

Masculinity Around the World*

Ralph De Haas[†] Victoria Baranov[‡] Ieda Matavelli[§] Pauline Grosjean[¶]

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Abstract

This paper shows how masculinity norms predict decision-making in key socio-economic and political domains. We collect the first cross-cultural evidence on adherence to masculinity norms among more than 87,000 individuals in 70 countries, combining nationally representative face-to-face surveys and online surveys. In economics, adherence to dominance masculinity supports labor supply at the intensive margin and competitiveness, but generates frictions by constraining occupational choice to traditionally masculine sectors. In health, adherence to dominance masculinity is linked to more risk-taking and higher rates of depression. In politics, it predicts support for anti-democratic and anti-market strong-man leadership. Gender differences in adherence to masculinity norms explain as much as 15% of the gender gap in competitiveness, 30% of the gender gap in the willingness to supply long working hours, 22% of the gender gap in risk aversion, and more than two thirds of the gender gap in support for liberal democracy. Our results highlight the dual roles of preferences and social norms in explaining our results.

JEL classification: D91; I12; J16; J24; Z13

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

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[†]EBRD, KU Leuven and CEPR. E-mail: dehaasr@ebrd.com.

[‡]University of Melbourne and CEPR. E-mail: victoria.baranov@unimelb.edu.au.

[§]UNSW. E-mail: i.matavelli@unsw.edu.au.

[¶]UNSW and CEPR. E-mail: p.grosjean@unsw.edu.au.

1 Introduction

Norms and attitudes about the appropriate roles and behaviors of women play a large role in perpetuating gender inequalities. They constrain women’s behavior across multiple domains—from sexual and reproductive health (Jayachandran, 2015; Becker, 2024) and domestic responsibilities (Bertrand et al., 2015), to labor market participation (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).¹ Given their profound impact, gender role norms have drawn wide attention from scholars and media and have driven many policies aimed at promoting gender equality.

In comparison, preferences and social norms about the appropriate behavior of *men*—in short hand, masculinity norms—have received, until now, less attention. This paper aims to rectify this imbalance by providing the first large-scale, cross-cultural, and global evidence on individuals’ adherence to masculinity norms. We show how accounting for masculinity norms deepens our understanding of economic, social, and political decision-making and sheds new light on the drivers of gender inequality.

We measure masculinity norms through survey questions that capture practices identified as characteristic of male behavior (Pleck, 1995; Levant et al., 2007). We focus on ‘dominance masculinity’, i.e. behaviors that assert male authority in society and reinforce the subordination of both women and non-conforming men.² We extract questions from the Conformity to Masculinity Norms Inventory (CMNI), a standard measure in the social science literature,³ on

¹We 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. For a comprehensive review, see Giuliano (2020); for recent global evidence on (perceptions of) gender role norms, see Bursztyn et al. (2023).

²Dominance 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 across fields including gender studies, sociology, psychology, and medicine.

³The CMNI, developed through a qualitative and quantitative process to identify the most prevalent set of norms and expectations characteristic of male behavior (see Section 3.2), is widely used in psychology and public health. While CMNI scores consistently predict male behavior—particularly in 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 evidence comes from small-scale laboratory studies in developed countries.

five core dimensions of masculinity: the importance of winning, violence, help avoidance, control over women, and disdain for homosexuals, and integrate them into the 2022–2023 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 that also includes rich modules on socio-demographics, economic conditions, and political attitudes. We supplement this data with large-scale online surveys in 32 countries in the Americas, Australasia, South and East Asia, Western Europe, and Southern Africa. Altogether, our 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 focused, short data collection tool to increase our geographical coverage and to collect additional measures that enable us to disentangle the respective roles of preferences and social norms of masculinity.

We first briefly discuss global patterns in adherence to masculinity norms. The analysis reveals intriguing heterogeneity. In particular, while Western countries hold far more equal views about gender roles relative to the rest of the world, the divergence is not as stark for dominance masculinity. Although the levels of adherence to dominance masculinity are lower in Western countries relative to the Middle East, Africa, and Asia, they are on par with former socialist countries of Europe. There is also much more variation within particular regions in adherence to dominance masculinity compared to attitudes towards gender equality. The data also reveals a robust inverse pattern of how masculinity norms relate to economic development compared to norms about women and gender roles. While economic development goes together with more equal gender roles norms—in line with a positive feedback between economic growth and female empowerment (Duflo, 2012; Jayachandran, 2015)—it is associated with *stricter* adherence to dominance masculinity norms. Our cross country results are consistent in the representative subsample of LiTS, as shown in Appendix and discussed in a

⁴In order to compare survey answers in nationally representative, face-to-face surveys vs. online samples, we implemented both surveys in six countries.

previous working paper by De Haas et al. (2024).

Turning our analysis to individuals, we first discuss individual covariates of adherence to masculinity norms. Gender is the most quantitatively meaningful predictor of adherence to masculinity norms, with women scoring, on average, 0.4 standard deviations lower than men on the CMNI. Other covariates such as education, urban vs. rural residence, religion and religiosity are not consistent predictors of masculinity norms. This stands in sharp contrast with attitudes towards gender roles, for which we observe a clear gradient of more educated, urban, and less religious individuals holding more equal views. Moreover, the age gradients for masculinity and for gender equality norms are opposite to one another. While younger men hold more equal views about gender roles, they adhere *more* to masculinity norms.

We then explore how adherence to masculinity norms predicts individual behaviors and attitudes in three crucial domains. First, in the economic decision-making realm, we find that individuals who adhere more strongly to masculinity norms supply more labor at the intensive margin and are more competitive. While such behavior may feed positively into economic growth, it may also sustain gender gaps in labor markets. After all, gender differences in competitiveness and in the supply of long (and inflexible) working hours are leading explanatory factors of gender pay gaps (Niederle and Vesterlund, 2011; Goldin, 2014, 2021). Our results show that gender differences in adherence to masculinity norms explain nearly 15% of the gender gap in competitiveness and 30% of the gender gap in the willingness to supply longer working hours. By contrast, individual attitudes towards gender roles and gender equality are neither systematically associated with labor supply nor with competitiveness. Consistent with work linking gender norms to occupational sorting between women and men (Akerlof and Kranton, 2000, 2010; Baranov et al., 2023; Delfino, 2024), we document how dominance masculinity norms contribute to frictions in the labor market by confining men to employment in traditionally masculine sectors. Our results show that these relationships hold universally in our sample, and illustrate the negative consequences of these frictions for employment in economies with low labor demand in extractive and traditionally male sectors.

Second, we document unambiguously negative associations between dominance masculinity and health and wellbeing. Key aspects of dominance masculinity—such as emotional restraint, help avoidance, excessive risk-taking, and aggression—are hypothesized to drive gender health gaps (WHO, 2013; Schanzenbach et al., 2016), as these behaviors increase risks of suicide, substance abuse, morbidity, and mortality (Case and Paxson, 2005; IHME, 2010; Baker et al., 2014). Our analysis 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 the association between masculinity and the propensity to seek help with mental health issues explains part of the link with depression. In contrast, norms about gender roles have no consistent association with men’s risk preferences nor their mental health behaviors and outcomes. Again, these patterns hold in nearly all countries in our sample and explain a substantial fraction of gender gaps. Gender differences in adherence to masculinity norms explain more than 22% 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 who adhere more strongly 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 also speak to the global gender political divide in support for liberal values.⁶ Gender differences in adherence to masculinity norms explain a large fraction of the gender differences in the support for liberal values, with women consistently more pro-democracy and more opposed to strongman leadership across our sample. The gender gap in adherence to masculinity norms explains as much as 2/3rd of the gender gap in pro-democratic attitudes, 4/5th of the gender gap in support for a strong leader and 3/4th of the gender gap in support for Army rule.

Last, we measure more precisely the contributions of personal preferences and social norms

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

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

to our results. Adherence to masculinity norms could reflect: (i) personal preferences and values (i.e., what one likes to do, or how one likes to behave, as a man), which may partly reflect internalized norms; or (ii) social norms, i.e. beliefs about what men should do (Bicchieri, 2017; Gelfand et al., 2024).

We find that both preferences and social norms matter, but do so to different extents in different domains. In politics, both preferences and social norms matter, but social norms play a quantitatively larger role. For competitiveness and risk aversion, preferences and social norms matter, but preferences play a quantitatively larger role. For depression, only preferences and internalized norms are statistically significant.

Our analysis of masculinity norms—using newly collected and harmonized data from 70 countries across all continents—makes several contributions to economics and social sciences. First, we expand the cross-cultural measurement of gender norms to masculinity norms. While existing representative surveys—such as the General Social Survey, World Values Survey, and Demographic and Health Surveys—focus on attitudes about women’s roles in society and gender equality, we answer calls for gender norms measurements focusing explicitly on men (OECD, 2021).

In doing so, we advance the masculinity norms literature, which has so far relied on small Western samples.⁷ Our analysis reveals consistent relationships between dominance masculinity norms and economic, health, and political outcomes across the world. This broad geographic scope not only provides the first evidence from representative samples (LiTS) but also validates the CMNI scale as a meaningful measure of masculinity norms across cultures and societies.

Our second major contribution is to a rich literature on how social norms shape individual behavior and aggregate outcomes.⁸ We demonstrate how dominance masculinity shapes

⁷Among 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).

⁸See Nunn (2012) and Alesina and Giuliano (2015) for reviews.

decision making and influences socioeconomic, health, and political outcomes. While the economic literature has focused on norms about women and about women’s and men’s relative positions in society or, more recently, on gender identity (Brenøe et al., 2022; Banan et al., 2023; Ayyar et al., 2024; Brenøe et al., 2024), our findings highlight the need to measure and understand the specific role of masculinity norms.⁹ In particular, we show that stricter adherence to masculinity norms, and especially the importance given to winning, is a key driver of risk taking and competitive preferences, while gender role norms play no, or an opposite, role and gender identity plays a relatively more marginal role. Given the documented socio-economic consequences of gender differences in risk and competitiveness preferences, these results illustrate how dominance masculinity norms may hinder further progress in gender equality. We further advance this literature by contrasting the roles of preferences and social norms. These distinctions have important implications for policy design. Policy interventions that may be able to shape the perceptions of social norms through the provision of information may not be so effective at changing preferences and internalized norms.

Lastly, our findings echo concerns about dominance masculinity fueling a political backlash against liberal values and feminism (Blais and Dupuis-Déri, 2012; Roose et al., 2022). In organizations, too, excessively competitive behavior, “masculinity contests” (Berdahl et al., 2018), and harassment and violence against women (Folke and Rickne 2022 and Adams-Prassl et al. 2024)—arguably all manifestations of dominance masculinity—have been identified as major obstacles to women’s progress and gender equality.

The paper proceeds as follows. Section 2 provides some background on the definition and measurement of masculinity norms. Section 3 describes our Global Masculinity Survey. Section 4 briefly discusses descriptive statistics and global patterns. Section 5 discusses individual-level results on the explanatory power of dominance masculinity norms for economic, health,

⁹Exceptions include Baranov et al. (2023), who examine masculinity norms’ role in Australian socioeconomic outcomes without directly measuring these norms, and Matavelli (2024), who demonstrates how limited gender communication among adolescents creates misperceptions about appropriate male behavior regarding crying and violence. D’Acunto (2019) finds that exposing experimental subjects to gendered behavioral stereotypes increases male risk-taking.

and political outcomes. Section 6 provides a discussion of the roles of preferences and social norms. Section 7 concludes.

2 Conceptual Background

This section provides background on the definition and measurement of masculinity norms.

2.1 Masculinity And Cultural Transmission

Masculinity norms can be defined as the set of attributes and behaviors that society considers appropriate or ideal for men and boys. These may vary across social domains; for example idealized masculinity in a sports field may encompass different traits than idealized masculinity in a political arena. However, a key common aspect of masculinity norms is in their relation to social dominance and the justification of male dominance in social hierarchies (Connell, 2020). Masculinity norms can therefore be more specifically understood as the configuration of attributes and behaviors that provides legitimacy for the subordination of less respected social groups, which include women as well as men who do not conform to idealized masculinity. Masculinity norms that serve the legitimation of a male-dominated social order are sometimes labeled as hegemonic or dominance masculinity (Wedgwood et al., 2023).

The transmission and persistence of cultural norms operate through the conjoint roles of imitation (either of the same generation, through so-called horizontal transmission, or of older generations, through so-called oblique transmission) and direct inculcation (including for example through the vertical transmission from parents to children) (Bisin and Verdier, 2001; Hauk and Saez-Marti, 2002). The processes of transmission and persistence are not independent from the nature of specific norms and their relations to social dominance hierarchies. The cultural norms and traits of dominant individuals are more likely to be adopted and transmitted for two chief reasons. First, through an evolutionary-like process, the norms of successful individuals are more likely to be imitated (Giuliano and Nunn, 2021). Second, dominant in-

dividuals in social groups are more effective at enforcing their preferences on others (Gelfand et al., 2024). As such, masculinity norms are not only held and upheld by men at the top of the social hierarchy, but shared widely in society.

2.2 Measurement: The Conformity to Masculinity Norms Inventory

The most widely used measure of masculinity norms in the psychology and public health literature is the Conformity to Masculinity Norms Inventory (hereafter, CMNI) (Mahalik et al., 2003). The CMNI measures the extent to which an individual's preferences, beliefs, and actions conform to a set of behaviors and values that most distinctively characterize men. This set of masculinity norms was selected and validated through focus groups, pilots, and clinical studies. The CMNI includes 22 questions that capture 11 distinct masculinity norms:¹⁰ 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.¹¹

2.3 Preferences, Internalized Norms, And Social Norms

The CMNI asks respondents to rate their degree of agreement with separate masculinity norms based on their "actions, feelings and beliefs". As such, answers may reflect not just social masculinity norms but also preferences. A key distinguishing factor between preferences and social norms, in the framework of e.g. Bicchieri (2017), consists in conditionality. Preferences matter irrespective of considerations about what others do or think (e.g. it bothers me to ask

¹⁰The 22 subitems were extracted from 144 original items following a factor analysis (Mahalik et al., 2003).

¹¹*Importance of Winning* relates to wanting to be admired and respected, successful/powerful/competitive, performing competently, and being physically adequate. *Emotional Control* concerns measures of emotional restriction. *Risk-Taking* relates to measures of toughness and adventure. *Violence* relates to measures of toughness and violence. *Power Over Women* relates to anti-femininity and the subordination of women. *Dominance* relates to wanting to be admired and respected, tough, successful/powerful/competitive, and subordinating women. *Playboy* relates to adventure, anti-femininity, concealing emotions, and subordinating women. *Self-Reliance* relates to disconnecting from others, and in terms of disconnection as measured by the other masculinity scales, this should relate to emotional disconnection. *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, successful/powerful/competitive, and performing well (Mahalik et al., 2003, p.14)).

for help because I do not like talking to other people). In contrast, social norms operate through others' actions and expectations, or, rather, beliefs about others' actions and expectations since these are not perfectly observable (e.g. it bothers me to ask for help because I think others may disapprove of my asking for help).

The distinction between preferences and social norms does not exclude the possibility that preferences may be shaped by social forces. As Postlewaite (2011) puts it: "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 may, in particular, reflect religious indoctrination or parental inculcation, which itself may reflect the persistent influence of salient past historical shocks. Recent literature has also highlighted how media consumption can change preferences (Levy and Razin, 2019). Still, these internalized norms operate through a different channel than social norms, as they should predict behavior independently of expectations about others.

In this paper, we adopt a version of the CMNI as our main measure of masculinity norms. The online survey includes additional questions on social norms.

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. We discuss how this combination enables us to overcome 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 finer measurement of 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 conducted jointly by the European Bank for Reconstruction and Development and the World Bank every four years since 2006.¹² Respondents are drawn randomly, using a two-stage sampling method, with census enumeration areas as primary sampling units¹³ and households as secondary sampling units. It is a repeated cross-section that, at its inception, took place in former Communist Europe and the former USSR, and Germany as a Western Europe comparator country. It has since expanded to North Africa, the Middle East, and Sub-Saharan Africa. Table C in Appendix provides the list of all 44 included countries and national sample sizes. Section A1.2.1 provides additional information on survey implementation.

Our goal is to provide global evidence on masculinity norms. While the strength of LiTS consists in the representativeness of the sample with respect to underlying populations, a potential weakness resides in the limited geographical coverage of the survey – constrained by EBRD's countries of operation– and the restrictions to the number of questions we could include – constrained by competing organizational interests from the different constituencies involved in such large-scale surveys and respondent fatigue considerations.

To increase the geographic coverage of our survey and enrich our measurement of masculinity norms, we augment the LiTS sample with surveys implemented online. We primarily targeted continents and regions with limited or no coverage in LiTS, primarily in the Americas, South and South East Asia, and Western Europe. We first describe this online component and then turn to our measures of masculinity norms.

¹²Each round of LiTS is the object of a competitive tendering process. In the wave used in this paper, IPSOS was the implementing firm.

¹³Primary sampling units were drawn randomly, with probability proportional to size.

3.1.2 Online Surveys

Online surveys were rolled out in November and December 2024 among 42,761 respondents in 32 countries by the survey company *Respondi* or its partners. *Respondi* targeted participants aged 18-64 years old, aiming to match a representative sample on gender, age, and income. Nevertheless, a lack of representativeness persists despite quota designs in certain countries, as we discuss in Section 3.1.3. Section A1.2.2 discusses further details on the implementation of the online surveys. Table C shows the list of countries and sample sizes. Six countries were included both in LiTS and in the online survey, enabling us to compare responses across representative face-to-face and online surveys. We refer to the resulting combined LiTS and online samples of 87,359 individuals in 70 countries as the Global Masculinity Survey (GMS).

The online survey is meant as a short and focused survey that includes only the smallest overlap set with LiTS necessary to replicate our analyses and a limited number of additional questions to hone in on the mechanisms underlying the patterns uncovered in the LiTS analysis. As a result, the survey only includes questions about basic sociodemographics (e.g. age, education, urban status, religion), about gender norms (including masculinity), and the same outcome variables measured in LiTS and presented in De Haas et al. (2024) analysis. We also included one attention check question, and failure to complete it triggered automatic exclusion from the sample.

3.1.3 Descriptive Statistics And Comparison Between LiTS And Online Samples

Table C2 presents descriptive statistics on key socio-demographics. The average respondent is 43 years old, are equally likely to be Catholic or Muslim (23%), have mostly completed at least secondary education (85%), and live in urban centers (72%). Men and women are similar in these characteristics.

As common in online surveys and despite usual instructions to the survey company to draw a sample that mimics national statistics in terms of gender, age, and income, online samples are

not representative of underlying population.¹⁴ Figure B2 compares average covariates in LiTS and the online surveys for countries included in both. Men, younger individuals, living in urban centers, employed and more educated are overrepresented in the online sample. However, if anything, respondents in online surveys tend to score lower on the CMNI.

We draw on the representativeness of the LiTS component and our initial analysis of the LiTS data circulated as De Haas et al. (2024) to ground the validity of our cross-country and individual analyses.

3.2 Masculinity Norms In The GMS

3.2.1 The CMNI-5

The major innovations of LiTS are twofold. First, we provide the first nationally representative, cross-country evidence using thoroughly-validated masculinity norm questions. Second, we expand the measures of economic, social, and political behaviors and values that we can link to individual measures of masculinity norms. To maintain a comprehensive measurement of socioeconomic conditions and social and political attitudes within the constraints of costly face-to-face surveys, we had to limit the number of questions in the LiTS questionnaire. We provide in Appendix A more background on previous research using the CMNI and on the selection and validation procedures we used to select the questions for LiTS. The resulting CMNI-5 module focuses on five core dimensions of masculinity and measures individuals' agreements with the following statements:

1. *“Winning is the most important thing”* (Importance of Winning)

¹⁴Lack of representativeness of online samples may be particularly acute in countries with low internet penetration or low internet use. 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 included 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>. Representativeness of online sample is also more difficult to achieve in middle and low income countries, where survey firms rarely have their own panels and have to rely on several local partners.

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". We rescaled all responses so 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). We discuss further in Appendix the results of descriptive analyses that validate the high internal consistency of the CMNI scale.

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.

3.2.2 Additional Measures Of Masculinity Norms

The online survey includes additional measures of social norms of masculinity. We elicit the "normative masculinity index", which measures respondents' beliefs about the expected behaviors of men in the following core dimensions of masculinity: *Help-Avoidance* (e.g. "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 [A1.4.1](#) includes the full list of questions, references, and details on how we calculate the overall index.

3.3 Norms About Gender Roles And Gender Equality

We also included usual survey questions about gender role norms and attitudes towards women's social and economic roles and spheres of competence in both components of the GMS. These questions cover various domains, from household labor and childcare allocation, to labor force participation and representation in politics. The questions were taken from standard questionnaires (e.g. the World Values Survey) and previous rounds of LiTS. The full list of 6 questions is detailed in Appendix A1.3. 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 in order to be directly comparable to the CMNI, and coded such that a higher value indicates 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 pair-wise correlation matrix between the CMNI-5, the 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 with the low correlation of the CMNI with the TGRI (either overall or across individual items), the individual dimensions of the CMNI correlate reasonably strongly *within* their respective index. The Cronbach's alpha, a measure of reliability and consistency between items in a scale, is 0.62 for the CMNI-5, 0.59 for the TGRI, with similar values among women in the online sample only. The value for the CMNI-5 reflect acceptable reliability, meaning that the items within each index cohesively measure the underlying construct of conformity to dominance masculinity norms. The CMNI is more cohesive, as indicated by the higher average inter-item correlation 0.24 for the CMNI-5, compared to 0.16 for the TGRI. Figure 1 (Panel B) also shows that the correlation between the CMNI-5 and the normative Masculinity Index is moderate ($\rho = 0.44$), but ranges from 0.08

to 0.68 for their individual items. The Normative Masculinity Index is also highly internally consistent, with a Cronback alpha of 0.82.

4 Masculinity And Gender Roles Norms Across The World

This section provides a brief overview of the global patterns that emerge from the data collection. We focus our analysis on the sample of men, and discuss gender gaps in masculinity norms.

4.1 Sample Statistics And Gender Gaps

We asked the CMNI-5 questions to all respondents online ($N = 42,761$) but only to male respondents in LiTS ($N = 18,810$) due to lack of pre-validation of the CMNI among female respondents and data collection costs. Questions included in the TGRI were asked of all respondents in both online and in-person samples of the GMS ($N = 87,359$).

Overall, the CMNI-5 has a mean of 2.46 and a standard deviation of 0.62 among the 41,170 male respondents of the GMS. The dimension of the CMNI-5 with the most adherence is *Help Avoidance* (2.64) and the one with the lowest is *Violence* (1.71)—see Table C4. The mean in the LiTS sample is slightly higher compared with the online component, at 2.52 vs. 2.40. These patterns are consistent with the normative masculinity index in the online survey: the mean (2.36) and hierarchy of different items are similar (*Help-Avoidance* at the top and *Violence* at the bottom). The correlation between the CMNI and the normative index is positive but moderate ($\rho = 0.44$), hinting that they capture different dimensions. Figure B3 shows heterogeneity across countries, with some countries, like Korea, above the 45 degree line, suggesting that average levels of adherence to masculinity norms are higher than perceived social norms, and others like Spain below the 45 degree line, suggesting lower average adherence compared to social norms. We come back to the distinction between the CMNI and the normative index in Section 6.

Gender gaps. We report gender gap in the masculinity and gender roles norms measures based on the the online component where questions were asked of both women and men. Women’s CMNI-5 and TGRI score are 0.4sd lower ($p < 0.001$) than men’s. The largest gender gaps are in the *Violence* and *Disdain For Homosexuals* dimensions. We also document a large (0.56sd) gender gap in the Normative Masculinity Index.

4.2 Cross-Country Patterns

In this section, we briefly discuss variation in adherence to masculinity norms across the world. The GMS partly draws from online samples, thereby raising concerns about national-level representativeness of the samples. We discuss in Appendix how we leverage the representativeness of the LiTS component of the GMS to gauge the reliability of inference from online samples.

Figure 2 maps the z-scores of the CMNI, and for comparison the TGRI, across countries. Adherence to dominance masculinity norms is strongest in Sub-Saharan Africa and South and South East Asia. The countries with the highest CMNI scores are Benin (3.11), Tunisia (2.90), West Bank & Gaza (2.89), and Algeria (2.80) (all in LiTS). These regions also include the countries that are the most conservative towards gender equality. However, as examine in more detail in Figure 3, even within these regions, the countries where attitudes towards gender roles are the most unequal are not those necessarily that also adhere most strongly to dominance masculinity. Although average attitudes towards women and gender roles are, relatively to the rest of the sample, very unequal in Algeria and West Bank & Gaza, they are more equal in Benin and Tunisia compared to other sub-Saharan African countries, such as Cote d’Ivoire, Ghana, or Nigeria. India is, by far, the country with the most unequal norms towards gender roles. However, adherence to masculinity norms in India is comparable to China, or to one of the most highly masculine European country, Latvia.

The co-variation in the CMNI and the TGRI is even more decoupled for western countries

and former communist countries of Europe and central Asia. Western Europe and its offshoots (US, Canada, Australia) clearly stand out from the rest of the world in terms of attitudes towards gender equality. However, this is not the case for masculinity norms. The most striking examples are the US and Canada. While attitudes towards gender roles are much more equal in these countries than in the rest of the sample, and on par with most of western Europe, they stand above the median of the distribution of worldwide adherence to masculinity norms. The US in particular clearly stands out as the most masculine western country. The average CMNI score in the US is comparable to Russia, itself among the most masculine in the former socialist bloc.

To explore further how the CMNI and TGRI co-vary across countries, Figure 4 plots the correlation between the CMNI and TGRI indices across countries. Dominance masculinity norms and norms about gender roles are positively correlated, but the figure reveals considerable heterogeneity across countries. In the upper right quadrant of countries with high average scores of masculinity and more unequal gender roles norms are most countries in Sub Saharan Africa, Middle East and North Africa, and South and South East Asia. Most countries in Western Europe, former socialist Europe, and Latin America are found in the lower left quadrant, scoring below average on both CMNI and TGRI. In the upper left quadrant are a handful of countries with low average levels of masculinity but gender unequal norms. All of these countries are former socialist countries in central Asia and the Caucasus. In the lower right quadrant, Canada and particularly the US stand out as highly masculine but gender equal.

More broadly, our analysis reveals a striking asymmetric pattern in how masculinity norms and gender equality 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 employment in services, and unequal norms about gender roles.¹⁵ By con-

¹⁵We 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

trast, the correlation between either measure of economic development and dominance masculinity norms is, instead, positive. In the next section, we discuss within-country evidence on the ambivalent economic role of adherence to dominance masculinity norms that may support this aggregate relationship.

5 Individual-Level Evidence

This section presents within-country individual-level analyses of the relationship between adherence to masculinity norms and outcomes related to economics, health and wellbeing, and political preferences. We focus our analysis on the sample of men, and discuss how differences in the distributions of adherence to masculinity norms between men and women account for a significant fraction of the gender gaps across these domains.

5.1 Empirical Specification

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

$$Y_{ic} = \alpha + \beta CMNI_{ic} + X_{ic}\Gamma + \delta_c + \varepsilon_{ic} \quad (1)$$

where Y_{ic} are economic, health, and political outcomes for respondent i in country c ; $CMNI_{ic}$ is i 's CMNI score; X_{ic} are individual characteristics; and δ_c are country fixed effects.¹⁶ We correct for heteroskedasticity and cluster standard errors at the country level.

Age and life stages may be major determinants of adherence to and upholding of dominance masculinity norms (Connell, 2020). The strength of masculinity norms overall, as well as the relative importance of particular dimensions of masculinity, may also systematically vary across urban and rural areas because of differences in social structures and contexts (Silva,

norms, controlling for continent fixed effects and using population size weights.

¹⁶Table C5 defines the outcome variables and Table C3 presents summary statistics for all outcomes and control variables.

2022). We therefore control for age and urban vs. rural location of the respondent in all specifications.

Education, religion, and religiosity are other important potential correlates of masculinity norms and of our outcomes of interest, especially across our religiously heterogeneous sample (Connell, 1989). After our baseline estimates with only 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 dimensions and for potential unobserved heterogeneity across respondents who do not answer specific subitems on the scale, we control in all specifications for a set of dummy variables that indicate whether the respondent answered each specific subdimension.

In order to compare the relative magnitudes of masculinity norms and gender role norms in predicting outcomes of interest, we systematically 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.

Decomposing Gender Gaps. Equation 1 is first estimated in the sample of men. We then examine gender differences by including a *Female* dummy equals to 1 if the respondent is female, and 0 if male, using the online subsample of the GMS. Next, we assess the extent to which adherence to dominance masculinity and traditional gender role norms account for these observed differences. We follow the decomposition approach described in Gelbach (2016), which uses the omitted variable bias formula to calculate the exact contribution of each covariate in the gender gap. That is, it multiplies the raw gender gap in the CMNI or TGRI indices, including the baseline controls as in Equation 1, by their effect on our outcomes of interest with the full set of controls.

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, or, for comparison, the TGRI index, on a range of demographic and socioeconomic characteristics and country fixed effects.

Respondent gender is the most quantitatively meaningful covariate in predicting CMNI scores, with women's 0.4 of a standard deviation lower than men, on average. Age is also a meaningful predictor of adherence to masculinity norms, with younger men scoring significantly more masculine than older men. The relationship between age and CMNI is opposite to the relationship between age and TGRI: while younger individuals are more gender equal, they are more masculine.

Other covariates, such as education, urbanity, religion or even religiosity are not statistical predictors of adherence to masculinity norms. Again, this contrasts deeply with attitudes towards gender norms, for which each of these covariates holds a significant and quantitatively large predictive power, with more educated, urban, less religious individuals systematically holding more gender equal norms, and large difference across religions, with Muslims and Catholics holding less gender equal views. In contrast, adherence to masculinity norms transcends education, religion, urban, and rural groups.

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 very long working hours.¹⁷ The prediction here is that adherence to masculinity norms correlates positively with labor supply at the intensive margin. Separately, an economics literature has stressed how

¹⁷Berdahl 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.

gender roles norms and gender identity norms influence 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 displaced or suffer negative economic shocks (Autor et al., 2019; Katz, 2014), 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.¹⁸ Results are displayed in columns 1 (with the baseline set of 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 scores (Panel A). Panel C confirms that the relationship between conformity to masculinity norms and labor supply at the intensive margin 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 is about two and a half as large as the relationship between labor supply and TGRI. The estimates indicate that a one standard deviation increase in the CMNI 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), the association between conformity to masculinity norms and employment in a masculine sector remains

¹⁸ Appendix Table C includes details on each variable used in the analysis.

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 score and employment status is insignificant. The prediction here is 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 in Figure B4 is consistent with this. It shows that in countries that are relatively specialized in the tertiary sector (e.g. Austria, Singapore), stronger adherence to masculinity norms is associated with a lower probability of being employed at the extensive margin, which 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 that are specialized in –traditionally masculine– primary and secondary sectors (e.g. Nigeria, Ghana, Uzbekistan).

Competitiveness. The economics literature suggests that a gender gap in competitiveness is an important driver of unequal gender outcomes in education, occupational choice, and labor market earnings.¹⁹ 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 provide strong evidence that men who adhere more strongly to dominance masculinity norms are more competitive. Moreover, evidence in Panels B and C show that gender roles norms are, comparatively, marginal drivers of competitiveness and that the relationship between masculinity and competitiveness is robust and stable in magnitude when individual attitudes towards gender roles norms are included as additional covariates.

Result in Figure B4 shows that the positive association between CMNI and competitiveness

¹⁹See Bertrand (2011) and Niederle and Vesterlund (2011) for reviews and Reuben et al. (2017) and Cortés et al. (2023) for recent contributions.

holds in most countries in our sample. Results in Table C6 show that every dimension of the CMNI-5 plays a significant role in explaining economic outcomes, with “Importance of winning” and “Control over women” the most robust and quantitatively meaningful.

Gender Gaps. Figure B7 presents the results of the decomposition of gender gaps, using the Gelbach (2016) approach discussed in Section 5.1. We focus primarily on gender gaps in competitiveness and in labor supply at the intensive margins, which have been highlighted as major and persistent drivers of economic inequality between women and men (Niederle and Vesterlund, 2011; Goldin, 2014, 2021). Our estimates show that gender difference in adherence to masculinity norms can significantly account for nearly 12% of the gender gap in competitiveness and nearly 29% of the gender gap in intensive labor supply in our sample. By contrast, gender differences in attitudes towards gender equality plays a weaker role.

5.4 Risk-Taking, Health Behaviors, And Mental Health

Dominance masculinity is often singled out as a driver of excessive risk-taking, emotional restraint, and help avoidance behavior. Emotional restraint and help avoidance are contributing factors to depression and poor mental health, while risk-taking and help avoidance are associated with lower take up of preventative health measures, including routine doctors’ 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, which has been shown to correlate positively with risk-taking behavior in incentivized tasks and real-world risk taking (Eckel, 2019).²⁰ We also gauge revealed risk-taking by asking whether respondents usually wear a seatbelt in the car.²¹

²⁰The 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).

²¹We assess seatbelt wearing by whether respondents usually wear a seatbelt, either as a driver (83%), passenger in the front seat (79%), or passenger in the back seat (48%) – see Table C3.

We assess mental health by including the standard PHQ4 questions—a valid ultra-brief tool for detecting both anxiety and depressive disorders—in the survey. 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 2.37 (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, followed by Jordan and West Bank & Gaza) 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 with a mental health professional in case of “personal or emotional problem” as a potential channel explaining the relationship between adherence to dominance masculinity norms and mental health outcomes.

Table 2 shows that 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 quantitatively meaningful. A one s.d. increase in the CMNI 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 the CMNI contribute to these results, albeit to different extents. 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.

Figure B5 displays the estimated coefficients separately for each country in the sample and shows that the positive association between masculinity norms and risk taking, avoidance of medical help and depression are robust and universal patterns.

Gender Gaps In Risk Aversion. Again, we take the approach described in Section 5.1 to ex-

plore the extent to which masculinity norms can shed light on gender gaps. Our findings confirm previous findings of a significant gender gap in risk aversion, with women being more risk averse than men (Falk et al., 2018), the implications of which for health as well as economic and financial decision-making has been studied in the literature (see, e.g. van Huizen and Alessie 2019). Decomposing this gap, results in Figure B7 show that gender differences in adherence to masculinity norms can explain more than 22% of the gender gap in stated risk taking. By comparison, gender differences in views about gender equality do not explain any fraction of the gender gap in risk aversion.

5.5 Politics

The GMS includes a set of questions about individual support for democratic values, support for a market economy, and support for various dimensions of authoritarian leadership, including by the army (see Table C5 for variable descriptions). Panel A of Table 3 reveals clear negative relationships between adherence to dominance masculinity and support for liberal political and economic systems. Columns 1 to 4 show that men who adhere more to dominance masculinity are 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 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 to 8 p.p. 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 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 leadership. This type of leadership often goes hand in hand with performative masculinity, which is displayed

by populist leaders or embodied by the military (Lombardo et al., 2021).

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

Figure B6 shows the estimated coefficients separately for each country in the sample. The figure clearly shows that the negative association between masculinity norms and liberal political and economic systems and the positive association between masculinity norms and support for strongman leadership are universal. Furthermore, these patterns are even stronger in more developed countries (i.e., those more specialized in the services sector) in the sample.

Gender Gaps In Liberal Values. Recent commentary has highlighted increasing gender divides in political values and in particular in support for democratic values.²² Results in Figure B7 confirm that women are, on average, more pro-democracy, more pro-market, more opposed to strongman leadership and to Army rule compared to men.²³

Results in Figure B7 show that masculinity norms explain a substantial part of this gender political divide. Gender difference in adherence to dominance masculinity norms explain as much as 2/3d of the gender gap in pro-democratic attitudes, 4/5th of the gender gap in support for a strong leader and 3/4th of the gender gap in support for Army rule. Gender difference in attitudes towards gender roles and gender equality are also meaningful contributors to these political gender gaps. However, the magnitude of the role played by gender differences in masculinity norms in explaining gender gaps in politics is consistently larger compared with the role of gender equality attitudes.

²²See, for example, <https://www.ft.com/content/29fd9b5c-2f35-41bf-9d4c-994db4e12998>.

²³The results also show that these gender divides are particularly salient among younger generations. Among younger individuals (40 years old or below), women are 5pp more likely than men to support a democratic regime, and 8pp less likely to support the Army rule, while there is no gender gap among those above 40 years old.

5.6 Robustness And Extensions

We briefly discuss here the results of several robustness tests underlying the internal and external validity of our findings.

Sample Selection Bias. First, we leverage the unique, dual nature of the GMS to deal with potential respective limitations of face-to-face and online surveys. We examine issues related to sample selection bias in online surveys and social desirability bias in face-to-face surveys. Selection into online samples could bias our results to the extent that the relationships between the CMNI and our outcomes of interest may systematically differ for respondents who select into online panels vs. others. To assess the extent to which this potential bias influences our results, we systematically discuss the consistency of our results in the nationally representative LiTS sample. The results are consistent. The only difference between LiTS- and online-based results consists in the relationship between age and CMNI. While we do not find a strong gradient for age as a determinant of the CMNI in LiTS, younger male respondents in the online survey systematically score higher on the CMNI. The age gap is particularly large in the United Kingdom, Netherlands and Germany, where men 40 years old or below adhere more to dominance masculinity by 0.81sd, 0.60sd and 0.48sd. For a more detailed description of the results, we refer the reader to an initial working paper where we only analyzed the LiTS sample (De Haas et al., 2024).

Social Desirability Bias. Social desirability bias may impact reporting of CMNI and TGRI in face-to-face interviews (see, e.g. Young 2025). We investigate if this is a likely concern by looking at how reporting was affected by the gender of the interviewer. For the CMNI, female interviewer gender does not significantly predict overall CMNI-5 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 is more of a concern with the TGRI. However, all our results are robust if we include interviewer gender as a control in our main analyses, suggesting that social desirability bias is not a concern to the interpretation of our results (Tables C11-C13).

Differentiating From Competitiveness And Risk Aversion. Another potential criticism of this analysis, particularly in light of a large literature that shows 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 reestimate 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 is still a robust predictor of all the other outcomes of interest. Moreover, apart from seat-belt use, the coefficients associated with the CMNI are stable in magnitude. This suggests that the CMNI masculinity measures capture something beyond competitiveness and risk-aversion preferences (Tables C14-C16).

Results For Women. Finally, we investigate whether adherence to dominance masculinity norms is also predictive of outcomes among female respondents. Using the online survey, which was conducted with both men and women, we reproduce the main analysis for the subsample of women. The results in Table C17 show that adherence to these norms also predicts economic, health, and political outcomes among women. Apart from the willingness to work more and being pro-market, all associations between the CMNI and outcomes are slightly attenuated for women compared to men (by approximately 10%), and only one of the coefficients are different statistically (depression, $p=0.002$).

6 Preferences And Social Norms

In this section, we leverage the online component of the GMS to draw a more nuanced picture of the behavioral underpinnings of our results, by attempting to gauge the relative contributions of preferences and social norms.

To understand whether the relationships documented above between the CMNI-5 and behaviors reflect preferences or social norms, we add the measures of normative masculinity (that is, what men think about how men should behave) together with adherence to masculinity norms to Equation 1. As discussed in Section 3.2.2, the normative masculinity index comprises of five questions that capture the normative sentiment of individuals along the five behaviors in the CMNI. The interpretation is that, conditional on the masculinity norms, the coefficient on CMNI reflects preferences and internalized norms.

Estimation results are displayed in Table C18. For labor supply at the intensive margin, the CMNI continues to be a significant predictor. The CMNI also remains significantly associated with competitiveness, and the degree of association is greater than that of the association between masculinity norms and these outcomes. For sector of employment, however, we find that controlling for masculinity norms attenuates the association between CMNI and masculine sector. Finally, we continue to see no association between the CMNI and labor supply at the extensive margin. Interestingly, the coefficient on Normative Masculinity is significantly negative, albeit small, and may be driven by the phenomenon of retrospective wait unemployment in high income countries.

We see the same pattern across all outcomes related to health. For depression, the coefficient on CMNI is statistically significant while the coefficient on 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.

For political attitudes, we find that masculinity norms are a slightly stronger predictor than preferences with coefficients approximately 50% larger than coefficients on CMNI, although

preferences remain significant. In other words, men who have a stronger preferences for dominance masculinity and who perceive that society should be more masculine oppose liberal values more strongly.

Overall, this analysis advances our understanding of the respective roles of preferences and social norms, which are factors that had so far mostly been either explored in isolation of one another or through measures that confound preferences and social norms. The results show that preferences and social norms matter to different extents as predictors of competitiveness and risk aversion preferences, work choices, and political attitudes. If measured alone, the CMNI likely captures both social norms and underlying preferences (which may be internalized norms). But by including a more careful measure of social norms as a regressor, we also highlight role of preferences. These results have important implications for policy design. Recent policy efforts have concentrated on information provision as a policy tool for behavioral change (e.g. Bursztyn et al. 2020). Because preferences remain important, they are unlikely to be affected by information provision aimed at corrected misperceptions. Our results suggest that these efforts, while perhaps effective in some domains, may be less in others and have, overall, small rates of return.

7 Conclusion

This study has demonstrated how men’s adherence to dominance masculinity norms shapes economic, health, and political outcomes. Drawing on new data from 70 countries across all continents, we move beyond traditional analyses of gender role norms to reveal how masculinity systematically predicts individual behavior and societal outcomes. By integrating the Conformity to Masculinity Norms Inventory (CMNI) scale into our survey, we have also created a reliable tool for measuring 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 an interesting contrast: while Western nations exhibit more progressive attitudes towards women compared to other countries, they are on par with much less economically advanced economies when it comes to the prevalence of dominance masculinity norms among their male populations.

At the level of individual men, our results indicate that adherence to dominance masculinity norms shapes health and risk-taking behaviors; the supply of labor at the intensive margin and in specific industries; as well as support for strongman political leadership and opposition to liberal values. Overall, our analysis reveals contrasting results regarding the consequences 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 unambiguously 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 these norms.

Future research could explore several promising directions. First, investigating how dominance masculinity norms are transmitted within and across generations could inform interventions aimed at addressing potential frictions in the labor market due to the mismatch between masculinity norms and expanding economic opportunity in so-called pink collar jobs. Second, examining how these norms interact with economic shocks and technological change could help shed light on the drivers of rising support for populism and strongman, authoritarian 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*** (0.007)	0.047*** (0.007)	0.022*** (0.005)	0.021*** (0.005)	-0.005 (0.004)	-0.004 (0.004)	0.091*** (0.013)	0.092*** (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*** (0.006)	0.032*** (0.006)	0.032*** (0.004)	0.028*** (0.004)	-0.004 (0.004)	-0.002 (0.004)	0.023* (0.014)	0.029** (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*** (0.007)	0.041*** (0.007)	0.012*** (0.004)	0.013*** (0.004)	-0.004 (0.004)	-0.004 (0.004)	0.094*** (0.012)	0.093*** (0.011)
TGRI Score	0.017*** (0.005)	0.017*** (0.005)	0.027*** (0.004)	0.022*** (0.004)	-0.002 (0.004)	0.001 (0.004)	-0.009 (0.011)	-0.003 (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 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 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 C5. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Source: LiTS and Online.

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*** (0.012)	0.093*** (0.012)	-0.060*** (0.008)	-0.060*** (0.008)	0.065*** (0.005)	0.065*** (0.005)	0.164*** (0.012)	0.164*** (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*** (0.013)	0.039*** (0.013)	-0.052*** (0.009)	-0.051*** (0.009)	0.017 (0.011)	0.016 (0.010)	0.089*** (0.011)	0.087*** (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*** (0.011)	0.090*** (0.011)	-0.049*** (0.009)	-0.050*** (0.009)	0.074*** (0.005)	0.074*** (0.005)	0.152*** (0.012)	0.152*** (0.012)
TGRI Score	0.004 (0.010)	0.008 (0.010)	-0.036*** (0.010)	-0.034*** (0.010)	-0.020* (0.011)	-0.020* (0.010)	0.034*** (0.010)	0.032*** (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		×		×		×		×

Note: OLS regressions. An observation is an individual respondent in LiTS. 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 depression. For more details on the definitions of the dependent variables, please refer to Table C5. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Source: LiTS and Online.

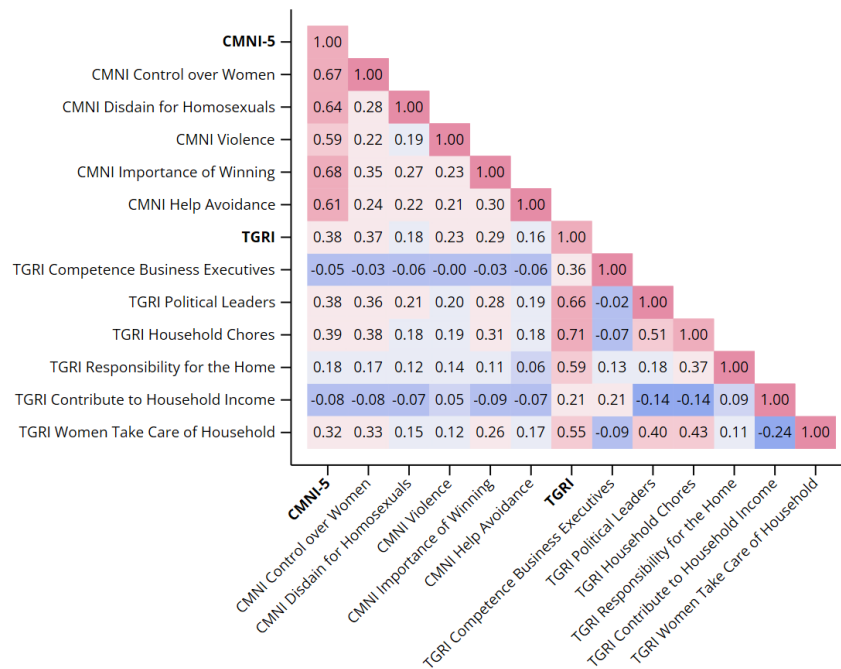
Table 3: Dominance Masculinity (CMNI-5) and Gender Role Norms – Politics

	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*** (0.006)	-0.035*** (0.006)	-0.065*** (0.007)	-0.064*** (0.007)	0.085*** (0.008)	0.084*** (0.009)	0.064*** (0.006)	0.063*** (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*** (0.004)	-0.044*** (0.004)	-0.057*** (0.008)	-0.055*** (0.008)	0.086*** (0.008)	0.084*** (0.009)	0.065*** (0.006)	0.062*** (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*** (0.005)	-0.023*** (0.005)	-0.052*** (0.005)	-0.052*** (0.005)	0.064*** (0.006)	0.064*** (0.006)	0.047*** (0.005)	0.047*** (0.005)
TGRI Score	-0.037*** (0.003)	-0.036*** (0.003)	-0.037*** (0.007)	-0.036*** (0.007)	0.062*** (0.006)	0.061*** (0.006)	0.048*** (0.005)	0.045*** (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		×		×		×		×

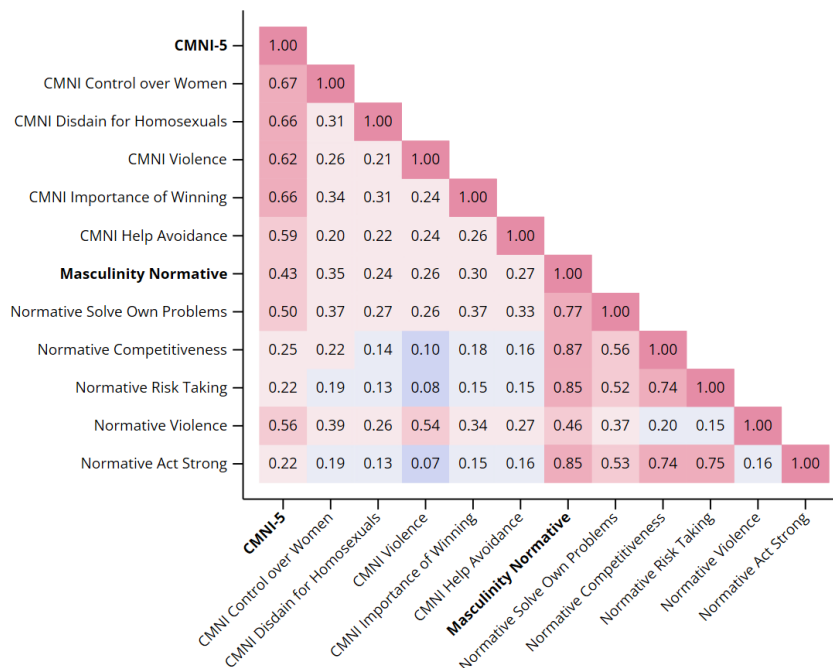
Note: OLS regressions. An observation is an individual respondent in LiTS. All dependent variables are defined as dummies equal to 1 if the respondent agrees that democracy is preferable to any other political system (columns 1-2), if he agrees that a market economy is preferable to any other economic 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). For more details on the definitions of the dependent variables, please refer to Table C5. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Source: LiTS and Online.

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

Panel A: CMNI-5 Vs. TGRI - LiTS and Online Survey



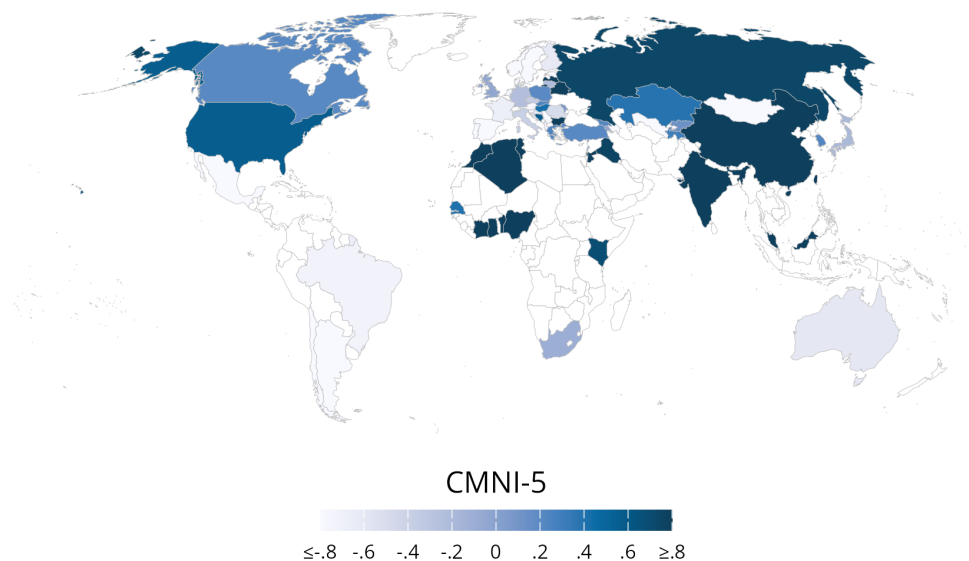
Panel B: CMNI-5 Vs. Normative Masculinity Index - Online Survey



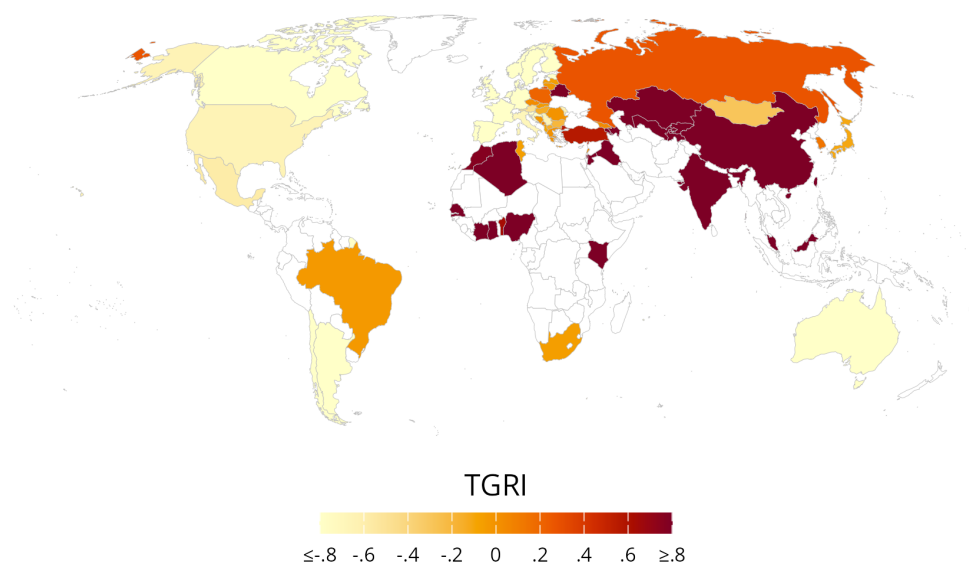
Notes: This figure displays the pair-wise individual correlation matrix between the five-item Conformity to Masculinity index (CMNI) and the Traditional Gender Roles Index (TGRI). Source: LiTS and Online.

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

Panel A: Masculinity Norms

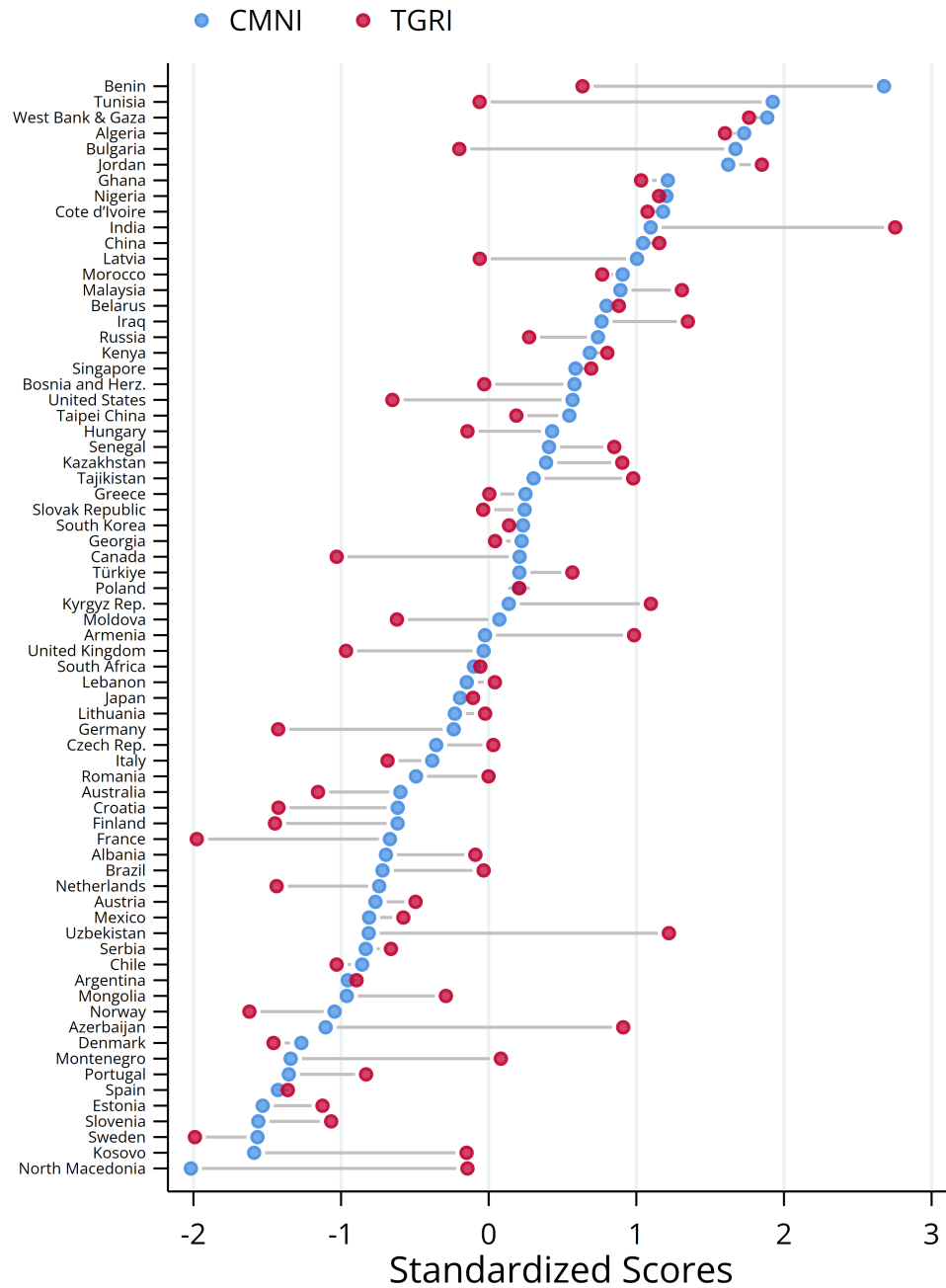


Panel B: Norms about Gender Roles



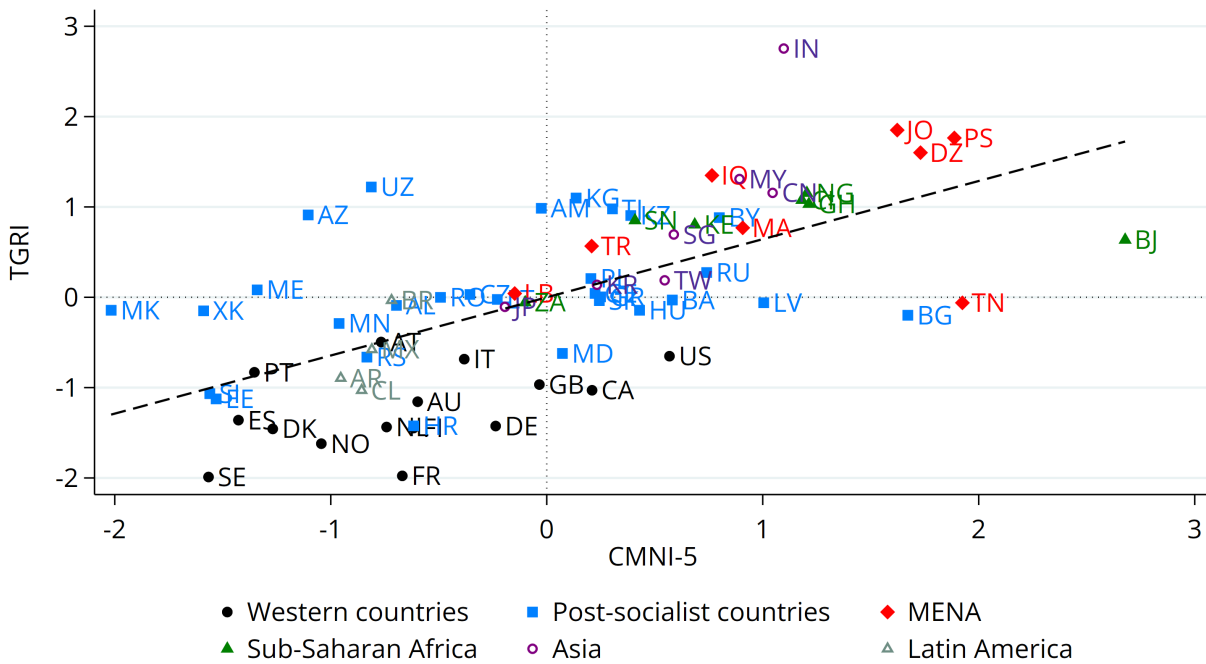
Notes: Panel A shows a map of the average standardized five-item Conformity to Masculinity Norms Index (CMNI) across countries. A higher number indicates more conservative masculinity norms. Panel B shows a map of the average standardized six-item Traditional gender role norms Index (TGRI) across countries.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

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



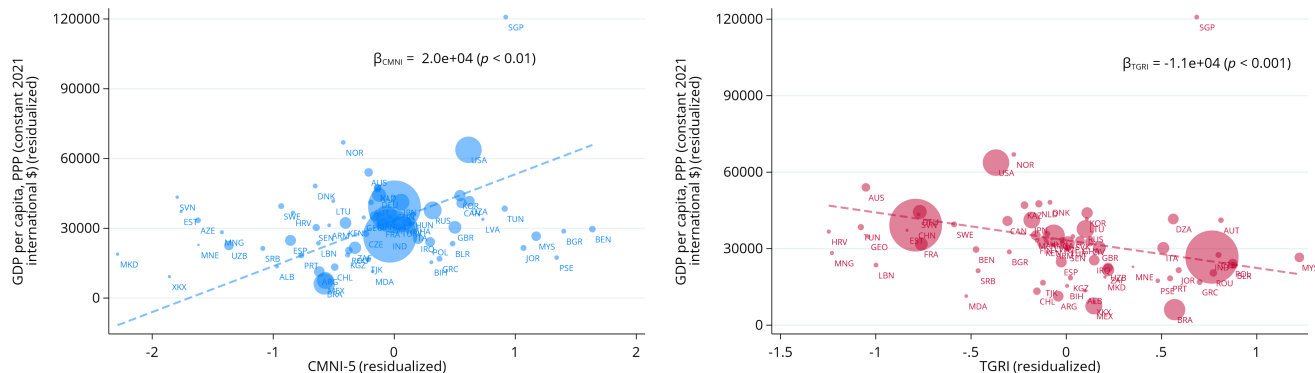
Notes: This figure displays the mean values of the Conformity to Masculinity Norms Index (CMNI) and the Traditional Gender Roles Index (TGRI) across regions (left) and countries (right). Higher scores indicate more conservative norms. Source: LiTS and Online.

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



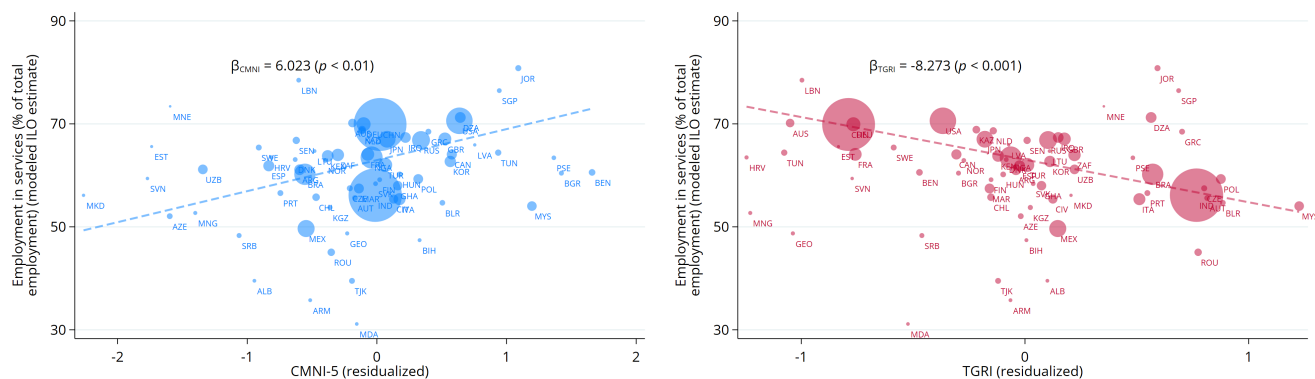
Notes: This figure displays a scatter plot and fitted linear regression of the five-item Conformity to Masculinity index (CMNI) and the Traditional Gender Roles Index (TGRI) across countries. Source: GMS.

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) and are weighted by population size. Source: World Bank WDIs, GMS.

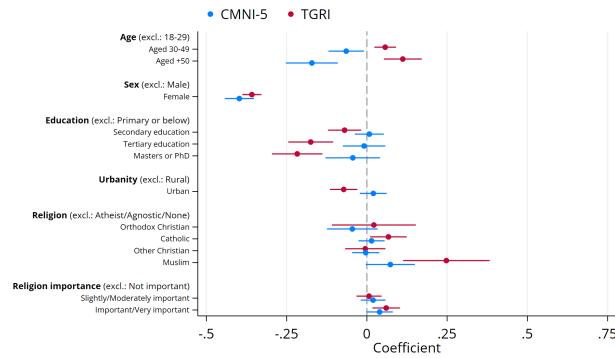
Figure 6: Dominance Masculinity Norms, Norms about Gender Roles, and Employment in Services



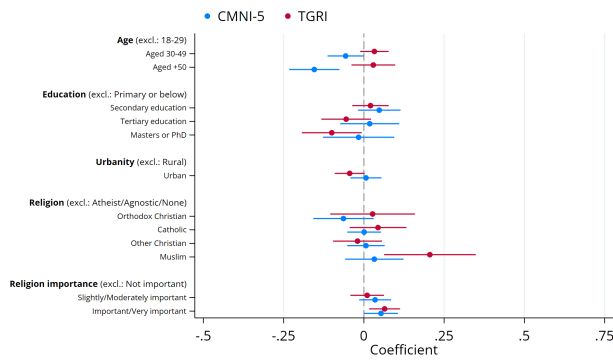
Notes: The left panel shows a binscatter plot of the country-level relationship between the latest available data point for employment in services as a share of total employment and the standardized Conformity to Masculinity Norms Index (CMNI-5) once the influence of the Traditional Gender Roles Index (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) and are weighted by population size. Source: World Bank WDIs, LiTS, Online.

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

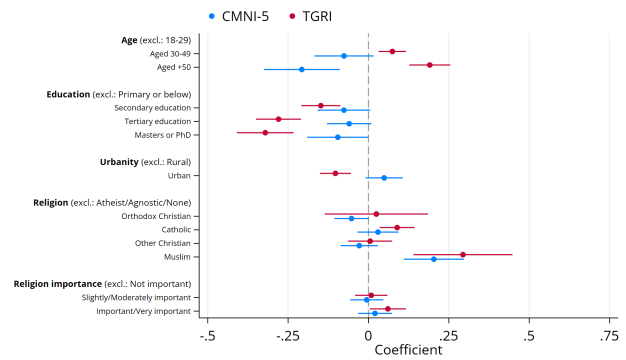
Panel A: Full sample



Panel B: Women



Panel C: Men



Notes: This figure displays a coefficient plot showing the results from OLS regressions of the five-item Conformity to Masculinity Norms Index (CMNI) 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. Source: LiTS and Online.

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Online Appendix A: Additional Information On The Surveys And Measurement

A1.1 Selection and Validation of the CMNI-5

Until recently, the CMNI had remained mostly a clinical or research tool used in small, non-representative samples from Western countries.²⁴ 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*.²⁵ This *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 in the Appendix provides correlations between the overall CMNI-22 index, its 22 sub-dimensions, and health and violence outcomes. 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. However, 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 were constrained to choose 5 out of the 22 items of the CMNI for inclusion in LiTS. We chose the five questions (henceforth, CMNI-5) that correlated most strongly with the overall CMNI score in the *Ten to Men* survey. As shown in Table A1, in *Ten to Men* data, the resulting CMNI subscore has a correlation with the overall CMNI score of 0.76. It alone explains 57% of the variation in the total CMNI score. The raw correlations of the CMNI 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 as the correlations of the CMNI overall 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)
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)

²⁴The 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).

²⁵See https://aifs.gov.au/research_programs/ten-men.

5. *"It is important to me that people think I am heterosexual"* (Disdain for homosexuals)

[H]

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

Dep. Var.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	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	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										
Wrking	-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

Note: This table presents correlations between the CMNI-22, CMNI-5 and each of its 5 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 LiTS

Like all other questions in LiTS, the CMNI questions were back-translated,²⁶ validated by the contracted survey firm (IPSOS), 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. It consequently was dropped from the survey in those cases.

Figure B1 shows the item non-response rates for the CMNI by region. Across regions, we see that the question related to homosexuality had the greatest item non-response. In sensitivity analyses, we found that the results are similar using a CMNI metric that excluded the homosexuality-related question (CMNI-4, results are available in the previous working paper De Haas et al. 2024).

A1.2.2 Online Surveys

How The Panels Work. The survey company *Respondi* or its partners recruits participants from a pool of pre-recruited 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, *Respondi* 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, behaviours, or socio-demographic background.

AI Tools For Data Quality. *Respondi* 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.

²⁶Translations 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.

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.

Representativeness And Limitations: While *Respondi* aims to assemble samples representative of the population by age, gender, and income, there are inherent limitations. Because the survey is taken via a computer, smartphone, or tablet, individuals 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's 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.

A1.3 Survey Questions About Gender Roles And Attitudes Towards Women

Table A2 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 A2: Traditional Gender Roles Index

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

A1.4 Online Surveys

A1.4.1 Masculinity Norms Questions

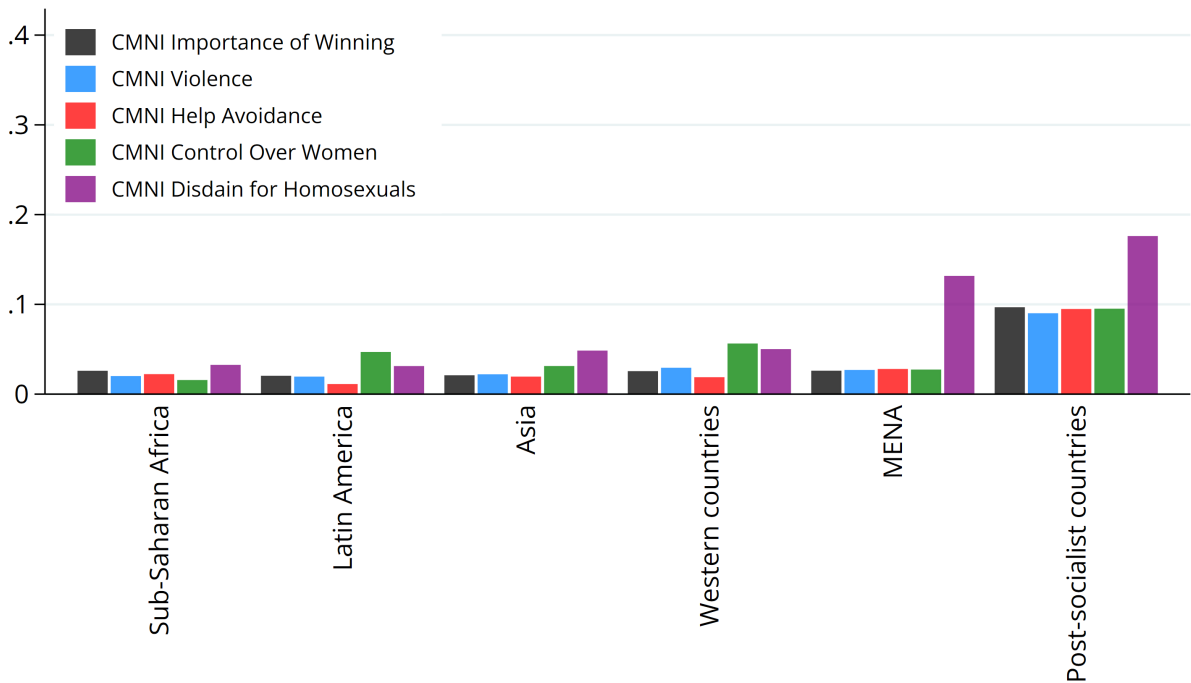
Table A3 presents the each individual item (Column 1) included in the Normative Masculinity Index and their respective masculinity dimensions (Column 2) and sources (Column 3). Respondents read the same instructions as for the CMNI and provided answers on a four-point Likert scale, from Strongly Agree (1) to Strongly Disagree (4), 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 A3: Normative Masculinity Index

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

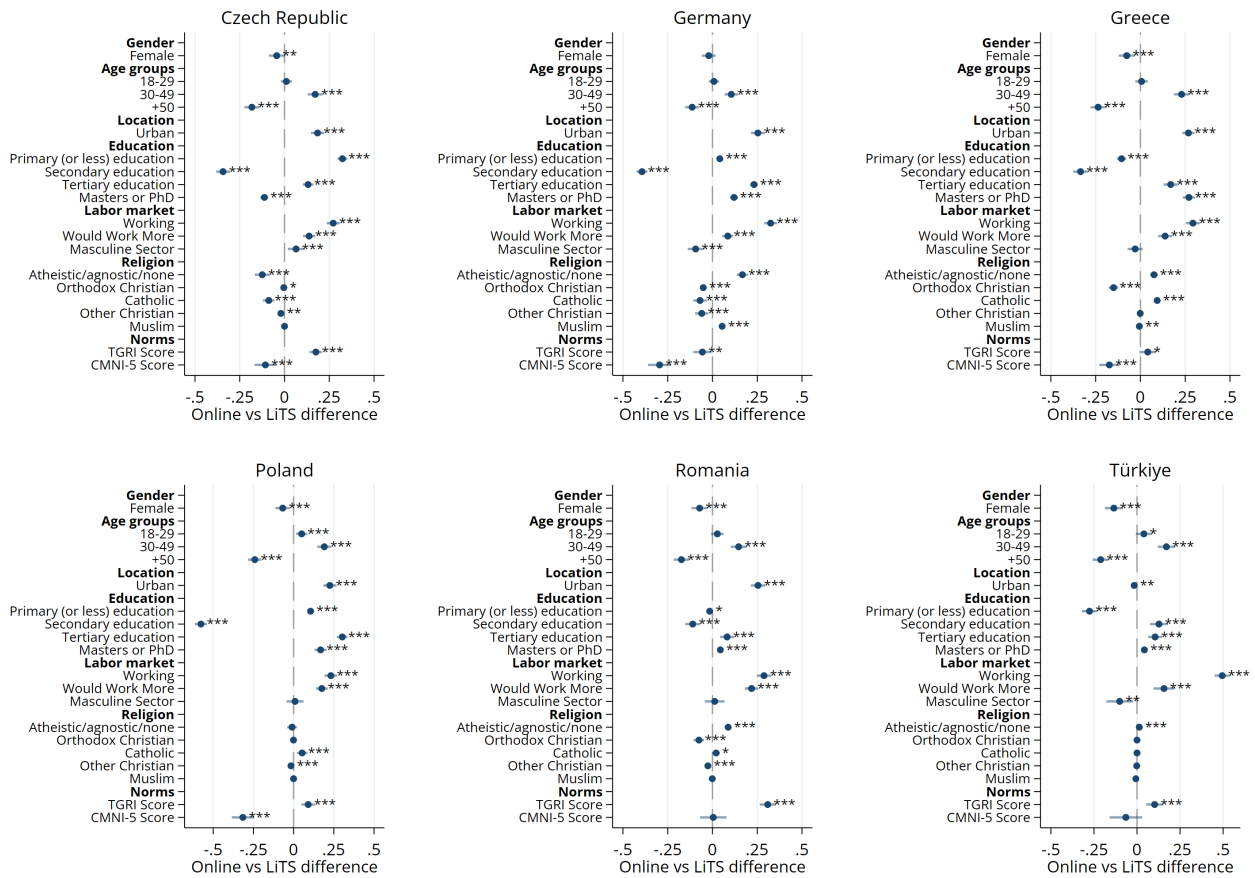
Online Appendix B: Supplementary Figures

Figure B1: Non-response rates across regions and CMNI questions



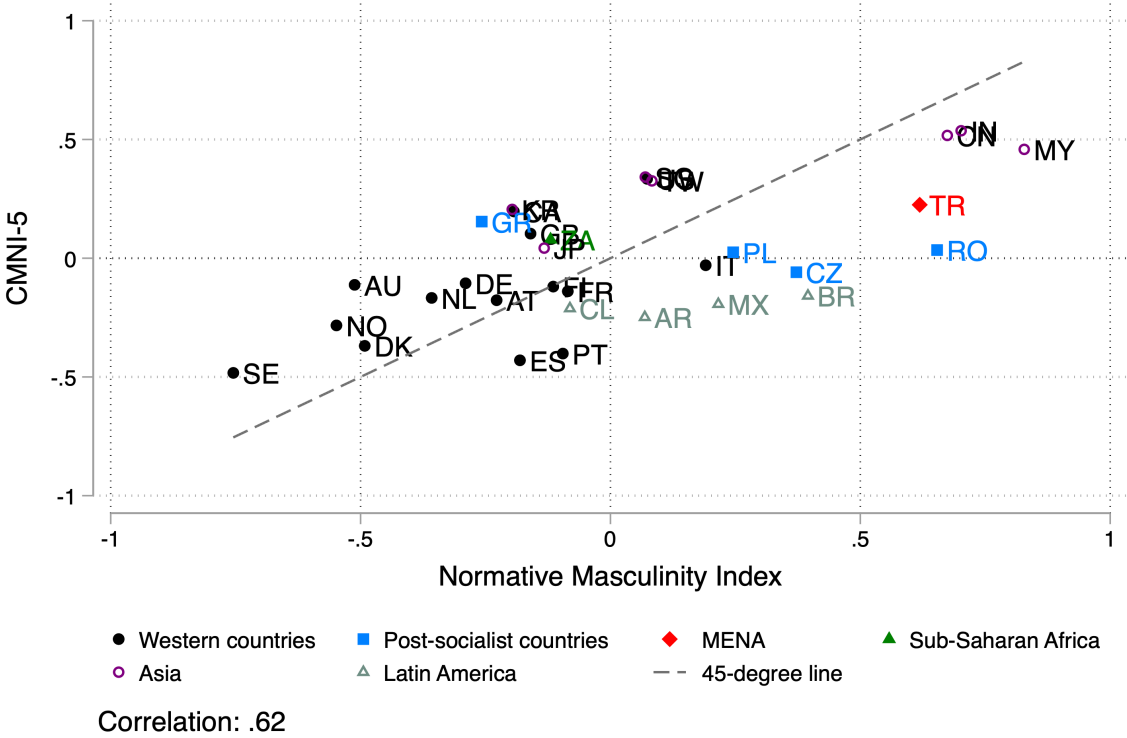
Notes: This figure displays the proportion of respondents (males only) across LiTS regions who refused to answer or answer they do not know to each item of the Conformity to Masculinity Norms Index. Source: LiTS and Online.

Figure B2: Sample Representativeness: LiTS Vs. Online Survey Comparison



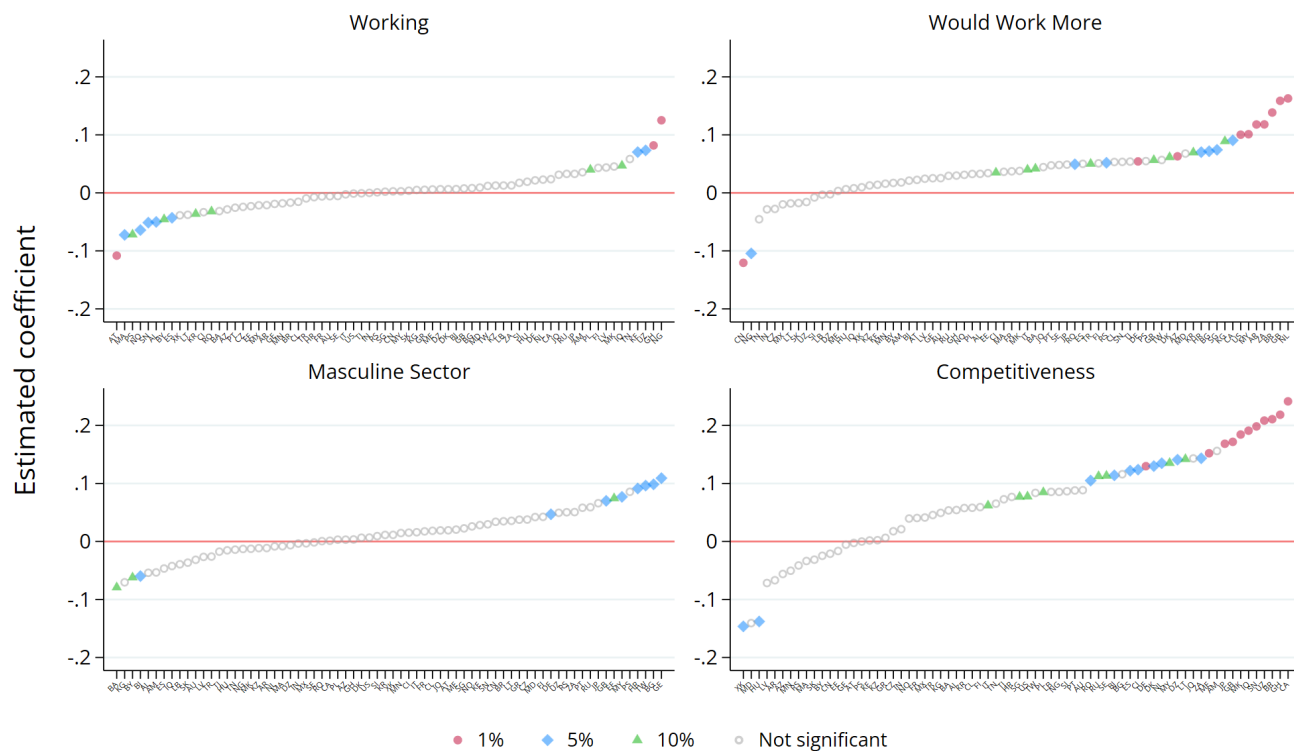
Notes: Source: Each row represents a separate regression at the individual level for each country sampled in both LiTS and in the Online surveys of the variable depicted on the y-axis on a dummy equals to 1 if the observation comes from the online, and zero otherwise. Spikes show 95% confidence intervals based on standard errors clustered at the country level. Source: Lits and Online.

Figure B3: Cross-Country Correlations: CMNI-5 And Normative Masculinity Norms



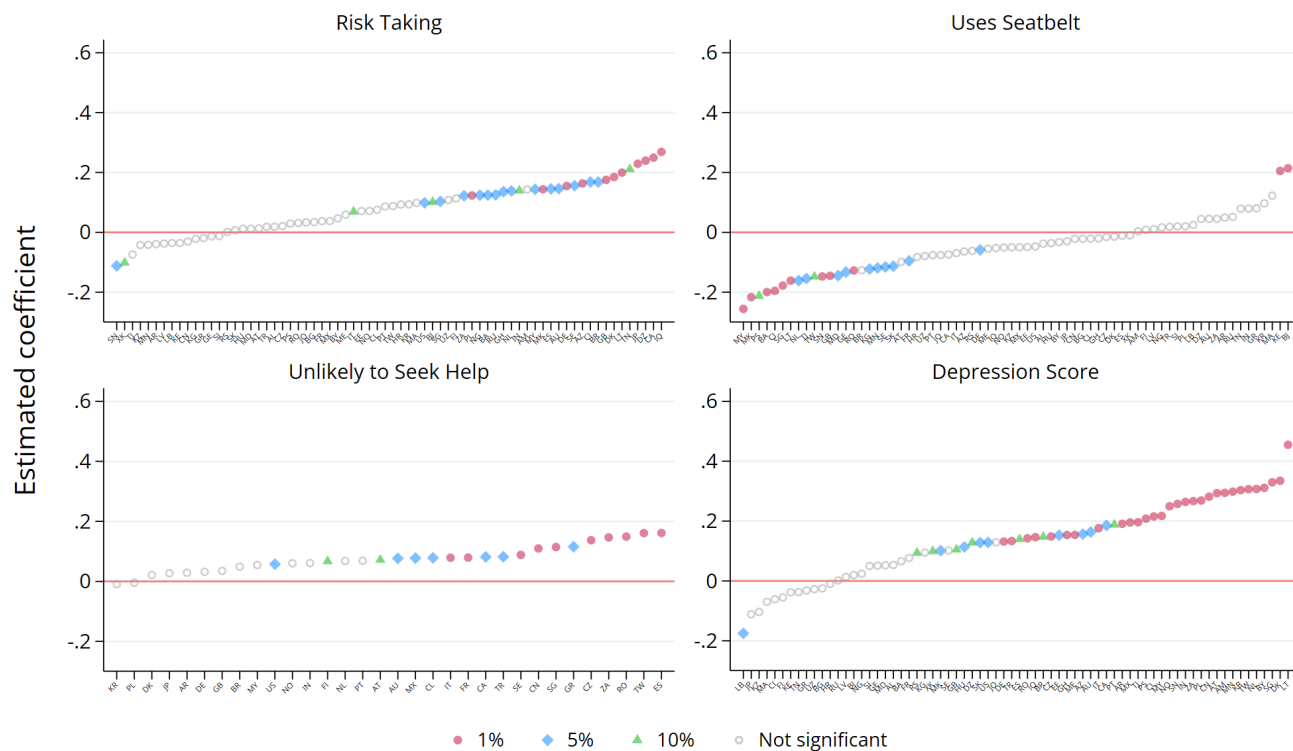
Notes: This figure displays a scatter plot at the country level of the CMNI-5 and the Normative Masculinity index. Source: Online Survey.

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



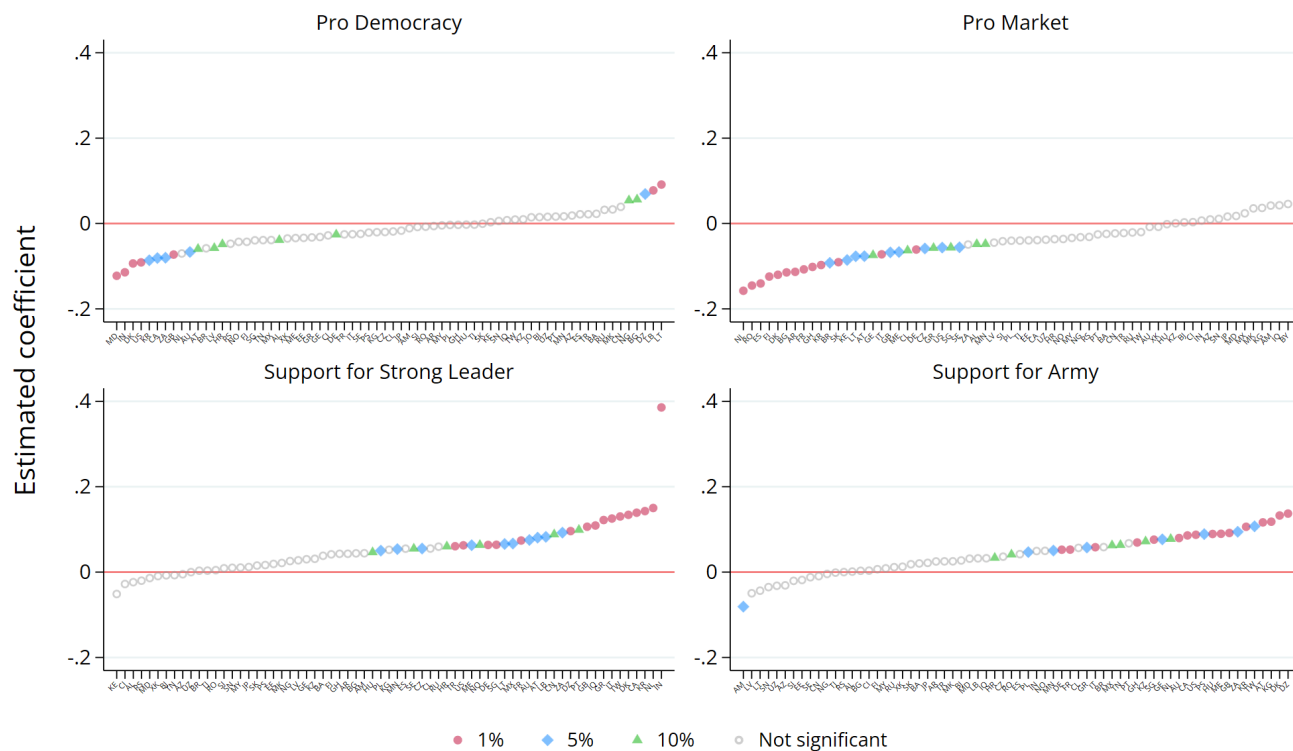
Notes: The dependent variables *Working*, *Would Work More*, and *Masculine Sector* are defined as dummies, whereas *Competitiveness* is standardized. See Table C5 for a more detailed description of the outcome variables. The chart reports the CMNI-5 coefficients from an individual-level regression run separately for each country, controlling for the TGRI, age, urban status and survey type (Online or LiTS). Source: Online + LiTS.

Figure B5: Dominance Masculinity Norms (CMNI-5) By Country – Risk and Health



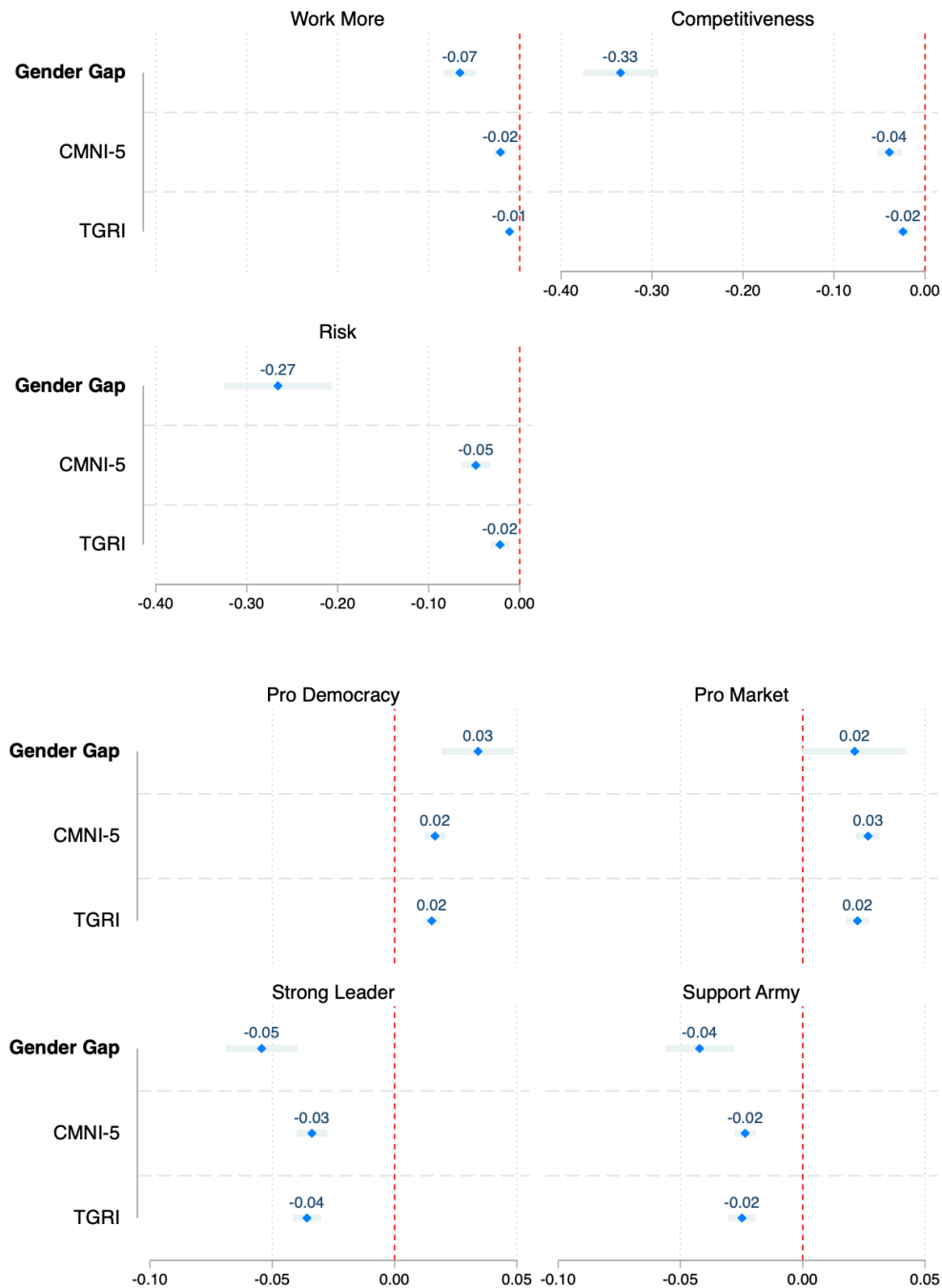
Notes: The dependent variable *Unlikely to Seek Help* is defined as a dummy, whereas *Risk Taking*, *Uses Seatbelt* and *Depression Score* are standardized. See Table C5 for a more detailed description of the outcome variables. The chart reports the CMNI-5 coefficients from an individual-level regression run separately for each country, controlling for the TGRI, age, urban status and survey type (Online or LiTS). Source: LiTS and Online.

Figure B6: Dominance Masculinity Norms (CMNI-5) By Country – Politics



Notes: All dependent variables are defined as dummies. See Table C5 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). Source: Online + LiTS.

Figure B7: Decomposing Gender Gaps Into Dominance Masculinity Norms and TGRI



Notes: *Gender Gap* is the coefficient on the female dummy of a regression of each outcome on female, and controls for age, urban and country fixed effects. The other coefficients are the mean gender gap in each masculinity index multiplied by how much each index influences the outcome in a regression with the full set of controls, using the (Gelbach, 2016) decomposition method. For example, gender differences in the CMNI-5 explain 12% (0.04 over 0.33) of the gender gap in competitiveness (Upper Panel, Left Plot), whereas gender gap in the Normative Masculinity index explains 3%.

Online Appendix C: Supplementary Tables

Table C1: Country List and Sample Size (as of January 27, 2025)

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	

Note: This table presents the list of countries and respective sample sizes (Total and Men only) included in LiTS and Online.

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	41621	42.69	14.42	45190	42.65	15.43
Urban	0	1	0.71	0.46	41621	0.72	0.45	45190	0.69	0.46
Primary Education (=1)	0	1	0.15	0.35	41621	0.14	0.35	45190	0.16	0.36
Secondary Education (=1)	0	1	0.46	0.50	41621	0.45	0.50	45190	0.47	0.50
Tertiary Education (=1)	0	1	0.39	0.49	41621	0.41	0.49	45190	0.38	0.49
Orthodox (=1)	0	1	0.14	0.35	41621	0.13	0.34	45190	0.15	0.36
Catholic (=1)	0	1	0.23	0.42	41621	0.23	0.42	45190	0.23	0.42
Other Christian (=1)	0	1	0.16	0.36	41621	0.16	0.37	45190	0.16	0.36
Muslim (=1)	0	1	0.23	0.42	41621	0.23	0.42	45190	0.24	0.43
Atheistic/Agnostic/None (=1)	0	1	0.17	0.38	41621	0.18	0.38	45190	0.16	0.37
Other Religion (=1)	0	1	0.05	0.23	41621	0.06	0.23	45190	0.05	0.22

Note: This table presents summary statistics (*min*, *max*, *mean* and *standard deviation*) for all the variables used in this paper, except the CMNI and TGRI indices and subitems (see Table C4.). The table presents the statistics for the full LiTS+Online sample, and separately for men and women.

Table C3: 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

Note: This table presents summary statistics (*min*, *max*, *mean* and *standard deviation*) for all the variables used in this paper, except the CMNI and TGRI indices and subitems (see Table C4.). The table presents the statistics for the full LiTS+Online sample, and separately for men and women.

Table C4: 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

Note: 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 C5: Outcomes Description

Domain	Variable Name	LiTS 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 <i>Agriculture, Forestry, and Fishing, Mining, Construction, Manufacturing or Transportation and Public utilities</i>
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 <i>Having a democratic political system</i> 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 <i>A market economy is preferable to any other form of economic system</i>
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 <i>Having a strong leader who does not have to bother with parliament and elections</i> 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 <i>Having the army rule</i> is fairly or very good for their country

Note: This table presents a description of the outcome variables from LiTS and Online surveys used for the main analysis in this paper, for each of the *Economics*, *Risk and Health*, and *Politics* domains.

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*** (0.006)	0.043*** (0.006)	0.014*** (0.004)	0.014*** (0.004)	-0.006* (0.004)	-0.006* (0.003)	0.108*** (0.012)	0.108*** (0.011)
TGRI Score	0.020*** (0.005)	0.020*** (0.005)	0.027*** (0.004)	0.023*** (0.004)	-0.002 (0.004)	0.001 (0.004)	-0.002 (0.012)	0.004 (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** (0.005)	0.012** (0.005)	-0.001 (0.004)	-0.001 (0.004)	-0.007** (0.003)	-0.008** (0.003)	0.034*** (0.009)	0.033*** (0.009)
TGRI Score	0.029*** (0.006)	0.029*** (0.006)	0.031*** (0.005)	0.027*** (0.004)	-0.002 (0.004)	0.001 (0.004)	0.014 (0.013)	0.020 (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*** (0.005)	0.015*** (0.005)	0.003 (0.003)	0.003 (0.003)	-0.003 (0.003)	-0.003 (0.003)	0.021** (0.010)	0.021** (0.009)
TGRI Score	0.030*** (0.006)	0.030*** (0.006)	0.031*** (0.004)	0.027*** (0.004)	-0.003 (0.004)	-0.000 (0.004)	0.021 (0.013)	0.027** (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*** (0.005)	0.045*** (0.005)	0.011** (0.005)	0.011** (0.005)	0.001 (0.005)	0.001 (0.004)	0.092*** (0.014)	0.092*** (0.013)
TGRI Score	0.018*** (0.005)	0.018*** (0.005)	0.026*** (0.004)	0.023*** (0.004)	-0.004 (0.004)	-0.001 (0.004)	-0.002 (0.012)	0.004 (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** (0.004)	0.008** (0.004)	0.010** (0.004)	0.011*** (0.004)	0.002 (0.004)	0.001 (0.004)	0.028*** (0.010)	0.027*** (0.010)
TGRI Score	0.032*** (0.006)	0.032*** (0.006)	0.030*** (0.005)	0.026*** (0.004)	-0.005 (0.004)	-0.002 (0.004)	0.019 (0.014)	0.025* (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 C5. The CMNI subitems and TGRI score are standardized. Standard errors are clustered at the country level and shown in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Source: LiTS and Online.

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*** (0.012)	0.104*** (0.011)	-0.041*** (0.009)	-0.041*** (0.009)	0.040*** (0.004)	0.040*** (0.004)	0.056*** (0.008)	0.056*** (0.008)
TGRI Score	0.013 (0.010)	0.017 (0.010)	-0.043*** (0.009)	-0.042*** (0.009)	0.003 (0.010)	0.003 (0.010)	0.075*** (0.011)	0.073*** (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*** (0.009)	0.044*** (0.009)	-0.038*** (0.007)	-0.038*** (0.007)	0.042*** (0.004)	0.042*** (0.004)	0.137*** (0.010)	0.138*** (0.010)
TGRI Score	0.024** (0.012)	0.028** (0.011)	-0.043*** (0.008)	-0.041*** (0.008)	0.003 (0.011)	0.003 (0.010)	0.051*** (0.009)	0.048*** (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** (0.009)	0.020** (0.009)	-0.025*** (0.008)	-0.025*** (0.008)	0.040*** (0.005)	0.040*** (0.005)	0.152*** (0.013)	0.152*** (0.013)
TGRI Score	0.035*** (0.013)	0.038*** (0.013)	-0.049*** (0.009)	-0.048*** (0.009)	0.008 (0.010)	0.008 (0.010)	0.067*** (0.010)	0.065*** (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*** (0.012)	0.087*** (0.011)	-0.025** (0.012)	-0.025** (0.012)	0.053*** (0.005)	0.054*** (0.005)	0.078*** (0.013)	0.078*** (0.013)
TGRI Score	0.012 (0.011)	0.016 (0.011)	-0.045*** (0.010)	-0.044*** (0.010)	-0.005 (0.009)	-0.005 (0.009)	0.066*** (0.011)	0.064*** (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 (0.009)	0.012 (0.009)	-0.014 (0.008)	-0.014* (0.008)	0.034*** (0.005)	0.034*** (0.005)	0.018* (0.010)	0.019* (0.010)
TGRI Score	0.034** (0.014)	0.038*** (0.013)	-0.056*** (0.009)	-0.055*** (0.009)	0.008 (0.011)	0.008 (0.010)	0.095*** (0.011)	0.093*** (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		×		×		×		×

Note: 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 equals 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 C5. 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. Source: LiTS and Online.

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*** (0.004)	-0.018*** (0.004)	-0.022*** (0.005)	-0.022*** (0.005)	0.061*** (0.006)	0.061*** (0.006)	0.047*** (0.005)	0.047*** (0.005)
TGRI Score	-0.042*** (0.004)	-0.041*** (0.004)	-0.052*** (0.007)	-0.050*** (0.007)	0.071*** (0.007)	0.069*** (0.007)	0.054*** (0.005)	0.052*** (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*** (0.004)	-0.017*** (0.004)	-0.052*** (0.005)	-0.052*** (0.005)	0.026*** (0.005)	0.027*** (0.005)	0.024*** (0.005)	0.024*** (0.005)
TGRI Score	-0.041*** (0.004)	-0.040*** (0.004)	-0.042*** (0.007)	-0.040*** (0.007)	0.079*** (0.008)	0.077*** (0.008)	0.058*** (0.006)	0.055*** (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 (0.004)	-0.005 (0.004)	-0.023*** (0.004)	-0.023*** (0.004)	0.018*** (0.004)	0.018*** (0.004)	0.009** (0.004)	0.009** (0.004)
TGRI Score	-0.045*** (0.004)	-0.044*** (0.004)	-0.054*** (0.008)	-0.053*** (0.008)	0.084*** (0.008)	0.082*** (0.009)	0.064*** (0.006)	0.062*** (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*** (0.005)	-0.021*** (0.005)	-0.041*** (0.005)	-0.040*** (0.005)	0.061*** (0.007)	0.060*** (0.007)	0.044*** (0.006)	0.044*** (0.006)
TGRI Score	-0.040*** (0.004)	-0.039*** (0.004)	-0.043*** (0.008)	-0.042*** (0.008)	0.067*** (0.007)	0.065*** (0.007)	0.052*** (0.005)	0.050*** (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* (0.004)	-0.007* (0.004)	-0.021*** (0.005)	-0.021*** (0.005)	0.026*** (0.005)	0.026*** (0.005)	0.017*** (0.005)	0.018*** (0.004)
TGRI Score	-0.048*** (0.004)	-0.047*** (0.004)	-0.057*** (0.008)	-0.055*** (0.008)	0.084*** (0.008)	0.083*** (0.008)	0.065*** (0.006)	0.063*** (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		×		×		×		×

Note: OLS regressions. An observation is an individual respondent in LiTS or Online. All 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). For more details on the definitions of the dependent variables, please refer to Table C5. The CMNI subitems and TGRI score are standardized. Standard errors are clustered at the country level and shown in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Source: LiTS and Online.

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 (0.053)	-0.049 (0.053)	-0.027 (0.055)	-0.032 (0.054)	-0.135*** (0.044)	-0.139*** (0.044)	0.054 (0.046)	0.055 (0.046)	-0.030 (0.058)	-0.035 (0.058)	-0.021 (0.051)	-0.022 (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	0.15	0.13	0.14	0.07	0.08	0.07	0.07	0.24	0.24	0.14	0.15
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. Standard errors are clustered at the country level and shown in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. 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	-0.106** (0.050)	-0.121** (0.048)	-0.133*** (0.042)	-0.141*** (0.041)	-0.060 (0.040)	-0.068* (0.038)	-0.090* (0.051)	-0.101* (0.050)	-0.025 (0.062)	-0.028 (0.062)	0.017 (0.053)	0.011 (0.052)	-0.047 (0.037)	-0.061 (0.037)
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	0.14	0.05	0.06	0.07	0.08	0.10	0.12	0.03	0.04	0.06	0.06	0.09	0.11
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. Standard errors are clustered at the country level and shown in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. 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*** (0.005)	0.020*** (0.005)	0.020*** (0.007)	0.015** (0.007)	0.001 (0.008)	0.004 (0.007)	0.037** (0.017)	0.044** (0.016)
Female interviewer	0.001 (0.017)	0.001 (0.017)	0.011 (0.022)	0.004 (0.019)	-0.006 (0.018)	-0.001 (0.016)	-0.058 (0.053)	-0.046 (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 (0.006)	-0.002 (0.006)	0.040*** (0.006)	0.026*** (0.006)	-0.004 (0.006)	0.004 (0.005)	-0.050*** (0.014)	-0.031** (0.014)
Female interviewer	-0.001 (0.017)	-0.002 (0.017)	0.013 (0.021)	0.005 (0.018)	-0.005 (0.017)	0.002 (0.016)	-0.065 (0.052)	-0.051 (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*** (0.006)	0.021*** (0.006)	0.012* (0.007)	0.010 (0.007)	0.002 (0.008)	0.004 (0.008)	0.049*** (0.016)	0.052*** (0.016)
TGRI Score	-0.004 (0.006)	-0.007 (0.006)	0.037*** (0.006)	0.023*** (0.006)	-0.003 (0.006)	0.005 (0.006)	-0.059*** (0.014)	-0.042*** (0.014)
Female interviewer	0.001 (0.017)	-0.000 (0.017)	0.014 (0.021)	0.006 (0.019)	-0.006 (0.018)	-0.001 (0.016)	-0.064 (0.053)	-0.051 (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 C5. 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. 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*** (0.015)	0.059*** (0.015)	-0.063*** (0.014)	-0.060*** (0.014)	0.103*** (0.018)	0.100*** (0.018)
Female interviewer	-0.046 (0.039)	-0.037 (0.037)	0.096* (0.051)	0.102* (0.052)	0.058 (0.039)	0.053 (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* (0.012)	-0.010 (0.011)	-0.068*** (0.014)	-0.062*** (0.014)	0.048*** (0.014)	0.040*** (0.013)
Female interviewer	-0.046 (0.040)	-0.036 (0.038)	0.089* (0.049)	0.095* (0.050)	0.055 (0.037)	0.049 (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*** (0.016)	0.063*** (0.015)	-0.052*** (0.015)	-0.051*** (0.015)	0.095*** (0.018)	0.094*** (0.018)
TGRI Score	-0.033*** (0.012)	-0.023** (0.011)	-0.058*** (0.015)	-0.052*** (0.015)	0.028** (0.013)	0.020 (0.013)
Female interviewer	-0.047 (0.040)	-0.038 (0.038)	0.088* (0.049)	0.094* (0.050)	0.061 (0.039)	0.056 (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		×		×		×

Note: 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 equals 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 C5. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. 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 (0.006)	-0.002 (0.006)	-0.031*** (0.009)	-0.029*** (0.009)	0.032*** (0.006)	0.031*** (0.005)	0.035*** (0.009)	0.033*** (0.008)
Female interviewer	0.005 (0.013)	0.008 (0.013)	0.011 (0.022)	0.013 (0.022)	-0.010 (0.024)	-0.012 (0.023)	0.035 (0.023)	0.029 (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*** (0.005)	-0.025*** (0.005)	-0.026** (0.012)	-0.021* (0.012)	0.034*** (0.007)	0.031*** (0.007)	0.037*** (0.007)	0.030*** (0.007)
Female interviewer	0.000 (0.012)	0.003 (0.012)	0.012 (0.021)	0.015 (0.022)	-0.009 (0.023)	-0.011 (0.023)	0.038 (0.023)	0.032 (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 (0.006)	0.003 (0.006)	-0.027*** (0.008)	-0.026*** (0.008)	0.026*** (0.006)	0.025*** (0.006)	0.027*** (0.008)	0.027*** (0.008)
TGRI Score	-0.029*** (0.005)	-0.026*** (0.004)	-0.019* (0.011)	-0.014 (0.011)	0.028*** (0.007)	0.025*** (0.007)	0.031*** (0.007)	0.024*** (0.007)
Female interviewer	0.002 (0.013)	0.005 (0.013)	0.009 (0.022)	0.012 (0.022)	-0.008 (0.024)	-0.010 (0.023)	0.038 (0.023)	0.033 (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		×		×		×		×

Note: 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 C5. 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. 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*** (0.008)	0.049*** (0.008)	0.023*** (0.005)	0.022*** (0.005)	-0.008* (0.004)	-0.007* (0.004)
Risk Taking	0.038*** (0.006)	0.038*** (0.006)	-0.003 (0.005)	-0.002 (0.005)	0.017*** (0.005)	0.015*** (0.005)
Competitiveness	0.026*** (0.006)	0.026*** (0.006)	-0.002 (0.005)	0.007* (0.004)	0.029*** (0.007)	0.024*** (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*** (0.006)	0.033*** (0.006)	0.030*** (0.005)	0.025*** (0.005)	-0.005 (0.004)	-0.002 (0.004)
Risk Taking	0.038*** (0.006)	0.038*** (0.006)	-0.002 (0.005)	-0.002 (0.005)	0.017*** (0.005)	0.015*** (0.005)
Competitiveness	0.029*** (0.006)	0.029*** (0.006)	-0.001 (0.004)	0.008** (0.004)	0.030*** (0.007)	0.025*** (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*** (0.007)	0.043*** (0.008)	0.015*** (0.004)	0.015*** (0.004)	-0.007 (0.005)	-0.007 (0.004)
TGRI Score	0.017*** (0.005)	0.017*** (0.005)	0.024*** (0.005)	0.020*** (0.005)	-0.002 (0.004)	0.000 (0.004)
Risk Taking	0.037*** (0.006)	0.037*** (0.006)	-0.003 (0.005)	-0.002 (0.005)	0.017*** (0.005)	0.015*** (0.005)
Competitiveness	0.026*** (0.006)	0.026*** (0.006)	-0.002 (0.004)	0.008* (0.004)	0.029*** (0.007)	0.024*** (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 C5. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Source: LiTS.

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*** (0.009)	-0.048*** (0.009)	0.065*** (0.006)	0.065*** (0.006)	0.161*** (0.013)	0.160*** (0.013)
Risk Taking	-0.094*** (0.014)	-0.095*** (0.014)	0.006 (0.012)	0.006 (0.012)	-0.001 (0.014)	-0.000 (0.014)
Competitiveness	-0.067*** (0.017)	-0.072*** (0.017)	-0.000 (0.013)	-0.001 (0.013)	-0.023 (0.014)	-0.020 (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*** (0.010)	-0.049*** (0.010)	0.015 (0.011)	0.015 (0.011)	0.090*** (0.012)	0.089*** (0.012)
Risk Taking	-0.095*** (0.014)	-0.096*** (0.014)	0.010 (0.011)	0.009 (0.011)	0.006 (0.014)	0.007 (0.014)
Competitiveness	-0.069*** (0.017)	-0.073*** (0.017)	0.005 (0.012)	0.004 (0.012)	-0.015 (0.015)	-0.013 (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*** (0.010)	-0.036*** (0.010)	0.075*** (0.007)	0.075*** (0.007)	0.147*** (0.013)	0.148*** (0.012)
TGRI Score	-0.039*** (0.011)	-0.037*** (0.011)	-0.022* (0.012)	-0.022* (0.012)	0.038*** (0.011)	0.036*** (0.012)
Risk Taking	-0.094*** (0.014)	-0.095*** (0.014)	0.003 (0.011)	0.002 (0.011)	-0.002 (0.014)	-0.000 (0.014)
Competitiveness	-0.068*** (0.017)	-0.072*** (0.017)	0.004 (0.012)	0.004 (0.012)	-0.022 (0.014)	-0.020 (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		×		×		×

Note: 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 equals 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 C5. The CMNI-5 and TGRI scores are standardized. Standard errors are clustered at the country level and shown in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Source: LiTS.

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*** (0.006)	-0.030*** (0.006)	-0.067*** (0.008)	-0.066*** (0.007)	0.082*** (0.008)	0.081*** (0.008)	0.062*** (0.006)	0.061*** (0.006)
Risk Taking	-0.009* (0.005)	-0.010** (0.005)	0.017*** (0.006)	0.017*** (0.006)	0.024*** (0.006)	0.025*** (0.006)	0.016** (0.006)	0.017** (0.006)
Competitiveness	-0.007 (0.005)	-0.009* (0.005)	-0.007 (0.008)	-0.011 (0.007)	0.017** (0.007)	0.020*** (0.007)	0.012* (0.006)	0.016** (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*** (0.004)	-0.037*** (0.004)	-0.057*** (0.009)	-0.055*** (0.009)	0.083*** (0.008)	0.081*** (0.009)	0.064*** (0.007)	0.061*** (0.007)
Risk Taking	-0.010** (0.005)	-0.011** (0.005)	0.016*** (0.006)	0.015** (0.006)	0.025*** (0.006)	0.026*** (0.006)	0.018*** (0.006)	0.019*** (0.006)
Competitiveness	-0.009* (0.005)	-0.011** (0.005)	-0.011 (0.008)	-0.014* (0.007)	0.022*** (0.007)	0.024*** (0.007)	0.015** (0.006)	0.018*** (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*** (0.005)	-0.020*** (0.005)	-0.055*** (0.006)	-0.054*** (0.006)	0.061*** (0.006)	0.061*** (0.006)	0.045*** (0.005)	0.045*** (0.005)
TGRI Score	-0.031*** (0.004)	-0.030*** (0.004)	-0.037*** (0.009)	-0.035*** (0.008)	0.061*** (0.007)	0.059*** (0.007)	0.048*** (0.006)	0.045*** (0.006)
Risk Taking	-0.009* (0.005)	-0.010** (0.005)	0.018*** (0.006)	0.017*** (0.006)	0.023*** (0.006)	0.024*** (0.006)	0.015** (0.006)	0.016** (0.006)
Competitiveness	-0.007 (0.005)	-0.009* (0.005)	-0.008 (0.007)	-0.011 (0.007)	0.018** (0.007)	0.020*** (0.007)	0.013** (0.006)	0.016*** (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		×		×		×		×

Note: 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 C5. 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. Source: LiTS.

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*** (0.009)	0.051*** (0.005)	0.013** (0.005)	0.012*** (0.004)	-0.002 (0.003)	-0.002 (0.005)	0.098*** (0.011)	0.087*** (0.016)
TGRI	0.029*** (0.005)	0.022*** (0.006)	0.019*** (0.004)	0.010* (0.005)	-0.000 (0.004)	-0.011*** (0.003)	0.049*** (0.009)	0.077*** (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*** (0.013)	0.101*** (0.017)	-0.050*** (0.008)	-0.050*** (0.013)	0.071*** (0.005)	0.055*** (0.005)	0.187*** (0.014)	0.166*** (0.015)
TGRI	0.044*** (0.010)	0.074*** (0.015)	-0.007 (0.007)	-0.045*** (0.009)	-0.020* (0.010)	-0.015 (0.010)	0.028* (0.014)	-0.027** (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*** (0.005)	-0.035*** (0.005)	-0.061*** (0.005)	-0.063*** (0.006)	0.079*** (0.006)	0.076*** (0.006)	0.057*** (0.005)	0.049*** (0.005)
TGRI	-0.039*** (0.005)	-0.034*** (0.005)	-0.049*** (0.006)	-0.061*** (0.007)	0.086*** (0.006)	0.087*** (0.006)	0.058*** (0.007)	0.062*** (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 C5. 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 survey.

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*** (0.009)	0.037*** (0.008)	0.013** (0.005)	-0.005 (0.006)	-0.002 (0.003)	0.004 (0.003)	0.098*** (0.011)	0.084*** (0.012)
Normative Masculinity		0.022*** (0.005)		0.047*** (0.005)		-0.015*** (0.003)		0.038*** (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*** (0.013)	0.104*** (0.014)	-0.050*** (0.008)	-0.040*** (0.009)	0.071*** (0.005)	0.065*** (0.005)	0.187*** (0.014)	0.184*** (0.015)
Normative Masculinity		0.034** (0.012)		-0.025** (0.010)		0.016*** (0.005)		0.008 (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*** (0.005)	-0.024*** (0.006)	-0.061*** (0.005)	-0.041*** (0.005)	0.079*** (0.006)	0.049*** (0.007)	0.058*** (0.005)	0.034*** (0.006)
Normative Masculinity		-0.043*** (0.006)		-0.053*** (0.004)		0.080*** (0.006)		0.062*** (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 C5. 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 survey.