Setting Limits: Ethical Thresholds to the CEO-Worker Pay Gap

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Abstract

In the discussion about wage inequality, principles of fairness and need for incentives are juxtaposed as opposing motivations for wage inequality acceptance. While previous literature focused on ideal inequality, in one correlational and one preregistered experimental study (Ntotal = 473) we tested the hypothesis of a threshold of inequality acceptance. Participants were asked to indicate what a CEO should earn, ideally (i.e., ideal pay gap) and at maximum (i.e., highest acceptable pay gap), given the wage of a worker. Results showed that individuals generally indicated higher values for highest acceptable than for ideal pay gaps. In conclusion, these studies pave the way for new research on the cognitive and motivational underpinnings of attitudes towards economic inequalities.

Keywords : economic inequality, wage inequality, CEO-Worker pay gap

In the discussion about economic inequality, it is often argued that the concentration of wealth at the top of the social ladder is an essential incentive that encourages individuals to strive for success and make an extra effort to reach higher positions in society. At the same time, however, people universally hold principles of equity and fairness at high value: since childhood, we are willing to reject distributions that are unfair either to ourselves or to others, even at our own cost (McAuliffe et al., 2017). Research has shown that a sense of fairness is linked to the willingness to reduce inequality (Franks & Sherr, 2019), and that the belief that the economic system is illegitimate (hence, unfair) leads to higher demand for the redistribution of resources (Rodriguez-Bailón et al., 2017). When considering wage inequality in particular, greater differences in pay were shown to be positively linked to performance (Lallemand et al., 2004; Eriksson, 1999; the evidence, however, is mixed: see Conyon et al., 2001), but also to employees' negative perception of the company (Benedetti & Chen, 2018), diminished perception of leaders' efficacy and charisma (Peters et al., 2019), lower integration and poorer performance of top executives (Ou et al., 2018), and higher likelihood of fraud

(Haß et al., 2015), as well as reduced purchasing intention (Mohan et al., 2018) and a negative opinion of the company (Benedetti & Chen, 2018) by consumers.

The coexistence of these two notions may be explained by the belief that inequality is good, but only as long as it falls within a certain range. Even 4-year-old children are ready to reward merit, thus creating some degree of inequality, yet they refuse to cross a certain inequality threshold (Baumard, 2012). In other words, inequality acceptance might be imagined as a curve in which the turning point is represented by one's threshold of inequality tolerance, the "ethical ceiling" mentioned by Osberg and Smeeding (2006). This paper aims to explore this threshold in the context of CEO-Worker Pay Gap Ratios (henceforth, "PGRs").

Research consistently shows that individuals prefer wealth distributions that are more equal than the current ones but that still show some degree of inequality (Norton & Ariely, 2013; Norton et al., 2014; Osberg & Smeeding, 2006). Even for pay gaps, across the world people seem to agree that a certain level of inequality is ideal, although large cross-cultural differences in the "amount of inequality" exist (e.g., Kiatpongsan & Norton, 2014; Osberg & Smeeding, 2006; Pedersen & Mutz, 2019). To our knowledge research on economic inequality and pay-gap ratios has yet to explore whether there is a limit to the inequality that individuals deem ethically acceptable, namely the highest acceptable pay gap. Osberg and Smeeding (2006), for example, conceptualise the "ethical ceiling" as the ideal PGR, with the assumption that ideal ratios are the threshold for acceptable inequality. We argue instead that these are two different concepts, as individuals have a tolerance for inequality that goes beyond their preference. Hence, the primary, overarching aim of this research was to investigate whether and where people would set the limits for CEO-worker pay gaps.

A Threshold to Wage Inequality: The Highest Acceptable Pay Gap

The idea of a maximum acceptable wealth or pay gap is by no means new. Plato, in Book 5 of The Laws, discusses the ethical underpinnings of wealth distribution, making very precise policy recommendations for a hypothetical city state. To avoid hatred and divisions among individuals, he suggests prohibiting excessive accumulation of wealth and to distribute land and housing across four social classes. In his ideal society, each man is guaranteed the possession of one lot (the minimum) whereas the maximum is set to four times this amount: "Let the limit of poverty be the value of a lot [. . .] This the legislator will permit a man to acquire double or triple, or as much as four times the amount of this" (Plato, 348 BC, p. 112). Similarly, magistrates are required to keep registers of the amount of property "excepting four *minae* which are allowed to citizens of the first class, three allowed to the second, two to the third, and a single mina to the fourth" (p. 119). Any surplus beyond this limit ought to be given to the state or to the gods. Thus, Plato is more concerned about defining the maximum acceptable wealth gap than to discuss the ideal distribution, which, according to his opinion, is far below the 1:4 rule.

In advanced social democracies, the maximum pay gap is generally defined by two interrelated rules, concerning minimum wage and executive salaries, respectively. Since executive compensation includes not only salaries, but also different forms of non-salary benefits, maximum wage regulations generally are based on two approaches: caps on remuneration and/or performance-related pay policies (for an overview see Bruni, 2017). According to Bruni, 11 EU member states have implemented a binding cap policy in the public and/or semipublic sectors, whereas 17 states have performance-related pay regulations. Given that laws generally define thresholds rather than ideals, from an applied point of view, setting limits to remuneration seems much more relevant than defining ideal levels of inequality. Since these regulations are already present in some (albeit few) countries, the highest acceptable PGR may be envisaged as more realistic than an ideal PGR, which can hardly be transformed into a tangible policy. Since the highest acceptable PGR can actually be implemented in the form of maximum and minimum wage laws, exploring the individual and contextual determinants of people's threshold for wage inequality might prove more consequential for the political and social landscape than individual preferences or ideals.

Although we do not explore this issue here, the highest acceptable PGR may also be interesting from a psychological point of view. Since the threshold can be considered a personal norm, one may predict that a

violation of this norm (i.e., higher inequality) may be perceived as more illegitimate than the violation of one's ideal, thus possibly leading to greater anger and willingness to engage in collective action to reduce inequality. This may be especially true when inequality beyond the threshold is perceived as unethical, i.e., as a moral violation. Thus, there are both theoretical and applied reasons for separating highest acceptable from ideal PGRs that point to the relevance of investigating them as separate constructs.

Legitimizing PGRs: Wage-Setting Criteria

There are several factors that may affect the levels of inequality that individuals prefer and are willing to accept. For example, people who see themselves as wealthier tend to indicate higher pay gaps between CEOs and workers as ideal (Buchel et al., 2020). Here, we explore the legitimization of wage differentials through wage-setting criteria.

To date, relatively little is known about the criteria that lay people believe determine wages. Evans and colleagues (2010) consider family need, performance, and authority as criteria for wage determination, which may legitimize differences in pay. The authors define family need as the need to support a family and children with one's own wage, performance as how hard one works and how good one is at the job, and authority as number of years spent in education as well as authority over others. They find cross-cultural consensus on performance as justifying high pays, whereas authority appears to be particularly relevant in some countries, but not in others. Kiatpongsan and Norton (2014), instead, consider responsibility, performance, and effort, and find that individuals with different beliefs indicate ideal PGRs that are smaller than perceived ones, though it remains unclear whether and to which degree these criteria predict perceived or ideal PGRs. However, many criteria that determine wages in real life (such as shifts, or skillset needed) are not considered in previous studies. Consistent with research on fairness and meritocracy, people believe that a fair distribution of resources ought to take differences in effort into account (e.g., Starmans et al., 2017). Consequently, one may assume that fair wages – and hence, fair PGRs – should reflect differences in effort, skillsets or stress levels that come with different roles within an organization. In other words, the relative importance that people attribute to different criteria should be predictive of their ideal and highest acceptable PGRs.

Hypotheses

The main aim of this research is to investigate whether people perceive a threshold of wage inequality that should not be crossed. To do so, we asked participants how much a CEO should earn ideally and at maximum, based on the wage of the lowest-paid worker in the same company. We predicted that highest acceptable wages indicated by participants would exceed ideal ones (Hp1).

To explore potential mechanisms underlying ideal and highest acceptable PGRs, the second aim was to investigate the criteria that, in participants' minds, guide wage setting. We predicted that people who primarily value those criteria that are typically associated with CEOs (e.g., competence), but not those typical of the worker (e.g., fatigue) would also accept and desire higher PGRs (Hp2).

Open Practices and Transparency

All study data, materials, and appendices are accessible at this link: https://osf.io/9uk2t/?view_only=943ab64c6cf84ec883db93248f34c2f1. We report how we determined our sample size, all data exclusions, all manipulations, and all measures in the studies. Furthermore, this line of research had the additional aim to explore gender differences in ideal and highest acceptable PGRs. Although not reported here, one study investigating this aim and all analyses concerning gender differences are available on OSF. Results confirmed our hypotheses that men feel the need for, prefer, and tolerate higher wage inequality than women, and that this is partially mediated by social dominance orientation and importance attributed to wage-setting criteria typical of the worker.

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Study 1

We predicted that highest acceptable PGRs would be higher than ideal PGRs, consistently with the results of a Pilot Study (Appendix A). Additionally, we explored which criteria participants believe (a) are applied and (b) ought to be applied in wage setting and tested whether these predicted PGRs.

Method

Participants

In total, 334 participants accessed the questionnaire; of these, 12 did not complete it and were excluded. Thus, 322 participants completed the questionnaire (200 women, 117 men, 5 non-binary; M_{age} = 25.61; SD_{age} =10.36), of whom 47% students; they were left leaning ($M = 43.98, SD = 25.31$) and saw themselves as better off than the average Italian family ($M = 54.36$, $SD = 15.34$). The results of a post-hoc sensitivity power analysis ran on G*Power 3 (Faul et al., 2007) showed that our sample had 80% statistical power to detect at least an effect size of $f = .15$ for the interaction between our predictors.

Procedure

As part of a research lab, four groups of first-year Psychology students attending a Social Psychology course handled data collection during the first semester. As they did so independently, they added variables of their interest to the questionnaire; nonetheless the variables included in this study were unaffected by other variables.

Participants were first asked to indicate in two open text-boxes how much a CEO should earn ideally and at most compared to the least-paid worker of the same company (i.e., 1000\euro). A subgroup of participants ($N = 131$)[1] was also asked to indicate to what degree certain criteria are currently used (perceived criteria) and ought to be used (ideal criteria) to determine wages, using a 7-point Likert scale. Four items assessed job-related fatigue and included total amount of hours, distribution of hours in shifts, whether the job was physically exhausting, and whether it was emotionally exhausting ($a_{\pi\epsilon\rho\varsigma\epsilon\iota\epsilon\delta} = .69; a_{\iota\delta\epsilon a\lambda} = .70$). Two items assessed competence, namely required skills and responsibility required by the role ($a_{\pi\epsilon\rho\varsigma\epsilon\iota\epsilon\delta} = .79$; $a_{\iota\delta\epsilon a\lambda} = .67$). Three items assessed utility, namely money circulated by the activity, benefits produced for the company, and benefits produced for society ($a_{\pi\epsilon\rho\varsigma\epsilon\iota\epsilon\delta} = .80; a_{\iota\delta\epsilon a\lambda} = .64$). Participants could also indicate additional criteria through a text box.

Finally, participants were asked demographic information: gender, age, education, region of birth and residence, family income, number of family members, SSES (i.e., "Compared to the average Italian family, my family is...", from 0 - *worse off* to 100 - *better off*), political orientation (from 0 - *left-wing* to 100 –*right-wing*) and religiosity; and they were debriefed.

Results and Discussion

Ideal and Highest Acceptable Pay-Gaps

Ideal PGR ranged from 1 to 150 ($M = 6.49$; $SD = 14.69$) and highest acceptable PGR from 1 to 1000 ($M = 18.78; SD = 98.08$). Most participants ($N = 183$, 57%) indicated a higher value for highest acceptable than for ideal PGR, while 115 (36%) indicated the same amount for both variables, and only 24 (7%) indicated lower highest acceptable PGRs than ideal ones.

As participants were able to indicate any value above 1000\euro, we divided wages by 1000 and tested the difference between PGRs through both linear and non-parametric methods. As for the linear method, our data required two additional steps before analysis: first, we excluded outliers on any of the two variables through the interquartile-range (IQR) approach for detecting extreme outliers (three IQRs above the third quartile; Ghasemi & Zahediasl, 2012), then values were adjusted through log-linear transformation to correct

for skewedness. Across studies, outliers are excluded for linear analyses involving PGRs, while all other analyses employ the full sample.

A Wilcoxon Signed-Ranks test indicated that highest acceptable PGR was greater than ideal PGR, $Z = -10.01$, $p < .001$, $\eta^2 = .31$, which was confirmed by a paired-samples t-test, $t(301) = -9.57$, $p < .001$, $d = -.55$ after outlier exclusion ($N = 20$; see Figure 1).

Wage-Setting Criteria

To test whether perceived and ideal criteria were perceived differently, we ran a 2(perceived vs ideal) x 3(type of criteria) ANOVA with repeated measures[2] on both variables. We found a main effect of perceived vs ideal criteria, $F(1, 134) = 204.06$, $p < .001$, $\eta_\pi^2 = .60$, with participants believing that criteria should ideally have greater weight in determining wage, and a main effect of type of criteria, $F(2, 261) = 78.08$, $p < .001$, $\eta_\pi^2 = .37$, showing that competence was believed to be more important than the other two criteria. The interaction between the two, $F(2, 264) = 6.85$, $p = .001$, $\eta_\pi^2 = .05$, showed that, according to our participants, all three dimensions should have greater weight in determining salaries , but this was particularly true for fatigue, $t(134) = -14.95$, $p < .001$, followed by competence, $t(134) = -12.05$, $p < .001$, but less so for utility, $t(134) = -8.58$, $p < .001$. Then, we ran four regression models with PGRs as outcomes and ideal or perceived fatigue, competence, and utility as predictors, but found no effects (p s $> .10$).

Discussion

Study 1 confirmed our hypothesis that ideal pay gaps and highest acceptable pay gaps are two distinct concepts in the majority of cases, with individuals indicating highest acceptable PGRs greater than ideal PGRs. Moreover, our results show that men prefer and tolerate higher wage inequality compared to women. There are several potential psychological processes that may lead to this outcome: for example, men may believe more strongly in system-justifying ideologies, such as meritocracy or social mobility (Jost & Kay, 2005), or they may have a stronger need for well-defined hierarchies (e.g., Pratto et al., 2000), and thus accept greater distance between the low-status employee (the worker) and the high-status employee (the CEO). Hence, we tested the role of these potential mediators in Study 2.

Study 2

The within-participants design of Study 1 might have created a demand effect and led participants to assume that they ought to provide different answers to the two items. Therefore, in Study 2 we employed a between-participants design and once again, we predicted that highest acceptable gaps would be greater than ideal gaps. Additionally, we aimed to explore the predictive value of a new set of wage-setting criteria. Finally, in this study we also explored the motivations that lead participants to select highest acceptable and ideal PGRs. This study is preregistered at: https://aspredicted.org/blind.php?x=pe5qi9.

Method

Participants

G*Power 3 (Faul et al., 2007) indicated a sample of 138 to detect an effect size of $d = .43$ (based on Pilot Study 2, Appendix B) with $a = .05$ and 80% power. To allow for exclusions, our sample consisted of 151 Prolific workers[3] (68 women, 82 men, 1 non-binary; $M_{age} = 26.31$; $SD_{age} = 7.30$), of whom 50% students; participants leaned to the left, $t(150) = -10.90$, $p < .001$ ($M = 32.50$, $SD = 19.73$), and saw their social standing as similar to the average Italian family ($M = 52.21$, $SD = 15.12$).

Procedure

Participants were randomly assigned to one of two conditions (highest acceptable PGR vs ideal PGR). To help them answer the PGR item, in this study participants were also provided with a figure visualizing different PGRs from 1:1 to 55:1 (Pilot Study 3 - Appendix C). Then, they answered items exploring the motivations that led participants to select highest acceptable and ideal PGRs. Motivations were investigated through item pairs (from 1 – *I did not think about this* to 7 –*This motivation was fundamental in my decision*) assessing equality/fairness (Spearman-Brown = .76), merit (Spearman-Brown = .25), and quality of life[4] (Spearman-Brown = .31; we were unable to use the latter two due to low reliability), and a bipolar item assessing which was more relevant in deciding the wage of the CEO, equality (1 – "maintaining equality and equity between the two workers, without creating unfairness or privileges") or merit (6 – "Rewarding the merit of the CEO, who has greater responsibility and competence"). Additionally, we included one item that we predicted to be higher in the ideal PGR condition ("I wanted to create a balance between the two categories"), and one that we predicted to be higher in the highest acceptable PGR condition ("I thought there were no justifications for a greater gap").

At this point, we assessed participants' need for legislation (i.e., if they thought there should be a law setting a ceiling to CEO wages, from 0 – *absolutely not* to 100 – *absolutely yes*), and perceived usefulness of ideal vs. maximum pay gap rules (i.e., if it would be more efficient to have an ideal wage gap that companies should approach or a maximum gap that companies must not exceed, from 0 –*ideal gap* to 100 – *maximum gap*).

A new pre-tested measure of wage-setting criteria (Appendix D) distinguished, also according to an exploratory factor analysis, between criteria associated with low-status workers (i.e., physical exhaustion and shift work, Spearman-Brown = .73) and criteria associated with CEOs (competence, responsibility, leadership ability, organizational ability, and knowledge of languages; a = .78). Participants were asked to rate how much each criterion was important in setting the wage of a person (from 1 – *not at all* to 7 – *extremely*).

Finally, participants were presented with a manipulation check and demographic items (gender, age, education level, work status, general, social, and economic political orientation, SSES, and annual family income), and they were debriefed.

Results and Discussion

Pay Gap Ratios

First, we ran a non-parametric Mann-Whitney U test on PGR. As predicted, participants in the highest acceptable condition indicated higher pay gaps than those in the ideal PGR condition, $U = 2240$, $p = .026$, $\eta^2 = .03$. For the linear approach, after excluding outliers ($N = 6$, four men and two women, all in the highest acceptable condition) and log-transforming data, the difference between the two conditions failed to reach significance, $t(143) = -1.55$, $p = .124$, $d = .26$. This may be due to outliers all being in the highest acceptable condition, or because providing the figure led to drastically reduced thresholds of inequality. Still, in line with our hypotheses, PGR was larger for highest acceptable than for ideal PGR, as shown in Figure 2. Although the partial divergence between robust and linear models warrants additional studies, the two studies together provide first evidence for our hypothesis that ideal and highest acceptable PGRs are two separate concepts.

In line with the preregistration, we also tested gender differences in pay gaps, through a 2 (condition) x 2 (gender[5]) ANOVA. A main effect of gender emerged, $F(1, 139) = 6.44$, $p = .012$, $\eta^2_\pi = .04$, so that men indicated higher PGRs than women, regardless of type of PGR

As for motivations, there were no differences between conditions for the items targeted at ideal PGR, $t(148) = 1.59$, $p = .114$, and at the highest acceptable PGR, $t(148) = .12$, $p = .907$, and for the bipolar item, $t(148) = .51$, $p = .609$. Nevertheless, only ideal PGR correlated negatively with equity motivation and

positively with preference for merit over equality (see Table 1) suggesting that moral principles may be more relevant for ideal pay-gaps than for maximum acceptable thresholds, as shown in Table 1. When including all motivations as predictors in a regression, there was no effect for highest acceptable PGR, whereas for ideal PGR preference for merit was the only predictor, $B = 0.22$, 95% CI [0.07, 0.37], $t = 2.87$, $p = .005$.

Therefore, although participants indicated that similar motivations led them to select both PGRs, only ideal PGRs increased with preference for merit.

Wage-Setting Criteria

To test the prediction that the more importance attributed to worker criteria, the lower the PGR would be, we ran a regression model with PGR as dependent variable and CEO and worker wage-setting criteria, condition, and the interaction between the two as predictors. The importance attributed to wage criteria typical of workers negatively predicted PGR, $B = -.19$, 95% CI [-.34, -.04], $t = -2.52$, $p = .013$, while CEO criteria predicted PGR positively, $B = .44$, 95% CI [.25, .64], $t = 4.51$, $p < .001$. Therefore, the less importance was attributed to dimensions typical of the worker's activity, and the more importance was attributed to those typical of the CEO, the higher PGRs were. There was no effect of the two interactions between condition and criteria, suggesting that the criteria played a similar role in establishing ideal and maximum acceptable PGRs.

Need for Legislation and Usefulness of Ideal vs. Maximum Pay Gap Rules

Though not preregistered, responses to these two items were skewed towards the two extremes and were thus dichotomized. The majority of participants (77%) desired a law that caps executive salaries[6] (i.e., indicated scores higher than the mid-point), binomial < .001. Consistently, the majority of participants (62%) deemed it more useful to reduce inequalities by defining a maximum gap that companies must not exceed than to define an ideal wage gap that companies should comply to as best as possible[6], binomial < .001. Those who had such preference were more left-wing ($M = 26.92$, $SD = 18.65$) than those who did not ($M = 37.14$, $SD = 17.10$), $t(146) = 3.34$, $p = .001$. These preferences did not affect PGR, either by themselves or in interaction with condition, all p's [?] .088. After excluding outliers, those who believed that an upper limit for the wage gap would be more useful, $t(142) = 1.98$, $p = .050$, indicated smaller gaps for highest acceptable PGR, regardless of condition, all p's $\geq .14$. There was no difference for need for legislation, $t(140) = 1.02$, $p = .310$.

Discussion

Study 2 provides evidence for our hypothesis that ideal and highest acceptable PGRs are two separate concepts and exist separately in participants' minds, even when investigated in a between-participants design. Nevertheless, the effects of condition were small, which suggests that the comparison between the two values (Study 1) leads participants to magnify their difference. Importance attributed to CEO criteria, on the other hand, predicted higher PGRs. Furthermore, participants deemed a law setting a limit to wage gaps, rather than an ideal gap, as more useful. This may be due to the fact that in this study, the item specified to think about "practical purposes, in order to curb the increasing economic inequalities".

Although participants provided different ideal vs. highest acceptable PGRs, they failed to mention distinct motivations for their decisions. This finding is open to different interpretations. First, participants may indeed have employed the same reasoning to decide both PGRs. Second, they may lack the introspection to understand the reasons that led up to their decisions. Third, the wording of the questions may have been too complex (which could also explain the low correlations for the three pairs that we excluded from the analyses). Further studies should investigate the challenging question of what cognitive and motivational factors lead to defining ideal versus maximum acceptable wage gaps.

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General Discussion

Economic theories investigating the effects of wage dispersion have taken two opposing stances, namely the idea that wage inequality enhances ambition and thus motivation, and that it leads to perceptions of unfairness and thus decreases motivation. As of today, economic literature provides evidence for both, as competing and complementary phenomena (Henderson & Fredrickson, 2001). Extending this debate on individual perceptions and generic preferences about wage inequality, our studies confirm our hypothesis that individuals have specific thresholds of inequality acceptance, that are affected by individual characteristics such as gender or system-justifying beliefs.

Our studies provide first evidence for our hypothesis that individuals have specific thresholds of inequality acceptance. When asked both PGRs, the large majority of participants indicated thresholds for inequality that exceeded their ideal preference, suggesting that they are able to distinguish the two concepts. This was to some degree also true in Study 2 using a between-participants design. However, the high correlation between PGRs in Study 1 (Appendix E) and the fact that they share some of the predictors (in particular, the endorsement of wage criteria) in Study 2 suggests a certain overlap between the two constructs. At the same time, they are distinct in two ways: first, ideal PGR appears to be relatively homogeneous across participants, whereas highest acceptable PGR has much greater variability. Thus, there seems to be a collective idea of what PGRs should look like ideally, possibly driven by culturally shared principles such as preferences for equality and merit. In line with this interpretation, the second difference regards the distinct predictors. In Study 2, ideal, but not maximum acceptable pay-gaps were predicted by merit beliefs and, to a lesser extent, by concern for equity and fairness. Thus, ideal PGRs seem to be guided by moral considerations, whereas the level of inequality acceptance may be driven by different processes. For example, Plato's main concern was the prevention of negative consequences of inequality on society. Legal limits to inequality (in particular, the 1:4 rule) were intended to prevent "quarrels of long standing" and "disputes among citizens". By preventing the accumulation of wealth, the legislator was expected to contribute to the "happiness" of its citizens and to create a state "free of enmity". Thus, at the center of his arguments were the consequences, not the moral bases, of distribution. Whether this is true also for modern lay reasoning remains a question to be explored in future research.

Two limits of our research should be acknowledged. First, about half of our participants were students, who tend to be younger, more privileged, and better educated than the general population (Cummins, 2003) - and social sciences students in particular tend to be more progressive (Rubinstein, 1997); even their in-lab behavior is substantially different from representative samples (Cappelen et al., 2015). Possibly, a truly representative sample may show larger ranges of inequality acceptance. Second, even though participants were asked to indicate wages for CEOs while keeping in mind the wage of the worker, as of now we cannot prove with certainty that people considered the wage of the worker and adjusted the wage of the CEO accordingly. Further studies need to address this limit more systematically, for example by employing different anchors as worker wages.

Wage-Setting Criteria

A second general conclusion that can be drawn from our studies is that ideal and accepted levels of wage inequality are closely intertwined with importance attributed to criteria typically associated with the CEO and the worker characteristics; in this sense, the roles seem more relevant than the criteria per se. The more participants valued wage criteria typical of workers (such as physical exhaustion), the lower the wage gap they tolerated or found ideal. Thus, our research contributes to the under-investigated question of how wages should be determined and how this relates to people's tolerance for pay gaps. However, given the correlational nature of our studies, we cannot draw any conclusions about the causal link between the two. Our primary interpretation was that subjective wage-setting criteria make people more, or less, tolerant of pay gaps. Still, it is also possible that subjective wage-setting criteria serve as post-hoc justification of one's belief on what pay gaps are acceptable. For instance, if a 1:300 pay gap is considered ethically acceptable,

then this belief can be justified on the ground that leadership ability and responsibility are much more important wage-setting criteria than fatigue or shifts. Disentangling the causal relation between the two remains a challenge for future research.

Policy Implications

Although the above studies need to be replicated with representative and possibly cross-national samples, we believe that our findings have important policy implications. While most European countries have minimum wage regulations, only few regulate maximum salaries and generally only for the public and semi-public sector: for example, Italy has introduced a maximum yearly gross salary of \euro240.000 for public administration personnel in 2014 (art. 13 of the Legislative Decree N. 66 of 24 April 2014). In our (non-representative) sample, the majority of participants supported this kind of regulation, in line with Plato's claim that "the legislator should determine what is to be the limit of poverty or wealth", to ensure that there be "neither extreme poverty, nor, again, excess of wealth" (p. 112). Given that pay gap regulations contain ethical, in addition to economic, considerations, policy makers may be well advised to give greater consideration to public opinion, rather than to rely exclusively on expert advice from economists. Understanding where and why people perceive the ethical limit of pay gaps is an important first step in this direction.

Conclusion

Previous research on pay gaps has focused on what individuals believe is an ideal level of inequality; this set of studies instead sheds light on a new dimension of attitudes towards economic inequality, namely the threshold of inequality acceptance. Exploring this threshold and the cognitive and motivational factors that shape it is fundamental to our understanding of attitudes towards economic inequalities.

References

Footnotes

[1]Two of the groups who handled data collection decided not to include wage-setting criteria in the questionnaire, thus data on this variable is only available for a subgroup of participants.

[2]With Greenhouse-Geisser correction.

[3]After exclusion of 23 participants who failed the manipulation check and three who failed one attention check.

[4]These motivations emerged from Pilot Study 3 (Appendix C).

[5]Excluding non-binary participants due to low sample size.

[6]Regardless of condition.

Tables

Table 1

Correlations Between PGR and Motivations by Type of PGR (Study 2)

	Ideal PGR ($N = 81$)	Highest Acceptable PGR ($N = 64$)
2. Equity	-.24*	-.13
3. Preference for merit	.38***	.15

	Ideal PGR ($N = 81$)	Highest Acceptable PGR ($N = 64$)
4. Balance between categories	-.16	-.21
5. No justifications for a larger gap	-.11	.02

Notes. * $p < .05$; *** $p < .001$.

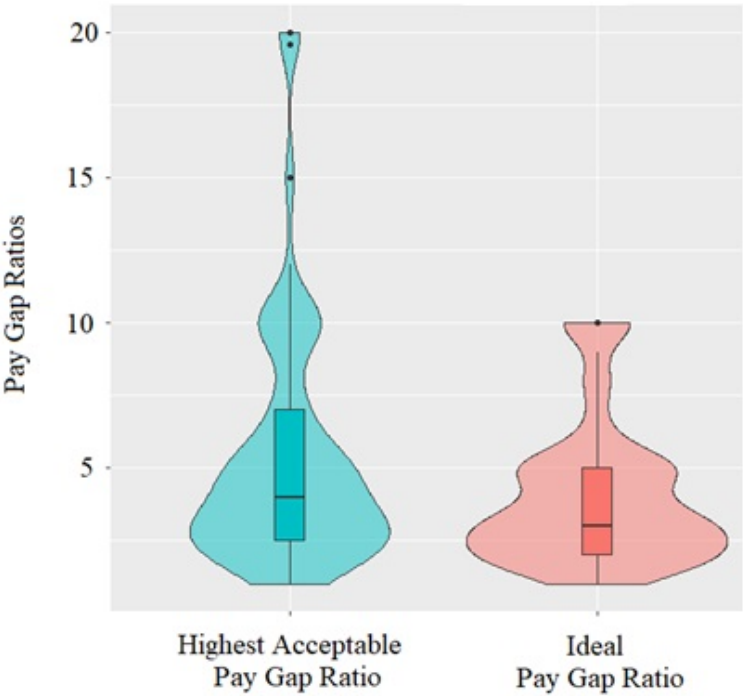**Figures**

Figure 1

Ideal and Highest Acceptable PGRs (Study 1)

Figure 2

Ideal and Highest Acceptable PGRs (Study 2)