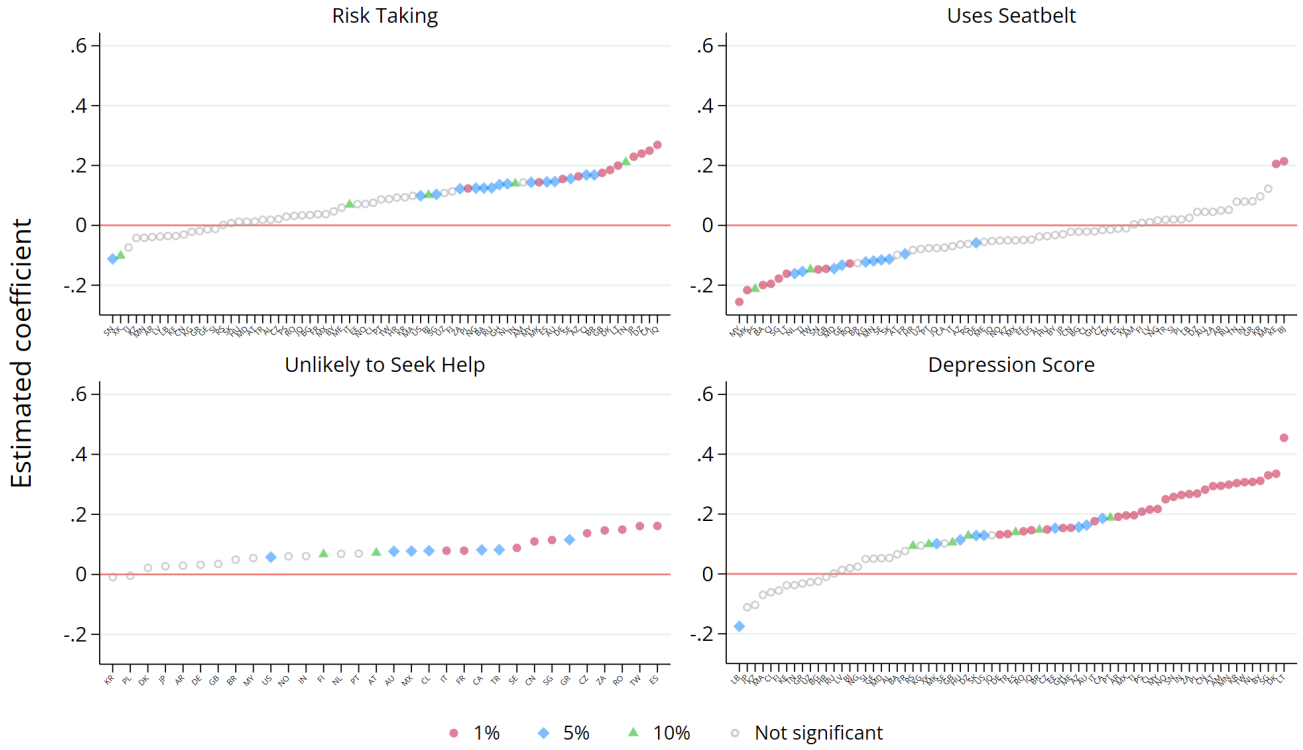
Notes: This figure displays the gender gap in the CMNI-5 index across countries, estimated using country-specific regressions of standardized CMNI-5 scores on a female dummy. Spikes reflect 95% confidence intervals based on robust standard errors. Source: GMS (online surveys).

Figure B2: Dominance Masculinity Norms (CMNI-5) By Country – Economics



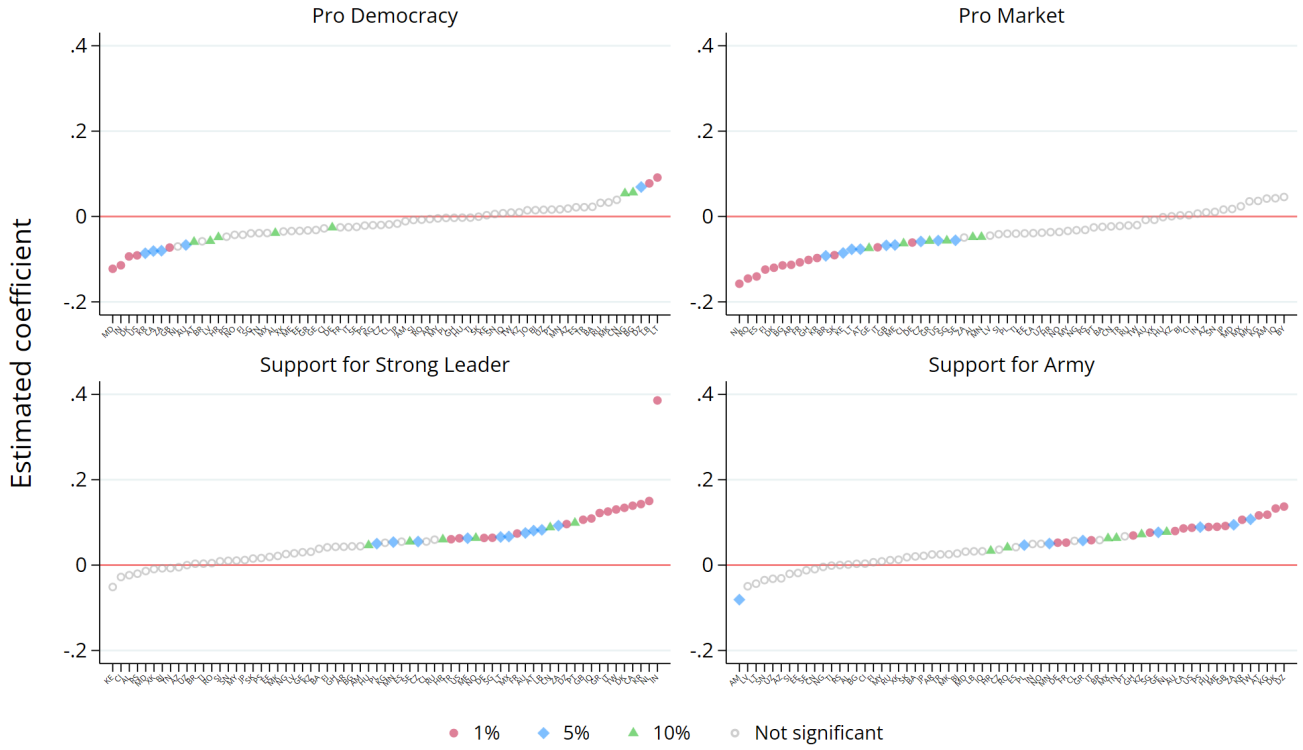
Notes: The dependent variables *Working*, *Would Work More*, and *Masculine Sector* are defined as dummies, whereas *Competitiveness* is standardized. See Table C4 for a more detailed description of these outcome variables. The chart reports the CMNI-5 coefficients from an individual-level regression run separately for each country, controlling for the TGRI, age, urban status and survey type (online or LiTS). Sample of male respondents only. Source: GMS (LiTS and online surveys).

Figure B3: Dominance Masculinity Norms (CMNI-5) By Country – Risk and Health



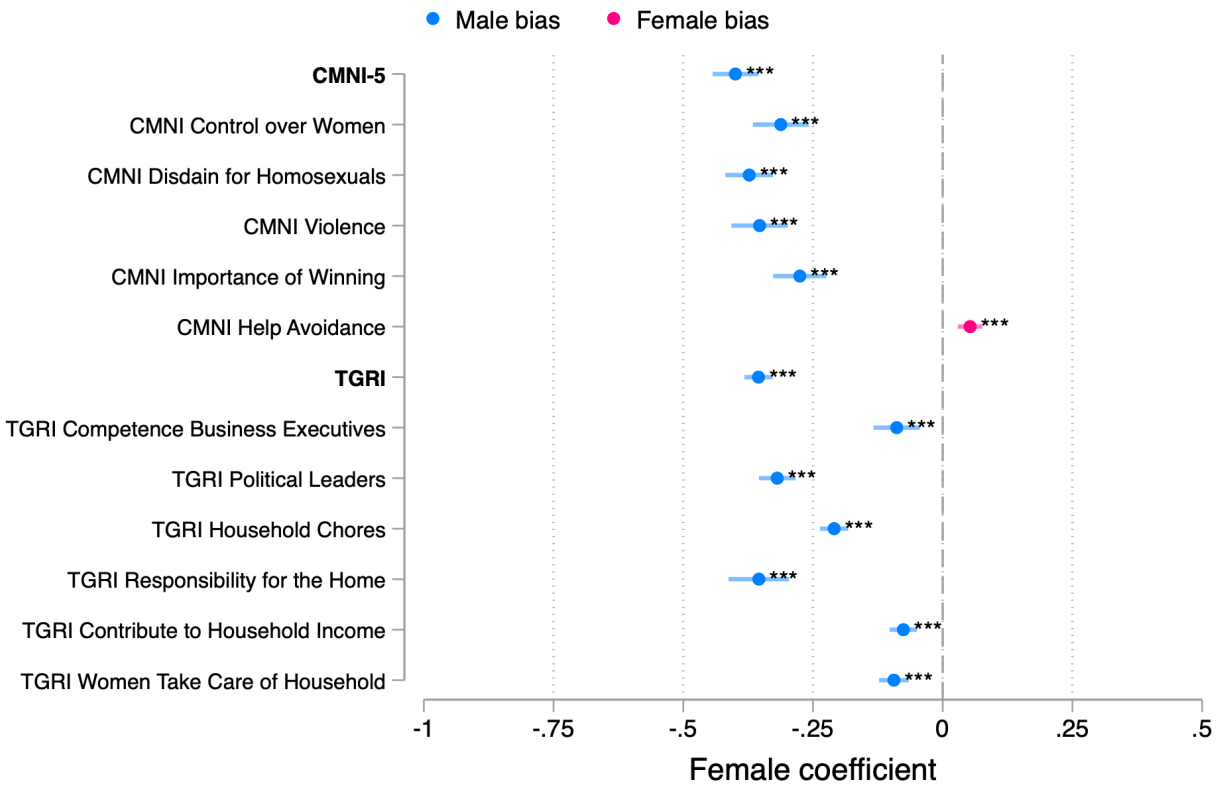
Notes: The dependent variable *Unlikely to Seek Help* is defined as a dummy, whereas *Risk Taking*, *Uses Seatbelt* and *Depression Score* are standardized. See Table C4 for a more detailed description of the outcome variables. The chart reports the CMNI-5 coefficients from an individual-level regression run separately for each country, controlling for the TGRI, age, urban status and survey type (online or LiTS). Sample of male respondents only. Source: GMS (LiTS and online surveys).

Figure B4: Dominance Masculinity Norms (CMNI-5) By Country – Politics



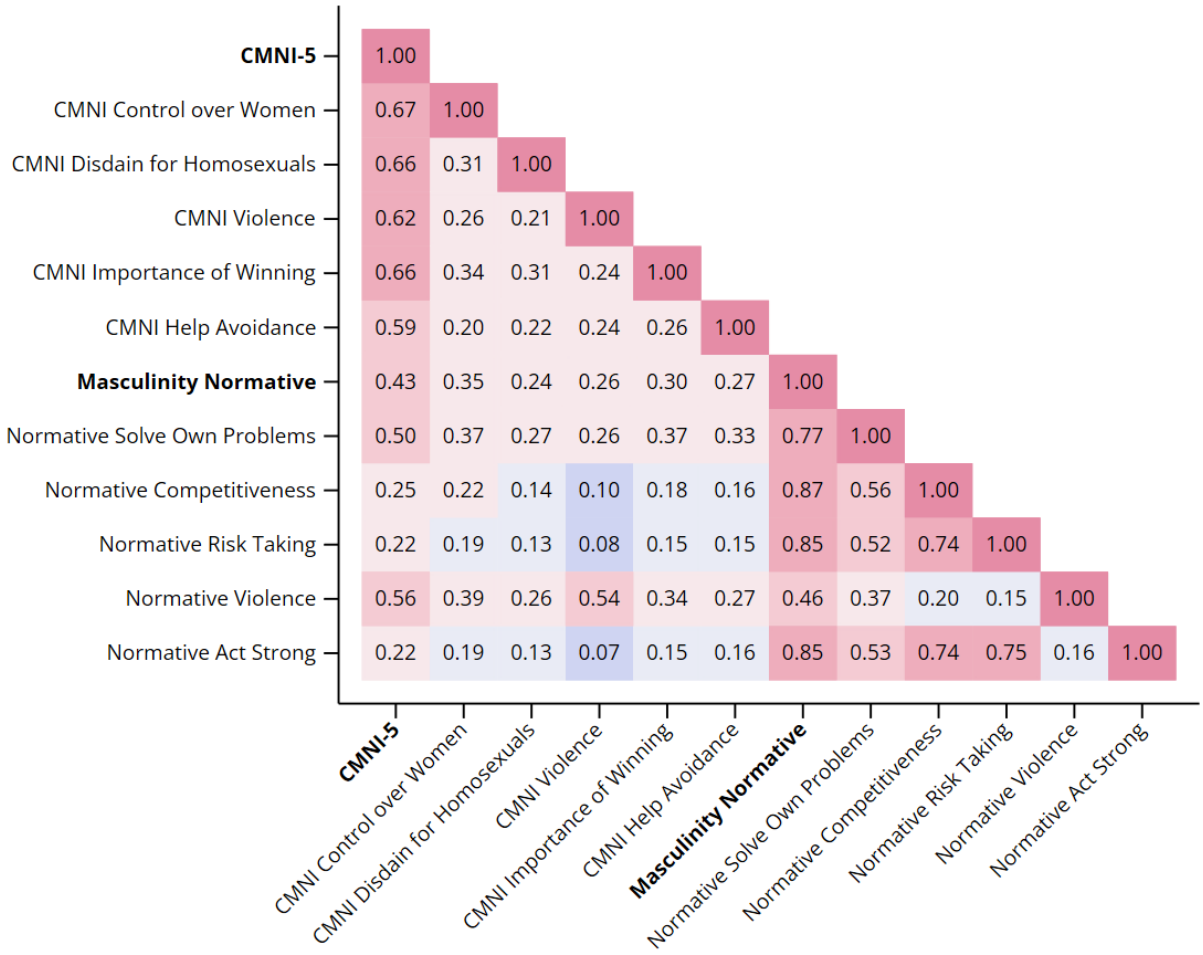
Notes: All dependent variables are defined as dummies. See Table C4 for a more detailed description of the outcome variables. The chart reports the CMNI-5 coefficients from an individual-level regression run separately for each country, controlling for the TGRI, age, urban status and survey type (LiTS and online). Sample of male respondents only. Source: GMS (LiTS and online surveys).

Figure B5: Gender Gaps in Masculinity Norms and Gender Norms



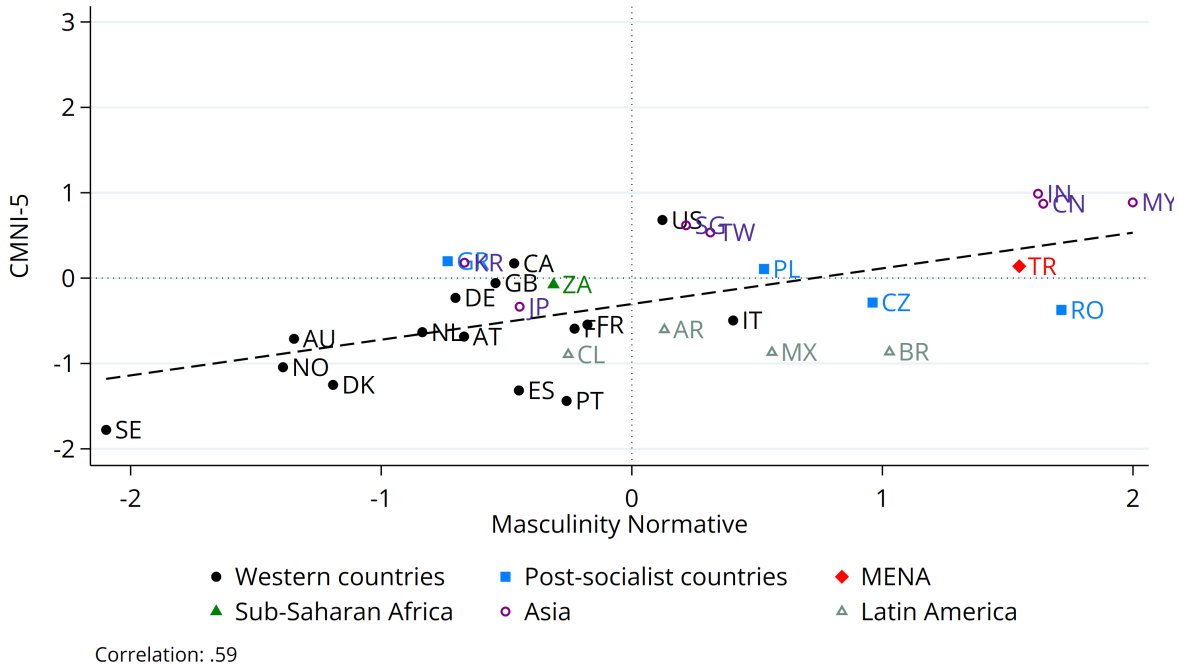
Notes: Each row represents a separate regression of the variable depicted on the y-axis on a female dummy and country fixed effects. All outcomes are standardized. Spikes show 95% confidence intervals based on standard errors clustered at the country level. Source: GMS (online survey).

Figure B6: Correlation Matrix Between CMNI-5 and Normative Masculinity Index - Online Survey



Notes: This figure displays the pair-wise individual correlation matrix between the five-item Conformity to Masculinity Index (CMNI-5) and the Normative Masculinity Index. Sample of male respondents only. Warmer colors indicate stronger positive correlations. Source: GMS (Online surveys).

Figure B7: Cross-Country Correlations: CMNI-5 And Normative Masculinity Norms



Notes: This figure displays a scatter plot at the country level of the CMNI-5 and the Normative Masculinity Index. Source: GMS (online surveys).

Online Appendix C: Supplementary Tables

Table C1: Country List and Sample Size

Country Code	Country	Survey	Region	N (Total)	N (Men)
AU	Australia	Online	Western countries	1,100	588
AT	Austria	Online	Western countries	1,107	589
CA	Canada	Online	Western countries	1,100	576
DK	Denmark	Online	Western countries	1,102	591
FI	Finland	Online	Western countries	1,110	564
FR	France	Online	Western countries	2,695	1,353
DE	Germany	LiTS & Online	Western countries	3,777	1,929
IT	Italy	Online	Western countries	2,757	1,557
NL	Netherlands	Online	Western countries	1,102	646
NO	Norway	Online	Western countries	1,085	567
PT	Portugal	Online	Western countries	1,100	567
ES	Spain	Online	Western countries	1,103	582
SE	Sweden	Online	Western countries	1,103	574
GB	United Kingdom	Online	Western countries	2,673	1,372
US	United States	Online	Western countries	2,747	1,467
AL	Albania	LiTS	Post-socialist countries	1,039	472
AM	Armenia	LiTS	Post-socialist countries	1,001	315
AZ	Azerbaijan	LiTS	Post-socialist countries	1,012	482
BY	Belarus	LiTS	Post-socialist countries	1,002	393
BA	Bosnia and Herz.	LiTS	Post-socialist countries	1,003	502
BG	Bulgaria	LiTS	Post-socialist countries	1,008	415
HR	Croatia	LiTS	Post-socialist countries	1,006	426
CZ	Czech Rep.	LiTS & Online	Post-socialist countries	2,155	1,119
EE	Estonia	LiTS	Post-socialist countries	1,009	415
GE	Georgia	LiTS	Post-socialist countries	1,003	315
GR	Greece	LiTS & Online	Post-socialist countries	2,095	1,068
HU	Hungary	LiTS	Post-socialist countries	1,000	409
KZ	Kazakhstan	LiTS	Post-socialist countries	1,028	370
XK	Kosovo	LiTS	Post-socialist countries	1,004	425
KG	Kyrgyz Rep.	LiTS	Post-socialist countries	1,002	403
LV	Latvia	LiTS	Post-socialist countries	1,004	372
LT	Lithuania	LiTS	Post-socialist countries	1,005	452
MK	North Macedonia	LiTS	Post-socialist countries	1,002	411
MD	Moldova	LiTS	Post-socialist countries	1,002	327
MN	Mongolia	LiTS	Post-socialist countries	1,001	434
ME	Montenegro	LiTS	Post-socialist countries	1,006	444
PL	Poland	LiTS & Online	Post-socialist countries	2,105	1,010
RO	Romania	LiTS & Online	Post-socialist countries	2,104	1,069
RU	Russia	LiTS	Post-socialist countries	1,017	346
RS	Serbia	LiTS	Post-socialist countries	1,001	456
SK	Slovak Republic	LiTS	Post-socialist countries	1,002	462
SI	Slovenia	LiTS	Post-socialist countries	1,004	461
TJ	Tajikistan	LiTS	Post-socialist countries	1,034	337
UZ	Uzbekistan	LiTS	Post-socialist countries	1,006	334
DZ	Algeria	LiTS	MENA	1,000	352
IQ	Iraq	LiTS	MENA	1,066	535
JO	Jordan	LiTS	MENA	1,019	358
LB	Lebanon	LiTS	MENA	1,010	438
MA	Morocco	LiTS	MENA	1,000	318
TN	Tunisia	LiTS	MENA	1,036	364
TR	Türkiye	LiTS & Online	MENA	2,059	1,173
PS	West Bank & Gaza	LiTS	MENA	1,012	343
BJ	Benin	LiTS	Sub-Saharan Africa	1,006	629
CI	Cote d'Ivoire	LiTS	Sub-Saharan Africa	1,021	483
GH	Ghana	LiTS	Sub-Saharan Africa	1,026	495
KE	Kenya	LiTS	Sub-Saharan Africa	1,013	426
NG	Nigeria	LiTS	Sub-Saharan Africa	1,053	541
SN	Senegal	LiTS	Sub-Saharan Africa	1,024	447
ZA	South Africa	Online	Sub-Saharan Africa	1,100	598
CN	China	Online	Asia	1,089	588
IN	India	Online	Asia	824	412
JP	Japan	Online	Asia	1,100	629
MY	Malaysia	Online	Asia	1,074	588
SG	Singapore	Online	Asia	1,079	587
KR	South Korea	Online	Asia	1,084	613
TW	Taipei China	Online	Asia	1,069	566
AR	Argentina	Online	Latin America	1,091	628
BR	Brazil	Online	Latin America	1,101	640
CL	Chile	Online	Latin America	1,098	608
MX	Mexico	Online	Latin America	1,051	627
Total				87,426	41,952

Notes: This table lists all countries and sample sizes ("Total" and "Men only") in LiTS and the online surveys.

Table C2: Summary Statistics - Demographics

	Full sample				Men			Women		
	Min	Max	Mean	SD	N	Mean	SD	N	Mean	SD
Age	18	95	42.67	14.93	41,621	42.69	14.42	45,190	42.65	15.43
Urban	0	1	0.71	0.46	41,621	0.72	0.45	45,190	0.69	0.46
Primary Education (=1)	0	1	0.15	0.35	41,621	0.14	0.35	45,190	0.16	0.36
Secondary Education (=1)	0	1	0.46	0.50	41,621	0.45	0.50	45,190	0.47	0.50
Tertiary Education (=1)	0	1	0.39	0.49	41,621	0.41	0.49	45,190	0.38	0.49
Orthodox (=1)	0	1	0.14	0.35	41,621	0.13	0.34	45,190	0.15	0.36
Catholic (=1)	0	1	0.23	0.42	41,621	0.23	0.42	45,190	0.23	0.42
Other Christian (=1)	0	1	0.16	0.36	41,621	0.16	0.37	45,190	0.16	0.36
Muslim (=1)	0	1	0.23	0.42	41,621	0.23	0.42	45,190	0.24	0.43
Atheistic/Agnostic/None (=1)	0	1	0.17	0.38	41621	0.18	0.38	45,190	0.16	0.37
Other Religion (=1)	0	1	0.05	0.23	41,621	0.06	0.23	45,190	0.05	0.22

Notes: This table presents summary statistics (*min*, *max*, *mean* and *standard deviation*) for the main respondent characteristics used in this paper, except the CMNI-5 and TGRI indices and subitems (see Table C3.). Statistics are presented for the combined LiTS and online samples as well as separately for men and women.

Table C3: Summary Statistics - Dominance Masculinity And Gender Roles Norms

	Full sample				Men			Women		
	Min	Max	Mean	SD	N	Mean	SD	N	Mean	SD
CMNI-5 Score (1-4)	1	4	2.37	0.62	40906	2.46	0.62	19297	2.16	0.57
CMNI Importance of Winning (1-4)	1	4	2.45	0.93	39687	2.56	0.94	18908	2.21	0.87
CMNI Violence (1-4)	1	4	1.92	0.95	39764	2.00	0.96	18906	1.74	0.87
CMNI Control over Women (1-4)	1	4	2.30	1.02	39189	2.46	1.01	18717	1.96	0.97
CMNI Help Avoidance (1-4)	1	4	2.65	0.90	39933	2.65	0.92	19052	2.65	0.85
CMNI Disdain for Homosexuals (1-4)	1	4	2.50	1.04	36782	2.62	1.04	18028	2.23	0.98
Traditional Gender Norms Index (TGRI) (1-4)	1	4	2.15	0.48	41407	2.23	0.47	44959	2.06	0.48
TGRI Political Leaders (1-4)	1	4	2.03	0.90	40749	2.09	0.89	44254	1.98	0.91
TGRI Competence Business Executives (1-4)	1	4	2.33	0.98	40770	2.47	0.96	43915	2.19	0.98
TGRI Household Chores (1-4)	1	4	2.17	0.99	40926	2.25	0.97	44508	2.09	1.00
TGRI Responsibility for the Home (1-4)	1	4	1.73	0.81	40316	1.87	0.85	43963	1.58	0.74
TGRI Contribute to Household Income (1-4)	1	4	1.95	0.80	41018	1.99	0.80	44457	1.90	0.80
TGRI Women Take Care of Household (1-4)	1	4	2.64	0.95	40761	2.68	0.93	44161	2.61	0.97

Notes: This table presents summary statistics for the CMNI-5, TGRI, and their subitems based on LiTS and online surveys, separately for men and women. Only men were asked the CMNI questions.

Table C4: Outcomes Description

Domain	Variable Name	Question(s)	Variable Description
Economics	Working	= 1 if declared working positive hours, conditional on being employed	How many hours do you work in your main job during a typical week?
Economics	Would Work More	= 1 if would like to work more hours in main job	Would you like to work more hours in your main job? Answers: Yes or No
Economics	Masculine Sector	In which sector do you work in your main job? Answers: Agriculture, Forestry, and Fishing; Mining; Construction; Manufacturing; Transportation and Public Utilities; Wholesale Trade; Retail Trade; Finance, Insurance and Real State; Services; Public Sector	=1 if employed in *Agriculture, Forestry, and Fishing*, *Mining*, *Construction*, *Manufacturing* or *Transportation and Public utilities*
Economics	Competitiveness	How competitive do you consider yourself to be? Please choose a value on a scale of 0 to 10, where the value 0 means "not competitive at all" and the value 10 means "very competitive".	Answers coded from 0 to 10, standardized
Risk and Health	Uses Seatbelt	Do you normally wear a seatbelt in the car (a) if you are the driver; (b) if you are a passenger sitting in the front seat; (c) if you are a passenger sitting in the back seat?. Answers: Yes or No for each question.	Mean across the three LiTS questions that ask about seatbelt use, coded individually as = 1 if they answer Yes, and 0 otherwise
Risk and Health	Risk Taking	Please rate your willingness to take risks, in general, on a scale from 1 to 10, where 1 means that you are not willing to take risks at all, and 10 and means that you are very much willing to take risks.	Self-assessed willingness to take risks
Risk and Health	Unlikely to Seek Help (LiTS)	If you were having a personal or emotional problem, how likely is it you would seek help from a mental health professional (i.e. psychologist, social worker, counsellor)? (a) Extremely unlikely; (b) Unlikely; (c) Likely; (d) Extremely unlikely	= 1 if responds Unlikely or Likely and 0 otherwise
Risk and Health	Unlikely to Seek Help (Online)	If you were having a personal or emotional problem, how likely is it you would seek help from a mental health professional (i.e. psychologist, social worker, counselor)	= 1 if responds Extremely Unlikely or Unlikely and 0 otherwise
Risk and Health	Depression Score	How often, if at all, do the following apply to you? (a) You feel very anxious, nervous, or worried; (b) You feel very sad; (c) You feel depressed; (d) You have little interest or pleasure in doing things. Answers: Never, A few times a year, Monthly, Weekly, Daily.	Mean across the four LiTS questions on mental health, coded on a Likert scale from 1 to 5, meaning the larger the score, the more depressed
Politics	Pro-Democracy	I am going to describe various types of political systems and ask what you think about each as a way of governing [COUNTRY]. For each one, would you say it is a very good, fairly good, fairly bad or very bad way of governing [COUNTRY]? (d) Having a democratic political system	= 1 if thinks that *Having a democratic political system* is fairly or very good for their country
Politics	Pro-Market	Which one of the following statements do you agree with most? Answers: A market economy is preferable to any other form of economic system; Under some circumstances, a planned economy may be preferable to a market economy; For people like me, it does not matter whether the economic system is organised as a market economy or as a planned economy	= 1 if agrees that *A market economy is preferable to any other form of economic system*
Politics	Support for Strong Leader	I am going to describe various types of political systems and ask what you think about each as a way of governing [COUNTRY]. For each one, would you say it is a very good, fairly good, fairly bad or very bad way of governing [COUNTRY]? (a) Having a strong leader who does not have to bother with parliament and elections	= 1 if thinks that *Having a strong leader who does not have to bother with parliament and elections* is fairly or very good for their country
Politics	Support for Army	I am going to describe various types of political systems and ask what you think about each as a way of governing [COUNTRY]. For each one, would you say it is a very good, fairly good, fairly bad or very bad way of governing [COUNTRY]? (c) Having the army rule	= 1 if thinks that *Having the army rule* is fairly or very good for their country

Notes: This table describes each outcome variable (based on either the LiTS or the online surveys) in the *Economics*, *Risk and Health*, and *Politics* domains.

Table C5: Summary Statistics - Outcome Variables

	Full sample				Men			Women		
	Min	Max	Mean	SD	N	Mean	SD	N	Mean	SD
Seatbelt in Front Seat (=1)	0	1	0.79	0.41	40876	0.78	0.42	43644	0.80	0.40
Seatbelt in Back Seat (=1)	0	1	0.48	0.50	40085	0.51	0.50	42850	0.45	0.50
Seatbelt in Driver Seat (=1)	0	1	0.83	0.38	38060	0.83	0.37	34847	0.83	0.38
Risk-Taking (1-10)	1	10	5.53	2.77	41509	5.90	2.71	44950	5.14	2.78
Unlikely to Seek Help (=1)	0	1	0.43	0.50	22811	0.46	0.50	19402	0.39	0.49
Depression Score	1	5	2.37	1.06	41271	2.28	1.05	44814	2.47	1.07
Competitive Self-Assessment (1-10)	1	10	5.39	2.69	41621	5.70	2.58	45190	5.06	2.76
Would Work More (=1)	0	1	0.26	0.44	31465	0.28	0.45	26012	0.24	0.43
Working (=1)	0	1	0.67	0.47	41621	0.75	0.43	45190	0.59	0.49
Work Agriculture (=1)	0	1	0.04	0.19	31470	0.05	0.21	26016	0.03	0.17
Work Mining (=1)	0	1	0.01	0.09	31470	0.01	0.10	26016	0.00	0.06
Work Construction (=1)	0	1	0.08	0.27	31470	0.12	0.32	26016	0.03	0.16
Work Manufacturing (=1)	0	1	0.10	0.30	31470	0.12	0.33	26016	0.07	0.26
Work Transportation (=1)	0	1	0.08	0.27	31470	0.10	0.30	26016	0.05	0.21
Work Wholesale Trade (=1)	0	1	0.03	0.18	31470	0.03	0.18	26016	0.03	0.18
Work Retail Trade (=1)	0	1	0.10	0.29	31470	0.07	0.26	26016	0.13	0.33
Work Finance (=1)	0	1	0.06	0.24	31470	0.06	0.23	26016	0.06	0.24
Work Services (=1)	0	1	0.21	0.41	31470	0.21	0.41	26016	0.21	0.41
Work Public Sector (=1)	0	1	0.20	0.40	31470	0.14	0.35	26016	0.28	0.45
Pro Democracy (=1)	0	1	0.75	0.43	39552	0.74	0.44	41039	0.76	0.43
Pro Market (=1)	0	1	0.55	0.50	36244	0.57	0.49	35651	0.53	0.50
Support for Strong Leader (=1)	0	1	0.47	0.50	38965	0.48	0.50	40204	0.46	0.50
Support for Army (=1)	0	1	0.36	0.48	38884	0.37	0.48	39858	0.35	0.48

Notes: This table presents summary statistics (*min*, *max*, *mean* and *standard deviation*) for all the variables used in this paper, except the CMNI-5 and TGRI indices and subitems (see Table C3). The table presents the statistics for the full GMS (LiTS and online surveys) and separately for men and women.

Table C6: Dominance Masculinity Dimensions – Economics

	Would Work More		Masculine Sector		Working		Competitiveness	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Masculinity - Importance of Winning								
CMNI Importance of Winning	0.043***	0.043***	0.014***	0.014***	-0.006*	-0.006*	0.108***	0.108***
	(0.006)	(0.006)	(0.004)	(0.004)	(0.004)	(0.003)	(0.012)	(0.011)
TGRI Score	0.020***	0.020***	0.027***	0.023***	-0.002	0.001	-0.002	0.004
	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.012)	(0.011)
Mean of outcome	0.28	0.28	0.36	0.36	0.77	0.77	-0.01	-0.01
R-squared	0.14	0.14	0.06	0.09	0.19	0.21	0.20	0.21
Observations	30,489	30,489	30,506	30,506	39,873	39,873	39,873	39,873
Panel B: Masculinity - Violence								
CMNI Violence	0.012**	0.012**	-0.001	-0.001	-0.007**	-0.008**	0.034***	0.033***
	(0.005)	(0.005)	(0.004)	(0.004)	(0.003)	(0.003)	(0.009)	(0.009)
TGRI Score	0.029***	0.029***	0.031***	0.027***	-0.002	0.001	0.014	0.020
	(0.006)	(0.006)	(0.005)	(0.004)	(0.004)	(0.004)	(0.013)	(0.012)
Mean of outcome	0.28	0.28	0.36	0.36	0.76	0.76	-0.01	-0.01
R-squared	0.13	0.13	0.06	0.09	0.19	0.21	0.20	0.21
Observations	30,504	30,504	30,521	30,521	39,955	39,955	39,955	39,955
Panel C: Masculinity - Help Avoidance								
CMNI Help Avoidance	0.015***	0.015***	0.003	0.003	-0.003	-0.003	0.021**	0.021**
	(0.005)	(0.005)	(0.003)	(0.003)	(0.003)	(0.003)	(0.010)	(0.009)
TGRI Score	0.030***	0.030***	0.031***	0.027***	-0.003	-0.000	0.021	0.027**
	(0.006)	(0.006)	(0.004)	(0.004)	(0.004)	(0.004)	(0.013)	(0.012)
Mean of outcome	0.28	0.28	0.36	0.36	0.76	0.76	-0.01	-0.01
R-squared	0.13	0.13	0.06	0.09	0.19	0.21	0.20	0.21
Observations	30,670	30,670	30,687	30,687	40,122	40,122	40,122	40,122
Panel D: Masculinity - Control Over Women								
CMNI Control Over Women	0.045***	0.045***	0.011**	0.011**	0.001	0.001	0.092***	0.092***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.014)	(0.013)
TGRI Score	0.018***	0.018***	0.026***	0.023***	-0.004	-0.001	-0.002	0.004
	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.012)	(0.012)
Mean of outcome	0.28	0.28	0.36	0.36	0.76	0.76	-0.01	-0.01
R-squared	0.14	0.14	0.06	0.09	0.20	0.21	0.20	0.21
Observations	29,984	29,984	30,002	30,002	39,375	39,375	39,375	39,375
Panel E: Masculinity - Disdain for Homosexuals								
CMNI Disdain for Homosexuals	0.008**	0.008**	0.010**	0.011***	0.002	0.001	0.028***	0.027***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.010)	(0.010)
TGRI Score	0.032***	0.032***	0.030***	0.026***	-0.005	-0.002	0.019	0.025*
	(0.006)	(0.006)	(0.005)	(0.004)	(0.004)	(0.004)	(0.014)	(0.013)
Mean of outcome	0.29	0.29	0.36	0.36	0.78	0.78	-0.01	-0.01
R-squared	0.14	0.14	0.06	0.09	0.19	0.20	0.20	0.21
Observations	28,759	28,759	28,777	28,777	36,985	36,985	36,985	36,985
Country FEs	×	×	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×		×

Notes: OLS regressions. An observation is an individual respondent in LiTS or Online. The dependent variables *Working* (columns 1-2), *Would Work More* (columns 3-4), and *Masculine Sector* (columns 5-6) are defined as dummies equal 1 if the individual was working, would like to work more hours, and was employed in a masculine sector, respectively. *Competitiveness* (columns 7-8) was measured on a scale from 1 – "not competitive at all" to 10 – "very competitive", and is standardized. For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 subitems and TGRI score are standardized. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: GMS (LiTS and online surveys).

Table C7: Dominance Masculinity Dimensions – Risk and Health

	Risk Taking		Uses Seatbelt		Unlikely to Seek Help		Depression Score	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Masculinity - Importance of Winning								
CMNI Importance of Winning	0.105***	0.104***	-0.041***	-0.041***	0.040***	0.040***	0.056***	0.056***
	(0.012)	(0.011)	(0.009)	(0.009)	(0.004)	(0.004)	(0.008)	(0.008)
TGRI Score	0.013	0.017	-0.043***	-0.042***	0.003	0.003	0.075***	0.073***
	(0.010)	(0.010)	(0.009)	(0.009)	(0.010)	(0.010)	(0.011)	(0.011)
Mean of outcome	0.01	0.01	-0.00	-0.00	0.46	0.46	0.00	0.00
R-squared	0.15	0.16	0.18	0.18	0.03	0.03	0.15	0.15
Observations	39,795	39,795	39,313	39,313	22,502	22,502	39,676	39,676
Panel B: Masculinity - Violence								
CMNI Violence	0.045***	0.044***	-0.038***	-0.038***	0.042***	0.042***	0.137***	0.138***
	(0.009)	(0.009)	(0.007)	(0.007)	(0.004)	(0.004)	(0.010)	(0.010)
TGRI Score	0.024**	0.028**	-0.043***	-0.041***	0.003	0.003	0.051***	0.048***
	(0.012)	(0.011)	(0.008)	(0.008)	(0.011)	(0.010)	(0.009)	(0.010)
Mean of outcome	0.01	0.01	-0.00	-0.00	0.46	0.46	-0.00	-0.00
R-squared	0.14	0.15	0.18	0.18	0.03	0.03	0.16	0.16
Observations	39,879	39,879	39,396	39,396	22,440	22,440	39,761	39,761
Panel C: Masculinity - Help Avoidance								
CMNI Help Avoidance	0.020**	0.020**	-0.025***	-0.025***	0.040***	0.040***	0.152***	0.152***
	(0.009)	(0.009)	(0.008)	(0.008)	(0.005)	(0.005)	(0.013)	(0.013)
TGRI Score	0.035***	0.038***	-0.049***	-0.048***	0.008	0.008	0.067***	0.065***
	(0.013)	(0.013)	(0.009)	(0.009)	(0.010)	(0.010)	(0.010)	(0.010)
Mean of outcome	0.01	0.01	-0.00	-0.00	0.46	0.46	0.00	0.00
R-squared	0.14	0.15	0.18	0.18	0.03	0.03	0.17	0.17
Observations	40,043	40,043	39,560	39,560	22,659	22,659	39,930	39,930
Panel D: Masculinity - Control Over Women								
CMNI Control Over Women	0.087***	0.087***	-0.025**	-0.025**	0.053***	0.054***	0.078***	0.078***
	(0.012)	(0.011)	(0.012)	(0.012)	(0.005)	(0.005)	(0.013)	(0.013)
TGRI Score	0.012	0.016	-0.045***	-0.044***	-0.005	-0.005	0.066***	0.064***
	(0.011)	(0.011)	(0.010)	(0.010)	(0.009)	(0.009)	(0.011)	(0.011)
Mean of outcome	0.01	0.01	-0.01	-0.01	0.46	0.46	0.00	0.00
R-squared	0.15	0.15	0.18	0.18	0.03	0.03	0.15	0.15
Observations	39,294	39,294	38,809	38,809	21,894	21,894	39,175	39,175
Panel E: Masculinity - Disdain for Homosexuals								
CMNI Disdain for Homosexuals	0.013	0.012	-0.014	-0.014*	0.034***	0.034***	0.018*	0.019*
	(0.009)	(0.009)	(0.008)	(0.008)	(0.005)	(0.005)	(0.010)	(0.010)
TGRI Score	0.034**	0.038***	-0.056***	-0.055***	0.008	0.008	0.095***	0.093***
	(0.014)	(0.013)	(0.009)	(0.009)	(0.011)	(0.010)	(0.011)	(0.011)
Mean of outcome	0.03	0.03	0.01	0.01	0.46	0.46	-0.02	-0.02
R-squared	0.14	0.15	0.18	0.18	0.02	0.03	0.13	0.13
Observations	36,927	36,927	36,539	36,539	21,835	21,835	36,841	36,841
Country FEs	×	×	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×		×

Notes: OLS regressions. An observation is an individual respondent in LiTS or Online. The dependent variable *Unlikely to Seek Help* (columns 5-6) is defined as a dummy equal to 1 if the respondent answered that it would be extremely unlikely or unlikely that they would seek help from a mental health professional if they were having a personal or emotional problem. The other outcome variables are standardized: *Risk Taking* (columns 1-2) was measured on a scale from 1 – "Not willing to take risk at all" to 10 – "Very much willing to take risk", *Uses Seatbelt* (columns 3-4) encompass the mean across three questions on whether the respondent uses seatbelt, and *Depression Score* (columns 7-8) encompass four questions that measure depression. For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI subitems and TGRI score are standardized. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: GMS (LiTS and online surveys).

Table C8: Dominance Masculinity Dimensions – Politics

	Pro Democracy		Pro Market		Support for Strong Leader		Support for Army	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Masculinity - Importance of Winning								
CMNI Importance of Winning	-0.018***	-0.018***	-0.022***	-0.022***	0.061***	0.061***	0.047***	0.047***
	(0.004)	(0.004)	(0.005)	(0.005)	(0.006)	(0.006)	(0.005)	(0.005)
TGRI Score	-0.042***	-0.041***	-0.052***	-0.050***	0.071***	0.069***	0.054***	0.052***
	(0.004)	(0.004)	(0.007)	(0.007)	(0.007)	(0.007)	(0.005)	(0.006)
Mean of outcome	0.73	0.73	0.58	0.58	0.48	0.48	0.36	0.36
R-squared	0.10	0.10	0.08	0.09	0.14	0.14	0.17	0.17
Observations	38,235	38,235	35,002	35,002	37,660	37,660	37,547	37,547
Panel B: Masculinity - Violence								
CMNI Violence	-0.017***	-0.017***	-0.052***	-0.052***	0.026***	0.027***	0.024***	0.024***
	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
TGRI Score	-0.041***	-0.040***	-0.042***	-0.040***	0.079***	0.077***	0.058***	0.055***
	(0.004)	(0.004)	(0.007)	(0.007)	(0.008)	(0.008)	(0.006)	(0.006)
Mean of outcome	0.73	0.73	0.58	0.58	0.48	0.48	0.36	0.36
R-squared	0.10	0.10	0.09	0.10	0.13	0.13	0.16	0.17
Observations	38,288	38,288	35,085	35,085	37,696	37,696	37,590	37,590
Panel C: Masculinity - Help Avoidance								
CMNI Help Avoidance	-0.004	-0.005	-0.023***	-0.023***	0.018***	0.018***	0.009**	0.009**
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
TGRI Score	-0.045***	-0.044***	-0.054***	-0.053***	0.084***	0.082***	0.064***	0.062***
	(0.004)	(0.004)	(0.008)	(0.008)	(0.008)	(0.009)	(0.006)	(0.006)
Mean of outcome	0.73	0.73	0.58	0.58	0.48	0.48	0.36	0.36
R-squared	0.10	0.10	0.09	0.09	0.13	0.13	0.16	0.17
Observations	38,422	38,422	35,217	35,217	37,853	37,853	37,753	37,753
Panel D: Masculinity - Control Over Women								
CMNI Control Over Women	-0.021***	-0.021***	-0.041***	-0.040***	0.061***	0.060***	0.044***	0.044***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.007)	(0.007)	(0.006)	(0.006)
TGRI Score	-0.040***	-0.039***	-0.043***	-0.042***	0.067***	0.065***	0.052***	0.050***
	(0.004)	(0.004)	(0.008)	(0.008)	(0.007)	(0.007)	(0.005)	(0.005)
Mean of outcome	0.73	0.73	0.57	0.57	0.48	0.48	0.37	0.37
R-squared	0.10	0.10	0.09	0.09	0.14	0.14	0.17	0.17
Observations	37,724	37,724	34,608	34,608	37,130	37,130	37,026	37,026
Panel E: Masculinity - Disdain for Homosexuals								
CMNI Disdain for Homosexuals	-0.007*	-0.007*	-0.021***	-0.021***	0.026***	0.026***	0.017***	0.018***
	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)
TGRI Score	-0.048***	-0.047***	-0.057***	-0.055***	0.084***	0.083***	0.065***	0.063***
	(0.004)	(0.004)	(0.008)	(0.008)	(0.008)	(0.008)	(0.006)	(0.006)
Mean of outcome	0.73	0.73	0.58	0.58	0.47	0.47	0.36	0.36
R-squared	0.10	0.10	0.08	0.09	0.13	0.13	0.16	0.17
Observations	35,673	35,673	33,204	33,204	35,118	35,118	34,991	34,991
Country FEs	×	×	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×		×

Notes: OLS regressions. An observation is a GMS respondent. Dependent variables are defined as dummies equal to 1 if the respondent thinks that democracy is fairly or very good (columns 1-2), if he agrees that a market economy is preferable to any other economic system (column 3-4), if he thinks that having a strong leader in power is fairly or very good (column 5-6), or if he thinks that having the army rule is fairly or very good (columns 7-8). More details on the definitions of the dependent variables are given in Table C4. The CMNI-5 subitems and TGRI score are standardized. Standard errors clustered at the country level in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: GMS (LiTS and online surveys).

Table C9: CMNI-5 and effect of Female Interviewer

	CMNI-5		Importance of Winning		Violence		Help Avoidance		Control over Women		Disdain for Homosexuals	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Female interviewer	-0.045	-0.045	-0.028	-0.028	-0.136***	-0.136***	0.057	0.057	-0.028	-0.028	-0.020	-0.020
	(0.053)	(0.053)	(0.055)	(0.055)	(0.044)	(0.044)	(0.047)	(0.047)	(0.059)	(0.059)	(0.051)	(0.051)
Mean of outcome	0.01	0.01	-0.01	-0.01	0.02	0.02	0.00	0.00	0.00	0.00	0.03	0.03
R-squared	0.14	0.14	0.13	0.13	0.07	0.07	0.07	0.07	0.23	0.23	0.14	0.14
Observations	18,219	18,219	17,443	17,443	17,584	17,584	17,534	17,534	17,558	17,558	15,200	15,200
Country FEs	×	×	×	×	×	×	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×		×		×		×

Notes: OLS regressions. An observation is an individual respondent in LiTS. The dependent variables correspond to the standardized CMNI-5 index and its subitems. *Female interviewer* is defined as a dummy equal to 1 if the interviewer in LiTS was a woman, and 0 otherwise. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: LiTS.

Table C10: TGRI and effect of Female Interviewer

	TGRI		Political Leaders		Business Executives		Household Chores		Responsibility for the Home		Contribute to Household Income		Women Take Care of Household	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Female interviewer	-0.105**	-0.105**	-0.134***	-0.134***	-0.060	-0.060	-0.088*	-0.088*	-0.025	-0.025	0.016	0.016	-0.046	-0.046
	(0.049)	(0.049)	(0.042)	(0.042)	(0.039)	(0.039)	(0.051)	(0.051)	(0.062)	(0.062)	(0.053)	(0.053)	(0.038)	(0.038)
Mean of outcome	-0.02	-0.02	0.13	0.13	0.12	0.12	0.08	0.08	0.09	0.09	0.05	0.05	0.06	0.06
R-squared	0.12	0.12	0.05	0.05	0.07	0.07	0.10	0.10	0.03	0.03	0.06	0.06	0.09	0.09
Observations	18,596	18,596	18,181	18,181	17,963	17,963	18,121	18,121	18,242	18,242	18,212	18,212	17,954	17,954
Country FEs	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×	×	×	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×		×		×		×		×

Notes: OLS regressions. An observation is an individual respondent in LiTS. The dependent variables correspond to the standardized TGRI index and its subitems. *Female interviewer* is defined as a dummy equal to 1 if the interviewer in LiTS was a woman, and 0 otherwise. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: LiTS.

Table C11: Dominance Masculinity (CMNI-5) and Gender Roles Norms – Economics (Controlling for Female Interviewer)

	Would Work More		Masculine Sector		Working		Competitiveness	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Masculinity Norms								
CMNI-5 Score	0.021***	0.020***	0.020***	0.015**	0.001	0.004	0.037**	0.044**
	(0.005)	(0.005)	(0.007)	(0.007)	(0.008)	(0.007)	(0.017)	(0.016)
Female interviewer	0.001	0.001	0.011	0.004	-0.006	-0.001	-0.058	-0.046
	(0.017)	(0.017)	(0.022)	(0.019)	(0.018)	(0.016)	(0.053)	(0.049)
Mean of outcome	0.17	0.17	0.44	0.44	0.59	0.59	-0.02	-0.02
R-squared	0.11	0.11	0.07	0.11	0.12	0.14	0.11	0.13
Observations	10,754	10,754	10,754	10,754	18,219	18,219	18,219	18,219
Panel B: Gender Roles Norms								
TGRI Score	0.001	-0.002	0.040***	0.026***	-0.004	0.004	-0.050***	-0.031**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.005)	(0.014)	(0.014)
Female interviewer	-0.001	-0.002	0.013	0.005	-0.005	0.002	-0.065	-0.051
	(0.017)	(0.017)	(0.021)	(0.018)	(0.017)	(0.016)	(0.052)	(0.048)
Mean of outcome	0.17	0.17	0.44	0.44	0.59	0.59	-0.02	-0.02
R-squared	0.11	0.11	0.07	0.11	0.12	0.14	0.11	0.13
Observations	10,953	10,953	10,953	10,953	18,596	18,596	18,596	18,596
Panel C: Masculinity and Gender Roles Norms								
CMNI-5 Score	0.021***	0.021***	0.012*	0.010	0.002	0.004	0.049***	0.052***
	(0.006)	(0.006)	(0.007)	(0.007)	(0.008)	(0.008)	(0.016)	(0.016)
TGRI Score	-0.004	-0.007	0.037***	0.023***	-0.003	0.005	-0.059***	-0.042***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.014)	(0.014)
Female interviewer	0.001	-0.000	0.014	0.006	-0.006	-0.001	-0.064	-0.051
	(0.017)	(0.017)	(0.021)	(0.019)	(0.018)	(0.016)	(0.053)	(0.049)
Mean of outcome	0.17	0.17	0.44	0.44	0.59	0.59	-0.02	-0.02
R-squared	0.11	0.11	0.07	0.11	0.12	0.14	0.11	0.13
Observations	10,715	10,715	10,715	10,715	18,130	18,130	18,130	18,130
Country FEs	×	×	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×		×

Notes: OLS regressions. An observation is an individual respondent in LiTS. The dependent variables *Working* (columns 1-2), *Would Work More* (columns 3-4), and *Masculine Sector* (columns 5-6) are defined as dummies equal 1 if the individual was working, would like to work more hours, and was employed in a masculine sector, respectively. *Competitiveness* (columns 7-8) was measured on a scale from 1 – "not competitive at all" to 10 – "very competitive", and is standardized. For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: LiTS.

Table C12: Dominance Masculinity (CMNI-5) and Gender Roles Norms – Risk and Health (Controlling for Female Interviewer)

	Risk Taking		Uses Seatbelt		Depression Score	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Masculinity Norms						
CMNI-5 Score	0.055***	0.059***	-0.063***	-0.060***	0.103***	0.100***
	(0.015)	(0.015)	(0.014)	(0.014)	(0.018)	(0.018)
Female interviewer	-0.046	-0.037	0.096*	0.102*	0.058	0.053
	(0.039)	(0.037)	(0.051)	(0.052)	(0.039)	(0.039)
Mean of outcome	-0.03	-0.03	0.00	0.00	-0.01	-0.01
R-squared	0.09	0.10	0.21	0.22	0.25	0.25
Observations	18,126	18,126	17,634	17,634	17,971	17,971
Panel B: Gender Roles Norms						
TGRI Score	-0.021*	-0.010	-0.068***	-0.062***	0.048***	0.040***
	(0.012)	(0.011)	(0.014)	(0.014)	(0.014)	(0.013)
Female interviewer	-0.046	-0.036	0.089*	0.095*	0.055	0.049
	(0.040)	(0.038)	(0.049)	(0.050)	(0.037)	(0.038)
Mean of outcome	-0.03	-0.03	0.01	0.01	-0.01	-0.01
R-squared	0.09	0.10	0.21	0.21	0.24	0.25
Observations	18,499	18,499	17,992	17,992	18,316	18,316
Panel C: Masculinity and Gender Roles Norms						
CMNI-5 Score	0.062***	0.063***	-0.052***	-0.051***	0.095***	0.094***
	(0.016)	(0.015)	(0.015)	(0.015)	(0.018)	(0.018)
TGRI Score	-0.033***	-0.023**	-0.058***	-0.052***	0.028**	0.020
	(0.012)	(0.011)	(0.015)	(0.015)	(0.013)	(0.013)
Female interviewer	-0.047	-0.038	0.088*	0.094*	0.061	0.056
	(0.040)	(0.038)	(0.049)	(0.050)	(0.039)	(0.039)
Mean of outcome	-0.02	-0.02	0.00	0.00	-0.01	-0.01
R-squared	0.10	0.10	0.21	0.22	0.25	0.26
Observations	18,042	18,042	17,549	17,549	17,900	17,900
Country FEs	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×

Notes: OLS regressions. An observation is an individual respondent in LiTS. The dependent variable *Unlikely to Seek Help* (columns 5-6) is defined as a dummy equal to 1 if the respondent answered that it would be extremely unlikely or unlikely that they would seek help from a mental health professional if they were having a personal or emotional problem. The other outcome variables are standardized: *Risk Taking* (columns 1-2) was measured on a scale from 1 – "Not willing to take risk at all" to 10 – "Very much willing to take risk", *Uses Seatbelt* (columns 3-4) encompass the mean across three questions on whether the respondent uses seatbelt, and *Depression Score* (columns 7-8) encompass four questions that measure depression. For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: LiTS.

Table C13: Dominance Masculinity (CMNI-5) and Gender Roles Norms – Politics (Controlling for Female Interviewer)

	Pro Democracy		Pro Market		Support for Strong Leader		Support for Army	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Masculinity Norms								
CMNI-5 Score	-0.003	-0.002	-0.031***	-0.029***	0.032***	0.031***	0.035***	0.033***
	(0.006)	(0.006)	(0.009)	(0.009)	(0.006)	(0.005)	(0.009)	(0.008)
Female interviewer	0.005	0.008	0.011	0.013	-0.010	-0.012	0.035	0.029
	(0.013)	(0.013)	(0.022)	(0.022)	(0.024)	(0.023)	(0.023)	(0.023)
Mean of outcome	0.82	0.82	0.46	0.46	0.45	0.45	0.33	0.33
R-squared	0.05	0.05	0.06	0.06	0.16	0.17	0.20	0.21
Observations	16,366	16,366	15,103	15,103	15,773	15,773	15,688	15,688
Panel B: Gender Roles Norms								
TGRI Score	-0.028***	-0.025***	-0.026**	-0.021*	0.034***	0.031***	0.037***	0.030***
	(0.005)	(0.005)	(0.012)	(0.012)	(0.007)	(0.007)	(0.007)	(0.007)
Female interviewer	0.000	0.003	0.012	0.015	-0.009	-0.011	0.038	0.032
	(0.012)	(0.012)	(0.021)	(0.022)	(0.023)	(0.023)	(0.023)	(0.024)
Mean of outcome	0.82	0.82	0.46	0.46	0.45	0.45	0.34	0.34
R-squared	0.05	0.06	0.05	0.06	0.17	0.17	0.21	0.22
Observations	16,645	16,645	15,410	15,410	16,056	16,056	15,975	15,975
Panel C: Masculinity and Gender Roles Norms								
CMNI-5 Score	0.004	0.003	-0.027***	-0.026***	0.026***	0.025***	0.027***	0.027***
	(0.006)	(0.006)	(0.008)	(0.008)	(0.006)	(0.006)	(0.008)	(0.008)
TGRI Score	-0.029***	-0.026***	-0.019*	-0.014	0.028***	0.025***	0.031***	0.024***
	(0.005)	(0.004)	(0.011)	(0.011)	(0.007)	(0.007)	(0.007)	(0.007)
Female interviewer	0.002	0.005	0.009	0.012	-0.008	-0.010	0.038	0.033
	(0.013)	(0.013)	(0.022)	(0.022)	(0.024)	(0.023)	(0.023)	(0.023)
Mean of outcome	0.82	0.82	0.46	0.46	0.45	0.45	0.33	0.33
R-squared	0.05	0.06	0.06	0.07	0.17	0.17	0.20	0.22
Observations	16,316	16,316	15,043	15,043	15,721	15,721	15,636	15,636
Country FEs	×	×	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×		×

Notes: OLS regressions. An observation is an individual respondent in LiTS. All dependent variables are defined as dummies equal to 1 if the respondent agrees that democracy is preferable to other political system (columns 1-2), if agrees that a market economy is preferable to any other economic system (column 3-4), if thinks that having a strong leader in power is fairly or very good (column 5-6), or if thinks that having the army rule is fairly or very good (columns 7-8). For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: LiTS.

Table C14: Controlling for competitiveness and risk preferences – Economics

	Would Work More		Masculine Sector		Working	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Masculinity Norms						
CMNI-5 Score	0.049***	0.049***	0.023***	0.022***	-0.008*	-0.007*
	(0.008)	(0.008)	(0.005)	(0.005)	(0.004)	(0.004)
Risk Taking	0.038***	0.038***	-0.003	-0.002	0.017***	0.015***
	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)
Competitiveness	0.026***	0.026***	-0.002	0.007*	0.029***	0.024***
	(0.006)	(0.006)	(0.005)	(0.004)	(0.007)	(0.007)
Mean of outcome	0.28	0.28	0.37	0.37	0.76	0.76
R-squared	0.15	0.16	0.06	0.09	0.20	0.21
Observations	31,036	31,036	31,041	31,041	40,813	40,813
Panel B: Gender Roles Norms						
TGRI Score	0.033***	0.033***	0.030***	0.025***	-0.005	-0.002
	(0.006)	(0.006)	(0.005)	(0.005)	(0.004)	(0.004)
Risk Taking	0.038***	0.038***	-0.002	-0.002	0.017***	0.015***
	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)
Competitiveness	0.029***	0.029***	-0.001	0.008**	0.030***	0.025***
	(0.006)	(0.006)	(0.004)	(0.004)	(0.007)	(0.007)
Mean of outcome	0.28	0.28	0.37	0.37	0.76	0.76
R-squared	0.15	0.15	0.06	0.09	0.20	0.21
Observations	31,328	31,328	31,333	31,333	41,310	41,310
Panel C: Masculinity and Gender Roles Norms						
CMNI-5 Score	0.043***	0.043***	0.015***	0.015***	-0.007	-0.007
	(0.007)	(0.008)	(0.004)	(0.004)	(0.005)	(0.004)
TGRI Score	0.017***	0.017***	0.024***	0.020***	-0.002	0.000
	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.004)
Risk Taking	0.037***	0.037***	-0.003	-0.002	0.017***	0.015***
	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)
Competitiveness	0.026***	0.026***	-0.002	0.008*	0.029***	0.024***
	(0.006)	(0.006)	(0.004)	(0.004)	(0.007)	(0.007)
Mean of outcome	0.28	0.28	0.37	0.37	0.76	0.76
R-squared	0.16	0.16	0.06	0.09	0.20	0.21
Observations	30,999	30,999	31,004	31,004	40,729	40,729
Survey × country FEs	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×

Notes: OLS regressions. An observation is an individual respondent in LiTS. The dependent variables *Working* (columns 1-2), *Would Work More* (columns 3-4), and *Masculine Sector* (columns 5-6) are defined as dummies equal 1 if the individual was working, would like to work more hours, and was employed in a masculine sector, respectively. *Competitiveness* was measured on a scale from 1 – "not competitive at all" to 10 – "very competitive", and is standardized. *Risk Taking* was measured on a scale from 1 – "Not willing to take risk at all" to 10 – "Very much willing to take risk", and is standardized. For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: GMS (LiTS and online surveys).

Table C15: Controlling for competitiveness and risk preferences – Health

	Uses Seatbelt		Unlikely to Seek Help		Depression Score	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: Masculinity Norms						
CMNI-5 Score	-0.048***	-0.048***	0.065***	0.065***	0.161***	0.160***
	(0.009)	(0.009)	(0.006)	(0.006)	(0.013)	(0.013)
Risk Taking	-0.094***	-0.095***	0.006	0.006	-0.001	-0.000
	(0.014)	(0.014)	(0.012)	(0.012)	(0.014)	(0.014)
Competitiveness	-0.067***	-0.072***	-0.000	-0.001	-0.023	-0.020
	(0.017)	(0.017)	(0.013)	(0.013)	(0.014)	(0.014)
Mean of outcome	0.01	0.01	0.46	0.46	0.00	0.00
R-squared	0.19	0.20	0.04	0.04	0.16	0.16
Observations	40,236	40,236	22,687	22,687	40,576	40,576
Panel B: Gender Roles Norms						
TGRI Score	-0.051***	-0.049***	0.015	0.015	0.090***	0.089***
	(0.010)	(0.010)	(0.011)	(0.011)	(0.012)	(0.012)
Risk Taking	-0.095***	-0.096***	0.010	0.009	0.006	0.007
	(0.014)	(0.014)	(0.011)	(0.011)	(0.014)	(0.014)
Competitiveness	-0.069***	-0.073***	0.005	0.004	-0.015	-0.013
	(0.017)	(0.017)	(0.012)	(0.012)	(0.015)	(0.014)
Mean of outcome	0.01	0.01	0.46	0.46	0.00	0.00
R-squared	0.19	0.19	0.02	0.03	0.15	0.15
Observations	40,713	40,713	22,811	22,811	41,041	41,041
Panel C: Masculinity and Gender Roles Norms						
CMNI-5 Score	-0.036***	-0.036***	0.075***	0.075***	0.147***	0.148***
	(0.010)	(0.010)	(0.007)	(0.007)	(0.013)	(0.012)
TGRI Score	-0.039***	-0.037***	-0.022*	-0.022*	0.038***	0.036***
	(0.011)	(0.011)	(0.012)	(0.012)	(0.011)	(0.012)
Risk Taking	-0.094***	-0.095***	0.003	0.002	-0.002	-0.000
	(0.014)	(0.014)	(0.011)	(0.011)	(0.014)	(0.014)
Competitiveness	-0.068***	-0.072***	0.004	0.004	-0.022	-0.020
	(0.017)	(0.017)	(0.012)	(0.012)	(0.014)	(0.014)
Mean of outcome	0.01	0.01	0.46	0.46	0.00	0.00
R-squared	0.19	0.20	0.04	0.04	0.16	0.17
Observations	40,154	40,154	22,687	22,687	40,508	40,508
Survey × country FEs	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×

Notes: OLS regressions. An observation is an individual respondent in LiTS. The dependent variable *Unlikely to Seek Help* (columns 5-6) is defined as a dummy equal to 1 if the respondent answered that it would be extremely unlikely or unlikely that they would seek help from a mental health professional if they were having a personal or emotional problem. The other outcome variables are standardized: *Uses Seatbelt* (columns 1-2) encompass the mean across three questions on whether the respondent uses seatbelt, and *Depression Score* (columns 5-6) encompass four questions that measure depression. *Competitiveness* was measured on a scale from 1 – "not competitive at all" to 10 – "very competitive", and is standardized. *Risk Taking* was measured on a scale from 1 – "Not willing to take risk at all" to 10 – "Very much willing to take risk", and is standardized. For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Sample of male respondents only. Source: GMS (LiTS and online surveys).

Table C16: Controlling for competitiveness and risk preferences – Politics

	Pro Democracy		Pro Market		Support for Strong Leader		Support for Army	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Masculinity Norms								
CMNI-5 Score	-0.031***	-0.030***	-0.067***	-0.066***	0.082***	0.081***	0.062***	0.061***
	(0.006)	(0.006)	(0.008)	(0.007)	(0.008)	(0.008)	(0.006)	(0.006)
Risk Taking	-0.009*	-0.010**	0.017***	0.017***	0.024***	0.025***	0.016**	0.017**
	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Competitiveness	-0.007	-0.009*	-0.007	-0.011	0.017**	0.020***	0.012*	0.016**
	(0.005)	(0.005)	(0.008)	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)
Mean of outcome	0.73	0.73	0.57	0.57	0.48	0.48	0.36	0.36
R-squared	0.09	0.10	0.09	0.10	0.14	0.14	0.17	0.18
Observations	38,983	38,983	35,713	35,713	38,391	38,391	38,307	38,307
Panel B: Gender Roles Norms								
TGRI Score	-0.039***	-0.037***	-0.057***	-0.055***	0.083***	0.081***	0.064***	0.061***
	(0.004)	(0.004)	(0.009)	(0.009)	(0.008)	(0.009)	(0.007)	(0.007)
Risk Taking	-0.010**	-0.011**	0.016***	0.015**	0.025***	0.026***	0.018***	0.019***
	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Competitiveness	-0.009*	-0.011**	-0.011	-0.014*	0.022***	0.024***	0.015**	0.018***
	(0.005)	(0.005)	(0.008)	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)
Mean of outcome	0.73	0.73	0.57	0.57	0.48	0.48	0.36	0.36
R-squared	0.10	0.10	0.09	0.09	0.14	0.14	0.17	0.18
Observations	39,388	39,388	36,061	36,061	38,798	38,798	38,718	38,718
Panel C: Masculinity and Gender Roles Norms								
CMNI-5 Score	-0.020***	-0.020***	-0.055***	-0.054***	0.061***	0.061***	0.045***	0.045***
	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.005)	(0.005)
TGRI Score	-0.031***	-0.030***	-0.037***	-0.035***	0.061***	0.059***	0.048***	0.045***
	(0.004)	(0.004)	(0.009)	(0.008)	(0.007)	(0.007)	(0.006)	(0.006)
Risk Taking	-0.009*	-0.010**	0.018***	0.017***	0.023***	0.024***	0.015**	0.016**
	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Competitiveness	-0.007	-0.009*	-0.008	-0.011	0.018**	0.020***	0.013**	0.016***
	(0.005)	(0.005)	(0.007)	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)
Mean of outcome	0.73	0.73	0.57	0.57	0.48	0.48	0.36	0.36
R-squared	0.10	0.10	0.10	0.10	0.15	0.15	0.18	0.18
Observations	38,936	38,936	35,656	35,656	38,343	38,343	38,258	38,258
Survey × country FEs	×	×	×	×	×	×	×	×
Age, Urban	×	×	×	×	×	×	×	×
Education, Religion, Religiosity		×		×		×		×

Notes: OLS regressions. An observation is an individual respondent in LiTS. All dependent variables are defined as dummies equal to 1 if the respondent agrees that democracy is preferable to any other political system (columns 1-2), if he agrees that a market economy is preferable to any other economic system (column 3-4), if he thinks that having a strong leader in power is fairly or very good (column 5-6), or if he thinks that having the army rule is fairly or very good (columns 7-8). *Competitiveness* was measured on a scale from 1 – "not competitive at all" to 10 – "very competitive", and is standardized. *Risk Taking* was measured on a scale from 1 – "Not willing to take risk at all" to 10 – "Very much willing to take risk", and is standardized. For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Sample of male respondents only. Source: GMS (LiTS and online surveys).

Table C17: Dominance Masculinity (CMNI-5) and Gender Role Norms – Men And Women Comparison (Online Sample)

	Would Work More		Masculine Sector		Working		Competitiveness	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Economics								
CMNI-5	0.046***	0.051***	0.013**	0.012***	-0.002	-0.002	0.098***	0.087***
	(0.009)	(0.005)	(0.005)	(0.004)	(0.003)	(0.005)	(0.011)	(0.016)
TGRI	0.029***	0.022***	0.019***	0.010*	-0.000	-0.011***	0.049***	0.077***
	(0.005)	(0.006)	(0.004)	(0.005)	(0.004)	(0.003)	(0.009)	(0.011)
R-Squared	0.12	0.12	0.03	0.04	0.02	0.04	0.34	0.37
Observations	20,566	16,173	20,584	16,185	22,951	19,581	22,951	19,581
Sample	Men	Women	Men	Women	Men	Women	Men	Women
	Risk Taking		Uses Seatbelt		Unlikely to Seek Help		Depression Score	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel B: Risk And Health								
CMNI-5	0.117***	0.101***	-0.050***	-0.050***	0.071***	0.055***	0.187***	0.166***
	(0.013)	(0.017)	(0.008)	(0.013)	(0.005)	(0.005)	(0.014)	(0.015)
TGRI	0.044***	0.074***	-0.007	-0.045***	-0.020*	-0.015	0.028*	-0.027**
	(0.010)	(0.015)	(0.007)	(0.009)	(0.010)	(0.010)	(0.014)	(0.012)
R-Squared	0.17	0.18	0.14	0.15	0.04	0.07	0.10	0.08
Observations	22,951	19,581	22,951	19,581	22,951	19,581	22,951	19,581
Sample	Men	Women	Men	Women	Men	Women	Men	Women
	Pro Democracy		Pro Market		Support for Strong Leader		Support For Army	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel C: Politics								
CMNI-5	-0.040***	-0.035***	-0.061***	-0.063***	0.079***	0.076***	0.057***	0.049***
	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.005)	(0.005)
TGRI	-0.039***	-0.034***	-0.049***	-0.061***	0.086***	0.087***	0.058***	0.062***
	(0.005)	(0.005)	(0.006)	(0.007)	(0.006)	(0.006)	(0.007)	(0.007)
R-Squared	0.09	0.10	0.07	0.09	0.14	0.12	0.15	0.17
Observations	22,951	19,581	20,916	16,032	22,951	19,581	22,951	19,581
Sample	Men	Women	Men	Women	Men	Women	Men	Women

Notes: OLS regressions. An observation is an individual respondent in the online component of the GMS. The dependent variables are as defined in Tables 1, 2 and Table 3. For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 and TGRI are standardized. All regressions control for age, urban status and country fixed effects. Standard errors are clustered at the country level and shown in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Source: Online surveys.

Table C18: Dominance Masculinity (CMNI-5), Normative Masculinity and Gender Role Norms – (Online Sample)

	Would Work More		Masculine Sector		Working		Competitiveness	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Economics								
CMNI-5	0.046***	0.037***	0.013**	-0.005	-0.002	0.004	0.098***	0.084***
	(0.009)	(0.008)	(0.005)	(0.006)	(0.003)	(0.003)	(0.011)	(0.012)
Normative Masculinity		0.022***		0.047***		-0.015***		0.038***
		(0.005)		(0.005)		(0.003)		(0.012)
R-Squared	0.12	0.12	0.04	0.04	0.02	0.02	0.34	0.34
Observations	20,566	20,566	20,584	20,584	22,951	22,951	22,951	22,951
	Risk Taking		Uses Seatbelt		Unlikely to Seek Help		Depression Score	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel B: Risk And Health								
CMNI-5	0.117***	0.104***	-0.050***	-0.040***	0.071***	0.065***	0.187***	0.184***
	(0.013)	(0.014)	(0.008)	(0.009)	(0.005)	(0.005)	(0.014)	(0.015)
Normative Masculinity		0.034**		-0.025**		0.016***		0.008
		(0.012)		(0.010)		(0.005)		(0.009)
R-Squared	0.17	0.17	0.14	0.14	0.04	0.04	0.10	0.10
Observations	22,951	22,951	22,951	22,951	22,951	22,951	22,951	22,951
	Pro Democracy		Pro Market		Support for Strong Leader		Support For Army	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel C: Politics								
CMNI-5	-0.040***	-0.024***	-0.061***	-0.041***	0.079***	0.049***	0.058***	0.034***
	(0.005)	(0.006)	(0.005)	(0.005)	(0.006)	(0.007)	(0.005)	(0.006)
Normative Masculinity		-0.043***		-0.053***		0.080***		0.062***
		(0.006)		(0.004)		(0.006)		(0.006)
R-Squared	0.09	0.10	0.07	0.08	0.14	0.16	0.15	0.16
Observations	22,951	22,951	20,916	20,916	22,951	22,951	22,951	22,951

Notes: OLS regressions. An observation is an individual respondent in the online component of the GMS. The dependent variables are as defined in Tables 1, 2 and Table 3. For more details on the definitions of the dependent variables, please refer to Table C4. The CMNI-5 and TGRI are standardized. All regressions control for age, urban status and country fixed effects. Standard errors are clustered at the country level and shown in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Source: Online surveys.