

# Perceptions of Inequality and Meritocracy: Their Interplay in Shaping Preferences for Market Justice in Chile (2016-2023)

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## Abstract

This study examines the interplay between perceptions of economic inequality and meritocracy in shaping preferences for market justice in Chile from 2016 to 2023. Economic inequality has intensified globally, raising concerns about its social impacts and the legitimacy of market-based distributions of resources. By utilizing longitudinal data from the Chilean Longitudinal Social Survey (ELSOC), the research investigates how subjective assessments of inequality influence attitudes towards social justice, focusing on the extent to which individuals believe access to essential services like healthcare, education, and pensions should depend on personal merit. The findings suggest that as perceptions of economic inequality rise, individuals tend to favor redistributive policies, although those with strong meritocratic beliefs are more likely to justify existing inequalities. The analysis also highlights the effect of major social movements in Chile during this period, which have shifted public discourse and potentially altered perceptions of inequality and meritocracy. This paper contributes to the understanding of how individual beliefs about fairness and equity evolve within a socio-political context characterized by high inequality and extensive free-market principles.

**Keywords:** Economic inequality, meritocracy, market justice, Chile, public preferences

## 1 Introduction

Since 1980, economic inequality and wealth concentration have dramatically increased worldwide, becoming one of the main challenges for the social sciences. Globally, in 2021, less than 50% of the world population owned only 2% of the wealth, while the richest 10% concentrated 76%, and the wealthiest 1% captured nearly 38% of total assets ([Chancel et al., 2022](#)). This context of economic disparity has sparked renewed interest in studying not only the objective aspects of inequality, such as income and access to resources, but also its subjective dimensions, including perceptions, beliefs, and associated attitudes ([Janmaat, 2013](#)). This has led, among other reasons, to widespread concern in the social sciences about the political delegitimization that economic inequality can produce ([Castillo et al., 2022](#)). Understanding

how people perceive inequality is crucial, as these perceptions can influence how societies comprehend and justify the distribution of goods and services.

The perception of economic inequality can be understood as an individual's subjective assessment of how resources are allocated among members of a given society (Akyelken, 2020). Regardless of their measurement, various studies have shown that this perception often underestimates the gap between the rich and the poor, which could have implications for attitudes toward the distribution of goods and services (Castillo et al., 2022; Schröder, 2017). Moreover, in recent years, there has been a discussion about the subjective and objective aspects of inequality, demonstrating inconsistencies between the two (Trump, 2018). This tension is relevant because advancing the study of perceptions could help understand how perceived inequality affects the distribution of resources within a society (Becker, 2020).

Perception of economic inequality has been associated with important outcomes such as redistributive preferences, justification of inequality, and legitimacy of the economic system (Castillo et al., 2022; García-Sánchez et al., 2020, 2018). Research shows that greater perceived inequality fosters stronger preferences for redistribution, regardless of actual inequality levels (García-Sánchez et al., 2019; Gimpelson & Treisman, 2018). However, other findings suggest that heightened perceptions of income gaps between high- and low-paying occupations may lead to greater justification of inequality (Castillo, 2011). A less explored area in this regard concerns market justice, which denotes the degree to which individuals consider just that social goods and services (e.g., health, pensions, education) are allocated according to individual contribution, competition, and ability to pay (Kluegel et al., 1999; Lane, 1986; Lindh, 2015). Market justice attitudes reflect the belief that the market promotes procedural fairness—equality of opportunity—so that outcomes result from individual achievement (Lane, 1986). Indeed, Lindh (2015) shows that market justice preferences are stronger in countries with higher private spending on services than in those with more comprehensive welfare systems. From this perspective, perceptions of economic inequality may be key, as lower perceived gaps can reinforce acceptance of free-market systems and justify existing inequalities.

Meritocracy posits that inequality can be legitimized through distributive criteria such as effort and talent (Davis & Moore, 2001; Young, 1962). Previous studies have demonstrated that people with stronger meritocratic beliefs tend to perceive less inequality as they attribute economic differences to individual achievements (Mijs, 2021; Wilson, 2003) and also to justify more inequality as these beliefs are associated with attitudes that legitimize status differences (Batruch et al., 2023). In a context like Chile, where the distribution of goods and services is predominantly governed by market logics strongly introduced during the military dictatorship (1973-1989) (Boccardo, 2020), these beliefs can play a crucial role in the acceptance of social inequalities. Incorporating the perception of meritocracy in this literature allows for an understanding of how attitudes toward inequality are shaped not only by the perception of economic gaps, but also by beliefs about how these gaps are justified. Furthermore, these beliefs are often consolidated from an early age, reinforced by institutions promoting values such as effort and individual skills to climb socially (Castillo et al., 2024; Reynolds & Xian, 2014).

The perception of meritocracy and the perception of economic inequality would interact intricately in shaping preferences for market justice. On the one hand, a stronger perception of merit as a criterion for

distribution could minimize the perception of economic gaps, thus justifying an unequal system (Castillo et al., 2012; Mijs, 2021). On the other hand, the perception of inequality could moderate the impact of meritocracy, as a higher perception of economic gaps might challenge the idea that these are solely based on merit.

The primary objective of this study is to analyze the interplay between perceptions of inequality and meritocracy and their joint influence on preferences for market justice in Chile from 2016 to 2023, using longitudinal data from the ELSOC survey. This interaction is expected to provide a more comprehensive explanation of attitudes toward market justice in a country characterized by high inequality and strong free-market influence (Boccardo, 2020; Flores et al., 2020). Additionally, this analysis seeks to elucidate how political and social contingencies—such as the 2019 and 2022 social movements—might have moderated these relationships by prompting more critical reflection on the commodification of social services. Recognizing the temporal dimension in shaping market justice preferences is essential, given that such preferences are not static but are influenced by historical and contextual factors that challenge or reaffirm prevailing social norms. In this regard, variations in perceived economic inequality and meritocracy over time can affect how individuals endorse market-based approaches. Consequently, public opinion may shift from supporting market justice to embracing redistributive policies aimed at mitigating inequalities.

## **2 Theoretical views on market justice, inequality perception, and meritocracy**

### **2.1 The justification of market inequality**

Conceptually, *market justice* has been discussed in the literature as a normative principle that legitimates the distribution of economic rewards based on individual merit and effort. It is possible to trace the concept to the understanding of Lane (1986), who defines market justice as a system of “earned deserts,” whereby individuals are seen as deserving of a determined distributive outcome due to their effort and skills. In contrast, political justice, emphasizes principles of equality and need, which are often represented by the welfare state action through social policies. An important remark is that the principles of market justice rely on the assumption that markets are neutral and self-regulating arenas, where individuals are treated fairly because they face the same formal rules of engagement (Lane, 1986). Consequently, the legitimacy of market justice stems from the assumption that inequalities are not only inevitable but fair—so long as the rules are transparent and opportunities are open. In this way, market justice provides a moral justification for inequality by framing it as a necessary outcome of individual responsibility.

Empirical studies have shown different strategies for the study of market justice preferences. A common approach in the literature is to gauge attitudes toward the legitimacy of inequality in specific domains, especially when linked to income differences. This can be traced to the seminal work of Kluegel and Smith (1981) who assessed the normative foundations that explain public support for economic inequality. Over time, this approach has been extended beyond income to include other market-mediated outcomes, such as education, healthcare, and/or pensions. For example, Von Dem Knesebeck et al. (2016) and

Immergut and Schneider (2020) examine whether citizens consider it fair that individuals with higher incomes can access better healthcare, while Lee and Stacey (2023) apply a similar method in the context of education in Australia. These studies usually rely on a survey item asking respondents to evaluate the fairness of income-based access to welfare services, allowing for comparing justice perceptions across different contexts. Similarly, comparative studies have also relied on these indicators to study the support for market-based distribution in welfare systems (Lindh, 2015; Svallfors, 2007). More recently, Castillo et al. (2024) introduced a single-item composite measure of market justice to assess student attitudes toward income-based access to education, healthcare, and pensions in Chile. These empirical strategies all aim to capture the extent to which individuals accept inequality when framed as a reflection of market outcomes.

The study of market justice preferences has increasingly focused on how they are shaped by individuals' socioeconomic position, normative beliefs, and the institutional context in which they are embedded. Across the literature, there is empirical evidence suggesting that individuals in more advantaged socioeconomic positions—those with higher occupational class, income, and education—are more likely to support market justice principles (Koos & Sachweh, 2019; Svallfors, 2007). This tendency reflects not only material self-interest but also a broader moral economy, in which winners of the market system internalize justifications for the status quo. At the same time, political ideology also plays a role—such as economically conservative values—where more right-wing individuals show higher support for meritocracy and more skepticism towards redistribution. This is particularly salient in countries with more restricted public provision of social services. For example, Castillo et al. (2024) in Chile and, Lee and Stacey (2023) in Australia show that those with right-leaning individuals are more supportive of market-based distribution of welfare. Beyond individual characteristics, country-level institutions also play a central role. In liberal welfare regimes like those of the United States or the United Kingdom, market justice preferences are more widespread, while in coordinated or social-democratic regimes—such as Sweden or Germany—citizens are generally more critical of market-based inequalities (Immergut & Schneider, 2020; Lindh, 2015). These findings suggest that market justice is also shaped contextually, which is represented by the development of welfare institutions.

## 2.2 Perception of inequality

Perceptions of inequality have been associated with attitudes about market justice (Kluegel et al., 1995; Lindh, 2015). Research indicates that lower perceived inequality can reinforce support for market-based distributive arrangements by suggesting that the system is fair and that outcomes reflect effort and ability (Kuhn, 2011). In contrast, when inequality is perceived as excessive or structurally determined, individuals could question the legitimacy of market justice and become more supportive of redistributive policies (Castillo et al., 2022; García-Sánchez et al., 2019).

Perceptions of inequality refer to individuals' subjective evaluations of the extent, causes, and consequences of income and wealth disparities. Unlike objective measures such as the Gini index, perceived inequality captures how individuals make sense of distributive hierarchies in their everyday lives, shaped by reference groups, social comparisons, and information environments (García-Castro et al., 2020; Gim-

pelson & Treisman, 2018; Mijts, 2016). Scholars have proposed multiple dimensions of perceived inequality, including its magnitude (how significant are the gaps), vertical structure (between which groups), the trend over time (increasing or decreasing), and legitimacy (whether it is just or not) (Engelhardt & Wagener, 2018; García-Sánchez et al., 2019). These dimensions encompass both cognitive and normative aspects of perceptions of inequality and can vary across societies and social groups, depending on exposure, ideology, and personal experience (Castillo et al., 2022; García-Sánchez et al., 2018).

Among the different approaches to measuring perceived inequality, one of the most widely used is the estimation of wage gaps between occupational extremes, such as between a CEO and a manual worker. This type of item provides a concrete frame that respondents can relate to more easily than abstract questions about national income distribution (Castillo et al., 2012; Easterbrook, 2021; Willis et al., 2015). While it enables the estimation of inequality using simple heuristics, this method is not without challenges. For instance, people often lack reliable knowledge about the earnings of those at the top of the income ladder, which leads to high variability in responses and the use of biased mental shortcuts (Knell & Stix, 2020). Despite this, perceived wage gaps are strong predictors of political attitudes (García-Sánchez et al., 2018; Pedersen & Mutz, 2019), making them a valuable tool for understanding public responses to economic disparities.

Another relevant critique of this approach lies in its conflation of different psychological constructs. Many surveys assess perceived inequality through Likert-type items that ask respondents to agree or disagree with statements, such as “income differences are too large,” which captures general concern or discomfort rather than a specific perception (Castillo, 2011; García-Sánchez et al., 2019). These items mix cognitive estimations with affective evaluations, complicating the interpretation of what respondents perceive versus what they morally reject. As a result, the conceptual clarity between perceived inequality and inequality aversion remains blurred in many empirical studies. To address this limitation, recent work has emphasized the need to distinguish between absolute and comparative measures, as well as between ideal and actual estimates of economic gaps (Auspurg et al., 2017; García-Sánchez & De Carvalho, 2022).

## 2.3 Perception of meritocracy

Meritocracy constitutes a central ideological framework for legitimizing different types of social inequality, for instance through market justice beliefs. Rooted in the belief that rewards and positions should be allocated based on individual effort and talent, meritocracy operates as a normative ideal and a descriptive belief about how society functions. As initially conceptualized by Michael Young (1962), the term was meant to critique a system in which merit-based stratification becomes a new form of inequality. However, over time, meritocracy has been widely supported in many societies as a fair and desirable principle of distribution, particularly within liberal democracies and market-oriented economies (Mijts, 2021; Sandel, 2020). From a sociological perspective, the belief in meritocracy is more than a cognitive assessment; it reflects a moral lens through which individuals interpret inequality. People who believe that success results from hard work and talent are more likely to view social and economic disparities as legitimate (Batrach et al., 2023; Castillo et al., 2012). Conversely, if they see outcomes as driven by luck, social origin, or systemic barriers, inequality is more likely to be perceived as unjust. This distinction becomes

crucial in societies with persistent structural inequality, where public narratives often emphasize personal responsibility and merit while overlooking entrenched disadvantages.

We adopt a multidimensional perspective on meritocracy, distinguishing between two key dimensions: effort-based and talent-based perceptions. This distinction is essential, as it captures different pathways through which individuals justify inequality. Effort-based meritocracy emphasizes hard work and perseverance as the basis for social rewards, aligning closely with cultural narratives of personal responsibility. A talent-based meritocracy, by contrast, emphasizes intelligence and innate abilities, which are often perceived as less malleable and more unequally distributed. Both dimensions have been shown to correlate with acceptance of inequality, but they may carry distinct implications for how inequality is justified in specific domains (Castillo et al., 2023). The relevance of this distinction is supported by recent studies, which show that individuals respond differently to these dimensions. For instance, perceptions that effort is rewarded in society are more strongly associated with positive evaluations of fairness and acceptance of unequal outcomes (Batruch et al., 2023). This may be because effort is seen as a controllable and morally virtuous trait, whereas talent is often perceived as a natural advantage. Consequently, effort-based meritocracy is likely more potent in legitimizing inequality, particularly in neoliberal contexts.

These dimensions of meritocracy reflect how respondents perceive society's distributive logic, regardless of whether they endorse meritocratic principles. This distinction aligns with recent findings indicating that individuals distinguish between how merit is perceived in society and how it should ideally operate, which in turn shapes their preferences for redistribution and justice (Tejero-Peregrina et al., 2025). Meritocratic beliefs serve as symbolic justifications for unequal outcomes, particularly when access is stratified by income or social opportunity. Prior studies have shown that individuals who perceive higher levels of meritocracy tend to express stronger support for unequal distributions that reflect market outcomes (Castillo et al., 2012; Castillo et al., 2024).

In addition to influencing individual attitudes toward inequality, meritocratic beliefs can contribute to social division and the stigmatization of disadvantaged groups. Recent research has demonstrated that exposure to meritocratic narratives can reinforce the belief that poverty results from individual failings rather than systemic conditions, reducing support for redistributive measures and increasing the stigmatization of the poor (Hoyt et al., 2023). This reinforces negative stereotypes and reduces empathy toward individuals from lower socioeconomic backgrounds. Moreover, Bussemeyer et al. (2021) argues that meritocratic narratives can serve as feedback mechanisms that shape public opinion and well-being by framing individuals' understanding of welfare outcomes as deserved or undeserved within existing institutional structures. This psychological mechanism highlights the normative power of meritocracy in stabilizing unequal systems by shaping political attitudes and personal perceptions of success and failure.

## 2.4 This study

Building upon the previous literature, this study proposes that attitudes toward market justice are shaped by a dynamic interplay between individuals' perceptions of economic inequality and their beliefs in meritocracy. Specifically, we argue that both perceptions independently and interactively influence the extent to which individuals endorse market-based distributions of social goods and services in Chile.



First, consistent with previous findings, we expect that a lower perception of economic inequality will be associated with stronger market justice preferences. When individuals perceive smaller income gaps, they are more likely to view market mechanisms as fair and legitimate, reinforcing the acceptance of outcomes based on competition and ability to pay. Conversely, a heightened perception of inequality may erode confidence in market fairness, weakening support for market-based distribution. This relationship is particularly relevant in the context of Chile, where the neoliberal economic model has been a dominant force in shaping public attitudes toward inequality and justice.

Second, higher perceived meritocracy is expected to be positively associated with market justice preferences. Individuals who believe that effort and talent primarily determine success are more likely to justify unequal outcomes and endorse the notion that markets allocate resources fairly according to individual merit. This aligns with the idea that meritocratic beliefs serve as a moral framework that legitimizes market-based inequalities, as individuals perceive the system as just when they believe that rewards are based on individual merit. This is particularly relevant in contexts where neoliberal ideologies dominate, as they often emphasize individual responsibility and competition as the basis for social order.

Third, we propose that perceptions of meritocracy and perceptions of economic inequality interact in shaping market justice attitudes. Specifically, we argue that the legitimizing effect of perceived meritocracy on market justice preferences is moderated by perceived economic inequality: when perceived inequality is low, the positive association between meritocratic beliefs and market justice preferences will be stronger. However, when perceived inequality is high, this association will weaken, as greater awareness of large economic gaps may challenge the view that outcomes are purely merit-based.

Additionally, this study examines whether these relationships vary over time in response to significant social and political events. In particular, we explore whether the political outburst of 2019 and the subsequent constitutional processes in Chile have altered how perceptions of inequality and meritocracy shape market justice attitudes. We expect that after these critical events, perceptions of inequality may have a stronger negative effect on market justice preferences, reflecting increased societal questioning of market-based allocation mechanisms.

Based on these arguments, we propose the following hypotheses:

*H1:* Higher perceived economic inequality is associated with higher market justice preferences.

*H2:* Higher meritocratic beliefs are associated with higher market justice preferences.

*H3:* The positive association between meritocratic beliefs and market justice preferences is moderated by perceived economic inequality; specifically, this association is weaker when perceived economic inequality is high.

*H4:* The effects described in H1–H3 are attenuated after major social mobilizations (2019–2022), reflecting increased critical views of the market’s role in allocating social goods.

## 3 Data, Variables and Methods

### 3.1 Data

This study draws on data from the Chilean Longitudinal Social Survey (ELSOC), a panel study collected annually from 2016 to 2023. The survey evaluates how individuals think, feel, and behave regarding conflict and social cohesion in Chile. ELSOC employs a probabilistic, stratified, clustered, multistage sampling design encompassing major urban centers (Santiago, Valparaíso, and Concepción) and smaller cities. The target population includes women and men aged 18–75 who are habitual residents of private dwellings. The first wave included 2,927 participants, representing northern and southern regions, covering 77% of the country’s total population and 93% of its urban population, with a response rate of 62.4% (ELSOC, 2022).

The survey has been conducted yearly since 2016, except in 2020, when it was suspended due to the pandemic. Waves 2016, 2017, 2018, 2019, 2022, and 2023 used computer-assisted personal interviewing (CAPI), while a reduced wave in 2021 employed computer-assisted telephone interviews (CATI). Wave 3 included a refreshment sample ( $N = 1,519$ ) to counter attrition, but these cases are not used here to capture longer response trends. Between wave 1 and wave 7, attrition amounted to 40%, achieving a final sample of  $N = 1,741$ . Longitudinal weights adjust for both the sampling design and potential biases arising from systematic non-participation. Further details on sampling, attrition, and weighting can be found at <https://coes.cl/encuesta-panel/>, and the dataset is publicly available at <https://dataverse.harvard.edu/dataverse/elsoc>.

### 3.2 Variables

**Market justice preferences:** The dependent variable in this study is preferences for market justice. This construct is operationalized through three items that capture how strongly individuals justify conditioning access to social services—healthcare, pensions, and education—on income. Specifically, the justification of inequality in healthcare is assessed by the question: “Is it fair in Chile that people with higher incomes can access better healthcare than people with lower incomes?” The same question is posed for pensions and education. In all cases, respondents indicate their level of agreement on a five-point Likert scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). Additionally, we include a composite measure of “market justice preferences”, calculated as the average of these three items ( $\alpha = 0.84$ ). This index ranges from 1 to 5, with higher values indicating stronger preferences for market justice (see Table 1).



Table 1: Dependent variables for the first wave (2016)

Label	Stats / Values	Freqs (% of Valid)	Valid
Health distributive justice	1. Strongly disagree	558 (37.2%)	1501 (100.0%)
	2. Disagree	729 (48.6%)	
	3. Neither agree nor disagree	63 ( 4.2%)	
	4. Agree	133 ( 8.9%)	
	5. Strongly agree	18 ( 1.2%)	
Pension distributive justice	1. Strongly disagree	426 (28.4%)	1501 (100.0%)
	2. Disagree	718 (47.8%)	
	3. Neither agree nor disagree	108 ( 7.2%)	
	4. Agree	226 (15.1%)	
	5. Strongly agree	23 ( 1.5%)	
Education distributive justice	1. Strongly disagree	521 (34.7%)	1501 (100.0%)
	2. Disagree	783 (52.2%)	
	3. Neither agree nor disagree	73 ( 4.9%)	
	4. Agree	113 ( 7.5%)	
	5. Strongly agree	11 ( 0.7%)	
Market justice preferences	Mean (sd) : 2 (0.8)	12 distinct values	1501 (100.0%)
	min < med < max:		
	1 < 2 < 5		
	IQR (CV) : 0.7 (0.4)		

**Perception of economic inequality:** The main independent variable refers to the perception of economic inequality, measured through the perceived wage gap. (Castillo, 2009; Gijsberts, 1999; Hadler, 2005). This measure is derived from the salary gap between the perceived salaries of jobs at opposite ends of the occupational hierarchy. Specifically, it relies on the division between the perceived salary of a large-company president and that of an unskilled worker (Castillo, 2011). Higher values of this term indicate a greater perception of economic inequality between occupations located at the extremes of the status continuum. This measure includes a logarithmic term in order to adjust income magnitudes (usually fewer cases with high income):

$$\text{perceived wage gap} = \log_{10} \left( \frac{\text{perceived salary of a large-company president}}{\text{perceived salary of an unskilled worker}} \right)$$

**Perception of Meritocracy:** this variable is operationalized through two components, namely effort and talent (Young, 1962). The item used to gauge effort is: “In Chile, people are rewarded for their efforts,” while the item for talent is: “In Chile, people are rewarded for their intelligence and skills”. In both cases, respondents indicate their level of agreement on a five-point Likert scale, ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

Table 2 shows the independent variables used, their response categories and their frequencies.

Table 2: Independent variables for the first wave (2016)

Label	Stats / Values	Freqs (% of Valid)	Valid
Inequality gap perception	Mean (sd) : 3.7 (1.1) min < med < max: 0.4 < 3.7 < 6.9 IQR (CV) : 1.6 (0.3)	296 distinct values	1501 (100.0%)
People are rewarded for their efforts	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree	169 (11.3%) 693 (46.2%) 263 (17.5%) 328 (21.9%) 48 ( 3.2%)	1501 (100.0%)
People are rewarded for their intelligence	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree	134 ( 8.9%) 617 (41.1%) 294 (19.6%) 401 (26.7%) 55 ( 3.7%)	1501 (100.0%)

### Controls

Sociodemographic and attitudinal variables are included to control for potential composition effects in the population. In terms of sociodemographic characteristics, we incorporate per capita household income quintile, educational level (1=Less than University, 2=University), age (in years), and sex (1=Male, 2=Female), which have been previously shown to influence market justice preferences significantly (Castillo et al., 2024; Lindh, 2015). Regarding attitudinal variables, we include political identification (1=Left, 2=Center, 3=Right, 4=No identification) and subjective social status (ranging from 1 to 10) as they may confound the relationship between market justice preferences and perceptions of inequality and meritocracy (Schneider & Castillo, 2015).

### 3.3 Methods

Given the data's hierarchical structure, in which observations are nested in survey waves, we employ longitudinal multilevel linear models (Singer & Willett, 2009). In a panel-data framework, within-person effects capture how shifts in individual-level variables across waves are associated with variations in market justice preferences. By contrast, between-person effects focus on differences among individuals, explaining how long-term (or average) values relate to overall levels of market justice preferences.

To estimate within-person effects, we use group-mean centering, where each respondent functions as the "group" (i.e., observations nested within persons). Meanwhile, the between-person effects are derived from each individual's average on these variables, calculated across the waves of panel data.

All the analyses were conducted using R software and the *lme4* package ([Bates et al., 2015](#)).

## 4 Results

### 4.1 Descriptive

Figure 1 shows the annual frequencies of market justice preferences for healthcare, pensions, and education from 2016 to 2023. Each year presents stacked percentage frequencies, and the flows between them reflect opinion changes among the same individuals from one year to the next, given that we are using panel data. For instance, of the 40.8% who strongly disagreed with justifying inequality in healthcare in 2019, around 24.3% maintained that position in 2022, while the remaining 16.5% shifted toward other response categories—primarily moving into disagreement rather than strong disagreement. Overall, more than half of the respondents exhibit a high level of disagreement (disagree + strongly disagree) with inequality in these three social service areas over time. Despite this general pattern, recent waves show a slight decrease in disagreement and a corresponding rise in support for inequality. Specifically, in healthcare and education, although disagreement remains substantial, agreement (agree + strongly agree) increased from 7.4% and 7.2% in 2019 to 13.1% and 14.2% in 2023, respectively. This shift is most evident in pensions, where the combined agree/strongly agree category grew by about 10 percentage points, from 16.9% in 2016 to 28% in 2023.

Figure 1: Change in the justification of inequality in healthcare, pensions and education over time (2016-2023)

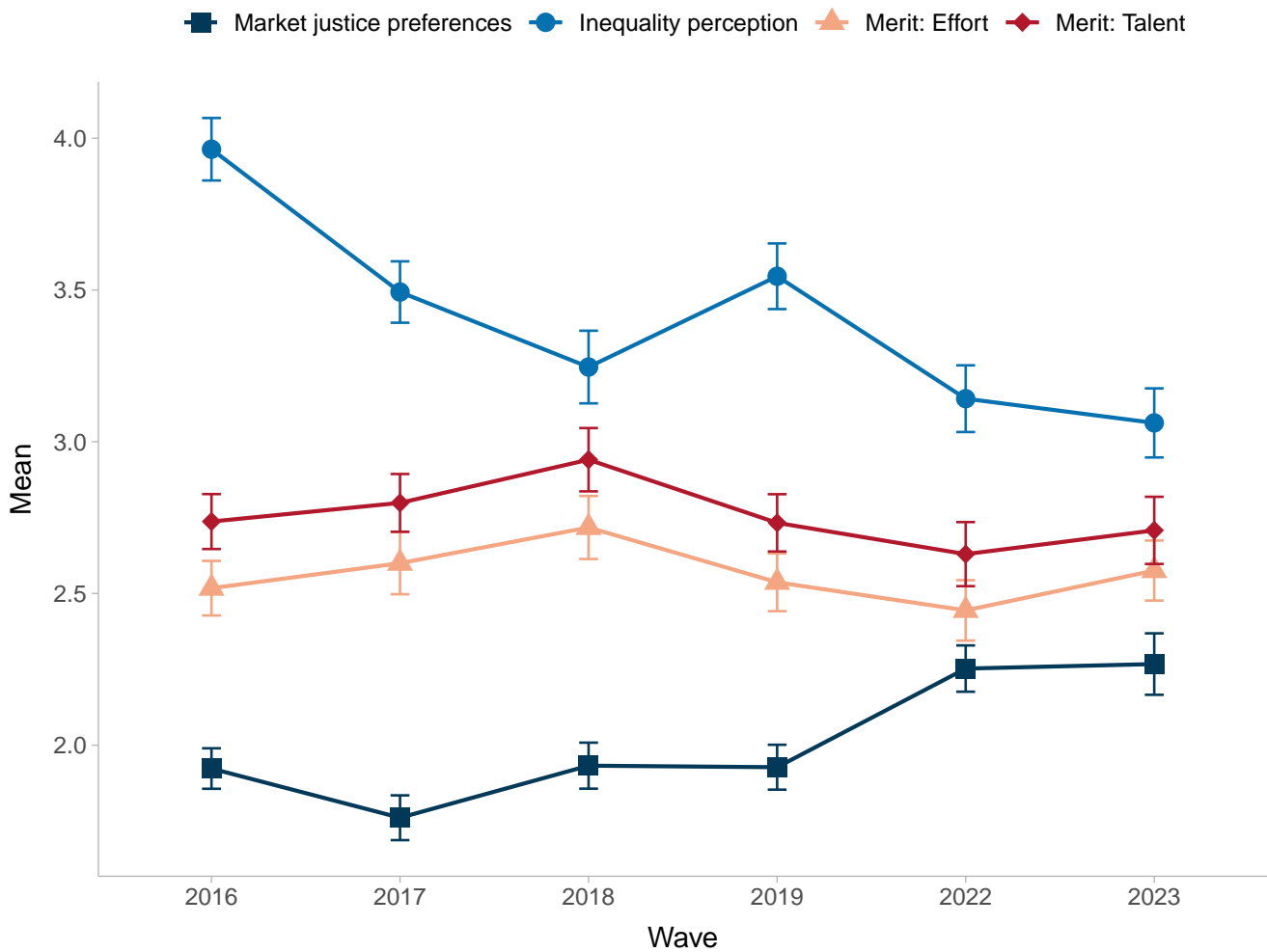


Source: own elaboration with pooled data from ELSOC 2016–2023 (n = 8460)

Regarding the main variables of this study, Figure 2 depicts their average changes over the years. We

observe an increase in the average level of market justice preferences in the most recent waves, which begins in 2019. The highest average consistently appears for perceived economic inequality, although this variable shows a downward trend of roughly one point over time. Interestingly, while perceptions of economic inequality declined in the latest measurements (2022–2023), market justice preferences increased. The meritocracy measures remain stable, though the perception that individuals are rewarded for intelligence is slightly higher than the perception that they are rewarded for their effort.

Figure 2: Change in the mean of market justice preferences, economic inequality perception, and meritocracy (2016-2023)



Source: own elaboration with pooled data from ELSOC 2016–2023 (n = 8460)

Figure 3 presents the correlation matrix for the main variables in the latest wave (2023). Overall, the coefficients range from low to moderate. The association between market justice preferences and economic inequality perception is negative but small and statistically significant ( $r = -0.05$ ,  $p < .05$ ). By contrast, market justice preferences positively and significantly correlate with the two meritocracy variables ( $r = 0.15$ ,  $p < .01$ ;  $r = 0.13$ ,  $p < .01$ ). Perceived economic inequality has negative and nonsignificant correlations with both meritocracy perceptions ( $r = -0.04$ ,  $p > .05$ ;  $r = -0.04$ ,  $p > .05$ ). Finally, the two

meritocracy variables exhibit a strong positive association with each other ( $r = 0.69, p < .01$ ).

Figure 3: Correlation matrix of the main variables for the last wave (2023)



## 4.2 Multilevel models

Table 3 presents the results of the multilevel models estimated for market justice preferences, examining both individuals (within) and group-level (between) effects. The intraclass correlation (Hox et al., 2017) from the empty model (see Supplementary Material), which decomposes the variance of market justice preferences, is 0.23, indicating that approximately 23% of the variation is attributable to differences between individuals. Complementary, 77% of the variation corresponds to within-individual differences over time.

According to Model 1, which includes the survey waves to capture intertemporal variations in the depen-



Table 3: Longitudinal multilevel models for market justice preferences

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Intercept	1.968*** (0.021)	2.015*** (0.035)	2.030*** (0.035)	2.028*** (0.035)	2.169*** (0.070)	1.456*** (0.097)	1.547*** (0.115)
Wave (Ref.= 2016)							
Wave 2017	-0.167*** (0.027)						
Wave 2018	-0.025 (0.027)						
Wave 2019	-0.046 (0.027)						
Wave 2022	0.285*** (0.028)						
Wave 2023	0.284*** (0.027)						
Wave		-0.121*** (0.022)	-0.125*** (0.022)	-0.128*** (0.022)	-0.128*** (0.022)	-0.128*** (0.022)	-0.129*** (0.022)
Wave <sup>2</sup>		0.028*** (0.003)	0.028*** (0.003)	0.029*** (0.003)	0.029*** (0.003)	0.029*** (0.003)	0.029*** (0.003)
Perception inequality (WE)			-0.039*** (0.010)	-0.034*** (0.010)	-0.034*** (0.010)	-0.034*** (0.010)	-0.034*** (0.010)
Merit: Effort (WE)				0.070*** (0.012)	0.070*** (0.012)	0.069*** (0.012)	0.069*** (0.012)
Merit: Talent (WE)				0.027* (0.012)	0.027* (0.012)	0.027* (0.012)	0.027* (0.012)
Perception inequality (BE)					-0.042* (0.018)	-0.006 (0.018)	-0.033 (0.018)
Merit: Effort (BE)						0.186*** (0.032)	0.178*** (0.031)
Merit: Talent (BE)						0.040 (0.032)	0.019 (0.031)
Controls	No	No	No	No	No	No	Yes
BIC	20780.594	20780.617	20781.113	20726.753	20736.627	20655.172	20749.047
Num. obs.	8643	8643	8643	8643	8643	8643	8643
Num. groups: idencuesta	1687	1687	1687	1687	1687	1687	1687
Var: idencuesta (Intercept)	0.172	0.223	0.219	0.209	0.207	0.182	0.171
Var: Residual	0.530	0.499	0.498	0.495	0.495	0.495	0.495
Var: idencuesta ola_num		0.011	0.010	0.009	0.009	0.009	0.009
Cov: idencuesta (Intercept) ola_num		-0.025	-0.024	-0.021	-0.020	-0.019	-0.019

Note: Cells contain regression coefficients with standard errors in parentheses. \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$ .

Table 4

dent variable, there is a decrease in 2017 ( $\beta = -0.167, p < .001$ ) relative to 2016, and similarly in 2018 ( $\beta = -0.025, p > .05$ ) and 2019 ( $\beta = -0.046, p > .05$ ), although the latter effects are not statistically significant. In contrast, in the more recent waves of 2022 and 2023, there is a statistically significant increase in market justice preferences ( $\beta = 0.285, p < .001$ ;  $\beta = 0.284, p < .001$ ), suggesting a non-linear effect. To model this trajectory over time, Model 2 incorporates time (survey waves) as a continuous variable, along with its quadratic term, representing the non-linear association initially observed in Model 1. While the linear term (survey wave) shows a negative association, reflecting an overall decline in market preferences over time, the positive quadratic term indicates a reversal of this pattern in the final measurement points.

Models 3 and 4 incorporate the within-group effects (WE) of the primary independent variables, capturing how individual changes in these variables over time shape the dependent variable. The results in Model 3 suggest that the within effect of perceived economic inequality is negative and statistically significant ( $p < .001$ ). Specifically, each one-point increase in an individual's perception of economic inequality between waves is associated with a 0.034 point decrease in market justice preferences. Model 4 shows that meritocratic beliefs operate in the opposite direction. An upward shift in the perception that effort is rewarded exerts a positive within effect ( $\beta = 0.071, p < .001$ ), and a parallel increase in the perception that intelligence and ability are rewarded is likewise associated with higher market-justice preferences ( $\beta = 0.028, p < .05$ ). Taken together, these results suggest that individuals who increasingly perceive meritocracy—whether through effort or talent—tend to hold stronger market justice preferences.

When examining the between-group effects (BE) in Model 5 and 6, which capture differences between individuals in the average of the main variables, a similar pattern emerges. Individuals who perceive higher levels of economic inequality tend to prefer less market justice ( $\beta = -0.042, p < .05$ ). In Model 6, the meritocratic perception that effort is rewarded is positively associated with market justice preferences ( $\beta = 0.186, p < .001$ ), whereas the perception that talent is rewarded shows a positive but non-significant coefficient ( $\beta = 0.040$ ). Notably, once the meritocratic variables are included, the negative coefficient for perceived economic inequality remains but is no longer statistically significant.

Model 7 adds the control variables. With the exception of the between-effect for perceived economic inequality—which becomes nonsignificant—the within- and between-effects of the principal predictors retain both their direction and statistical significance, confirming the robustness of the associations (see Supplementary Material for effects of control variables).

Table 5 reports whether perceived economic inequality moderates the impact of meritocratic perceptions on market-justice preferences. In neither the within-person specification (Model 8) nor the between-person specification (Model 9) do the interaction terms reach statistical significance, indicating that higher perceptions of economic inequality do not meaningfully alter the effect of meritocracy on support for market allocation of social services.

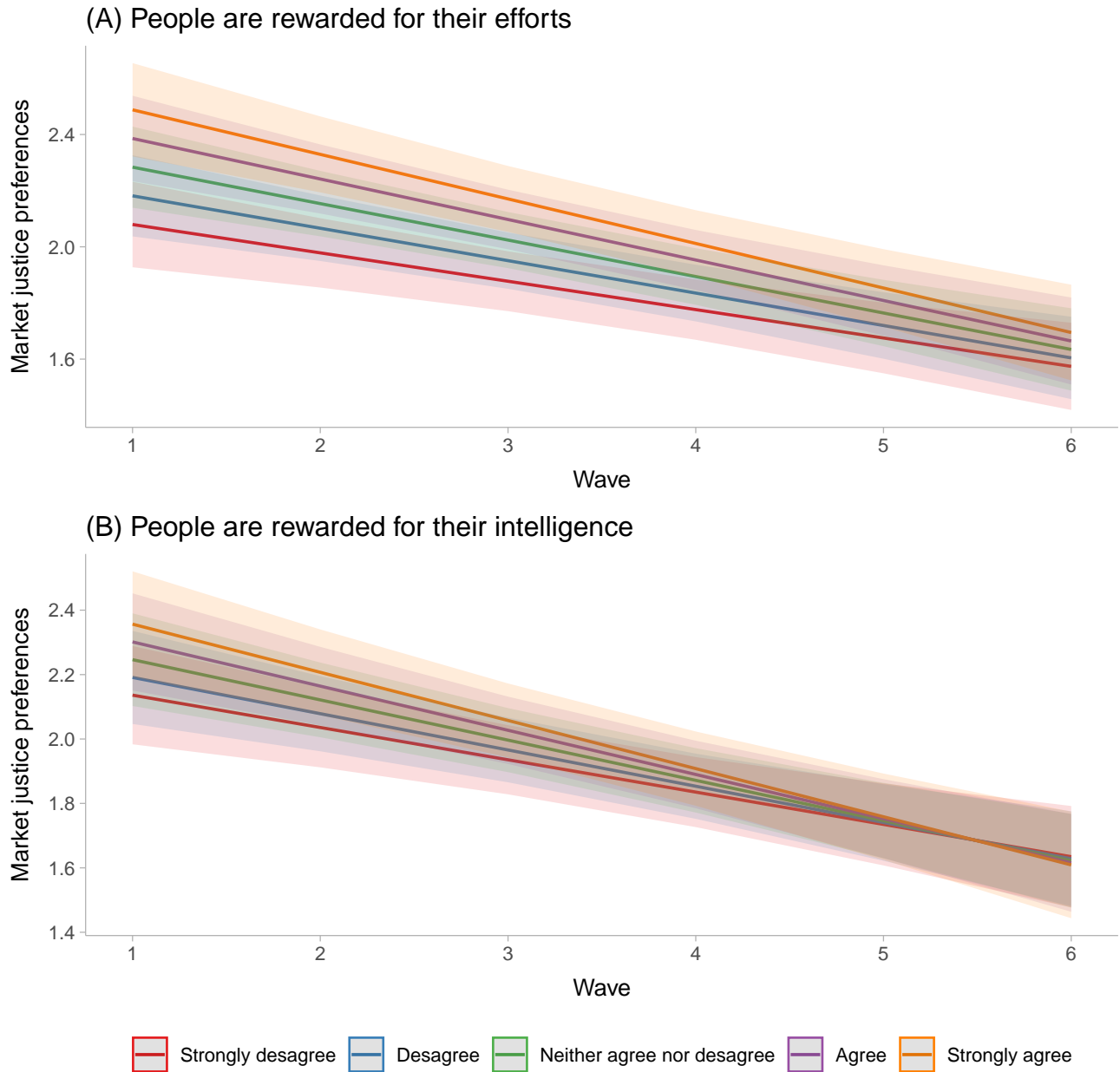
Table 5: Interactions for meritocracy, perceived economic inequality and market justice preferences

	Model 8	Model 9
Intercept	1.558*** (0.115)	2.361*** (0.287)
Merit: Effort (WE) x Perception inequality (WE)	0.019 (0.016)	
Merit: Talent (WE) x Perception inequality (WE)	−0.002 (0.016)	
Merit: Effort (BE) x Perception inequality (BE)		0.016 (0.045)
Merit: Talent (BE) x Perception inequality (BE)		0.070 (0.045)
Controls	Yes	Yes
BIC	20879.829	20819.684
Num. obs.	8643	8643
Num. groups: idencuesta	1687	1687
Var: idencuesta (Intercept)	0.147	0.141
Var: idencuesta merit_effort_cwc	0.016	
Var: idencuesta merit_talent_cwc	0.018	
Var: idencuesta perc_inequality_cwc	0.000	
Cov: idencuesta (Intercept) merit_effort_cwc	−0.005	
Cov: idencuesta (Intercept) merit_talent_cwc	0.015	
Cov: idencuesta (Intercept) perc_inequality_cwc	−0.006	
Cov: idencuesta merit_effort_cwc merit_talent_cwc	−0.003	
Cov: idencuesta merit_effort_cwc perc_inequality_cwc	0.000	
Cov: idencuesta merit_talent_cwc perc_inequality_cwc	0.001	
Var: Residual	0.503	0.528

Note: Cells contain regression coefficients with standard errors in parentheses. \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$ .

Table 6

Figure 4: Time varying within effects of meritocratic perceptions on market justice preferences



Source: own elaboration with pooled data from ELSOC 2016–2023 (n = 8460)

With respect to the temporal dynamics of the key predictors, Figure 4 illustrates the interaction between survey wave and the within-person effects of the meritocracy variables on market-justice preferences (complete models appear in the Supplementary Material). As time advances, the positive within-person effect of perceiving that effort is rewarded (panel A) or that intelligence is rewarded (panel B) progressively attenuates. Put differently, the uplift in market justice preferences associated with a strong meritocratic perception becomes smaller in each successive wave.

## 5 Discussion

## 6 Conclusion

## 7 References

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