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Sven Ehmes and Markus Gangl
Goethe University Frankfurt

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We welcome comments and suggestions on this research, please contact the corresponding author for this working paper at:

ehmes@soz.uni-frankfurt.de

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The Paradox of Inequality that isn't: Rising Economic Inequality Depresses and Polarises Citizens' Belief in Meritocracy

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Abstract

This study examines how rising income inequality has been impacting individuals' belief in merit-based success, using three decades of survey data from 39 advanced capitalist democracies. Challenging the seminal finding of a "paradox of inequality," we find no evidence of a positive effect of inequality on meritocratic beliefs across countries. Instead, we identify a substantively moderate but robustly negative effect of inequality on perceptions of meritocracy from within-country changes over time: as inequality rises, citizens' belief in meritocracy declines. We further uncover that inequality does not merely induce a mean shift, but affects the shape of the distribution of meritocracy beliefs insofar as we find the proportion of sceptical perceptions of meritocratic realities to be increasing with higher levels of inequality. Our findings thus suggest that growing inequality undermines citizens' trust in procedural fairness and contributes to an increased polarisation of attitudes and beliefs at the heart of open societies.

Keywords

economic inequality, meritocracy, inequality beliefs, stratification, procedural justice, cross-national comparison

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1. Introduction

Meritocracy – the idea that citizens can attain social status through their own merit and achievements – is understood as a constitutive cornerstone of liberal, open societies (Popper, 1945; Parsons, 1971). When meritocratic principles are guiding individual attainment, a liberal social order offers a promise of procedural fairness that individual talent, skill and effort will be rewarded without undue interference of heritage, tradition or social origin. However, the steep rise in economic inequality many of these liberal societies witnessed over the past decades (Stiglitz, 2013; Piketty, 2014; Atkinson, 2015) poses a fundamental challenge to this normative ideal, as it may distort the pathways through which merit is recognized and rewarded. When growing inequality is contributing to structural barriers that advantage the already privileged, the notion of meritocracy is put in jeopardy. To take educational attainment as an example: as inequality rises, family resources are getting more unequally distributed, thus equipping better-off families with additional resources which they can invest in their offspring's education. In contrast, low-income children are increasingly attending segregated, underfunded public schools and lack opportunities for advancement (Mayer, 2001; Reardon, 2011; Putnam, 2016), which ultimately restricts the level of social mobility.

Against this backdrop, the seminal study of Jonathan Mijs (2021) has garnered significant scholarly attention as it identified a "paradoxical" relationship between economic inequality and individuals' belief in meritocracy. Going against sociological folk wisdom, Mijs (2021) found that inequality and belief in meritocracy empirically go "hand in hand," so that citizens tend to more strongly believe in meritocracy in more economically unequal societies. To explain his findings, Mijs advanced the argument that inequality would tend to socially insulate individuals along economic lines, thus

limiting citizens' everyday interactions with people from different socioeconomic backgrounds and preventing them from fully grasping the extent of inequality in society. As a result, Mijs argued that people would be more likely to interpret societal success and unequal outcomes as meritocratically deserved, thereby reinforcing their belief in meritocracy.

However, the "paradox of inequality" has not gone uncontested. On a theoretical level, the very same segregation mechanism that Mijs (2021) invokes to explain his findings has been at the heart of classical sociological conflict theory – except, as we also discuss below, that increasing social insulation is assumed to foster structuralist beliefs about attainment in that perspective. In addition, recent comparative evidence has also challenged Mijs' (2021) finding on an empirical level by showing that cross-country differences in inequality do not influence individuals' belief in meritocracy. Moreover, recent single-country studies have also found limited support for the supposed "paradox of inequality" at either the regional or local level (Morris et al., 2022; Oetke et al., 2023), even as the segregation mechanism should most evidently be playing out there.

In view of this conflicting evidence, the present study revisits the substantive question of whether or not economic inequality is shaping citizens' belief in meritocracy. We adopt a comprehensive cross-country design by drawing on survey data from three internationally comparable survey programmes. We significantly expand on Mijs' seminal work by incorporating an additional wave of ISSP data and by integrating closely related data from the European and World Value Surveys (EVS/WVS), which ultimately allows us to leverage data from some 175,000 respondents surveyed over an observation window that extends over more than three decades (1989-2022) in 39 advanced capitalist democracies. We analyse this

data with a set of hybrid multilevel linear regression models in order to assess whether and how economic inequality is affecting citizens' perceptions of meritocracy.

Furthermore, we contend that current research may fall short in understanding fully how inequality impacts citizens' beliefs by relying on overall (average) effects of inequality. Drawing on competing theoretical perspectives, we rather anticipate that inequality exerts a heterogeneous effect, i.e. affecting citizens' belief in meritocracy to varying degrees and in varying directions. Employing recently developed hybrid multilevel multiscale ordered logit models, we examine to what extent inequality alters the distribution of beliefs and thus advance the scope of the current debate.

Challenging the "paradox of inequality" (Mijs, 2021), our findings provide robust evidence that rising inequality does erode citizens' faith in meritocracy, thus confirming standard conflict theory as well as aligning with and further corroborating the recent empirical findings provided by Bartram (2023). Like Bartram (2023), we find that changes in inequality over time are associated with decreasing belief in meritocratic allocation, but unlike Bartram, who used a separate item on the perceived legitimacy of wage differentials that is available in the ESS, we observe this "non-paradoxical" relationship between inequality and meritocratic beliefs right for the standard measures of respondents' perception of meritocracy that had also been used in Mijs' original research.

Beyond the general, yet moderate decline in belief in meritocracy, novel modelling techniques allow us to further uncover that inequality significantly alters the shape of the distribution of citizens' meritocratic beliefs. Specifically, we find that inequality is exerting a polarising effect on citizens' beliefs in meritocracy, whereby the spread of the belief distribution increases because the proportion of intensely

sceptical attitudes is growing with rising inequality, whereas there is hardly any systematic effect of inequality in the upper (i.e. meritocracy-supportive) parts of the distribution. This polarisation of meritocratic beliefs is partly reflected in a cross-level interaction between inequality and respondents' social class, yet class or other measures of respondent socioeconomic status are clearly insufficient to fully tap the sources of the polarisation of meritocratic beliefs that we observe in the data. Before we discuss these results more fully, we first provide the theoretical background to our study and then explain our statistical approach and research methodology.

2. Theoretical background: three perspectives on the relationship between inequality and citizens' belief in meritocracy

2.1. Social segregation and the "paradox of inequality"

Rising economic inequality has alarmed social scientists due to its presumedly corrosive impact on the fabric of liberal societies (DiPrete, 2007; Neckerman and Torche, 2007; Wilkinson and Pickett, 2009). Empirical studies have demonstrated how inequality is affecting social mobility (Andrews and Leigh, 2009; Corak, 2013; Bloome, 2015), social cohesion (Uslaner and Brown, 2005; Lancee and Van de Werfhorst, 2012; Schröder and Neumayr, 2023), and democratic orientations (Christmann, 2018; Goubin and Hooghe, 2020; Bienstman et al., 2024), yet relative to the social science evidence, popular concern remains astonishingly subdued (Kenworthy and McCall, 2007; Trump, 2018). One key explanation put forward in the literature is that people perceive inequality as fair and legitimate if outcomes follow a function of meritocratic allocation (Kluegel and Smith, 1981; Reynolds and Xian, 2014; Larsen, 2016; Trump, 2020).

While a growing strand of research has indeed documented that meritocratic beliefs serve as a vital legitimization of inequality, Jonathan Mijs' (2021) seminal finding of a "paradox of inequality" – whereby inequality fuels rather than depresses beliefs in meritocracy – has recently added a novel twist to the literature. To explain why inequality would paradoxically be generating "the social conditions for its legitimization" (Mijs, 2021, p. 12), Mijs has been referring to Allport's (1954) classical intergroup contact theory to argue that economic inequality is socially insulating people along economic fault lines. Then, increasing segregation is leaving people surrounded by people of similar socio-economic backgrounds and is creating an informational feedback loop "where more inequality paradoxically leads them to experience less of it" (Mijs, 2021, p. 31).

The evidence in favour of a "paradox of inequality" has been coming from an analysis of three waves of 1987-2009 ISSP data from 23 countries, where Mijs (2021) finds that people in more unequal societies also believe more strongly in meritocracy, while within-country changes of inequality over time do not show any effect on meritocratic beliefs. This lack of a within-relationship between inequality and meritocratic beliefs may have been a first reason to question the reality of the "paradox of inequality", yet the paradox of inequality has not gone uncontested on other grounds as well. A recent study by Bartram (2023), for example, failed to validate Mijs' (2021) findings. Attempting to replicate Mijs' original analysis, Bartram (2023) finds that original results appear highly sensitive to the selection of countries in the ISSP data, as once the case of Poland – as an extreme outlier with respect to changes in inequality – was dropped from the analysis the results did not hold anymore. Furthermore, Bartram (2023) also failed to replicate the "paradox of inequality" with the European Social Survey (ESS) data, where he found that higher

levels of economic inequality within countries over time actually depress the perceived legitimacy of wage differentials.

Likewise, single country studies that recently investigated the role of economic inequality on meritocratic beliefs at the local and regional level also lend limited support to the paradox of inequality at best. In direct contrast to the “paradox of inequality”, Oetke et al. (2023) identify a negative relationship between district-level segregation and meritocratic beliefs using data from the German Socio-Economic Panel. Moreover, Oetke et al. (2023) found that individuals in districts where high-status households are isolated place less importance on hard work as a means of advancement, so that – in contrast to Mijs’ (2021) segregation perspective – the most privileged individuals those in exclusive, high-status environments do seem aware, at least implicitly, that their advantages are not solely the result of their hard work.

2.2. Relative power theory

An alternative theoretical perspective that better fits with observations like those of Oetke et al. (2023) is relative power theory. This perspective posits that rising inequality is enhancing the power of the wealthy and those in economically powerful positions to shape public discourse and to spread ideological beliefs that are beneficial to them (Goodin and Dryzek, 1980). The disadvantaged in society, in turn, tend to internalize these beliefs – not only to justify the system, but also to self-justify their own position, providing them with the prospect of eventually escaping the feelings of powerlessness (Solt et al., 2016; Morris et al., 2022; McCoy et al., 2013). Meritocratic convictions may be particularly strong during periods of economic growth, as proposed in the ‘tunnel effect’ by Hirschman and Rothschild (1973), when rising inequality is tolerated and trust in meritocratic processes is sustained by the

prospect of future personal economic advancement. This process ultimately also leads to a stronger societal endorsement of meritocratic principles under conditions of high inequality, yet here the effect results because the meritocratic beliefs of less privileged citizens are converging to those of their more privileged compatriots. Evidence in favour of relative power theory comes from Solt et al. (2016), for example, who use the US Religious Landscape Survey to demonstrate that higher levels of county-level inequality are associated with stronger beliefs in meritocracy, and that this association is observed among low- to middle-income respondents only. Morris et al. (2022) report comparable findings for the UK: Using data from the British Household Panel Study, they show that low-income individuals in more unequal localities are more inclined to be embrace meritocracy, reaching endorsement levels similar to those of high-income individuals.

2.3. Conflict perspectives

Relative to Mijs' segregation perspective and to relative power theory that both imply the expectation that higher levels of inequality will be accompanied by more meritocratic beliefs in the citizenry, sociological conflict perspectives have traditionally implied the opposite relationship. From a conflict perspective, inequality exposes less resourceful citizens to structural barriers – such as limited access to education or resourceful neighbourhoods – that prevent them from climbing up the social ladder despite their best efforts. As their lived experiences increasingly contradict the idea of meritocracy, they are likely to grow sceptical of the belief that success is based solely on individual effort and talent, and instead consider structural factors more important, such as coming from a wealthy family (McCall et al., 2017; Zhu et al., 2022). Consequently, studies like Kang and Park (2024) show that individuals who are living in more unequal districts tend to be more pessimistic

about their prospects for advancing their socioeconomic status through hard work, and that this association is especially strong among economically disadvantaged individuals. With a view towards social psychological processes, social identity theories have also argued that lack of socioeconomic success is posing a threat to individuals' self-esteem, so that citizens at the lower end of the income distribution would be psychologically predisposed to use structuralist attributions to shield themselves from self-stigmatization (e.g. Roex et al., 2019).

However, scholars in the conflict tradition not only highlight these personal contradictions, but also argue that rising inequality is making economic disparities more salient, and may thus be triggering higher levels of class consciousness (in the Marxian sense of 'class for itself') (Newman et al., 2015). As a result, people become more aware of their own position within society and evaluate their position more critically in relation to the positions of others. Inequality, therefore, may lead disadvantaged individuals to rationalize their own position by attributing it to factors outside of their control, and to lose faith in meritocracy ('activated disillusionment', Newman et al., 2015, p. 329). Conversely, well-off individuals are expected to be more inclined to embrace the concept of meritocracy, as they may use it to justify and preserve their privileged position and to reduce cognitive dissonance caused by the high levels of inequality and poverty they encounter in their everyday lives ('activated loyalty') (Newman et al., 2015, p. 330). In line with these arguments, Newman et al. (2015) find that meritocratic beliefs are significantly stratified by income among U.S. respondents residing in unequal counties, compared to those in more egalitarian counties, with low-income individuals being more inclined to reject and high-income individuals more likely to endorse meritocracy.

2.4. Hypotheses

At the risk of some oversimplification, we believe that it is possible to distil three characteristic predictions to summarize the main theoretical argument about the relationship between economic inequality and citizens' perceptions of meritocracy from each of the foregoing perspectives. Conceptually and empirically, we distinguish between main effects and dispersion effects. The former refer to shifts in the overall belief distribution, while the latter imply changes in the shape of the belief distribution.

The segregation mechanism put forward by Mijs (2021, also see Mijs & Usmani 2024) predicts an overall positive effect of rising inequality on meritocratic beliefs. This effect arises because individuals lack social interaction with those from different socio-economic backgrounds, leading them into experiential feedback loops that make them more inclined to legitimize unequal outcomes as meritocratically deserved, rather than question their structural causes. Theoretically, the mechanism could operate either symmetrically or asymmetrically. On the one hand, the original study argues that individuals at both ends of the income distribution fail to grasp "the structural forces that make for inequality because they are increasingly unable to see it from their (isolated) position" (Mijs, 2021, p. 12) and thus tend to seek individualist explanations for socio-economic achievement (and see Mijs & Usmani 2024 for a formal model of the respective inferential processes). This claim finds some support by research on social capital that identifies a U-shaped relationship between class position and network homogeneity, indicating that individuals at both the lowest and highest social strata tend to have the most closed social networks (Otero et al., 2021). Such a symmetric effect would imply the absence of a dispersion effect of inequality and only result in an upward shift of the mean.

On the other hand, it seems at least equally plausible that segregation disproportionately narrows the perspective and awareness of privileged individuals, who become increasingly insulated from the harsh realities in the lower rungs of society. Those at the top may thus become less sensitive to structural forces of inequality and overly overoptimistic about the role of merit and personal agency in achieving societal success (Edmiston, 2018). Those at the bottom, however, despite similarly closed and homogeneous networks, are still on an everyday basis exposed to the different lifestyles and living circumstances of the privileged members of society – whether it is through direct social interactions in workplace or educational settings, healthcare institutions or indirectly via representations in the media. This form of asymmetric effect in our reading implies the presence of a polarizing dispersion effect of inequality, that is mainly driven by citizens at the top of the social hierarchy. The positive overall association would then mainly come about because inequality is making privileged citizens overly optimistic about meritocratic realities.

Relative power theory likewise predicts a positive association between inequality and beliefs in meritocracy, but sees the main mechanism being the internalisation of meritocratic beliefs among the disadvantaged, i.e. is offering the argument that the less privileged members of society are converging towards the views held by the more privileged strata under conditions of high inequality (e.g. Goodin and Dryzek, 1980; Solt et al., 2016; Morris et al., 2022). Sociological conflict perspectives instead generally predict that high levels of inequality will depress citizens' belief in meritocracy, and they primarily see increasingly structuralist attributions in the lower strata as the main culprit (e.g. Newman et al., 2015; McCall et al., 2017; Zhu et al., 2022).

We summarize these distinctive theoretical expectations in Table 1, and we now use these contrasting perspectives to guide our subsequent empirical analysis.

[INSERT TABLE 1 HERE]

3. Methodology and research design

3.1. Data

To assess these theoretical expectations empirically, we draw on individual-level survey data from three well-established cross-national survey programmes: the International Social Survey Programme (ISSP), the European Values Study (EVS), and the World Values Survey (WVS). From these data sources, we construct a harmonized database, consisting of four waves of ISSP (1989, 1992, 2009, 2019) (ISSP Research Group, 2024), one wave of the EVS (1990) (EVS, 2022), and five waves of the WVS (1989-1993, 1994-1998, 2005-2009, 2010-2014, 2017-2022) (Haerpfer et al., 2024). We complement this data with country-level information on macroeconomic conditions obtained from the Standardized World Income Inequality Database (Solt, 2020) and the World Development Indicators (The World Bank, 2024). Since our study focuses on advanced capitalist democracies, our country sample is comprised of 39 OECD and OECD candidate countries.[1] In total, our data encompasses over 175,000 individuals across 39 advanced capitalist democracies, spanning an observation window of more than three decades (1989-2022).

In the endeavour to identify the effect of economic inequality on meritocratic beliefs over appropriately expansive observation periods, our harmonization effort

[1] Our analysis includes the following set of our countries: Argentina, Australia, Austria, Brazil, Bulgaria, Canada, Chile, Colombia, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Iceland, Israel, Italy, Japan, Latvia, Lithuania, Mexico, Netherlands, New Zealand, Norway, Peru, Poland, Portugal, Romania, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States (see Table A2).

prioritized preserving as many historical data points across countries as possible, while maintaining consistent data quality. Although this harmonization approach naturally required certain compromises in the operationalization of variables over time across three surveys, we are confident that our final dataset offers the most comprehensive data basis to adequately evaluate the impact of economic inequality on meritocratic beliefs available to date, allowing us to leverage both significant cross-national and cross-temporal variation within countries over time. Given that we intend to primarily rely on over-time variation in inequality and meritocracy beliefs and on estimating multilevel regression models that incorporate country fixed effects, we restrict our analyses to those countries that have at least participated in two rounds of the ISSP or EVS/WVS surveys.

3.2. Variables

Dependent variable: Belief in meritocracy

Meritocratic beliefs are measured with two different variables coming from the ISSP and the EVS/WVS. The first variable is derived from three items from the ISSP's item battery "Getting ahead". Respondents were asked to rank the importance of several factors to get ahead in life from "Essential" to "Not important at all". For the belief in meritocracy, an index was calculated that captures respondents' importance of "hard work" to get ahead, ranging from 0 (not important at all) to 100 (essential), following the approach used in previous literature (cf. Larsen, 2016).

Likewise, for the belief in structural inequalities, an index was constructed that grasps the importance respondents attributed to "coming from a wealthy family" and "knowing the right people," ranging from 0 to 100 as well. Acknowledging the ongoing debate about the multidimensionality of meritocratic beliefs (Mijs, 2021; Castillo et al., 2023), our final analyses rely on an measure of overall belief in

meritocracy as suggested by Reynolds and Xian (2014). This composite measure calculates the difference between the two constructed indices, resulting in a range from 0 (low belief in meritocratic and high belief in non-meritocratic elements) to 100 (high belief in meritocratic and low belief in non-meritocratic elements). Substantively, we argue that a strong or 'pure' belief in meritocracy involves, at least to a certain extent, rejecting the primary importance of non-meritocratic factors to determine success in life. By incorporating the relative weight respondents assign to both hard work and structural factors, the composite measure provides a more analytically rich scale – in particular, when examining how changing structural conditions shape individuals' beliefs about success in society.[2]

The second variable to measure meritocratic beliefs is derived from the EVS/WVS item. Our measure is based on a question asking respondents to position themselves on a 10-point scale, with opposing statements at each end. One end has "In the long run, hard work usually brings a better life" (1), and the other end states "Hard work doesn't generally bring success –it's more a matter of luck and connections" (10). We reversed the scale so that higher values indicate a stronger belief in meritocracy. While the ISSP- and EVS/WVS-based rating scales differ from each other, we do not aim to harmonize both measures, but will instead rely on a newly developed modelling technique to account for these differences in rating scale formats (for further elaborations, see below).

Independent variables: Macro-economic conditions

[2] As a robustness check, we conducted analyses using each indicator separately as dependent variable. The results document that inequality affects both dimensions in the exact same direction; the effect is merely about twice as large in magnitude for believing in structural inequality, implying that rising inequality erodes meritocratic beliefs by diminishing the perceived role of individual achievements and effort and, even more importantly, by increasing the perceived importance of structural forces for success.

Our primary independent variable of interest is the level of economic inequality in a country and at a particular point in time. We measure income inequality as the Gini coefficient of household disposable (post-tax post-transfer) incomes, and we draw on the estimates as provided by the Standardized World Income Inequality Database (Solt, 2020).

We additionally control for economic prosperity at the macro level of countries and time points, where we use the inflation-adjusted Gross Domestic Product (GDP) per capita in US Dollars as derived from the World Development Indicators (The World Bank, 2024). In the interest of interpretation, we transformed the indicator to a base-2 logarithmic scale, so that each one-unit change in the variable is corresponding to a doubling of real GDP per capita.

Independent variables: Socio-economic and demographic controls

At the individual level, we capture respondents' socio-economic position based on their levels of education and their social class. Education was harmonized into five levels of education based on the ISCED classification scheme and, where not available, an approximation using respondents' years of education. As for social class, we utilize information on respondent's current or last occupation and job to create a harmonized class measure distinguishing between five class locations that broadly align with the well-known EGP class scheme of Erikson and Goldthorpe (1992). In our analyses, we incorporate centered and linearized versions of the variables in the model. In addition, we control for respondents' sex, birth cohort, and employment status. Table A1 provides full descriptive statistics for the analytic sample of the present study.

3.3. Analytical strategy

Leveraging the time series cross-sectional structure of our data, we implement a three-step strategy to infer the association between economic inequality and citizens' belief in meritocracy. First, we apply the random-effects within-between multilevel (REWB) estimator (Fairbrother, 2014) separately to the ISSP and EVS/WVS samples. This approach allows us to differentiate the effects of between-country differences in inequality levels on meritocratic beliefs from the impact of within-country inequality dynamics over time. By isolating these within-country changes from between-country differences in inequality, by primarily basing our inferences on the former, and by additionally incorporating period fixed effects (FEs) to account for any secular changes in meritocracy beliefs that may have occurred in all countries, we aim to minimize the risk of omitted variable bias, which otherwise complicates causal inference in cross-sectional analyses (Gangl, 2010; Morgan and Winship, 2014). Taking the concern about omitted variable bias one step further, we then estimate hybrid multilevel regression models with country fixed effects and fixed slopes (cFES) (Giesselmann and Schmidt-Catran, 2019), whereby we eliminate all time-invariant country-specific characteristics that might confound the relationship between inequality and beliefs in meritocracy, and whereby we ultimately rely on the longitudinal component of our data only.

After having estimated the REWB and cFES multilevel models separately for both original data sources, we apply a recently developed modelling technique that allows to pool our data across the ISSP and EVS/WVS sources despite differences in the response format of our dependent variable.

The so-called multiscale ordered logit model (Gangl, 2025) extends the standard ordered logit model by including multiple sets of scale location points and

by thus allowing to estimate response format-specific cut-off points and a common substantive regression model for the pooled survey data. As such, the multiscale ordered logit (mscologit) model is particularly suitable for studying the impact of inequality on meritocratic beliefs in the present context, as pooling the survey data allows us to significantly extend our analytical leverage by maximizing the geographical and historical scope of our database. In the course of pooling ISSP and EVS/WVS data together, we adjusted the hierarchical multilevel structure so that country-years that are represented in both surveys will be treated as independent samples from the same historical context. This approach was adopted in order to account for country-survey-year peculiarities, e.g. related to survey question or sampling specificities.

Finally, as third step of our approach, we take full advantage of the statistical flexibility of the mscologit model. As a generalised ordered logit model, the mscologit model permits to relax the parallel regression assumption and thus to assess whether model parameters are constant over the entire outcome distribution or whether individuals from one part of the outcome distribution are differently affected by a covariate than individuals from other parts of the distribution. A conceptually different but formally equivalent perspective is that evidence of effect heterogeneity provides an indication that some particular covariate is generating not just an upward or downward shift in the outcome variable, but is altering the spread and overall shape of the distribution of meritocracy beliefs among citizens. In our heterogeneity analysis, we will specifically examine variation in regression parameters between the lowest quartile, the second quartile and the upper half of the distribution of meritocracy beliefs. The separation of the outcome distribution into three distinctive parts corresponds to the maximum level of heterogeneity that is currently allowed for

in the mscologit Stata ado that we utilised to estimate the model, and we used a range of explorative analyses to determine the concrete cutoff points that best reflect the empirical patterns of effect heterogeneity among the two macro covariates of inequality and prosperity under this constraint.

4. Results

4.1. Does economic inequality erode meritocratic beliefs?

We present the main results from our multilevel models in Table 1 (and see Tables A2 and A3 for full results). Models M1 (ISSP data) and M4 (EVS/WVS data) show the baseline estimates for the effect of inequality, depending on the data source used. The first notable finding is the lack of support for the well-known "paradox of inequality". Unlike Mijs (2021), we do not observe a positive between-effect of inequality in either the ISSP or the EVS/WVS data, which is striking given that Mijs himself identified this effect using ISSP data from 1989 to 2009. Instead of a between-effect, however, we find a negative within-effect of inequality over time. According to our estimates, each one-point increase in the Gini coefficient is associated with a decrease in respondents' belief in meritocracy by a modest -0.344 points ($p<0.1$) on the 100-point scale of the ISSP data, and by -0.055 points ($p<0.05$) on the 10-point scale of the EVS/WVS.

In Models M2 and M5, we then control for economic prosperity to account for potential confounding effects on the relationship between inequality and meritocratic beliefs. These models also account for compositional differences by including individual-level socio-economic and socio-demographic controls. The estimates for the between-country differences in inequality and the within-country differences of inequality over time are hardly affected, all else being equal, not the least because

GDP per capita is hardly showing any robust association with respondents' meritocratic beliefs in our data.

[INSERT TABLE 2 HERE]

In the final model specification (Models M3 and M6), we eliminate all observed or unobserved time-invariant country differences by introducing country fixed effects. To obtain a genuine within estimator of inequality, these models furthermore account for country-specific effects heterogeneity of socio-economic factors (i.e. social class and education), also known as country fixed effects and slopes (cFES) model (Giesselmann and Schmidt-Catran, 2019). Nevertheless, our within estimates remain robust – and, if anything, become even stronger - after applying the most rigorous model specification with the available data. Rising inequality decreases individuals' belief in meritocracy by

-0.443 points ($p<0.001$) on 100-point scale using the ISSP and by -0.053 points ($p<0.05$) on a 10-point scale using the EVS/WVS data, respectively. While these effects are certainly rather moderate in magnitude, one should take into account that we are describing a sociotropic effect of changing income distribution on the average individuals' belief in meritocracy and holding constant individual socioeconomic status. When predicting the change in meritocratic beliefs across the range of changes in the Gini coefficient as seen in many countries over the past three and a half decades (where a change of +5 points corresponds to experiences of Sweden and the US, for example), Figure 1 illustrates that the implications are substantively relevant after all.

[INSERT FIGURE 1 HERE]

4.2. Beyond the mean: Heterogeneous responses to rising inequality

This main result is also confirmed when we pool the ISSP and EVS/WVS data and use the mscologit model to estimate a common regression model to predict respondents' meritocratic beliefs, even when the raw data has been collected in different rating question formats. Like in the separate models of Table 2, the estimates from the multiscale ordered logit model confirm that rising economic inequality is exerting a moderately negative effect on meritocracy beliefs (see Model M1 in Table 3), except that we are now able to leverage the full potential of our survey data from 39 countries, 183 country-survey-rounds, and more than 175,000 respondents. As with any logit model, the parameter estimate of β=-0.035 ($p<0.05$) expresses the logarithmic odds of respondents crossing any of the rating scale thresholds when characterising their belief in meritocracy and thus indicates that respondents become increasingly less likely to provide positive answers when inequality is rising within any country in the sample. We will also visualize the implied magnitude of the effect estimate when discussing the evidence from an mscologit model with heterogeneous effects in the next step, but it is worth mentioning that the parameter estimates that we report here and below all result from cFES model specifications, i.e. all continue the setup of models M3 and M6 in Table 1 and thus account for country- and period FEs as well as country-specific effects of respondents' SES on meritocratic beliefs.

[INSERT TABLE 3 HERE]

In addition to a standard regression model that is representing the association between covariates and outcome variables in form of a mean shift in the location of the outcome distribution, we can utilize the mscologit model to address whether the

effect of inequality is affecting the shape of the outcome distribution and whether citizens in different parts of the distribution of meritocracy beliefs are responding in different ways to rising inequality. Model M2 of Table 2 provides the corresponding estimates from a cFES mscologit model that allows for separate effect parameters in the lower quartile, the second quartile, and in the upper half of the outcome distribution, respectively. Empirically, we observe that the negative effect of inequality on meritocracy beliefs in meritocracy is most pronounced in the lower half of the distribution, i.e. among citizens who are already predisposed to view social success as determined by structural inequalities or luck. Notably, the effect of inequality is clearly negative in the lower half of the distribution (with β=-0.055, $p<0.001$ in the lowest quartile, β=-0.043, $p<0.01$ in the second quartile, and the difference in parameter estimates not being statistically significant between the first two quartiles), but not statistically significantly different from zero in the upper half of the outcome distribution (with β=-0.016, $p>0.1$, and the parameter difference of $\Delta\beta$=-0.028 between the second quartile and the upper half being statistically significant at $p<0.01$). As a result, rising inequality is contributing to a polarisation of meritocratic beliefs because inequality is specifically increasing the proportion of structuralist attitudes in the citizenry. From a theoretical point of view, this type of dispersion effect effectively corresponds to the expectations of sociological conflict perspectives – that rising inequality is primarily affecting the lower half of the belief distribution, and is inciting (more) doubts about meritocratic realities. In contrast, this evidence challenges theoretical expectations of both segregation theory and relative power theory which predict either patterns of polarization driven form the top or patterns of convergence driven from the bottom.

Interestingly, although it is beyond the scope of our present paper to provide any deeper discussion on this observation, model M2 indicates that standard regression specifications are masking important heterogeneity with respect to the effect of economic prosperity as well. Specifically, the null effects that we obtained in Table 2 and model M1 of Table 2 are concealing an important divergence in how rising prosperity is affecting meritocracy beliefs, insofar as evidently positive effects of rising prosperity in the lowest quartile of meritocracy beliefs (at $\beta=0.260$, $p<0.05$) are being offset by, tentatively, a negative effect in the upper half of the distribution (at $\beta=-0.198$, but $p>0.1$). These results offer some indication of a 'tunnel effect' (Hirschman and Rothschild, 1973) that might be at work, whereby rising prosperity fosters optimism about meritocracy, even amid increasing inequality.

To provide a graphical illustration of the effect of inequality, Figure 2 contrasts two predicted outcome distributions, each based on the heterogeneous effects model M2 and each done separately for the ISSP and EVS/WVS response scales: (1) a baseline distribution where all coefficients are set to zero (i.e. the centered mean) and (2) a counterfactual distribution that results from simulating the effect of a five-point increase in the Gini coefficient. Figure 2 clearly visualizes that rising inequality leads to a polarisation of meritocratic beliefs from below. This dispersion effect is most clearly visible in the ISSP scale, which exhibits greater variance than the EVS/WVS one and which thus provided a somewhat more nuanced depiction of how rising inequality alters the shape of the distribution – particularly through a widening spread of the distribution in its lower half.[3]

[3] In a robustness check on our results, we have also estimated the heterogeneous mscologit model separately for the ISSP and the EVS/WVS samples. This additional analysis indicates that our findings on attitudinal polarization are primarily driven by patterns in the EVS/WVS sample, whereas the effects of both economic inequality and GDP/capita appear largely homogeneous across the full outcome distribution in the ISSP data. In our view, these results suggest that effect heterogeneity is sensitive to the survey measurement. More specifically, the measurement in the ISSP data allows for

[INSERT FIGURE 2 HERE]

As a final step of the analysis, we assess whether the polarisation of meritocratic beliefs that is evident in Figure 2 is being channelled via a socio-economic polarisation of meritocratic beliefs. To this end, we run a final mscologit model that is incorporating effect heterogeneity and cross-level interactions between respondents' socio-economic positions, namely their social class and level of education, and our two macro covariates of inequality and economic prosperity. According to Model M3 of Table 4, we do find robust, albeit moderately-sized, evidence in favour of a cross-level interaction between inequality and respondents' social class, but we do not observe a similar pattern for respondents' education. Accounting for these cross-level interactions is mediating the heterogeneous effect of inequality (i.e. lowering coefficient estimates) to some small extent, yet it seems evident that the channel via individuals' socioeconomically stratified responses to rising inequality is not the primary driver for the observed polarization of meritocratic beliefs.

[INSERT TABLE 4 HERE]

5. Conclusions

By leveraging three decades of comparative survey data from 39 advanced capitalist economies, we investigated how changes in income inequality influence citizens' beliefs about the role of merit in achievement and success in society.

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more ambiguity in beliefs as individuals can hold beliefs in both meritocratic and non-meritocratic forces of inequality at the same time. In the EVS/WVS, however, individuals are confronted with a trade-off between the significance of non-meritocratic and meritocratic elements, thereby compelling them to position themselves or at least to lean towards one direction. As we read our results, it appears that inequality is particularly unfolding a heterogeneous impact once individuals are facing such a trade-off as they seem more inclined to reassess and adjust their beliefs. We are grateful to one of the anonymous SER reviewers for suggesting this supplementary analysis.

Challenging the seminal finding of an apparent “paradox of inequality” from Mijs (2021), we do not find an effect of inequality at the between-country level in our data at all. Instead, our empirical analysis reveals robust evidence of a substantively moderate, but clearly negative effect from the within-country component of variation in economic inequality. That is, as inequality is rising within a country over time, citizens tend to lose faith in meritocracy to a certain degree, in fact independently of their personal socio-economic standing. As our multilevel regression models account for respondents’ socio-demographic characteristics when estimating the association between macro level inequality and citizens’ beliefs in meritocracy, our analyses confirm a sociotropic effect of changes in inequality on changing beliefs in meritocracy that cannot be reduced to an effect of individual socio-economic positions. In addition, we observe that this negative effect of changes in inequality is not uniform across the distribution of citizens’ beliefs in meritocracy, but is occurring mainly in its lower part. Rising inequality in other words is contributing to an increasing polarisation in citizens’ perceptions of meritocratic realities, because the proportion of citizens who hold deeply sceptical perceptions of meritocracy is growing at the same time while the share of citizens who are holding fundamentally positive views about the state of meritocracy in their society is essentially unaffected by changes in inequality.

With these empirical observations, our study ends up striking the middle ground between sharply opposing perspectives that have characterised the study of material inequality and meritocratic beliefs in recent years. As we fail to find evidence for a positive effect of inequality on citizens’ belief in meritocracy, we cannot confirm any counterintuitive association that then would require new theoretical propositions to explain any apparent paradox in the next step. Without evidence for a positive

association between inequality and belief in meritocracy, however, our analysis fails to support the segregation mechanism introduced by Mijs (2021) as well as the power resources model advanced by Solt et al. (2016), which have both been put forward to account for “paradoxical” effects of inequality observed in their research. Instead, our evidence that rising inequality is depressing citizens’ belief in meritocracy principally aligns with sociology’s traditional conflict theory perspective as well as with public discourse around contributions like those of Wilkinson and Pickett (2009) or Savage (2021) that identify rising economic inequality as a main cause of social ills. Relative to such generalist perspectives, however, our analysis sides with empirical studies like those of McCall et al. (2017) and Kang and Park (2024) that find negative, but substantively moderate effects of inequality on citizens’ belief in meritocracy. Rising inequality thus weakens belief in meritocracy, but equally clearly, even the significant increases in inequality as observed in many affluent economies over the past three decades have not fundamentally undermined citizens’ convictions that individual skills and effort get rewarded in their societies.

One factor in this surely is that in response to rising inequality, we observe a polarisation of citizens’ beliefs that is driven from below. Especially in the EVS/WVS surveys, where the question format forces respondents to place themselves on a unidimensional scale, we find that citizens’ beliefs in the upper half of the distribution remain largely unaltered from changes in inequality, whereas rising inequality is having a more pronounced impact in the bottom part of the belief distribution. Rising inequality in other words tends to deepen meritocratic scepticism among those citizens who are already holding more structuralist beliefs than the average citizen. This pattern principally accords with the predictions from a conflict perspective, but on a more critical note, we also need to acknowledge that the polarisation of

meritocratic beliefs that we observe in the data does not appear to align particularly well with a conflict perspective insofar as attitudinal polarisation does not primarily seem to follow socio-economic fault lines. As one among several SES dimensions tested, respondents' social class position alone to some limited extent taps into the polarisation of meritocratic beliefs, but other measures entirely fail to yield evidence for a cross-level interaction effect with inequality. Judged from these empirical patterns, it seems doubtful that, as would be predicted from a conflict perspective, socioeconomic polarisation between privileged and disadvantaged members of society really is the major axis of attitudinal polarisation in the wake of rising inequality, at least as far as citizens' belief in meritocracy is being concerned.

As a matter of fact, understanding the precise nature of polarisation in meritocratic beliefs is certainly not the only aspect of the relationship between inequality and perceptions of meritocracy where further research seems required to disentangle alternative theoretical explanations, if not plain empirical facts. As one example, more detailed data are necessary to better capture relevant processes of belief formation, and to decide whether the root cause behind the negative effect of rising inequality on citizens' belief in meritocracy that we observe may be experiential in nature, i.e. may be reflecting the changing quality of citizens' social interactions and inferences in more or less stratified societies (e.g. Mijs, 2018; Mijs and Usmani, 2024), or whether rising inequality may be activating citizens' class consciousness as argued by Newman et al. (2015). Going beyond our specific findings, however, one cannot fail to notice that the whole area of research is characterised by rather wide variation in key findings, even across high-quality studies. To try and reconcile the discrepant results from the literature, one promising approach could be to explore systematic effect heterogeneity across time and place. If rising inequality

may trigger not just one, but potentially several plausible and complementary processes of belief formation – like those described under the three theoretical perspectives we have been contrasting in the present paper – variation in findings may result from variation in what may have been the dominant psychological or structural response to high levels of inequality under different institutional or historical settings. Our own study has reported empirical estimates of what clearly amounts to the average effect of inequality on meritocratic beliefs across a fairly broad sample of countries and across a fairly extensive observation window of more than three decades of historical data, and further insight might be generated by exploring more systematically whether and under what conditions – e.g. in single-country studies based on U.S. data versus more comprehensive cross-country studies – one may observe sign reversals or changes in the magnitude of inequality effects relative to the results that we report. A second consideration to account for the variability of findings in the literature might be that different studies may (implicitly perhaps) be defining different target estimands (see Lundberg et al., 2021), and that it is the variation in inferential targets rather than any technical or sample issues that is being reflected in the diversity of findings reported in the current literature. Along this train of thought, one could read some recent evidence (reference omitted during double-blind peer review) to suggest that the discrepancy of findings between the otherwise very similar studies of Mijs (2021) and our present work may be due to overcontrolling bias in Mijs (2021), which results in Mijs (2021) focusing on the effect of inequality on beliefs while keeping individual mobility experiences constant, whereas we conceive of them as part of treatment. Likewise, the discrepancy between the findings from some U.S. and British research using local inequality measures and studies like ours that has relied on national inequality measures may

reflect important substantive differences in the informational content of either type of experiential context, where local inequality may spur meritocratic beliefs because socioeconomically integrated environments are known to provide conditions to foster upward mobility, presumably via exposing lower-background individuals to local examples of socioeconomic success (see Chetty et al., 2022), whereas national-level inequality may be more likely to capture a broader set of processes from the effects of factual residential segregation to the impact of socioeconomic reference standards conveyed through local observation as well as through exposure to national media sources that all may affect how citizens construe and perceive meritocratic realities.

All that being said, we also believe that a quite general caveat on our work is in order. Throughout this paper, we have deliberately and quite consciously utilized a terminology of effects of inequality on citizens' meritocracy beliefs. We have done so both because we are convinced that the terminologies that we employ as researchers need to conceptually correspond to the inferential goals that we pursue, and because we are convinced that our empirical approach is capable to at least suggest a causal reading of our evidence and to provide useful empirical estimates to approximate the likely magnitude and direction of the effect in question. Defending this reading of our study in principle should not be equated with the claim that all the well-known threats in inferring causality from non-experimental research designs could have been countered in our work. Among these, two concerns are likely to stand out: First, despite aiming to isolate the causal effect of inequality on citizens' meritocratic beliefs, our study had to rely on repeated cross-sectional data provided by the ISSP and WVS/EVS surveys. Our analysis does speak to attitudinal changes being associated with changes in inequality, but as we are unable to directly observe

attitudinal changes at the individual level, we cannot with full certainty discriminate between actual changes in individual perceptions or group-level changes – e.g. generational replacement – as the source of the empirical association we observe. Likewise, while we think that a causal reading of our evidence is principally defensible, we readily acknowledge that inequality is a causally more opaque factor than the specific intervention at the heart of any randomized experiment. As a contextual condition at the macro level of whole societies, inequality clearly does not correspond to any singular and well-defined treatment, but is in fact the aggregate result of a multitude of processes in the labour market, within families, and in the political domain. Our own research as well as other studies in the area could definitely benefit from efforts to identify which particular sources of inequality – i.e. changes in labour markets, changes in the structure of families, or changes in public policies – may be responsible for changes in citizens' perceptions of meritocratic realities, and from additional attempts to ascertain the robustness of our findings against variations in our research design and modelling decisions. Once again, further research seems required.

References

Allport, G. W. (1954) *The Nature of Prejudice*, Reading, MA, Addison-Wesley.

Andrews, D. and Leigh, A. (2009) 'More Inequality, Less Social Mobility', *Applied Economics Letters*, **16**, 1489–1492.

Atkinson, A. B. (2015) *Inequality: What Can Be Done?*, Cambridge, Massachusetts, Harvard University Press.

Bartram, D. (2023) 'Does Belief in Meritocracy Increase with Inequality? A Reconsideration for European Countries', *The British Journal of Sociology*, **74**, 763–780.

Bienstman, S., Hense, S. and Gangl, M. (2024) 'Explaining the "Democratic Malaise" in Unequal Societies: Inequality, External Efficacy and Political Trust', *European Journal of Political Research*, **63**, 172–191.

Bloome, D. (2015) 'Income Inequality and Intergenerational Income Mobility in the United States', *Social Forces*, **93**, 1047–1080.

Castillo, J. C., Iturra, J., Maldonado, L., Atria, J. and Meneses, F. (2023) 'A Multidimensional Approach for Measuring Meritocratic Beliefs: Advantages, Limitations and Alternatives to the ISSP Social Inequality Survey', *International Journal of Sociology*, **53**, 448–472.

Chetty, R., Jackson, M. O., Kuchler, T., Stroebel, J., Hendren, N., Fluegge, R. B., Gong, S., Gonzalez, F., Grondin, A., Jacob, M., Johnston, D., Koenen, M., Laguna-Muggenburg, E., Mudekereza, F., Rutter, T., Thor, N., Townsend, W., Zhang, R., Bailey, M., Barberá, P., Bhole, M. and Wernerfelt, N. (2022) 'Social Capital I: Measurement and Associations with Economic Mobility', *Nature*, **608**, 108–121.

Christmann, P. (2018) 'Economic Performance, Quality of Democracy and Satisfaction with Democracy', *Electoral Studies*, **53**, 79–89.

Corak, M. (2013) 'Income Inequality, Equality of Opportunity, and Intergenerational Mobility', *Journal of Economic Perspectives*, **27**, 79–102.

DiPrete, T. A. (2007) 'What Has Sociology to Contribute to the Study of Inequality Trends? A Historical and Comparative Perspective', *American Behavioral Scientist*, **50**, 603–618.

Edmiston, D. (2018) 'The Poor "Sociological Imagination" of the Rich: Explaining Attitudinal Divergence towards Welfare, Inequality, and Redistribution', *Social Policy & Administration*, **52**, 983–997.

Erikson, R. and Goldthorpe, J. H. (1992) *The Constant Flux: A Study of Class Mobility in Industrial Societies*, Oxford, Clarendon Press.

EVS (2022) 'EVS Trend File 1981-2017'.

Fairbrother, M. (2014) 'Two Multilevel Modeling Techniques for Analyzing Comparative Longitudinal Survey Datasets', *Political Science Research and Methods*, **2**, 119–140.

Gangl, M. (2010) 'Causal Inference in Sociological Research', *Annual Review of Sociology*, **36**, 21–47.

Gangl, M. (2025) 'A Generalized Ordered Logit Model to Accommodate Multiple Rating Scales', *Sociological Methods & Research*, **51**, 315–350.

Giesselmann, M. and Schmidt-Catran, A. W. (2019) 'Getting the Within Estimator of Cross-Level Interactions in Multilevel Models with Pooled Cross-Sections: Why Country Dummies (Sometimes) Do Not Do the Job', *Sociological Methodology*, **49**, 190–219.

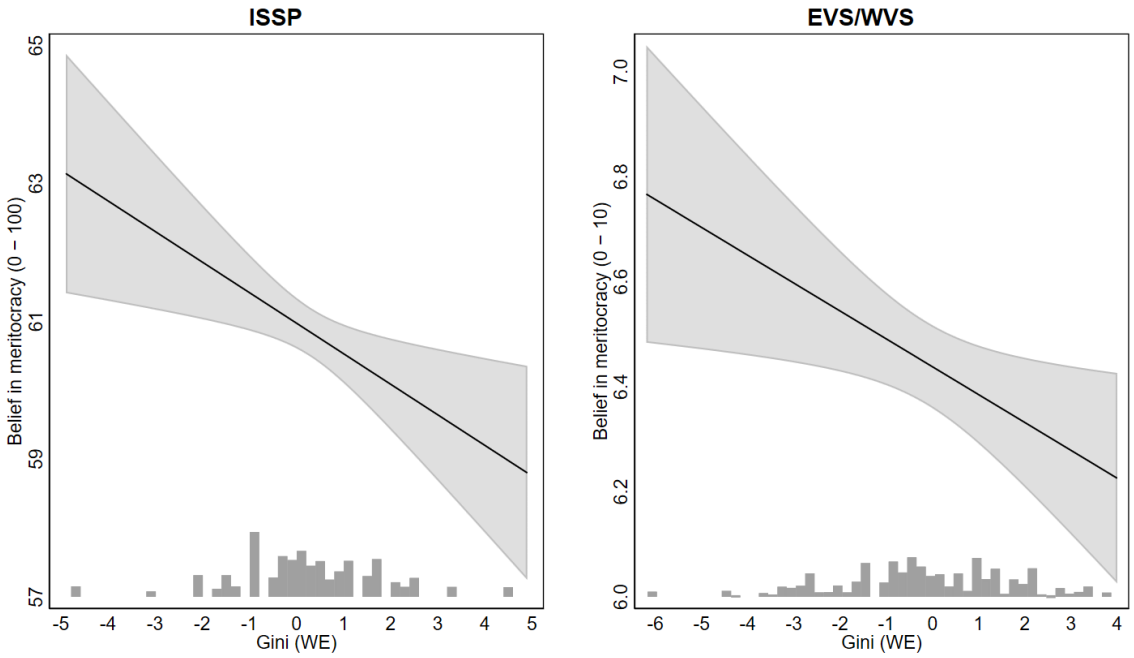
Goodin, R. and Dryzek, J. (1980) ‘Rational Participation: The Politics of Relative Power’, *British Journal of Political Science*, **10**, 273–292.
Goubin, S. and Hooghe, M. (2020) ‘The Effect of Inequality on the Relation Between Socioeconomic Stratification and Political Trust in Europe’, *Social Justice Research*, **33**, 219–247.
Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., Lagos, M., Norris, P., Ponarin, E. and Puranen, B. (2024) ‘World Values Survey (1981-2022). Trend File’.
Hirschman, A. O. and Rothschild, M. (1973) ‘The Changing Tolerance for Income Inequality in the Course of Economic Development*: With A Mathematical Appendix’, *The Quarterly Journal of Economics*, **87**, 544–566.
ISSP Research Group (2024) ‘International Social Survey Programme: Social Inequality I-V Cumulation’.
Kang, W. C. and Park, S. (2024) ‘Stuck in an Unequal Society: Wealth Inequality and Pessimistic Prospects on Future Social Mobility in South Korea’, *Social Forces*, **103**, 475–494.
Kenworthy, L. and McCall, L. (2007) ‘Inequality, Public Opinion and Redistribution’, *Socio-Economic Review*, **6**, 35–68.
Kluegel, J. R. and Smith, E. R. (1981) ‘Beliefs about Stratification’, *Annual Review of Sociology*, **7**, 29–56.
Lancee, B. and Van de Werfhorst, H. G. (2012) ‘Income Inequality and Participation: A Comparison of 24 European Countries’, *Social Science Research*, **41**, 1166–1178.
Larsen, C. A. (2016) ‘How Three Narratives of Modernity Justify Economic Inequality’, *Acta Sociologica*, **59**, 93–111.
Lundberg, I., Johnson, R. and Stewart, B. M. (2021) ‘What Is Your Estimand? Defining the Target Quantity Connects Statistical Evidence to Theory’, *American Sociological Review*, **86**, 532–565.
Mayer, S. E. (2001) ‘How Did the Increase in Economic Inequality between 1970 and 1990 Affect Children’s Educational Attainment?’, *American Journal of Sociology*, **107**, 1–32.
McCall, L., Burk, D., Laperrière, M. and Richeson, J. A. (2017) ‘Exposure to Rising Inequality Shapes Americans’ Opportunity Beliefs and Policy Support’, *Proceedings of the National Academy of Sciences*, **114**, 9593–9598.
McCoy, S. K., Wellman, J. D., Cosley, B., Saslow, L. and Epel, E. (2013) ‘Is the Belief in Meritocracy Palliative for Members of Low Status Groups? Evidence for a Benefit for Self-Esteem and Physical Health via Perceived Control’, *European Journal of Social Psychology*, **43**, 307–318.
Mijs, J. J. B. (2018) ‘Inequality Is a Problem of Inference: How People Solve the Social Puzzle of Unequal Outcomes’, *Societies*, **8**, 64.
Mijs, J. J. B. (2021) ‘The Paradox of Inequality: Income Inequality and Belief in Meritocracy Go Hand in Hand’, *Socio-Economic Review*, **19**, 7–35.
Mijs, J. J. B. and Usmani, A. (2024) ‘How Segregation Ruins Inference: A Sociological Simulation of the Inequality Equilibrium’, *Social Forces*, **103**, 45–65.
Morgan, S. L. and Winship, C. (2014) *Counterfactuals and Causal Inference: Methods and Principles for Social Research*, Cambridge, Cambridge University Press.

Morris, K., Bühlmann, F., Sommet, N. and Vandecasteele, L. (2022) 'The Paradox of Local Inequality: Meritocratic Beliefs in Unequal Localities', *The British Journal of Sociology*, **73**, 421–460.
Neckerman, K. M. and Torche, F. (2007) 'Inequality: Causes and Consequences', *Annual Review of Sociology*, **33**, 335–357.
Newman, B. J., Johnston, C. D. and Lown, P. L. (2015) 'False Consciousness or Class Awareness? Local Income Inequality, Personal Economic Position, and Belief in American Meritocracy: False Consciousness or Class Awareness?', *American Journal of Political Science*, **59**, 326–340.
Oetke, N., Norkus, M. and Goebel, J. (2023) 'Assessing the Effects of District-Level Segregation on Meritocratic Beliefs in Germany', *Social Sciences*, **12**, 376.
Otero, G., Volker, B. and Rozer, J. (2021) 'Open But Segregated? Class Divisions And the Network Structure of Social Capital in Chile', *Social Forces*, **100**, 649–679.
Parsons, T. (1971) *The System of Modern Societies*, Englewood Cliffs (N.J.), Prentice-Hall.
Piketty, T. (2014) *Capital in the Twenty-First Century*, Cambridge, Harvard University Press.
Popper, K. R. (1945) *The Open Society and Its Enemies. Volume I and II*, London, Routledge & Kegan Paul.
Putnam, R. D. (2016) *Our Kids: The American Dream in Crisis*, New York, Simon & Schuster Paperbacks.
Reardon, S. F. (2011) 'The Widening Academic Achievement Gap between the Rich and the Poor: New Evidence and Possible Explanations'. In *Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children*, New York, Russell Sage Foundation Press, pp. 91–116.
Reynolds, J. and Xian, H. (2014) 'Perceptions of Meritocracy in the Land of Opportunity', *Research in Social Stratification and Mobility*, **36**, 121–137.
Roex, K. L., Huijts, T. and Sieben, I. (2019) 'Attitudes towards Income Inequality: "Winners" versus "Losers" of the Perceived Meritocracy', *Acta Sociologica*, **62**, 47–63.
Savage, M. (2021) *The Return of Inequality: Social Change and the Weight of the Past*, Cambridge, MA, Harvard University ress.
Schröder, J. M. and Neumayr, M. (2023) 'How Socio-Economic Inequality Affects Individuals' Civic Engagement: A Systematic Literature Review of Empirical Findings and Theoretical Explanations', *Socio-Economic Review*, **21**, 665–694.
Solt, F. (2020) 'Measuring Income Inequality Across Countries and Over Time: The Standardized World Income Inequality Database', *Social Science Quarterly*, **101**, 1183–1199.
Solt, F., Hu, Y., Hudson, K., Song, J. and Yu, D. "Erico" (2016) 'Economic Inequality and Belief in Meritocracy in the United States', *Research & Politics*, **3**, 1–7.
Stiglitz, J. E. (2013) *The Price of Inequality: How Today's Divided Society Endangers Our Future*, New York, W. W. Norton.
The World Bank (2024) 'World Development Indicators'.
Trump, K.-S. (2018) 'Income Inequality Influences Perceptions of Legitimate Income Differences', *British Journal of Political Science*, **48**, 929–952.
Trump, K.-S. (2020) 'When and Why Is Economic Inequality Seen as Fair', *Current Opinion in Behavioral Sciences*, **34**, 46–51.
Uslaner, E. M. and Brown, M. (2005) 'Inequality, Trust, and Civic Engagement', *American Politics Research*, **33**, 868–894.

Wilkinson, R. G. and Pickett, K. E. (2009) ‘Income Inequality and Social Dysfunction’, *Annual Review of Sociology*, **35**, 493–511.
Zhu, X., Cheng, L., Li, Z., Xiao, L. and Wang, F. (2022) ‘Economic Inequality Perception Dampens Meritocratic Belief in China: The Mediating Role of Perceived Distributive Unfairness’, *International Review of Social Psychology*, **35**, 10.

Tables and Figures

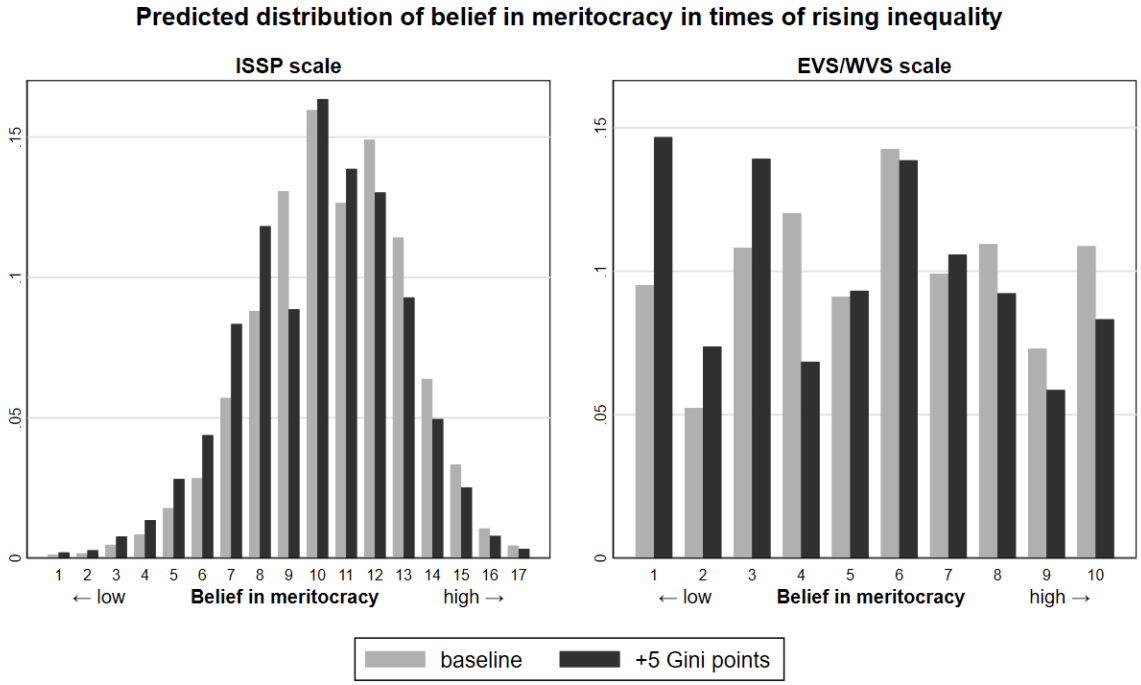
FIGURE 1
Predicted average belief in meritocracy by changes in inequality



Note: Predictive margins with 95% confidence intervals computed based on M3 and M6 in Table 2, respectively.

FIGURE 2

Predicted counterfactual distribution of belief in meritocracy with rising inequality



Note: Predictions computed from Model M2 in Table 3.

TABLE 1
Main theoretical predictions

	Theoretical expectation of economic inequality's impact on beliefs in meritocracy in the population	
Theoretical perspective	Main effect (*Shift of the mean of belief distribution*)	Dispersion effect (*Change in the shape of belief distribution*)
Segregation theory	Positive	Polarisation, driven from the top
Relative power theory	Positive	Convergence, driven from the bottom
Conflict theory	Negative	Polarisation, driven from the bottom

TABLE 2

Results of multilevel regression models on meritocratic beliefs

	ISSP			EVS/WVS		
	M1 Baseline	**M2** + Individual- and Macro Controls	**M3** + Country Fixed Effects & Slopes (cFES)	**M4** Baseline	**M5** + Individual- and Macro Controls	**M6** + Country Fixed Effects & Slopes (cFES)
Gini (BE)	0.096	0.128		0.007	0.005	
	(0.192)	(0.175)		(0.010)	(0.011)	
Gini (WE)	-0.344+	-0.397*	-0.443**	-0.055*	-0.049+	-0.053*
	(0.185)	(0.201)	(0.167)	(0.027)	(0.027)	(0.023)
Log_2 GDP/pc (BE)		3.290*			0.052	
		(1.473)			(0.114)	
Log_2 GDP/pc (WE)		2.217	2.082		-0.377+	-0.229
		(1.879)	(1.733)		(0.201)	(0.194)
Period FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	No	No	Yes	No	No	Yes
Country-specific effect of education	No	No	Yes	No	No	Yes
Country-specific effect of social class	No	No	Yes	No	No	Yes
Socio-economic/ demographic controls	No	Yes	Yes	No	Yes	Yes
Country-round random intercept	Yes	Yes	Yes	Yes	Yes	Yes
SD (Countries)	4.594***	4.047***		0.421***	0.394***	
SD (Country-Round)	1.502***	1.489***	1.192	0.456***	0.452***	0.375***
SD (Individuals)	14.689***	14.633***	14.620***	2.652***	2.639***	2.636***
N Countries	20	20	20	33	33	33
N Country-survey-rounds	53	53	53	119	119	119
N Individuals	59247	59247	59247	104768	104768	104768
AIC	486753.921	486353.766	486276.863	502079.443	501161.394	501029.862
BIC	486834.826	486686.376	487094.905	502175.038	501524.655	502282.157

Data: International Social Survey Programme, 1989-2019 & European Values Study/World Value Survey, 1989-2022.

Selected parameter estimates from multilevel models, full models are shown in the appendix, Tables A3 and A4. Standard errors in parentheses.

*+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001.*

TABLE 3

Results of multiscale ordered logit models on belief in meritocracy (cFES specifications)

	M1	M2: Heterogeneous effects				
	Homogeneous Model	**Lowest Quartile**	**Diff**	**Second Quartile**	**Diff**	**Upper-Half**
Gini (WE)	-0.035*	-0.055***		-0.043**	***	-0.016
	(0.016)	(0.014)		(0.015)		(0.018)
Log_2 GDP/pc (WE)	-0.069	0.260*	***	0.005	*	-0.198
	(0.123)	(0.120)		(0.114)		(0.146)
Period FE	Yes			Yes		
Country FE	Yes			Yes		
Country-specific effect of education	Yes			Yes		
Country-specific effect of social class	Yes			Yes		
Socio-economic/ demographic controls	Yes			Yes		
Country-survey-round random intercept	Yes			Yes		
N Individuals	175,158			175,158		
N Country-survey-rounds	183			183		
N Countries	39			39		

Data: International Social Survey Programme, 1989-2019 & European Values Study/World Value Survey, 1989-2022.

Selected parameter estimates from multilevel model specifications; lower-tail cutpoint defined by c_{low} < logit(0.25), upper-tail cutpoint defined by c_{high} ≥ logit(0.5). Standard errors in parentheses.

*+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001.*

TABLE 4

Results of cFES mscologit models including cross-level interactions with citizens' socio-economic position

	M3: Heterogeneous effects, including cross-level interactions with socio-economic position				
	Lower Quartile	**Diff**	**Second Quartile**	**Diff**	**Upper Half**
Gini (WE)	-0.053***		-0.042**	**	-0.017
	(0.015)		(0.015)		(0.018)
Log_2 GDP/pc (WE)	0.245*	***	-0.013	*	-0.200
	(0.121)		(0.114)		(0.147)
Social class	0.054***		0.047*		0.037***
	(0.007)		(0.021)		(0.005)
Education	0.061***	***	-0.008		-0.014*
	(0.010)		(0.017)		(0.007)
Gini (WE)					
x Social class	0.002		0.006*		0.004
	(0.004)		(0.002)		(0.003)
x Education	0.001		0.002		-0.003
	(0.005)		(0.003)		(0.004)
Log_2 GDP/pc (WE)					
x Social class	-0.016		-0.023**		-0.025**
	(0.011)		(0.007)		(0.008)
x Education	-0.017		0.003	*	0.030*
	(0.016)		(0.010)		(0.012)
Period FE			Yes		
Country FE			Yes		
Country-specific effect of education			Yes		
Country-specific effect of social class			Yes		
Demographic controls			Yes		
Country-survey-round random intercept			Yes		
N Individuals			175,158		
N Country-survey-rounds			183		
N Countries			39		

Data: International Social Survey Programme, 1989-2019 & European Values Study/World Value Survey, 1989-2022.

Selected parameter estimates from multilevel model specifications; lower-tail cutpoint defined by c_{low} < logit(0.25), upper-tail cutpoint defined by c_{high} ≥ logit(0.5). Standard errors in parentheses.

*+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001.*

Supplementary Material / Online Appendix

TABLE A1
Descriptive statistics of analytical sample

	Mean	Min	Max	SD	Within-variation	
					Mean range	Max. range
Individual-level variables						
Level of educational (*linearized*)	2.98	1	5	1.46		
Less than lower secondary education (ISCED 0-1)	0.20					
Lower secondary education completed (ISCED 2)	0.23					
Upper secondary education completed (ISCED 3)	0.23					
Post-secondary education completed (ISCED 4)	0.10					
Tertiary education completed (ISCED 5-6)	0.25					
Social class (*linearized*)	3.03	1	5	1.56		
Unskilled/semi-skilled manual workers	0.25					
Skilled manual and service workers	0.22					
Self-employed	0.11					
Intermediate non-manual employees	0.15					
Higher salariat	0.27					
Employment Status						
Paid work	0.68					
Unemployed	0.05					
In education or training	0.02					
House-/carework	0.05					
Retired	0.18					
Other	0.03					
Sex: Female	0.49	0	1			
Cohort						
1910-1914	0.01					
1915-1919	0.01					
1920-1924	0.02					
1925-1929	0.03					
1930-1934	0.04					
1935-1939	0.05					
1940-1944	0.07					
1945-1949	0.09					
1950-1954	0.10					
1955-1959	0.11					
1960-1964	0.11					
1965-1969	0.10					
1970-1974	0.08					
1975-1979	0.06					
1980-1984	0.05					
1985-1989	0.04					
1990-1994	0.03					
1995-1999	0.02					
2000-2004	0.01					
Contextual (country-round level) variables						
Gini (disposable HH income)	31.48	18.10	53.90	7.44	4.07	9.80
Log_2 GDP per capita	14.51	12.12	16.19	1.00	1.63	2.75
N Countries	39					
N Country-Rounds	183					
N Individuals	175,158					

TABLE A2

Overview of countries and country-rounds

	Number of country-rounds (both ISSP and EVS/WVS)								
Country	2	3	4	5	6	7	8	9	**N**
AR				x	x				2,883
AT				x					4,419
AU							x		8,565
BG					x				4,693
BR				x					3,728
CA			x						6,992
CH				x					5,474
CL						x			5,589
CO		x							1,789
CZ					x				8,310
DE								x	12,781
DK	x								1,716
EE		x							1,058
ES				x					4,082
FI			x						2,124
FR			x						5,364
GB						x			7,323
HR	x								870
HU					x				6,571
IL	x								2,125
IS	x								1,668
IT					x				3,687
JP						x			5,349
KR				x					1,944
LT		x							2,469
LV		x							2,018
MX				x					3,999
NL			x						5,030
NO					x				6,477
NZ						x			4,904
PE			x						2,842
PL						x			4,389
PT	x								1,691
RO				x					3,425
SE						x			5,108
SI						x			4,919
SK				x					4,835
TR				x					4,859
US								x	9,089
N	8,070	7,334	22,352	39,648	29,738	37,581	8,565	21,870	175,158

TABLE A3

Full results of multilevel regression models on meritocratic beliefs using the ISSP

	(A) Baseline	(B) + Individual- and Macro-Controls	(C) + Country FE	(D) + Country Fixed Slopes (cFES)
	b/se	b/se	b/se	b/se
Gini (BE)	0.096	0.128		
	(0.192)	(0.175)		
Gini (WE)	-0.344+	-0.397*	-0.410*	-0.443**
	(0.185)	(0.201)	(0.160)	(0.167)
Log_2 GDP per capita (BE)		3.290*		
		(1.473)		
Log_2 GDP per capita (WE)		2.217	2.372	2.082
		(1.879)	(1.666)	(1.733)
Education (linearized, centered)		0.221***	0.218***	0.300
		(0.060)	(0.060)	(0.210)
Cohort (Ref. 1970)				
1910		3.373***	3.366***	3.297***
		(0.947)	(0.947)	(0.948)
1915		3.111***	3.098***	3.066***
		(0.756)	(0.756)	(0.756)
1920		2.527***	2.514***	2.520***
		(0.554)	(0.554)	(0.554)
1925		2.306***	2.292***	2.261***
		(0.481)	(0.481)	(0.481)
1930		2.169***	2.153***	2.122***
		(0.424)	(0.424)	(0.424)
1935		1.282***	1.268***	1.250***
		(0.376)	(0.376)	(0.376)
1940		1.101**	1.089**	1.072**
		(0.343)	(0.343)	(0.343)
1945		0.392	0.384	0.384
		(0.315)	(0.315)	(0.315)
1950		0.112	0.105	0.118
		(0.298)	(0.298)	(0.298)
1955		0.267	0.263	0.263
		(0.289)	(0.289)	(0.289)
1960		-0.265	-0.267	-0.264
		(0.289)	(0.289)	(0.289)
1965		0.058	0.057	0.040
		(0.291)	(0.291)	(0.290)
1975		0.010	0.009	-0.000
		(0.326)	(0.326)	(0.326)
1980		0.238	0.237	0.223
		(0.339)	(0.339)	(0.339)
1985		-0.750*	-0.755*	-0.749*
		(0.366)	(0.366)	(0.366)
1990		0.388	0.385	0.366
		(0.442)	(0.442)	(0.442)
1995		0.410	0.408	0.448
		(0.551)	(0.551)	(0.551)
2000		2.521*	2.520*	2.550*
		(1.000)	(1.000)	(1.001)
Social class (linearized, centered)		0.211***	0.212***	0.015
		(0.045)	(0.045)	(0.145)
Employment status (Ref. Paid work)				
Unemployed		-2.402***	-2.404***	-2.337***
		(0.309)	(0.309)	(0.309)
In Education or Training		-0.182	-0.190	-0.152
		(0.470)	(0.470)	(0.472)
House-/Carework		-0.066	-0.071	-0.055
		(0.313)	(0.313)	(0.313)

	(A) Baseline	(B) + Individual- and Macro-Controls	(C) + Country FE	(D) + Country Fixed Slopes (cFES)
	b/se	b/se	b/se	b/se
Retired		0.361+	0.359+	0.427*
		(0.215)	(0.215)	(0.216)
Other		-0.416	-0.415	-0.466
		(0.301)	(0.301)	(0.301)
Sex (Ref. Male)		1.399***	1.400***	1.375***
		(0.123)	(0.123)	(0.124)
Country (Ref. DE)				
AT			0.148	-0.448
			(0.889)	(0.948)
AU			9.998***	10.129***
			(0.967)	(1.015)
BG			3.359***	3.199**
			(0.996)	(1.043)
CH			5.238***	5.141***
			(1.128)	(1.177)
CL			2.587*	2.312+
			(1.135)	(1.187)
CZ			6.529***	6.597***
			(0.980)	(1.026)
FR			10.392***	10.325***
			(1.269)	(1.323)
GB			11.630***	11.306***
			(1.241)	(1.291)
HU			0.476	0.276
			(1.041)	(1.102)
IL			3.514*	3.140+
			(1.605)	(1.674)
IT			-3.290**	-3.518**
			(1.127)	(1.175)
JP			10.558***	10.474***
			(1.414)	(1.481)
NO			9.120***	8.855***
			(0.955)	(1.005)
NZ			13.395***	13.307***
			(1.074)	(1.131)
PL			-0.227	-0.068
			(1.176)	(1.233)
SE			7.329***	6.994***
			(1.178)	(1.230)
SI			-1.716+	-1.745+
			(0.974)	(1.019)
SK			1.881	2.090+
			(1.150)	(1.207)
US			10.009***	9.685***
			(0.997)	(1.050)
Country (Ref. DE) # Education				
AT # Education				-0.911**
				(0.342)
AU # Education				-0.340
				(0.291)
BG # Education				0.093
				(0.363)
CH # Education				-0.263
				(0.299)
CL # Education				-0.006
				(0.359)
CZ # Education				0.826*
				(0.359)
FR # Education				-0.075
				(0.276)
GB # Education				-0.568+
				(0.328)

	(A) Baseline	(B) + Individual- and Macro-Controls	(C) + Country FE	(D) + Country Fixed Slopes (cFES)
	b/se	b/se	b/se	b/se
HU # Education				-0.307
				(0.316)
IL # Education				0.017
				(0.353)
IT # Education				-0.185
				(0.395)
JP # Education				-0.573
				(0.412)
NO # Education				-0.097
				(0.316)
NZ # Education				-0.305
				(0.343)
PL # Education				0.316
				(0.385)
SE # Education				0.119
				(0.317)
SI # Education				0.637+
				(0.371)
SK # Education				0.718
				(0.499)
US # Education				0.115
				(0.322)
Country (Ref. DE) # Social Class				
AT # Social Class				0.038
				(0.235)
AU # Social Class				-0.054
				(0.222)
BG # Social Class				0.438+
				(0.257)
CH # Social Class				0.049
				(0.217)
CL # Social Class				0.033
				(0.289)
CZ # Social Class				0.282
				(0.247)
FR # Social Class				-0.196
				(0.224)
GB # Social Class				0.586*
				(0.258)
HU # Social Class				0.030
				(0.233)
IL # Social Class				0.070
				(0.276)
IT # Social Class				0.350
				(0.300)
JP # Social Class				0.915**
				(0.283)
NO # Social Class				0.439+
				(0.229)
NZ # Social Class				0.220
				(0.252)
PL # Social Class				0.383
				(0.295)
SE # Social Class				0.239
				(0.257)
SI # Social Class				0.029
				(0.275)
SK # Social Class				0.493
				(0.353)
US # Social Class				0.150
				(0.217)
Survey-Round (Ref. 2019)				

	(A) Baseline	(B) + Individual- and Macro-Controls	(C) + Country FE	(D) + Country Fixed Slopes (cFES)
	b/se	b/se	b/se	b/se
1987	-1.467	1.642	2.023	1.311
	(1.104)	(2.977)	(2.645)	(2.754)
1992	-1.398+	2.118	2.306	1.804
	(0.832)	(3.001)	(2.674)	(2.782)
2009	-0.084	1.106	1.168	0.997
	(0.529)	(1.049)	(0.909)	(0.947)
Constant	58.347***	6.368	53.141***	53.607***
	(5.909)	(23.032)	(1.737)	(1.803)
SD (Countries)	4.594***	4.047***		
SD (Country-Rounds)	1.502***	1.489**	1.143	1.192
SD (Individuals)	14.689***	14.633***	14.633***	14.620***
N Countries	20	20	20	20
N Country-survey-rounds	53	53	53	53
N Individuals	59247	59247	59247	59247
AIC	486753.921	486352.901	486301.423	486276.863
BIC	486834.826	486685.511	486777.865	487094.905

Data: International Social Survey Programme, 1989-2019.
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001.

TABLE A4

Full results of multilevel regression models on meritocratic beliefs using the EVS/WVS

	(A) Baseline	(B) + Individual- and Macro-Controls	(C) + Country FE	(D) + Country Fixed Slopes (cFES)
	b/se	b/se	b/se	b/se
Gini (BE)	0.007	0.005		
	(0.010)	(0.011)		
Gini (WE)	-0.055*	-0.049+	-0.050*	-0.053*
	(0.027)	(0.027)	(0.023)	(0.023)
Log_2 GDP per capita (BE)		0.052		
		(0.114)		
Log_2 GDP per capita (WE)		-0.377+	-0.213	-0.229
		(0.201)	(0.195)	(0.194)
Education (linearized, centered)		0.020**	0.020**	-0.070**
		(0.007)	(0.007)	(0.025)
Cohort (Ref. 1970)				
1910		0.644***	0.644***	0.643***
		(0.109)	(0.109)	(0.109)
1915		0.611***	0.611***	0.614***
		(0.090)	(0.090)	(0.090)
1920		0.494***	0.493***	0.491***
		(0.068)	(0.068)	(0.068)
1925		0.555***	0.555***	0.556***
		(0.060)	(0.060)	(0.060)
1930		0.372***	0.372***	0.369***
		(0.054)	(0.054)	(0.054)
1935		0.358***	0.358***	0.358***
		(0.049)	(0.049)	(0.049)
1940		0.248***	0.248***	0.251***
		(0.045)	(0.045)	(0.045)
1945		0.214***	0.214***	0.214***
		(0.041)	(0.041)	(0.041)
1950		0.060	0.060	0.062
		(0.039)	(0.039)	(0.039)
1955		-0.006	-0.007	-0.005
		(0.038)	(0.038)	(0.038)
1960		0.017	0.017	0.017
		(0.038)	(0.038)	(0.038)
1965		-0.064+	-0.064+	-0.062
		(0.038)	(0.038)	(0.038)
1975		-0.008	-0.008	-0.010
		(0.044)	(0.044)	(0.044)
1980		-0.069	-0.070	-0.070
		(0.048)	(0.048)	(0.048)
1985		-0.035	-0.035	-0.040
		(0.053)	(0.053)	(0.053)
1990		-0.212***	-0.213***	-0.218***
		(0.062)	(0.062)	(0.062)
1995		-0.093	-0.092	-0.115
		(0.076)	(0.076)	(0.076)
2000		-0.047	-0.046	-0.053
		(0.151)	(0.151)	(0.151)
Social class (linearized, centered)		0.072***	0.071***	0.114***
		(0.006)	(0.006)	(0.026)
Employment status (Ref. Paid work)				
Unemployed		-0.448***	-0.447***	-0.466***
		(0.041)	(0.041)	(0.041)
In Education or Training		-0.038	-0.038	-0.045
		(0.076)	(0.076)	(0.076)
House-/Carework		-0.034	-0.033	-0.038
		(0.039)	(0.039)	(0.039)
Retired		-0.016	-0.015	-0.021

	(0.031)	(0.031)	(0.031)
Other	-0.281***	-0.278***	-0.281***
	(0.073)	(0.073)	(0.073)
Sex (Ref. Male)	-0.197***	-0.197***	-0.187***
	(0.017)	(0.017)	(0.017)
Country (Ref. DE)			
AR		0.022	-0.010
		(0.267)	(0.267)
AU		0.657*	0.661*
		(0.270)	(0.269)
BG		0.451	0.426
		(0.290)	(0.290)
BR		-0.244	-0.346
		(0.272)	(0.272)
CA		0.577*	0.598*
		(0.292)	(0.291)
CH		-0.144	-0.105
		(0.356)	(0.357)
CL		-0.047	-0.048
		(0.263)	(0.263)
CO		-0.096	-0.061
		(0.314)	(0.313)
CZ		0.167	0.229
		(0.287)	(0.286)
EE		0.240	0.255
		(0.339)	(0.338)
ES		0.222	0.243
		(0.279)	(0.280)
FI		0.959**	0.961**
		(0.333)	(0.333)
FR		-0.214	-0.199
		(0.335)	(0.334)
GB		0.199	0.206
		(0.289)	(0.288)
HU		0.079	0.059
		(0.301)	(0.301)
IT		-0.411	-0.390
		(0.330)	(0.329)
JP		0.144	0.099
		(0.259)	(0.258)
KR		0.480+	0.480+
		(0.276)	(0.277)
LT		-0.814*	-0.890**
		(0.337)	(0.336)
LV		0.203	0.200
		(0.380)	(0.379)
MX		0.894***	0.886***
		(0.254)	(0.253)
NL		-0.284	-0.296
		(0.281)	(0.280)
NO		-0.147	-0.168
		(0.287)	(0.286)
NZ		0.638*	0.627*
		(0.285)	(0.285)
PE		0.998***	1.023***
		(0.278)	(0.278)
PL		-0.699*	-0.753**
		(0.281)	(0.281)
RO		1.212***	1.221***
		(0.260)	(0.259)
SE		0.096	0.095
		(0.279)	(0.278)
SI		0.588*	0.559*
		(0.279)	(0.278)
SK		-0.050	0.031
		(0.266)	(0.265)
TR		0.264	0.174

	(0.256)	(0.256)
US	1.108***	1.103***
	(0.255)	(0.254)
Country (Ref. DE) # Education		
AR # Education		0.048
		(0.045)
AU # Education		0.078*
		(0.038)
BG # Education		0.031
		(0.057)
BR # Education		0.033
		(0.043)
CA # Education		0.064
		(0.042)
CH # Education		0.080
		(0.093)
CL # Education		0.154**
		(0.047)
CO # Education		0.275***
		(0.052)
CZ # Education		0.140**
		(0.043)
EE # Education		-0.033
		(0.074)
ES # Education		0.098*
		(0.043)
FI # Education		0.105+
		(0.063)
FR # Education		0.074
		(0.053)
GB # Education		0.094*
		(0.041)
HU # Education		0.146*
		(0.060)
IT # Education		0.123*
		(0.053)
JP # Education		0.204***
		(0.048)
KR # Education		0.086
		(0.057)
LT # Education		0.144*
		(0.063)
LV # Education		0.067
		(0.074)
MX # Education		0.088*
		(0.040)
NL # Education		0.199***
		(0.038)
NO # Education		0.178***
		(0.044)
NZ # Education		0.065
		(0.044)
PE # Education		0.175***
		(0.046)
PL # Education		-0.060
		(0.057)
RO # Education		0.064
		(0.047)
SE # Education		0.076+
		(0.044)
SI # Education		0.042
		(0.056)
SK # Education		0.181***
		(0.050)
TR # Education		-0.047
		(0.036)
US # Education		0.129**

	(0.042)
Country (Ref. DE) # Social class	
AR # Social class	-0.072
	(0.046)
AU # Social class	-0.039
	(0.038)
BG# Social class	-0.063
	(0.054)
BR # Social class	-0.208***
	(0.043)
CA # Social class	-0.055
	(0.035)
CH # Social class	0.110
	(0.086)
CL # Social class	-0.086*
	(0.043)
CO # Social class	-0.094
	(0.060)
CZ # Social class	0.017
	(0.040)
EE # Social class	-0.005
	(0.071)
ES # Social class	-0.007
	(0.045)
FI # Social class	-0.054
	(0.070)
FR # Social class	0.049
	(0.057)
GB # Social class	-0.047
	(0.037)
HU # Social class	-0.144*
	(0.058)
IT # Social class	0.069
	(0.052)
JP # Social class	-0.011
	(0.040)
KR # Social class	-0.095
	(0.062)
LT # Social class	-0.177**
	(0.055)
LV # Social class	-0.133*
	(0.067)
MX # Social class	-0.078+
	(0.041)
NL # Social class	-0.047
	(0.039)
NO # Social class	-0.056
	(0.044)
NZ # Social class	0.004
	(0.045)
PE # Social class	-0.119*
	(0.053)
PL # Social class	0.008
	(0.057)
RO # Social class	0.004
	(0.046)
SE # Social class	0.037
	(0.048)
SI # Social class	-0.072
	(0.054)
SK # Social class	0.004
	(0.045)
TR # Social class	-0.041
	(0.039)
US # Social class	-0.080*
	(0.037)
Survey-Round (Ref. 2017-2022)	

1989-1993	0.254+	-0.513	-0.170	-0.175
	(0.151)	(0.374)	(0.364)	(0.363)
1994-1998	0.137	-0.455	-0.236	-0.232
	(0.150)	(0.325)	(0.315)	(0.314)
2005-2009	0.189	-0.111	0.024	0.036
	(0.147)	(0.208)	(0.195)	(0.195)
2010-2014	0.421*	0.253	0.316*	0.352*
	(0.166)	(0.179)	(0.159)	(0.158)
Constant	6.023***	5.805**	6.271***	6.259***
	(0.383)	(1.794)	(0.284)	(0.283)
SD (Countries)	0.421***	0.377***		
SD (Country-Rounds)	0.456***	0.452***	0.377***	0.375***
SD (Individuals)	2.652***	2.639***	2.639***	2.636***
N Countries	33	33	33	33
N Country-survey-rounds	119	119	119	119
N Individuals	104768	104768	104768	104768
AIC	502079.443	501159.594	501140.148	501029.862
BIC	502175.038	501522.855	501780.635	502282.157

Data: European Values Study/World Value Survey, 1989-2022.
+ p<0.10, * p<0.05, ** p<0.01, *** p<0.001.