

**Great Plains, Few Peaks: The Global Landscape of  
Egalitarian Beliefs**

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**Working Paper No. 2026-02**

**March 2026**



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March 24, 2026

The authors would like to thank Justin Wiltshire for his perceptive comments. Remaining errors are our responsibility. The paper is part of an ongoing project – comments would be much appreciated (please send to [Lars.Osberg@dal.ca](mailto:Lars.Osberg@dal.ca) or [insa.bechert@gesis.org](mailto:insa.bechert@gesis.org)).

## Great Plains, Few Peaks: The Global Landscape of Egalitarian Beliefs

### Abstract

Using the 2019 International Social Survey Programme (ISSP) data on what 51,582 respondents in 34 countries thought different occupations “should earn”, this paper examines the importance of cross-national average differences in “fair pay ratio” beliefs relative to within-country differences in attitudes. It argues that a large majority of the population in all countries thinks that fair wage inequality would imply CEO/worker pay ratios that are (a) remarkably small compared to actual pay ratios and (b) remarkably similar. Because majority beliefs about the “fair” CEO/worker pay ratio are quite similar almost everywhere, cross-country comparisons of *average* attitudes towards fair pay ratios aggregate an egalitarian majority with an inegalitarian minority, whose beliefs differ from the egalitarian majority to differing degrees in different countries. The interesting question for analysis of cross-national differences in public redistributive policies therefore is why and how much the preferences of inegalitarian minorities within countries differ from those of the egalitarian majorities and how those minority preferences can become influential.

## Great Plains, Few Peaks: The Global Landscape of Egalitarian Beliefs

Insa Bechert and Lars Osberg

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Individuals' beliefs about "fair" inequality in pay differ within countries and across countries – but what is the best way to think about such differences in fairness values? Cross-country differences in average beliefs about "fair" pay inequality are often seen as indicators of general national differences in inequality aversion which reflect broad cultural differences. Gaspar et al. (2024), for example, compared attitudes to domestic, within-country inequality and attitudes to cross-country economic inequality<sup>1</sup> using averages of individuals' desired within-country inequality preferences. Almås, Bonn, Cappelen, *et al.* (2025) similarly used the average response to fairness questions<sup>2</sup> when comparing inequality attitudes in China, Germany, and the USA. When ChatGPT<sup>3</sup> was asked to scrape the web and distill its contents to explain "differences in preferences for "Fair" Wage Inequality", it asserted the importance of differences between Individualist vs. Collectivist Cultures, comparing the United States to Scandinavian countries. A closely related assumption often observed in the literature (e.g., Almas et al, 2022; OECD 2021:43) is the hypothesis that regression models predicting the variation in individuals' attitudes towards inequality can use country "fixed effects" dummies, as well as individual characteristics such as years of education or age, as explanatory variables<sup>4</sup>. As the overview of Cowell, Schokkaert and Tarrow (2025:615) of fourteen special issue papers on "Inequality perceptions and fairness judgements" notes: "Many of the papers in this area – and in this collection – report mainly average results."

This paper argues for a contrasting perspective – that cross-country differences in average attitudes mostly reflect the aggregation of egalitarian majorities, whose attitudes are fairly similar almost everywhere, with inegalitarian minorities, whose beliefs differ from the egalitarian majority to very differing degrees across countries. Public opinion polling<sup>5</sup> or quantitative psychology<sup>6</sup> or political science<sup>7</sup>, often distinguishes between types of people with differing political preferences or personality traits within countries and argues that countries differ because their percentages of such types differ<sup>8</sup>. This paper similarly distinguishes between inegalitarian minorities and egalitarian majorities. It examines the hypothesis that most people almost everywhere are quite egalitarian in their attitudes to "fair" CEO/unskilled factory worker pay ratios and that cross-country differences in fair pay ratio beliefs are mostly concentrated in an inegalitarian minority. It uses the same International Social Survey Programme (ISSP) data set as Gaspar et al (2024) to extend Bechert and Osberg (2023)<sup>9</sup> in arguing that a large majority of the population everywhere thinks that fair wage inequality would imply CEO/worker pay ratios that are (a) remarkably small compared to actual pay ratios and (b) remarkably similar.

Our results imply, in contrast to the hypothesis of national differences between "individualist" and "collectivist" cultures, that most people in both Scandinavia and the USA have quite similar attitudes, and that differences in *average* fairness values between Scandinavian and other countries are concentrated in the most inegalitarian of those countries. Because majority beliefs about "fair"

CEO/worker earnings differentials are quite similar almost everywhere, cross-country differences in *average* attitudes towards fair CEO pay reflect the aggregation of an egalitarian majority with an inegalitarian minority, whose beliefs differ from the egalitarian majority to differing degrees in different countries.

If all 51,582 ISSP respondents in all 34 countries in 2019 are considered as a global sample of beliefs about the CEO / Unskilled Factory Worker Fair Pay Ratio, this paper asks [1] how much of the total global differences among all respondents in their personal beliefs about the fair pay ratio is due to between country differences in national cultures compared to within country differences in attitudes among co-citizens and [2] how much of within country differences in fair pay beliefs is concentrated in the most inegalitarian few. The coefficient of variation is a summary measure of the inequality in a distribution that can be decomposed into the percentage of total inequality accounted for by “between group” differences in group averages and the percentage ascribable to “within group” differences. Although most commonly used to decompose the inequality of income distributions, it can also be used to decompose global differences in fair pay ratio beliefs.<sup>10</sup>

When the coefficient of variation squared of the global inequality of beliefs about fair CEO/worker pay ratios is decomposed,<sup>11</sup> only 4.9% of the total global variance of CEO / unskilled factory worker fair pay ratio beliefs among all respondents is due to between-country variation in average beliefs about the fair CEO / worker pay ratio.<sup>12</sup> Within-country variation accounts for 95.1% of the global inequality of beliefs. Within-country variance further decomposes into the fraction (86.3%) ascribable to the most inegalitarian 20% and the fraction (13.7%) due to the more egalitarian 80%. We read this data as indicating that the global distribution of attitudes to the “fair” CEO / worker pay ratio is dominated by within-country variation, most of which is concentrated in each country’s inegalitarian minority.

In ISSP data, the “fair” CEO/worker pay ratio beliefs of the median respondent differ across countries, but these differences are quite small compared to differences within countries between the beliefs of the inegalitarian minority and egalitarian majority – and especially small compared to actual CEO/worker pay ratios. CEO / unskilled factory worker (or CEO / shop assistant) pay ratios compare pay at the very top of the earnings distribution and pay near the bottom. In the academic literature, there have been experimental studies of attitudes towards inequality and surveys of attitudes about hypothetical income distributions<sup>13</sup> which evaluate the “fairness” of differentials in rewards, but these examine differentials in the middle of the earnings distribution – which are much smaller than CEO / worker differentials. Beliefs about the fairness of differences between individuals at the tails of the earnings distribution may plausibly differ from beliefs about the fairness of smaller differences among middle incomes<sup>14</sup>. Our analysis of fairness beliefs about CEO / worker pay comparisons, therefore, addresses only one aspect of public attitudes toward inequality.

However, an implication of our hypothesis of substantial differences in “fair” pay ratio beliefs between egalitarians and inegalitarians within countries is that explanations of redistributive policy differences across countries should probably focus on understanding who the inegalitarian minority in each country might be, how they differ across countries and how they may become politically influential. We therefore suggest that analysis of the political economy of policy formation should start with testing the hypothesis of distinct differences in egalitarian preferences within countries and then asking why

inegalitarian minorities may have attitudes to inequality different from the more egalitarian majority, to differing degrees in different countries. Given differences in egalitarian preferences, a second set of questions is how the inegalitarian minority may gain differential access to political influence and power.

The paper begins with a brief discussion of the ISSP data and its advantages and limitations as a source of evidence on inequality aversion. Section 2 then presents our main results for the “fair” CEO / Factory Worker pay ratio, Section 3 discusses attitudes about fair pay inequality more generally, and Section 4 suggests some implications.

## 1. Measures

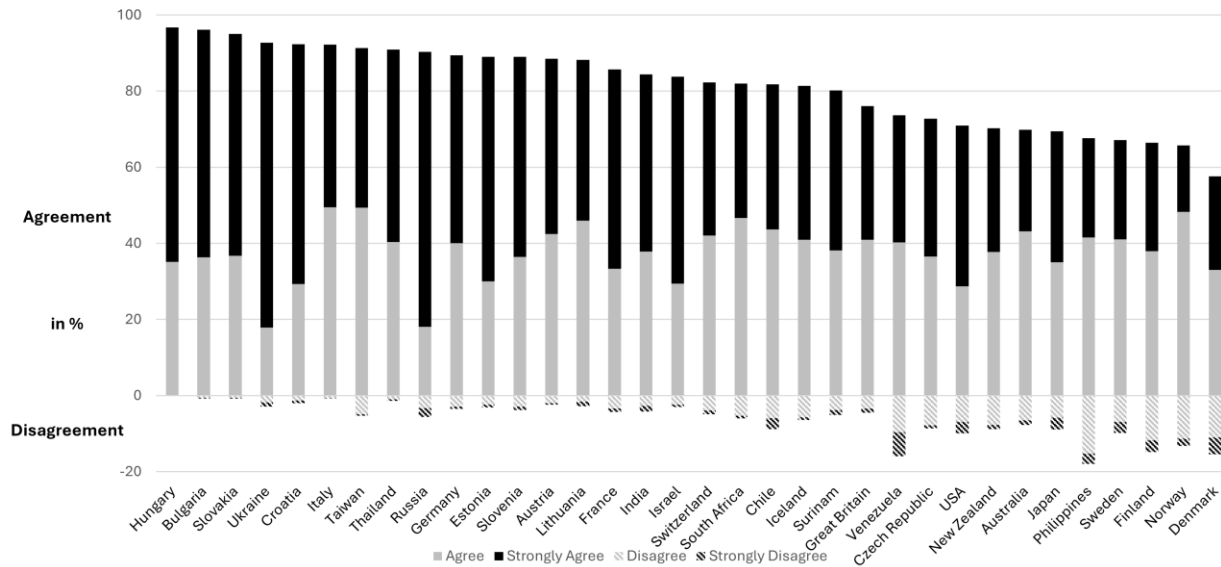
The International Social Survey Programme (ISSP)<sup>15</sup> is a cross-national collaboration program conducting annual surveys on diverse topics relevant to social sciences since 1984. All country samples are nationally representative of the adult populations with a minimum sample size of 1,000 cases. The “Social Inequality” modules conducted in 1987, 1992, 1999, 2009, and 2019 surveyed attitudes towards inequality. Our earlier paper (Bechert and Osberg, 2023) was restricted to seven industrialized nations<sup>16</sup> during those years. This paper uses data from all 29 countries that are included in the ISSP 2019 data file (ZA7600) and also integrates ISSP data from the Ukraine (ZA7810), Hungary (ZA7811), Slovakia (ZA7812), Estonia (ZA7813), and India (ZA7845). The combined data is thus based on responses from a total of 51,582 respondents<sup>17</sup> in 34 countries spanning a very wide range of socio-economic contexts. We focus on the series of questions in which respondents across all five ISSP “Social Inequality” modules have been asked first to estimate what salaries people in a list of jobs actually *do* earn and then asked what people in these jobs *should* earn. [Measures: “We would like to know what you think people in these jobs *do/should* earn.”] The list of jobs has varied over the years, but in all five survey waves, the jobs considered included shop assistant, doctor in general practice, chairman of a large national company, unskilled factory worker, and federal cabinet minister.

In the ISSP, the “do earn” series of questions is always asked before the “should earn” queries, so all “should earn” responses are always anchored in the respondent’s subjective perception of actual pay rates across a range of occupations. Responses are given in different national currencies and refer to the time period most commonly discussed in that nation. In 2019, eighteen countries asked about before-tax income, but in sixteen countries<sup>18</sup> an “after-tax” concept was specified. Taking the ratio of “should earn” earnings controls for cross-national differences in survey methodology.

In this paper, Section 2 focuses on respondents’ opinions about the “fair pay ratio” between how much the chairman of a large national company should earn and how much an unskilled factory worker should earn. All our results are replicated for the fair pay ratio between unskilled factory workers and all other available occupations in 2019, as Table 3a shows<sup>19</sup>. Although doctors and cabinet ministers are also well-paid, the “should earn” pay of the chairman of a large national company is, in our view, a relatively clean indicator of attitudes to the fairness of pay inequality, in itself. [We suspect that individuals’ “should earn” responses for doctors and cabinet ministers may mingle their attitudes on fair pay inequality with their probably positive evaluations of the social value of the work of doctors (saving lives

and curing illnesses) and their possibly negative opinions of the activities of politicians in general or, specifically, the current government.<sup>20]</sup> However, focusing on “should earn” pay at the top of the income distribution (the chair of a large national company) compared to “should earn” pay near the bottom (an unskilled factory worker or a shop assistant) cannot reveal attitudes to smaller differentials in the middle of the distribution of occupational pay. Section 3, therefore, discusses the more general question of the inequality of “should earn” pay among all the occupations mentioned in the 2019 ISSP.

The ISSP data do not enable us to directly address the quantitative importance of many issues arguably relevant to “fair” economic inequality (e.g., discrimination and inequality of opportunity in access to positions or the inequality of wealth or the distribution of taxes, transfers, and capital income). However, the ISSP data do consistently indicate the ubiquity of a vague generalized agreement that income differences are “too large”. As Gaspar et al (2024) note, “on average, ISSP respondents in every country would prefer less inequality than they perceive”. Only a minority, which the OECD (2021:39) notes has been shrinking, disagrees. Figure 1 plots the responses when people are asked the question whether they agreed or disagreed with the statement “Differences in income in (R's country) are too large”,<sup>21</sup> The average percentage, across all countries in 2019 who “Agree” or “Agree Strongly” is 81.5%. In all countries, there are extremely few people who “strongly disagree” (on average, 1.5%) and only slightly more who “disagree” (on average, 4.8%), as Figure 1 indicates.



**Fig. 1** Agreement/Disagreement with the statement: "Income Differences are too large."

To highlight value divergences, the bars in Figure 1 omit the fence-sitting “neither agree nor disagree” category and the missing and “can’t choose” categories. The length of each total bar graph thus implicitly indicates the “opinionated” percentage of each country’s population, which is notably lower in some countries (e.g., Denmark or Norway) compared to others (e.g., Bulgaria or Hungary).

Individual attitudes about general “income differences” mingle many perceptions (e.g., the importance of inheritances to billionaire wealth or of work effort to poverty) and values (e.g., with regard to transfer “dependency” or to equality of opportunity or to income needs).<sup>22</sup> In addition, respondents necessarily are answering from within different lived realities, with different implicit comparators when they are asked about “too large” income differences (i.e., compared to what?). Both the United States (with 71.0% agreeing or agreeing strongly) and Norway (with 65.8%) are at the lower end of the “income differences too large” consensus in 2019. However, Norway and the United States differ substantially in their current levels of market income inequality, income tax, and social transfers, so there is a different concrete personal meaning to a statement such as: “Income differences are too high” for Norwegian and American respondents. An American “left-winger” and a Norwegian “right-winger” might conceivably both actually want the same level of inequality and redistribution, but that common objective could plausibly motivate different responses to a “too high” or “too low” question about current inequality in their own country. Furthermore, a 5-point response scale – agree strongly/agree/neither/disagree/disagree strongly – does not permit observation of finer gradations in the intensity of individual preferences for greater equality (or inequality).

Our comparisons of “should earn” pay ratios below offer both a finer-grained evaluation of fairness attitudes and clear local referents. The calculation of the ratio of “should earn” earnings for CEOs to “should earn” earnings for unskilled factory workers implicitly holds constant issues such as household size and composition. However, within each country the socio-economic context of unskilled factory workers varies somewhat as the distribution of other jobs varies. Within our sample of 34 countries, GDP per capita in 2019<sup>23</sup> varies considerably - \$7,930 in India, \$21,728 in Thailand, \$61,602 in Sweden and \$69,113 in the USA. Although “the chairman of a large national company” would plausibly be at the very top of the earnings distribution in all 34 countries of the 2019 ISSP, the relative position in the local income hierarchy of an “unskilled factory worker” depends somewhat on the comparison being made. For example, although an unskilled factory worker would make far more in absolute income in Sweden than in India, respondents in India might well regard unskilled factory workers as relatively well-off compared to landless agricultural labourers, a group that is a much larger, and poorer, percentage of the population in India than in Sweden. In Swedish factories, most employees are highly skilled but in Indian factories, unskilled workers are the majority. Hence, despite their higher absolute income, compared to India, unskilled factory workers in Sweden have incomes that are lower relative to Swedish median income. However, despite the dissimilarities across these 34 countries in the socioeconomic context of the wages of an unskilled factory worker, most respondents in all of them come to fairly similar, and quite egalitarian, conclusions about the CEO/unskilled factory worker “should earn” pay ratio – which we find remarkable.

Within the U.S., an extensive literature has also argued that the ratio between CEO and worker salaries has economic consequences. Since 2017, publicly traded companies in the U.S. have had to disclose annually the ratio between Chief Executive Officer (CEO) earnings and the wages of the median employee in their firms<sup>24</sup>. As Chen (2025) documents, the median total direct compensation of CEOs in Securities and Exchange Commission (SEC) listed companies in 2024 was \$16.2 million<sup>25</sup>. The median

within firm CEO / median employee pay ratio was 213.5 to 1. Since the median employee at SEC listed firms earned substantially more (\$74,674 in 2024) than the median American production worker in manufacturing (\$43,750)<sup>26</sup>, the median actual CEO / production worker pay ratio was correspondingly higher – 371.8 to 1<sup>27</sup>.

A growing literature has used the SEC pay ratio data for individual firms to establish its correlates. Pan, et al. (2022) have, for example, examined the relationship between the CEO/worker earnings ratio and stock prices<sup>28</sup>. Other researchers have explored the linkages between the CEO/worker earnings ratio and firm productivity,<sup>29</sup> local social capital and minimum wages<sup>30</sup>, firm value and performance,<sup>31</sup> consumer perceptions<sup>32</sup>, corporate social responsibility<sup>33</sup>, corporate disclosures<sup>34</sup>, bond yield spreads<sup>35</sup>, Research and Development efficiency,<sup>36</sup> CEO pay packages<sup>37</sup> and the balance of power between the CEO (relative to the board) and ordinary employees (relative to management)<sup>38</sup>. A common thread in these diverse research projects is that levels of CEO compensation which are considered unfairly high compared to the wages of ordinary workers may have adverse impacts along the diverse dimensions studied. However, another common feature of all these papers is that no evidence is presented about perceptions of how much earnings inequality between CEOs and workers would be considered “fair” by the general public – a topic to which we now turn.

## 2. The “Great Plains of Egalitarianism” and the CEO / Factory Worker “Fair Pay Ratio”

Table 1 and Figures 2, 3, and 4 compare, for all 34 ISSP countries in 2019, the within-country distributions of the “Fair Pay Ratio” of respondents – i.e., the ratio for each respondent of what they think the chairman of a large national company “should earn” compared to what they think an unskilled factory worker “should earn”. Table 2.1 presents the 25<sup>th</sup>, 50<sup>th</sup> (median), 66<sup>th</sup>, 80<sup>th</sup>, 90<sup>th</sup>, and 99<sup>th</sup> percentiles of the distribution of CEO / Worker Fair Pay Ratios. The countries in which respondents were asked for a “before tax” response are denoted by an asterisk. Countries are ordered, from least to most, by the 80<sup>th</sup> percentile respondent’s CEO/worker “fair pay” ratio. As can be seen, countries in which the “before tax” concept was asked for can be found at the top, bottom, and middle of the distribution of countries. Averaging across all countries, the median respondent thought the fair CEO/worker pay ratio should be 5.06, while the average of median respondents when only before tax comparisons are considered was 5.60. Taiwan (a “before tax” fair pay country) appears to be an outlier in the data on CEO fair pay, so its inclusion or exclusion in comparisons has an appreciable impact on the cross-country average and dispersion of fair pay ratios at each percentile of the within-country distribution of attitudes.<sup>39</sup>

In Table 1, the columns document cross-country differences at comparable percentiles of the within-country distribution of fair pay ratio beliefs. The rows document, for each country, the differences within each country in beliefs about the fair pay ratio. If the objective is to analyze the political economy of redistribution policy within each country, we would argue that it is the distribution of attitudes within countries (i.e., the rows of Table 1) which matter – in particular, the sharp difference in most countries between most respondents’ fairness beliefs and the attitudes of the most inegalitarian 20% or 25% of respondents. Notably, it is only the very top percentile of respondents that suggest a fair CEO / worker pay ratio that is anywhere close to the CEO / worker pay ratio actually observed in the U.S. and Germany.

Reading down the columns in Table 1, which document the differences between countries at each within-country percentile of the distribution of fair pay ratio beliefs, and averaging the Scandinavian countries of Norway, Sweden, Denmark, and Iceland, the median fair pay ratio response was 2.3. – which can be compared to median US response of 6.3. The difference between American and Scandinavian attitudes widens dramatically as one considers the more inegalitarian respondents – at the 90<sup>th</sup> percentile, for example, Swedes and Norwegians thought a 5 to 1 CEO / Worker pay ratio would be fair while the comparable 90<sup>th</sup> percentile American thought 50 to 1 would be fair. Our reading of Table 1 cross-country differences in the middle of the distribution of attitudes are relatively small compared to the much larger differences between respondents within the same country.

**Table 1** Within-country percentiles of 2019 "fair pay ratio" CEO / factory worker

Country	25 <sup>th</sup>	50 <sup>th</sup> media n	66 <sup>th</sup>	75 <sup>th</sup>	80 <sup>th</sup>	90 <sup>th</sup>	99 <sup>th</sup>
Norway*	1.5	2.0	2.5	3.0	3.3	5.0	13.6
Sweden*	1.7	2.3	3.0	3.3	3.9	5.0	16.7
Croatia	2.0	2.9	3.4	4.0	4.4	5.7	20.0
Iceland*	2.0	2.6	3.3	4.0	4.4	5.9	16.7
Denmark*	1.4	2.3	3.1	4.0	4.7	8.6	84.7
Bulgaria*	2.0	3.0	4.0	4.6	5.0	7.5	18.8
Czech Republic	2.5	4.0	5.0	5.2	6.0	7.5	20.8
Lithuania	2.0	3.0	4.2	5.0	6.0	8.8	22.4
Israel	2.8	4.0	5.0	6.3	6.7	8.8	33.9
Philippines*	2.0	3.3	5.0	5.7	6.7	10.0	70.0
Estonia	2.5	3.8	5.0	5.9	6.7	10.0	30.0
Slovakia	2.8	3.8	5.0	6.3	7.1	10.0	50.0
Hungary	2.0	3.3	4.4	6.0	7.7	11.5	45.1
Slovenia	2.8	4.4	5.6	6.9	7.8	10.0	20.0
Italy	2.5	4.0	5.6	6.7	8.0	12.5	60.0
Finland*	2.9	4.4	6.0	7.5	8.0	13.3	49.0
Switzerland	2.7	4.0	5.7	7.5	9.5	17.8	166.7
Ukraine	2.0	4.0	5.6	8.3	10.0	14.3	125.0
Austria*	2.9	5.0	7.1	9.0	10.0	14.1	75.0
Great Britain*	3.0	5.0	6.7	9.4	11.1	20.8	122.8
New Zealand*	2.6	4.2	6.6	10.0	11.1	20.0	92.9
Venezuela	3.0	5.0	7.5	10.0	12.0	25.0	1,704.4
Russia	2.0	4.0	6.7	10.0	12.5	20.0	100.0
Surinam	3.0	5.8	8.8	11.1	12.5	20.0	175.0
France*	2.9	5.3	8.0	10.8	13.3	25.0	317.7
Australia*	2.5	5.0	10.0	13.7	16.7	28.9	333.3
Germany*	3.2	5.3	8.6	13.3	16.7	41.7	400.0
South Africa*	5.0	8.9	12.5	16.0	18.3	32.9	333.3

USA*	2.9	6.3	11.1	16.7	20.0	50.0	333.3
Chile	3.8	8.0	12.5	16.7	20.0	30.0	200.0
India	5.0	8.0	12.5	15.4	20.0	30.4	100.0
Thailand*	5.0	10.0	13.3	16.7	20.0	70.8	333.3
Japan*	5.5	8.6	12.5	16.7	20.0	37.5	200.0
Taiwan*	7.1	16.7	28.6	37.0	48.0	142.9	1,640.4
Average fair pay ratio	2.93	5.06	7.48	9.78	11.71	23	215.43
Average minus Taiwan	2.80	4.71	6.84	8.96	10.61	19.37	172.25
<i>"Before tax" countries only</i>							
Average ratio	3.12	5.60	8.52	11.32	13.60	30.93	257.44
Average minus Taiwan	2.88	4.91	7.27	9.71	11.45	23.93	171.00

\* indicates "before tax".

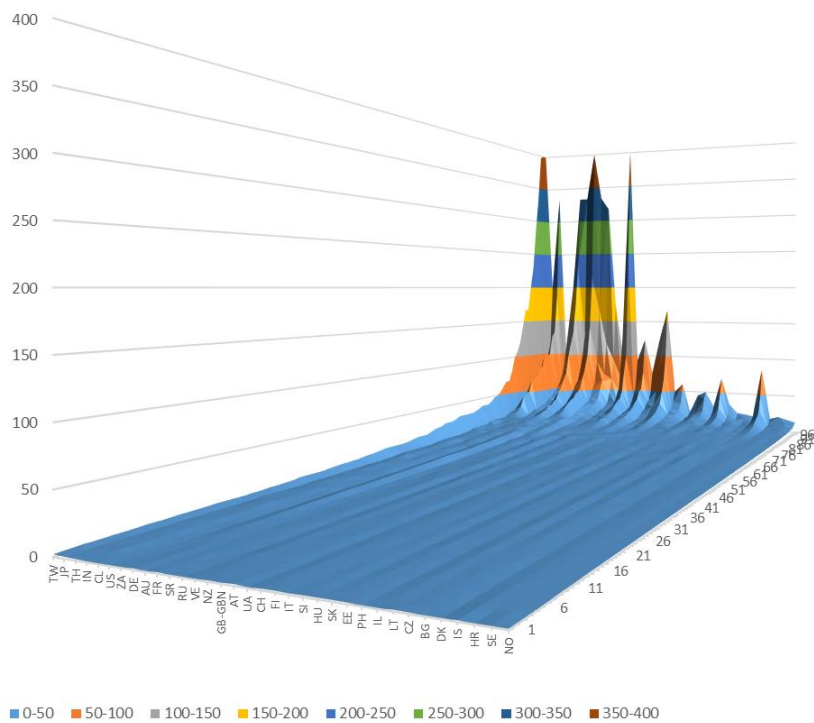
To put fair pay ratios in a concrete context, the median pay of production workers (Assemblers and Fabricators) in manufacturing was \$43,750 in the US in 2024. If the actual 2024 pay of U.S. production workers were a fair wage, the 6.3 to 1 CEO / worker fair pay ratio of the median respondent in the US would imply that they think fair pay for the CEO of a large national company would be approximately \$276,000 – which was a bit more than the average pay of a Full Professor at Berkeley in 2024 (\$242,489)<sup>40</sup>. If the actual 2024 pay of U.S. production workers were a fair wage, the median Scandinavian fair pay ratio of 2.3 would imply “fair” CEO pay of roughly \$100,000, which is a bit less than the pay of Assistant Professors at the University of California, Berkeley (an average of \$133,612 in 2024). Both salaries would be very small percentages (1.7% and 0.62%, respectively) of a median U.S. CEO’s actual compensation of \$16.2 million. Cross-country differences in the median respondent’s fair pay beliefs in Scandinavia and the USA were thus roughly comparable in size to across-rank actual pay differentials within some U.S. universities – differences which may be locally significant (e.g. in departmental politics) but which we would also call “small”, relative to actual differentials in pay across all occupations.

To help visualize the distribution of fair pay beliefs, Figure 2 is a three-dimensional plot of the cross-country and within-country distribution of the CEO / Worker Fair Pay Ratio in 2019. Its topography can be summarized as a “Great Plains” of flat similarity of CEO / worker fairness preferences which dominates the landscape for roughly 80% of the population<sup>41</sup>. That flatness gives way to foothills of inegalitarianism somewhere above the 80<sup>th</sup> percentile and then surges to mountain peaks of differing heights among the 90<sup>th</sup> to 99<sup>th</sup> percentiles of “fair” CEO / worker pay ratios<sup>42</sup>.

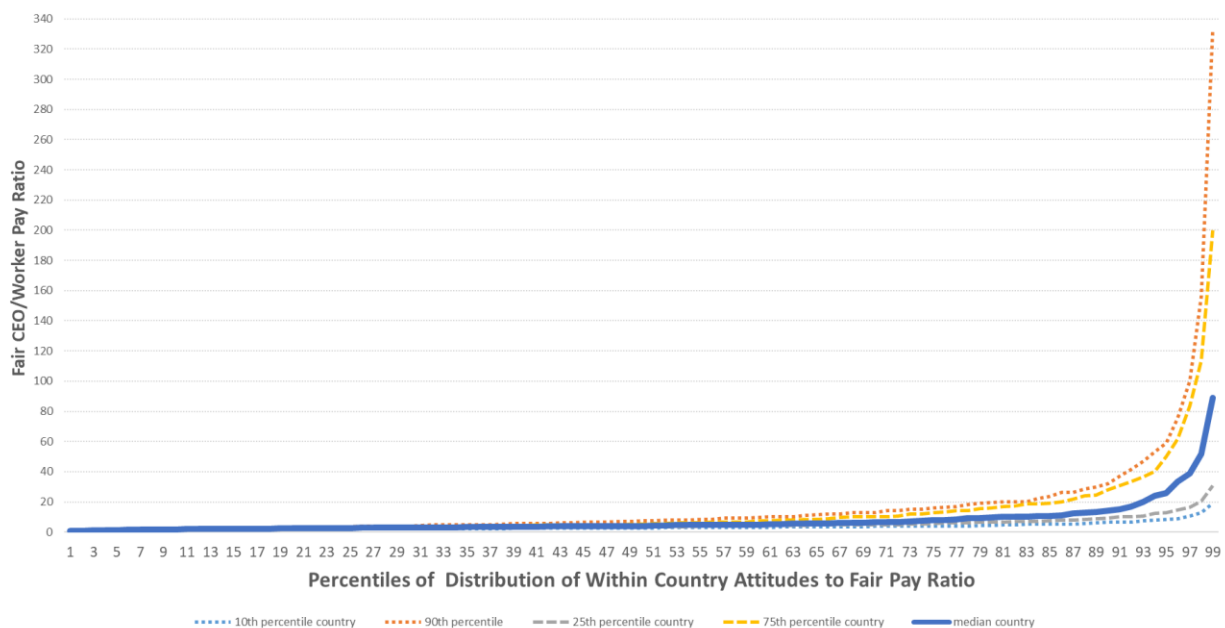
To examine the “Great Plains of Egalitarianism” visual impression of Figure 2 more closely, Figure 3 presents a two-dimensional plot which looks at Figure 2 “from the side”. It plots the cross-country variation in attitudes at each percentile of “fair pay ratio” ideas within each country – i.e., it asks how

much cross-country variation in attitudes there is among the most egalitarian percentile of the population within each country and at each higher percentile – e.g., the 25<sup>th</sup> percentile, the median, or the 75<sup>th</sup> percentile. If there were general differences across countries in inequality aversion, one would expect to see substantial and similar cross-country variation in fair pay ratio preferences at every point in the within-country distributions of fair pay preferences. The solid line in Figure 3 plots, for the median country of the cross-country distribution of fair pay preferences, the “fair pay ratio” which is observed at each percentile of the within-country distribution of fair pay attitudes. To illustrate the cross-country dispersion of attitudes, dashed lines plot the 25<sup>th</sup> and 75<sup>th</sup> percentiles of countries, and dotted lines plot the 10<sup>th</sup> and 90<sup>th</sup> percentile countries.

Figure 4 plots the Coefficient of Variation among countries in the Fair CEO / Worker Pay ratio at all percentiles of the within-country distribution of fairness attitudes. As can be seen, there is some variation across countries in the attitudes of the most egalitarian five percent of each country’s population, but not much inequality in cross-country attitudes until roughly the 80<sup>th</sup> percentile of the distribution of Fair Pay beliefs – a conclusion that is strengthened if Taiwan is excluded from the comparisons.



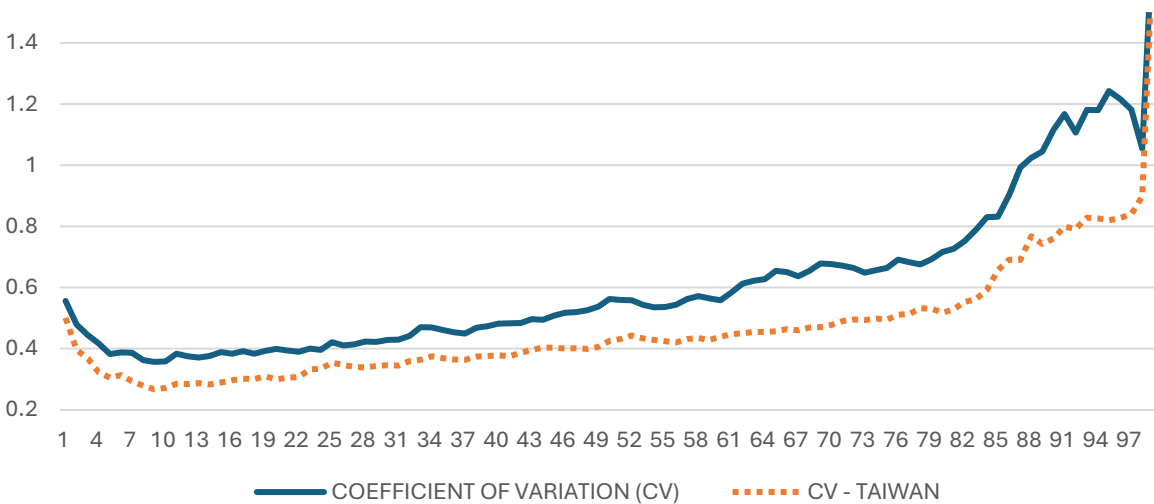
**Fig. 2** CEO/worker "should earn" ratios – 2019, countries sorted by 80th percentile (ISSP 2019)



**Fig. 3** Cross-Country variation at each percentile of CEO/worker fair pay ratio (ISSP 2019)

**Table 2** Cross-country variation at selected percentiles of within country “fair CEO pay ratio”

	10 <sup>th</sup>	25 <sup>th</sup>	Median Respondent	66 <sup>th</sup>	75 <sup>th</sup>	80 <sup>th</sup>	90 <sup>th</sup>	99 <sup>th</sup>
10 <sup>th</sup> % country	1.3	2.0	2.7	3.4	4.0	4.5	6.4	19.1
25 <sup>th</sup> % country	1.5	2.0	3.4	5.0	6.0	6.7	9.1	31.0
Median country	1.9	2.7	4.1	5.9	7.9	9.8	14.2	88.8
75 <sup>th</sup> % country	2.0	3.0	5.3	8.8	12.8	15.8	27.9	200.0
90 <sup>th</sup> % country	2.0	3.6	7.5	12.1	15.8	19.5	32.1	333.3
75 <sup>th</sup> to 25 <sup>th</sup> range	0.5	1.0	1.9	3.8	6.8	9.2	18.8	169.0
90 <sup>th</sup> to 10 <sup>th</sup> range	0.8	1.6	4.8	8.7	11.8	15.0	25.8	314.2



**Fig. 4** Cross-Country inequality in fair pay ratio by percentile (ISSP 2019)

In Table 2 the columns correspond to seven specific points along the horizontal axis of Figure 3 – i.e. ordering respondents within each country from the most egalitarian to the most inegalitarian, the columns present the 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, 80<sup>th</sup>, 90<sup>th</sup> and 99<sup>th</sup> percentiles of respondent attitudes. The rows correspond to percentiles of countries, ordered from most egalitarian to most inegalitarian country. In the 2019 ISSP data, the median respondent in the median country thought the Fair Pay Ratio should be 4.1 and there was not much dispersion across countries in the attitudes of the median respondent. In 25% of ISSP countries, the median respondent thought the Fair Pay Ratio should be 3.4 or less and in 75% of ISSP countries, the median respondent thought the Fair Pay Ratio should be less than 5.3 – i.e. in 50% of countries, the median respondent was somewhere in the range 3.4 to 5.3. In 90% of ISSP countries the median respondent thought the Fair Pay Ratio should be less than 7.5.

The median respondent in each country is interesting to examine because that person corresponds to the swing voter who could produce a bare majority of the electorate. The equity preferences of a stronger (2:1) majority can be discerned by reading down the column for the 66<sup>th</sup> percentile of respondents. In the median country the Fair Pay Ratio would be 5.9 for the 66<sup>th</sup> percentile respondent (who would be just at the margin of a two thirds majority – i.e. 65% of respondents think that the fair pay ratio should be less than 5.9). Reading down the column one can also see that in 75% of countries a two thirds majority would put the Fair Pay Ratio at no more than 8.8 while in 90% of countries it would not be more than 12:1. Reading down the columns for the 75<sup>th</sup> and 80<sup>th</sup> percentiles, which correspond to the voter at the margin of 3:1 and 4:1 majorities respectively within countries, dispersion across countries increases. At the 75<sup>th</sup> percentile of inegalitarian attitudes, the median country is at 7.9 and in three-quarters of countries, 75% of respondents think the Fair Pay Ratio should be 12.8 or less.

We read Table 2 and Figures 2 and 3 as indicating that cross-country differences in CEO / worker pay inequality aversion increase as one moves up the within-country distribution of inegalitarian

attitudes, but the differences span a pretty small range until one gets near the top end – i.e. there is relatively little cross-country variation to distinguish CEO / worker fair pay ratios among roughly the more egalitarian 80% of respondents. It is the most extreme 20% or 10% minority that make most of the difference in cross-country comparisons. Germany and the U.S. stand out in this last percentile range. At the inegalitarian top end of the attitudinal scale, the 90<sup>th</sup> percentile respondent in 2019 in Germany would accept a 42:1 ratio and in the U.S. a 50:1 ratio, which is quite different from the 20:1 ratio considered acceptable at the 90<sup>th</sup> percentile in Russia or Great Britain or the 12:1 ratio of the 90<sup>th</sup> percentile considered acceptable in Hungary or Italy. Cross-national differences in the data are relatively small until one gets to the top end of the within-country distribution of inegalitarian attitudes.

That impression of “small” differences in inequality aversion among most people is buttressed if one asks what the ratios presented in Table 2 would mean concretely for the “should earn” pay of the chairman of a large national company. As Table 2 indicates, the median respondent in the median country thought the Fair Pay Ratio should be 4.1:1. which, if a U.S. factory worker should make what they do make (roughly \$44,000), would imply a CEO income of approximately \$180,000 in the U.S. In 75% of countries, the median respondent thought CEO pay should be no more than \$232,000, and in 90% of countries the median respondent’s Fair Pay Ratio would imply CEO pay of no more than \$328,000. For a 3:1 majority within countries (i.e., 75% of respondents) in three quarters of countries, the Fair Pay Ratio should be 12.8 or less, which corresponds to a CEO salary in the U.S. of \$560,000, if a factory worker makes roughly \$44,000. All of these numbers are orders of magnitude less than actual CEO compensation (2024 U.S. median = \$16.2 million).

Indeed, in Figure 3, the variation across countries is hard to distinguish visually until the 75<sup>th</sup> or the 80<sup>th</sup> percentile of respondents. As Table 2 shows, there is some cross-country variation in the equity values of the more egalitarian half or two-thirds of every country – but that cross-country variation is small compared to the cross-country variation at the more inegalitarian end of the Fair Pay Ratio distribution.

However, hardcore egalitarianism gets very marginal support in our data. One can find a few respondents in several countries who think executive pay should be even less than worker pay and a few more who think worker and CEO pay should be exactly the same, but such responses die out well before the 5<sup>th</sup> percentile almost everywhere. In our view, the data show broad support for the fairness of some inequality in pay – but much less inequality than is now observed. In Table 1, the average 80<sup>th</sup> percentile respondent across all 34 ISSP countries in 2019 thought that the Chairman of a large national company should not earn more than about 12 times (11.71, to be exact) what a worker makes. If factory workers make about \$44,000, that would correspond to CEO pay of \$512,000. At the more egalitarian end of the inequality aversion distribution, the average 25<sup>th</sup> percentile respondent thought that the fair pay ratio was 2.83, which corresponds to CEO earnings of \$124,000.

### 3. Fair Pay Inequality Among Other Occupations

Examination of the “should earn” Fair Pay Ratio between factory workers and the Chair of a large national corporation provides some evidence on attitudes about the fairness of the extremes of the income distribution. However, comparing the “should earn” pay of these two occupations cannot reveal attitudes to inequalities throughout the income distribution. Measures of income inequality, such as the Gini index, attempt to summarize the inequalities that exist among all occupations. Although the Gini index is undoubtedly the most commonly presented single number used to summarize economic inequality, in real-world data it is quite insensitive to top-end income differences<sup>43</sup>. In Figure 5, the distribution of the Gini index of inequality of “should earn” income among all occupations is plotted for all 34 countries.<sup>44</sup> Dotted lines are used to try to make outlier countries stand out visually (Taiwan and the US at the top of the cross-country distribution, Norway and Sweden at the bottom). Since the Gini index is, by construction, limited to the [0 .. 1] range, while the CEO / factory worker pay ratio has no inherent upper bound, Figure 5 cannot reveal the inegalitarian peaks that are apparent in Figure 2. However, it is clear in Figure 5 that there is a large divergence of opinion between the most egalitarian 5% and the most inegalitarian 20%. In between, there is not much to distinguish at each percentile of the within country distribution of the “should earn” Gini. As in Figure 2, most of the population in all countries has fairly similar beliefs about pay inequality, so the visual impression is again of a great plains of fairly egalitarian preferences over most of the terrain.

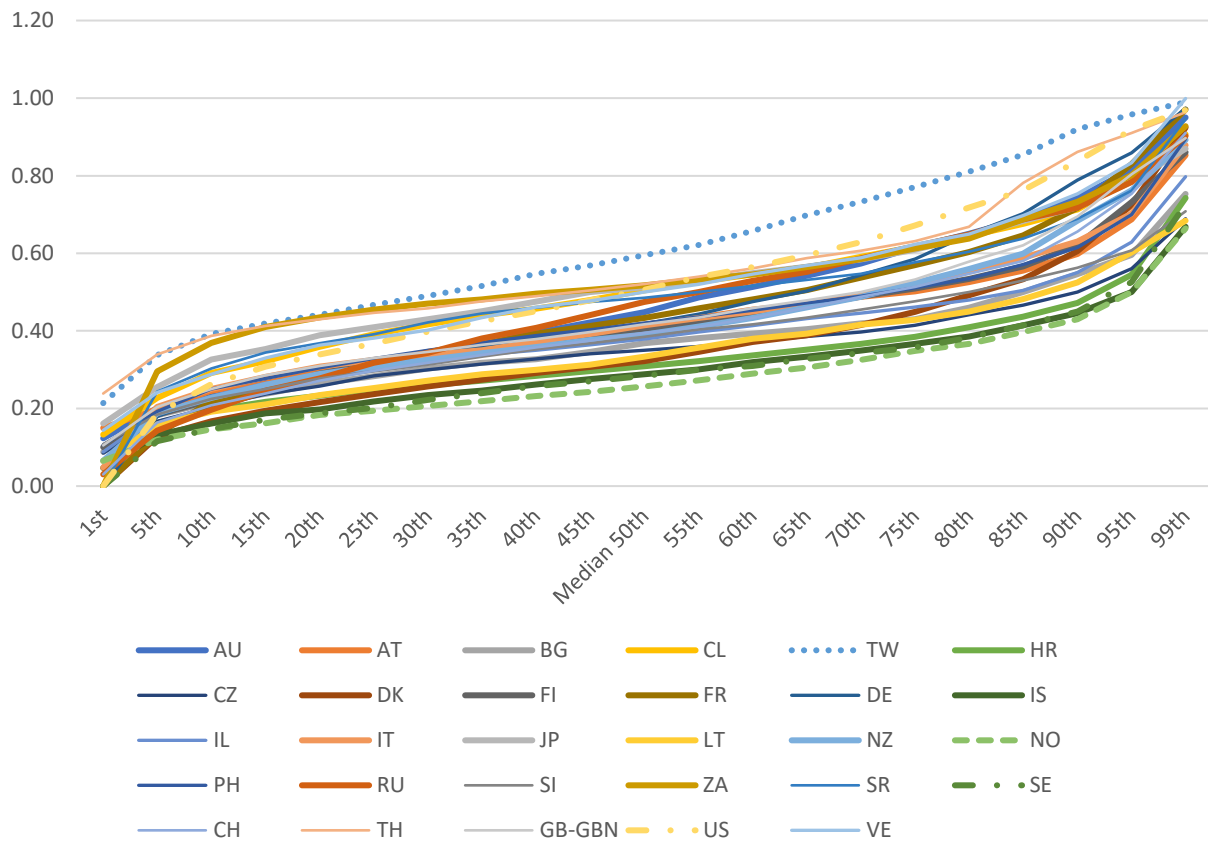


Fig. 5: GINI of “Should Earn” Pay by Percentile in ISSP 2019

In the 2019 ISSP, the “should earn” question is asked about the pay of a shop assistant, doctor in general practice, chairman of a large national company, unskilled factory worker and federal cabinet minister. A Gini Index calculated over these pay rates implicitly weights each occupation equally (which is very far from empirical reality) and three of these occupations are relatively highly paid. Although, therefore, that calculation produces a Gini index which can claim to be a summary index of the dispersion of “should earn” beliefs for those particular five occupations, a Gini index of the occupational inequality observed in ISSP data cannot be compared to Gini indices calculated over the wide range and frequency of wages observed in the real world<sup>45</sup>.

It is, therefore, more informative to examine directly cross-country differences in fair pay ratio beliefs for specific occupations. Table 3a presents “Fair Pay Ratio” for the median, the 80th, and the 90th percentile of egalitarian attitudes in the within-country distribution of Fair Pay Ratio attitudes when the “should earn” pay of Factory workers is compared to the “should earn” pay of Doctors, CEOs, Cabinet Ministers, and Shop Assistants<sup>46</sup>. Countries are ordered by their median respondent’s CEO /factory worker pay ratio. The median respondent is presented because that person marks a bare majority of attitudes. In Germany, for example, the median respondent thought the fair Doctor / Worker pay ratio was 3.3, implying that half the German population thought it should be less than that. The 80th percentile defines an overwhelming (4 to 1) majority of the population. In Germany, the 80th percentile respondent thought the fair Doctor / Worker pay ratio was 5.5 (i.e., four-fifths of the German population thought it should be less) and 90 per cent thought the ratio be 7.5 or less. Table 3b summarizes the cross-country distribution of median, 80th and 90th percentile attitudes presented in Table 3a and as it documents, German attitudes to fair pay for doctors are somewhat above the median country’s Doctor / Worker fair pay response.

To put these fair pay ratios in a concrete context, in Germany in 2024, an unskilled production worker made an average of € 31,200 annually, while in academia the German equivalent of an Assistant Professor made an average €72,000 and Full Professors were paid an average €106,800<sup>47</sup>- i.e. the actual pay ratio of a junior academic to a factory worker was 2.3 and the actual pay ratio of a senior academic to an unskilled production worker was 3.4<sup>48</sup>. Hence, when Table 3a shows the median German respondent thought the fair Doctor / Production worker pay ratio was 3.3 that is roughly the same as the actual 2024 pay ratio between senior academics and production workers. However, the 30 percent of respondents between the median and 80th percentile thought the fair pay ratio was higher – up to 5.5 and a further 10 percent would go even higher (up to 7.5). Hence, Table 3a can be read as indicating that many Germans think that Doctors should be paid more than professors are now being paid and some people think considerably more. Table 3a (and Table 2) also show some agreement in Germany that CEOs should be paid more than professors – but not nearly as much more as they actually are paid.

As Table 1 showed, Germany is at the more inegalitarian end of international comparisons of fair CEO pay – the median German respondent’s CEO / worker fair pay ratio was 5.3. (the 80th percentile was 16.7 and the 90th percentile response was 41.7). Concretely, if “should earn” pay for production workers was equal to actual 2024 pay, those ratios imply that half of German respondents thought that CEOs should at most be paid 50% more than full professors (i.e., up to €165,360 annually) while a further thirty percent thought fair CEO pay should be greater, (up to €520,000 annually or up to roughly

five times the pay of senior academics – but no more) and 90 percent thought fair pay would be €521,000 or less. In 2023, the average annual compensation of DAX 40 CEOs in Germany was approximately €6.1 million<sup>49</sup>, which was about 57 times the pay of a full professor and the actual CEO /factory worker pay ratio was 195.5 – i.e., more than an order of magnitude greater than four fifths of the German population think would be fair. As Table 1 shows, median German beliefs about the fair CEO / worker pay ratio are quite close to the cross-country average of median respondents, but the inegalitarian German minority is considerably more inegalitarian than their counterparts elsewhere. And as Section 2 discussed, most of the within-country inequality of beliefs about fair CEO/factory worker is concentrated within inegalitarian minorities, with substantial differences between inegalitarian minorities in different countries.

However, Tables 3a and 3b provide some evidence of cross-country fair pay consensus for lower paid occupations (i.e. shop assistants and factory workers). In Table 3a, the median fair pay ratio for production workers and shop assistants is approximately 1 in all countries – i.e. roughly equal “should earn” pay. [Shop Assistants are in fact often paid wages quite similar to those of unskilled factory workers<sup>50</sup>.] Although in a few countries (e.g. South Africa, Chile, Czechia, Japan) there is a minority opinion for slightly higher “should earn” wages for shop assistants, cross-country disagreements on the fair pay ratio for the two lower paid occupations are small, as Table 3b shows.

The median respondent in different countries disagrees a bit more, but not a lot more, about the fair pay ratio of factory workers to doctors and Cabinet Ministers. In the median country, the median respondent’s fair doctor / worker pay ratio is 2.8 (with a cross-country inter-quartile range of 1.5) and the Cabinet Minister / worker fair pay ratio is 3.2 for (interquartile range = 1.1)<sup>51</sup>. Similar to CEO/worker fair pay ratio beliefs, however, the more inegalitarian the respondents, the greater the cross-country divergence in fair pay ratio beliefs. The 80th percentile respondent in the median country thought a 4.3 Doctor/worker pay ratio to be fair, but the cross-country interquartile range of 4.1 (from 3.3 to 7.4), widened to 7.1 (from 3.9 to 11) for the 90th percentile respondents. Comparing the 80th and 90th percentile respondent’s opinions about the Cabinet Minister / factory worker fair pay ratio, the increase in cross-country range of opinions was particularly abrupt.

As Table 3a indicates, Taiwan is an outlier in responses concerning “should earn” pay for CEOs and the CEO / Worker Fair Pay Ratio, but is not particularly different from other countries when the Fair Pay Ratios for other occupations are considered – which should be a puzzle for theories positing general national attitudes to pay inequality. Another puzzle for such perspectives is the cross-country disagreements about fair relative CEO and Cabinet Minister pay evident in Table 3a and 3b. Although the median respondent (and the 80<sup>th</sup> and 90<sup>th</sup> percentile respondents) in the median country thought Cabinet Ministers should earn less than CEOs, in nine countries the median respondent thought both should be paid the same and in another two countries, the median respondent thought CEOs should be paid marginally less than Cabinet Ministers. When considering the full range of occupations available in the ISSP, general cross-national cultural differences in attitudes towards fair pay inequality (of the sort that might be adequately controlled for in regression analysis by country dummy variables) are difficult to discern.

**Table 3a** Fair pay ratio to factory worker of median, 80<sup>th</sup> and 90<sup>th</sup> percentile respondent

Country	Doctor			CEO			Cabinet Minister			Shop Assistant		
	50 <sup>th</sup>	80 <sup>th</sup>	90 <sup>th</sup>	50 <sup>th</sup>	80 <sup>th</sup>	90 <sup>th</sup>	50 <sup>th</sup>	80 <sup>th</sup>	90 <sup>th</sup>	50 <sup>th</sup>	80 <sup>th</sup>	90 <sup>th</sup>
Norway*	2.0	2.7	3.3	2.0	3.3	5.0	2.0	2.5	3.1	1.0	1.1	1.3
Denmark*	2.4	4.0	6.7	2.3	4.7	8.6	2.5	4.3	7.5	1.0	1.2	1.3
Sweden*	2.0	2.8	3.2	2.3	3.9	5.0	2.3	3.3	4.3	1.0	1.0	1.2
Iceland*	2.2	3.0	3.8	2.6	4.4	5.9	2.5	3.5	4.0	1.0	1.1	1.3
Croatia	2.4	3.2	3.8	2.9	4.4	5.7	2.0	2.8	3.5	1.1	1.3	1.4
Bulgaria*	2.3	3.3	4.2	3.0	5.0	7.5	3.0	5.0	6.7	1.0	1.3	1.4
Lithuania	1.9	2.6	3.3	3.0	6.0	8.8	2.9	4.3	5.0	1.0	1.3	1.4
Philippines*	3.3	6.7	10.0	3.3	6.7	10.0	3.3	7.0	10.0	1.0	1.3	1.5
Hungary	2.2	3.5	5.0	3.3	7.7	11.5	3.2	6.3	9.4	1.0	1.3	1.3
Estonia	1.7	2.5	3.0	3.8	6.7	10.0	3.0	5.0	6.0	1.0	1.1	1.3
Slovakia	2.2	3.3	3.9	3.8	7.1	10.0	3.8	6.3	8.9	1.1	1.3	1.5
Czech Republic	2.7	4.0	4.7	4.0	6.0	7.5	3.3	5.0	6.8	1.2	1.5	1.5
Israel	2.5	4.0	5.0	4.0	6.7	8.8	3.0	5.0	5.8	1.0	1.3	1.4
Italy	2.0	2.9	3.3	4.0	8.0	12.5	2.9	5.0	6.7	1.0	1.0	1.1
Russia	1.6	2.3	2.8	4.0	12.5	20.0	3.8	10.0	16.7	1.0	1.3	1.5
Switzerland	2.7	4.0	5.0	4.0	9.5	17.8	4.0	7.9	11.7	1.1	1.3	1.3
Ukraine	1.5	2.5	3.0	4.0	10.0	14.3	2.9	6.7	10.0	1.0	1.4	1.6
New Zealand*	3.1	5.0	6.7	4.2	11.1	20.0	3.0	5.0	6.0	1.0	1.2	1.3
Slovenia	2.8	4.0	5.0	4.4	7.8	10.0	2.5	4.2	5.6	1.0	1.3	1.4
Finland*	2.4	3.3	4.0	4.4	8.0	13.3	3.1	4.6	5.8	1.0	1.0	1.9
Australia*	3.6	6.2	8.4	5.0	16.7	28.9	3.0	5.4	8.0	1.0	1.2	1.3
Austria*	3.3	5.2	6.7	5.0	10.0	14.1	4.0	6.7	8.7	1.1	1.3	1.4
Great Britain*	3.8	5.4	6.7	5.0	11.1	20.8	3.1	5.0	6.7	1.0	1.2	1.3
Venezuela	2.7	5.0	8.0	5.0	12.0	25.0	5.0	11.7	20.0	1.1	1.6	2.0
France*	3.0	4.5	5.7	5.3	13.3	25.0	3.1	5.3	7.1	1.0	1.2	1.3
Germany*	3.3	5.5	7.5	5.3	16.7	41.7	3.6	6.7	10.0	1.2	1.5	1.7
Suriname	5.0	12.0	16.7	5.8	12.5	20.0	6.0	13.3	18.9	1.0	1.3	1.5
USA*	4.6	8.3	12.5	6.3	20.0	50.0	2.5	5.0	8.0	1.0	1.3	1.6

Chile	5.0	8.6	12.0	8.0	20.0	30.0	4.0	8.8	14.3	1.1	1.5	1.8
India	3.6	10.0	16.7	8.0	20.0	30.4	6.7	15.0	20.0	0.9	1.3	1.7
Japan*	5.0	8.3	12.5	8.6	20.0	37.5	6.7	13.7	25.0	1.1	1.5	1.7
South Africa*	8.8	16.0	22.4	8.9	18.3	32.9	10.0	20.0	42.5	1.1	1.6	2.0
Thailand*	4.2	8.0	12.3	10.0	20.0	70.8	7.0	12.5	16.7	1.0	1.2	1.3
						142.						
Taiwan*	5.4	8.7	12.0	16.7	48.0	9	5.0	8.0	10.7	1.0	1.2	1.3

**Table 3b** Fair pay ratio to factory worker of median & 80<sup>th</sup> percentile respondent

Country	Doctor			CEO			Cabinet Minister			Shop Assistant		
	Mdn	80th	90th	Mdn	80th	90th	Mdn	80th	90th	Mdn	80th	90th
10th %ile	1.9	2.6	3.2	2.7	4.5	6.4	2.5	3.7	4.5	1.0	1.1	1.3
25th %ile	2.2	3.3	3.9	3.8	6.7	10.0	2.9	5.0	6.0	1.0	1.2	1.3
median	2.8	4.3	5.4	4.3	10.0	16.1	3.2	5.9	8.4	1.0	1.3	1.4
75th %ile	3.7	7.4	11.0	5.6	16.7	29.5	4.0	8.4	13.0	1.1	1.3	1.6
90th %ile	5.0	8.8	12.9	8.6	20.0	42.5	6.7	13.3	20.0	1.1	1.5	1.8
RANGE												
10th to 90th	3.1	6.2	9.7	5.9	15.5	36.2	4.2	9.6	15.5	0.1	0.4	0.5
25th to 75th	1.5	4.1	7.1	1.8	10.0	19.5	1.1	3.4	7.0	0.1	0.1	0.3

#### 4. Concluding Comments

This paper attempts to contribute to a growing literature on redistributive preferences (Cowell, Schokkaert and Tarrow (2025); Alesina et al., 2013; Durante et al., 2014; Alesina and Giuliano, 2011; Alesina and La Ferrara, 2005), beliefs about inequality (Piketty, 1995) and fairness concerns (Clark and D’Ambrosio, 2015; Cappelen et al., 2007; Cappelen et al., 2013a; Almås et al., 2011). This literature has argued that redistributive preferences are affected by culture (Luttmer and Singhal, 2011; Alesina and Giuliano, 2011), institutions (Alesina and Fuchs-Schündeln, 2007), relative income (Karadja et al., 2017; Cruces et al., 2013), reference points (Charité et al., 2015), beliefs about government debt (Roth and Wohlfart, 2018), and historical experiences (Chen et al., 2016). Our data suggest that the within country average of such preferences can be a very misleading statistic for the summarization of inequality preferences and that one should examine the differences between the attitudes of egalitarian majorities and inegalitarian minorities. We argue for the importance of the within-country inequalities of inequality attitudes – specifically, we suggest that cross-country differences in beliefs about “should earn” pay ratios are dominated by the differences between inegalitarian minorities in different countries because most people almost everywhere are relatively egalitarian.

In Bechert and Osberg (2023), we explicitly tested the hypothesis, for the seven industrialized countries over five waves of the ISSP examined, of a structural break in fairness attitudes at the 80<sup>th</sup> percentile. Those results are replicated when we run the same regressions for all 34 countries in the 2019 ISSP wave<sup>52</sup>. Other analysts may prefer a different demarcation line between the Egalitarian Majority and the Inegalitarian Minority within countries – but our key point is the stark attitudinal differences in most countries between Inegalitarian Minorities and the substantial similarities in beliefs about fair CEO / worker pay ratios within the Egalitarian Majority. Scandinavian countries do not stand out from other countries in beliefs about the “fair” CEO / worker pay ratio because of differences in median beliefs (which are quite small) but because the inegalitarian minorities in Scandinavia are relatively small and less different from the egalitarian majority than the inegalitarian minorities of many other countries (e.g. Germany or the USA).

If the citizens of a country differ in their attitudes to fair inequalities of wages, whose preferences should count in determining public policy? Whose preferences do count? Within economics, a long research tradition has argued that Social Welfare depends on both average income and the inequality of incomes. If the Social Welfare Function for each country is defined as  $SWF(\mu_y, \delta_y)$ , where  $\mu_y$  is mean income and  $\delta_y$  is some measure of income inequality, cross-country comparisons of well-being depend on both the specification of “inequality” – i.e.  $\delta_y$  - and on the weighting of inequality within the Social Welfare Function (SWF)<sup>53</sup>. But whose weighting of inequality matters? The assumption of general national cultural differences in social preferences dodges that question. If, for example, Americans are assumed to come from a more “individualist” culture and Scandinavians are assumed to be more “collectivist” it may perhaps be argued that countries get the level of inequality that their citizens prefer.

An alternative hypothesis, which we advocate here, is that a large majority of respondents in 34 ISSP countries have substantially similar and quite egalitarian opinions about fair CEO / worker pay differentials. We are not surprised to find broadly similar majority attitudes, in a homogenizing world of economic globalization, rapid technological and cultural diffusion, instant communication and pervasive global social media. However, if majority opinions are similar and cross-country differences in fairness beliefs are, as we argue, very much concentrated in an inegalitarian minority, the crucial political issue becomes the institutions which determine how much influence that minority has on public policy. Explaining why inegalitarian minorities differ from majority attitudes, to differing degrees in differing countries, is, in our view, the interesting analytical question. Self-interest or self-justification can clearly not entirely explain the attitudes of the most inegalitarian 10% or 20% of the population – 99% of the population are never in the top 1%, and the CEOs of large national companies are a tiny fraction of even the top 1%. The substantial cross-country variation in attitudes about other occupations’ fair pay also suggests that explanation of the differences between inegalitarian minorities is likely to be heavily influenced by country-specific historical and institutional influences.

In international comparisons, it is easy to see that countries differ substantially in the level and type of redistributive public policies which affect economic inequality. In analyzing those public policy differences one should not, we suggest, ask “why do some countries have more/less egalitarian preferences than other countries?” Rather, the interesting questions are about how much the preferences of the inegalitarian minorities within countries differ from those of the egalitarian majorities, why they differ and how those minority preferences can become expressed in public policies.

## References

- Alesina, A., La Ferrara, E.: Preferences for redistribution in the land of opportunities. *J. Public Econ.* 89(5-6), 897–931 (2005). <https://doi.org/10.1016/j.jpubeco.2004.05.009>
- Alesina, A., Fuchs-Schündeln, N.: Good-bye Lenin (or not?): The effect of communism on people's preferences. *Am. Econ. Rev.* 97(4), 1507–1528 (2007). <https://doi.org/10.1257/aer.97.4.1507>
- Alesina, A., Giuliano, P.: Preferences for redistribution. In: Jess Benhabib, Alberto Bisin, Matthew O. Jackson (eds.) *Handbook of Social Economics*, vol. 1, pp. 93–131. Elsevier/North-Holland, Amsterdam (2011). <https://doi.org/10.1016/B978-0-444-53187-2.00004-8>
- Alesina, A., Giuliano, P., Nunn, N.: On the origins of gender roles: women and the plough. *Q. J. Econ.* 128(2), 469–530 (2013). <https://doi.org/10.1093/qje/qjt005>
- Almås, I., Cappelen, A.W., Tungodden, B.: Measuring unfair (in)equality. *J. Public Econ.* 95(7-8), 488–499 (2011). <https://doi.org/10.1016/j.jpubeco.2010.11.002>
- Almås, I., A.W. Cappelen, E.Ø. Sørensen, & B. Tungodden, Global evidence on the selfish rich inequality hypothesis, *Proc. Natl. Acad. Sci. U.S.A.* 119 (3) e2109690119, <https://doi.org/10.1073/pnas.2109690119> (2022).
- Almås, I., Cappelen, A.W., Sørensen, E.Ø., Tungodden, B.: Attitudes to inequality: preferences and beliefs. *Oxf. Open Econ.* 3 (Issue Suppl. 1), i64–i79 (2024). <https://doi.org/10.1093/ooec/odae001>
- Almås, I., Bonn, C., Cappelen, A.W. *et al.* Inequality acceptance in China: fairness views, inequality beliefs, and policy attitudes in a socialist market economy. *J Econ Inequal* **23**, 623–636 (2025). <https://doi.org/10.1007/s10888-025-09707-3>
- Atkinson, A.B.: On the measurement of inequality. *J. Econ. Theory* 2(3), 244–263 (1970)
- Aymeric, G., Magdalou, B. Does the Gini index represent people's views on inequality?. *J Econ Inequal* **23**, 637–665 (2025). <https://doi.org/10.1007/s10888-025-09695-4>
- Bahna, M., Džambazović, R., Zagrapan, J.: International Social Survey Programme: Social Inequality V – ISSP 2019 (Slovakia) (ZA7812; Version 1.0.0). GESIS, Cologne (2022). <https://doi.org/10.4232/1.13865>
- Bao, M.X., Cheng, X., Smith, D.: A path analysis investigation of the relationships between CEO pay ratios and firm performance mediated by employee satisfaction. *Adv. Account.* 48, 100457 (2020). <https://doi.org/10.1016/j.adiac.2020.100457>
- Bechert, I.: *Blame the data or blame the theory? On (in-)comparability in international survey research.* Mannheim: University of Mannheim (2018)
- Bechert, I., Osberg, L.: A few people make all the difference – an international comparison of 'fair' pay differentials. *Int. J. Sociol.* 53(6), 421–447 (2023). <https://doi.org/10.1080/00207659.2023.2274713>
- Benedetti, A.H., Chen, S.: High CEO-to-worker pay ratios negatively impact consumer and employee perceptions of companies. *J. Exp. Soc. Psychol.* 79, 378–393 (2018). <https://doi.org/10.1016/j.jesp.2018.09.003>

- Benson, Rebecca, Bobby Duffy, Rachel Hesketh, Kirstie Hewlett, Attitudes to inequalities, *Oxford Open Economics*, Volume 3, Issue Supplement\_1, 2024, Pages i39–i63, <https://doi.org/10.1093/oec/odad069>
- Boone, A., Starkweather, A., White, J.T.: The saliency of the CEO pay ratio. *Rev. Finance* 28(3), 1059–1104 (2024). <https://doi.org/10.1093/rof/rfad039>
- Bureau of Labor Statistics, U.S. Department of Labor: Occupational outlook handbook, assemblers and fabricators. <https://www.bls.gov/ooh/production/assemblers-and-fabricators.htm> (2025). Accessed 4 June 2025
- Cappelen, A.W., Hole, A.D., Sørensen, E.Ø., Tungodden, B.: The pluralism of fairness ideals: An experimental approach. *Am. Econ. Rev.* 97(3), 818–827 (2007). <https://doi.org/10.1257/aer.97.3.818>
- Cappelen, A.W., Konow, J., Sørensen, E.Ø., Tungodden, B.: Just luck: An experimental study of risk-taking and fairness. *Am. Econ. Rev.* 103(4), 1398–1413 (2013). <https://doi.org/10.1257/aer.103.4.1398>
- Chan, H.L., Kawada, B., Shin, T., Wang, J.: CEO–employee pay gap and firm R&D efficiency. *Rev. Account. Finance* 19(2), 271–287 (2020). <https://doi.org/10.1108/RAF-10-2018-0207>
- Chanel, O., Luchini, S., Teschl, M. *et al.* Preferences for redistributive justice: A participatory-democracy experiment. *J Econ Inequal* 23, 717–747 (2025). <https://doi.org/10.1007/s10888-025-09706-4>
- Chang, W., Dambra, M., Schonberger, B., Suk, I.: Does sensationalism affect executive compensation? Evidence from pay ratio disclosure reform. *J. Account. Res.* 61, 187–242 (2023). <https://doi.org/10.1111/1475-679X.12458>
- Charité, J., Fisman, R., Kuziemko, I.: Reference points and redistributive preferences. *J. Public Econ.* 216, 104797 (2022). <https://doi.org/10.1016/j.jpubeco.2022.104761>
- Chen, J.: CEO Pay Trends: A post proxy season recap. Harvard Law School Forum on Corporate Governance. <https://corpgov.law.harvard.edu/2025/06/17/ceo-pay-trends-a-post-proxy-season-recap/> (2025). Accessed 08 September 2025
- Cheng, M., Zhang, Y.: Corporate stakeholders and CEO–worker pay gap: evidence from CEO pay ratio disclosure. *Rev. Account. Stud.* (2023). <https://doi.org/10.1007/s11142-023-09803-7>
- Cheng, Q., Ranasinghe, T., Zhao, S.: Do high CEO pay ratios destroy firm value? Robert H. Smith School Research Paper No. RHS 2861680. Singapore Management University School of Accountancy Research Paper (2017)
- Clark, A.E., D’Ambrosio, C.: Attitudes to income inequality: experimental and survey evidence. In: Atkinson, A.B., Bourguignon, F. (eds.) *Handbook of Income Distribution*, vol. 2, pp. 1147–1208. Elsevier, Amsterdam (2015)
- Corneo, G., Neher, F.: Democratic redistribution and rule of the majority. *Eur. J. Polit. Econ.* 40(A), 96–109 (2015). <https://doi.org/10.1016/j.ejpoleco.2015.08.003>
- Cowell, F., Schokkaert, E. & Tarrow, B. Measuring distributional preferences: opportunities and challenges. *J Econ Inequal* 23, 607–622 (2025). <https://doi.org/10.1007/s10888-025-09704-6>

- Cruces, G., Perez-Truglia, R., Tetaz, M.: Biased perceptions of income distribution and preferences for redistribution: Evidence from a survey experiment. *J. Public Econ.* 98, 100–112 (2013). <https://doi.org/10.1016/j.jpubeco.2012.10.009>
- Deshmukh, Y.: International Social Survey Programme: Social Inequality V – ISSP 2019 (India) (ZA7845; Version 1.0.0). GESIS, Cologne (2023). <https://doi.org/10.4232/1.14207>
- Durante, R., Putterman, L., van der Weele, J.: Preferences for redistribution and perceptions of fairness: An experimental study. *J. Eur. Econ. Assoc.* 12(4), 1059–1086 (2014). <https://doi.org/10.1111/jeea.12082>
- Faleye, O., Reis, E., Venkateswaran, A.: The determinants and effects of CEO–employee pay ratios. *J. Bank. Finance* 37(8), 3258–3272 (2013). <https://doi.org/10.1016/j.jbankfin.2013.03.003>
- Fischer, M., Lindermoyer, J.: Dodd Frank Act: Reporting CEO compensation relationship to worker ratio and firm performance. *Am. J. Manag.* 20(1) (2020) <https://articlearchives.co/index.php/AJM/article/view/1493>
- Fleurbaey, M., Zuber, S.: Unequal inequality aversion within and among countries and generations. *Journal of Economic Inequality* (2024). <https://doi.org/10.1007/s10888-024-09657-2>
- Gaspar, T., Botelho-Guedes, F., Cerqueira, A., Baban, A., Rus, C., Gaspar-Matos, M.: Burnout as a multidimensional phenomenon: how can workplaces be healthy environments? *Journal of Public Health* (2024). <https://doi.org/10.1007/s10389-024-02223-0>
- Gimpelson, V., Treisman, D.: Misperceiving inequality. National Bureau of Economic Research, Working Paper 21174. Cambridge, MA (2017). <http://www.nber.org/papers/w21174>
- Huang, G.Y., Huang, H.H., Yu, J.: CEO–employee pay ratio and bond yield spreads. SSRN Working Paper (2018). <https://doi.org/10.2139/ssrn.3109430>
- ISSP Research Group: International Social Survey Programme: Social Inequality V – ISSP 2019 (ZA7600; Version 3.0.0). GESIS, Cologne (2022). <https://doi.org/10.4232/1.14009>
- Karadja, M., Mollerstrom, J., Seim, D.: Richer (and holier) than thou? The effect of relative income improvements on demand for redistribution. *Rev. Econ. Stat.* 99(2), 201–212 (2017). [https://doi.org/10.1162/REST\\_a\\_00623](https://doi.org/10.1162/REST_a_00623)
- Kelly, K., Seow, J.L.: Investor reactions to company disclosure of high CEO pay and high CEO-to-employee pay ratio: An experimental investigation. *J. Manag. Account. Res.* 28(1), 107–125 (2016). <https://doi.org/10.2308/jmar-51392>
- Kerber A, Roth M, Herzberg PY (2021) Personality types revisited—a literature-informed and data-driven approach to an integration of prototypical and dimensional constructs of personality description. *PLOS ONE* 16(1): e0244849. <https://doi.org/10.1371/journal.pone.0244849>
- Luttmer, E.F.P., Singhal, M.: Culture, context, and the taste for redistribution. *Am. Econ. J. Econ. Policy* 3(1), 157–179 (2011)
- Marshall, Alfred (1890) *Principles of Economics* MacMillan, New York and London

- Matz, S., Chan, Y. W. F., & Kosinski, M. (2016). Models of personality. In M. Tkalčič, B. De Carolis, M. de Gemmis, A. Odić, & A. Košir (Eds.), *Emotions and personality in personalized services: Models, evaluation and applications* (pp. 35–54). Springer International Publishing/Springer Nature. [https://doi.org/10.1007/978-3-319-31413-6\\_3](https://doi.org/10.1007/978-3-319-31413-6_3)
- Jian, M., Lee, K.W.: CEO compensation and corporate social responsibility. *J. Multinat. Financ. Manag.* 29, 46–65 (2015). <https://doi.org/10.1016/j.mulfin.2014.11.004>
- Norman, C.S., Rose, A.M., Rose, J.M., Suh, I.: An investigation of corporate directors' responses to CEO pay ratio disclosures and say-on-pay votes. *Hum. Resour. Manag.* 60, 455–474 (2021). <https://doi.org/10.1002/hrm.22034>
- OECD: Does inequality matter? How people perceive economic disparities and social mobility. OECD Publishing, Paris (2021). <https://doi.org/10.1787/3023ed40-en>
- Oksamytna, S., Ivashchenko, O.: International Social Survey Programme: Social Inequality V – ISSP 2019 (Ukraine) (ZA7810; Version 1.0.0). GESIS, Cologne (2022). <https://doi.org/10.4232/1.13853>
- Osberg, L.: On the limitations of some current usages of the Gini index. *Rev. Income Wealth* 63(3), 574–584 (2017). <https://doi.org/10.1111/roiw.12256>
- Osberg, L., Smeeding, T.: 'Fair' inequality? Attitudes to pay differentials: The United States in comparative perspective. *Am. Sociol. Rev.* 71, 450–473 (2006)
- Pan, Y., Pikulina, E.S., Siegel, S., Wang, T.Y.: Do equity markets care about income inequality? Evidence from pay ratio disclosure. *J. Finance* (2022). <https://doi.org/10.1111/jofi.13113>
- Panagiotidou, G. and Chadjipadelis, T. (2025). Mapping Electoral Behavior and Political Competition: A Comparative Analytical Framework for Voter Typologies and Political Discourses. In: Trejos, J., Chadjipadelis, T., Grané, A., Villalobos, M. (eds) *Data Science, Classification, and Artificial Intelligence for Modeling Decision Making*. IFCS 2024. *Studies in Classification, Data Analysis, and Knowledge Organization*. Springer, Cham. [https://doi.org/10.1007/978-3-031-85870-3\\_16](https://doi.org/10.1007/978-3-031-85870-3_16)
- Pennell, B., et al.: A Total Survey Error Perspective on Surveys in Multinational, Multiregional, and Multicultural Contexts. Pp. 179–202 in *Total Survey Error in Practice*, edited by P. B. Biemer, et al West. Hoboken: Wiley. (2017).
- Piketty, T.: Social mobility and redistributive politics. *Q. J. Econ.* 110(3), 551–584 (1995). <https://doi.org/10.2307/2946692>
- Przychodzen, W., Gómez-Bezares, F.: CEO–employee pay gap, productivity and value creation. *J. Risk Financ. Manag.* 14(5), 196 (2021). <https://doi.org/10.3390/jrfm14050196>
- Rauthmann, J. F., & Kuper, N. (2025). The landscape of personality psychology in the new millennium: A systematic keyword analysis of journal articles from 2000 to 2021. *Journal of Personality and Social Psychology*, 128(3), 722–763. <https://doi.org/10.1037/pspp0000532>
- Roland, G., Yang, D.Y.: China's Lost Generation: Changes in Beliefs and their Intergenerational Transmission. NBER Working Paper No. 23441 (2017). <https://cesi.econ.cuhk.edu.hk/wp->

[content/uploads/Roland\\_Gerard\\_Chinas-lost-generation\\_Changes-in-beliefs-and-their-intergenerational-transmission.pdf](#)

Roosalu, T., Täht, K.: International Social Survey Programme: Social Inequality V – ISSP 2019 (Estonia) (ZA7813; Version 1.0.0). GESIS, Cologne (2022). <https://doi.org/10.4232/1.14020>

Roth, C., Wohlfart, J.: Experienced inequality and preferences for redistribution. *J. Public Econ.* 167, 251–262 (2018). <https://doi.org/10.1016/j.jpubeco.2018.09.012>

Shorrocks, A.F.: The class of additively decomposable inequality measures. *Econometrica* 48(3), 613–625 (1981). <https://doi.org/10.2307/1913126>

Smith, T.W.: Refining the Total Survey Error Perspective. *International Journal of Public Opinion Research*, 23(4), 464–484 (2011). <https://doi.org/10.1093/ijpor/edq052>

Tóth, I.G.: International Social Survey Programme: Social Inequality V – ISSP 2019 (Hungary) (ZA7811; Version 1.0.0). GESIS, Cologne (2022). <https://doi.org/10.4232/1.13854>

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<sup>1</sup> See their Figures 1 and 3, and Table 4 Gaspar et al (2024) argue that: “people’s perceived and desired levels of domestic inequality and their assessment of their relative socio-economic status closely correlate with how they think about cross-country economic differences. “

<sup>2</sup> See also Luttmer and Singhal (2011).

<sup>3</sup> ChatGPT (accessed Jan 28, 2025) summarizes World Wide Web knowledge on the topic as: “In **individualist cultures**, higher wage inequality is often seen as fair because it's believed to reward individual effort, talent, and risk-taking. In **collectivist cultures**, fairness tends to be associated with smaller wage gaps to promote social cohesion and equality.” DeepSeek tells much the same story.

<sup>4</sup> The hypothesis that individuals’ attitudes about inequality and fairness judgements may differ discretely across countries but vary continuously within countries is perhaps partly informed by the enduring influence in economics of Marshall (1890), who famously argued that “Nature does not make jumps”. See also Corneo and Neher, who explicitly assume “well-behaved reduced-form utility functions that describe how expected utilities vary with the amount of redistribution” (2015:98) or Gimpelson and Treisman (2017) or Roth and Wohlfart’s summary (2018,252) of “a growing literature on the determinants of redistributive preferences.”

<sup>5</sup> In February 2025, for example, the Angus Reid poll of Canadian voters identified four “types” of attitudes to climate change and carbon pricing <https://angusreid.org/centre-left-support-carbon-tax/>.

<sup>6</sup> See, for example, Rauthmann and Kuper (2025) or Matz, Chan, and Kosinski, M. (2016) or Kerber, Roth, and Herzberg (2021).

<sup>7</sup> See, for example, Panagiotidou and Chadjipadelis (2025).

<sup>8</sup> For example, in studying fairness beliefs, Almas et al (2024:169) argued that the percentages of people with “egalitarian”, “libertarian” and “meritocratic” types of fairness views differ significantly in the sixty countries they compared. Benson et al (2024) used latent class analysis to divide their UK sample into three groups – “Structuralists”, “In the Middle” and “Individualists” – with differing perspectives on the extent, causes and consequences of British inequalities.

<sup>9</sup> Bechert and Osberg (2023) emphasized trends in inequality preferences over time using data from 1987, 1992, 1999, 2009, and 2019 from Norway, Germany, Italy, Great Britain, the U.S.A., Russia, and Hungary.

<sup>10</sup> Shorrocks (1981) noted that it is the coefficient of variation squared which decomposes exactly.

<sup>11</sup> Let the total population be divided into G groups (e.g., countries), with group g having  $n_g$  respondents. Let  $x_{gi}$  be the value for individual i in group g, and  $\mu_g$  be the mean of group g. Let  $\mu$  be the overall mean across all individuals.

The squared coefficient of variation ( $CV^2$ ) for the entire population is defined as:

$$CV^2 = (1/N\mu^2) \sum_{g=1}^G \sum_{i=1}^{n_g} (x_{gi} - \mu)^2$$

This total variance can be decomposed into within-group and between-group components:

$$CV^2 = CV^2_{within} + CV^2_{between}$$

Where:

$$CV^2_{within} = (1/N\mu^2) \sum_{g=1}^G \sum_{i=1}^{n_g} (x_{gi} - \mu_g)^2$$

$$CV^2_{between} = (1/N\mu^2) \sum_{g=1}^G n_g (\mu_g - \mu)^2$$

Here,  $CV^2_{within}$  captures the inequality within each group (country), and  $CV^2_{between}$  captures the inequality due to differences in group means.

<sup>12</sup> When Taiwan is excluded as an outlier from the calculation, between-country differences in mean attitudes are 3.2% of total variance and within-country variation is 96.8%.

<sup>13</sup> Aymeric and Magdalou (2025), for example, ask for attitudes about income distributions that at maximum span the range (2....30) while rewards ranging from 0 to 10 Euros drive the experimental results of Chanel, Luchini, and Teschl (2025). Almås, Cappelen, Sørensen, and Tungodden (2024) survey the experimental evidence on inequality attitudes.

<sup>14</sup> If occupation i has a pay rate  $w_i$  and occupation j has a pay rate of  $w_j$ , where  $w_i > w_j$ , it would be mathematically convenient if beliefs about fair pay ratio were given by a smooth functional form like  $[w_i / w_j]^\beta$  where  $\beta \geq 0$ . But we see no reason to assume this is true.

<sup>15</sup> Full documentation is available at <https://issp.org>.

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<sup>16</sup> Germany, Great Britain, Hungary, Italy, Norway, Russia and the United States

<sup>17</sup> ZA7600 (ISSP Research Group, 2022); ZA7810 (Oksamytna, S. , & Ivashchenko, O. (2022)); ZA7811 (Tóth, I. G. (2022); Bahna, M. et al. (2022); 7813 Roosalu, T. , & Täht, K. (2022); ZA7845 Deshmukh, Y. (2023). Various methodological reasons have led to the national data of the Ukraine, Hungary, Slovakia, Estonia, and India not being integrated in the official international ISSP file. We have carefully considered the possible implications of these reasons in our analyses. Although the data from these countries may not be entirely comparable with that from other countries in terms of methodology, we believe that they provide valuable support for the overall picture, since they show the same clear trends as the data from the main file.

<sup>18</sup> In Table 1, an asterisk (\*) denotes “before-tax” countries. A respondent who believes that the income tax system in their country is actually progressive might say that the Fair Pay ratio is greater when before tax income is discussed than when after tax income is the concept used. However, a respondent who is cynical about income tax enforcement, tax loopholes and the actual progressivity of the income tax system might not. Saez and Zucman (2019) document how the very rich in the U.S. have increasingly been able to avoid income tax, to the extent that their average effective income tax rate is now less than the average income tax rate for the middle class [see also <https://taxjusticenow.org/> or <https://americansfortaxfairness.org> ]. As Table 1 indicates, the before/after tax distinction does not seem to make a systematic difference to country rankings.

<sup>19</sup> Table 3a below documents how the “Fair Pay Ratio” for Shop Assistants relative to an unskilled factory worker is tightly centered on 1:1. The results for Shop Assistant/CEO “Fair Pay Ratio” were replicated for 2009 and resemble the results for worker/CEO in 2019.

<sup>20</sup> In comparing cross-national averages, and changes in averages, of “fair pay” ratios (OECD, 2021:47, Figures 2.17, 2.18 and 2.19) the OECD (2021) made a different choice - doctor and CEO “fair pay” were averaged and Cabinet Ministers were ignored. As Table 3a below shows, there is no evidence of cross-country consensus on whether CEOs should earn more than Cabinet Ministers and considerable heterogeneity in the doctor/CEO fair pay ratio.

<sup>21</sup> Online Resource 2 presents the numbers underlying Figure 1. Cross-national comparisons depend on survey item measurement equivalence, which can never be fully guaranteed in different settings – see Smith (2011), Pennell et al. (2017) and Bechert (2018).

<sup>22</sup> See Osberg and Smeeding (2006) for fuller discussion.

<sup>23</sup> GDP per capita, PPP (constant 2021 international \$) World Development Indicators

<sup>24</sup> More exactly, firms must disclose “the ratio of the median of the annual total compensation of all employees to the annual total compensation of the chief executive officer” [Pay Ratio Disclosure \(sec.gov\)](#).

<sup>25</sup> The 25<sup>th</sup> percentile of CEO compensation was \$11.6 million and the 75<sup>th</sup> percentile was \$21.7 million. The 25<sup>th</sup> percentile CEO/worker ratio was 129.1 and 75<sup>th</sup> percentile was 348.8.

<sup>26</sup> [Assemblers and Fabricators : Occupational Outlook Handbook: : U.S. Bureau of Labor Statistics](#)  
<https://www.bls.gov/ooh/production/assemblers-and-fabricators.html>

<sup>27</sup> At the 25<sup>th</sup> percentile of CEO compensation the actual CEO / factory worker pay ratio was 266.2 to 1 and at the 75<sup>th</sup> percentile 498.0 to 1.

<sup>28</sup> [PAN, PIKULINA, SIEGEL and WANG](#) *Journal of Finance*, (2022)

<sup>29</sup> Boone, Starkweather and White, *Review of Finance* 2024; Przychodzen and Gómez-Bezares *Journal of Risk and Financial Management* 2021.

<sup>30</sup> Cheng and Zhang *Review of Accounting Studies*, 2023.

<sup>31</sup> Fischer and Lindermoyer, *American Journal of Management* (2020); May, Xiaoyan and David Smith *Advances in Accounting*,(2020; Cheng, Ranasinghe and Sha, (2017).

<sup>32</sup> Benedetti and Chen, *Journal of Experimental Social Psychology* (2018)

<sup>33</sup> Ming and Lee, *Journal of Multinational Financial Management* (2015)

<sup>34</sup> Kelly and Seow, *Journal of Management Accounting Research* (2016)

<sup>35</sup> Huang, Huang and Yu, Asian Finance Association 2018

<sup>36</sup> Chan, Kawada, Shin, and Wang *Review of Accounting and Finance* (2020)

<sup>37</sup> Chang, Dambra, Schonberger and Suk *Journal of Accounting Research* (2023); Norman, Rose, Rose , and Suh *Human Resource Management*. 2021.

<sup>38</sup> Faleye, Reis and Venkateswaran *Journal of Banking & Finance* (2013),

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<sup>39</sup> As Table 3a shows, when the Fair Pay comparisons are to Doctor or Cabinet Minister, Taiwan is much more similar to other countries. Outlier cases where respondents reported “fair pay” as zero for an occupational group or where the fair pay ratio exceeded 10,000 may reflect respondent ideology more than fair pay perceptions and were therefore deleted.

<sup>40</sup> The average salary of an Associate Professor at Berkeley was \$164,341. As [University of California-Berkeley Professor Salary by Academic Rank](https://www.univstats.com/salary/university-of-california-berkeley/faculty/) <https://www.univstats.com/salary/university-of-california-berkeley/faculty/> notes: “UC Berkeley’s average faculty salary is \$170,122. UC Berkeley’s faculty salary is much higher than the national average faculty salary at four-years colleges (\$67,936). Its salary is also well above the average salary (\$77,092) of four-years colleges in California”.

<sup>41</sup> The average height of land at each latitude in North America is not very informative. If one starts in the middle of the U.S. and travels west, although the Great Plains of the Mid-West occupy most of the land area eventually one encounters foothills (somewhat earlier at some latitudes) before then reaching the Rocky Mountains. Descriptions of the landscape typically distinguish qualitatively between the prairies and the mountains, even if there may be disagreement about exactly when prairies transition to foothills and exactly when foothills become mountains. Similar qualitative distinctions and ambiguity of exact delineation arise in analyzing public attitudes to “fair” inequality but to us, the data suggest that there is a sharp contrast between the Great Egalitarian Plains of most people in attitudes to the fair pay ratio between top executives and factory workers and the Inequality Mountains of a minority of respondents.

<sup>42</sup> With 34 countries being compared in 2019, there is only space for some countries to be explicitly labelled on the axis of Figure 2 – for example, CH (Switzerland) and IT (Italy). As Table 1 shows, Finland is between Switzerland and Italy when countries are ordered by the size of the 80<sup>th</sup> percentile “should earn” ratio in 2019, and its data is, although unlabeled, also plotted there in Figure 2.

<sup>43</sup> see Osberg (2017).

<sup>44</sup> We used this formula to calculate the GINI coefficient over the available “should-earn” variables

$$G = \frac{\sum_i \sum_j |x_i - x_j|}{2n^2 \bar{x}}$$

<sup>45</sup> Since the ISSP has, over the years, changed the list of occupations about which “should earn” questions are asked, our 2019 “should earn” Gini calculations can also not be directly compared to similar calculations (as in Osberg and Smeeding, 2006) made in previous ISSP waves.

<sup>46</sup> Each ranking of respondents by fair pay ratio for a particular occupational comparison within the same country is done separately. This implies, for example, that the median (and the 80<sup>th</sup> and 90<sup>th</sup> percentile) respondent for the fair Doctor/ Worker pay ratio is not necessarily the same person as the median respondent (and the 80<sup>th</sup> and 90<sup>th</sup> percentile respondent) in the distribution of fair Cabinet Minister/ Worker pay ratio beliefs.

<sup>47</sup> See: <https://web.arbeitsagentur.de/entgeltatlas/>; Unskilled worker: <https://web.arbeitsagentur.de/entgeltatlas/beruf/50939> assistant professor: <https://web.arbeitsagentur.de/entgeltatlas/beruf/9184> and full professor (W3): <https://www.beamtenbesoldung.org/beamtenbesoldung/bund/a/852-2025.html>

<sup>48</sup> The average actual pay ratio between senior and junior German academics was 1.48:1. At Berkeley, the full professor / assistant professor average actual pay ratio in 2023 was 1.81 : 1.

<sup>49</sup> Publicly Traded Companies DAX 40 CEOs (2023 data): Average total compensation: approx. €6.1 million per year includes Fixed salary: ~€1.2–1.5 million, Bonuses & short-term incentives: ~€1–2 million, Long-term incentives (stock options, etc.): ~€2–3 million. Source: hkp/// group and annual reports of DAX companies

<sup>50</sup> In the U.S., “Retail Salesperson” (41-2031) and Production Worker (51-9199) are the terms used by the Bureau of Labor Statistics. In 2021, the full-time annual earnings of a retail salesperson in the U.S. ranged between \$21,840 (10<sup>th</sup> percentile) and \$45,460 (90<sup>th</sup> percentile) with a median of \$29,120 – (Bureau of Labor Statistics, 2021a) while the wages of production workers in manufacturing in 2021 were roughly 10% higher, ranging from \$23,700 to \$49,980 with a median of \$32,930 (ibid., 2021b). All our discussion of the CEO/factory worker “should earn” pay ratio is also applicable to Shop assistants.

<sup>51</sup> The 90-10 range is 3.1 and 4.2, respectively.

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<sup>52</sup> Specifically, we estimated, across all respondents in each country in 2019, the regression:

$$(1) Y = c + \beta_1 * R + \beta_2 * D * (R - 80)$$

Y = [CEO 'Should Earn' Salary / Unskilled Worker 'Should Earn' Salary]

R = Respondent's Percentile Rank in distribution of Y

D = 0 if R < 80

D = 1 if R ≥ 80

The small size of the coefficient  $\beta_1$  produces the flatness of "should earn" pay ratio gradient among most of the population. The coefficient  $\beta_2$  measures the "additional support" for the fairness of more inegalitarian CEO / worker pay ratios throughout the more inegalitarian 20%. Its statistical significance tests the hypothesis of a structural shift in attitudes at the 80<sup>th</sup> percentile – for percentile ranks greater than 80, each percentile rank differs from adjoining percentile ranks by  $[\beta_1 + \beta_2]$ . As expected,  $\beta_1$  is much smaller than  $\beta_2$  and  $\beta_2 * D$  varies significantly across countries. Both are strongly statistically significant. Detailed results are available on request.

<sup>53</sup> As Atkinson (1970) noted long ago, the choice of inequality index and the SWF weighting of different parts of the income distribution are not independent issues. Because inequality indices (like the Gini or Theil or coefficient of variation) differ in their sensitivity to change in different parts of the income distribution, the choice of inequality index implicitly reflects the inequality emphasis of the analyst's Social Welfare Function. Fleurbaey and Zuber (2023) investigate the properties of global Social Welfare Functions in which agents may have local preferences about inequality.