



This article is part of the issue "Marketplace Morality"

Consumers Avoid Buying From Firms With Higher CEO-to-Worker Pay Ratios

Bhavya Mohan D University of San Francisco

Tobias Schlager University of St. Gallen and University of Lausanne

Rohit Deshpandé and Michael I. Norton Harvard Business School

Accepted by Margaret C. Campbell and Karen Page Winterich, Guest Editors; Lisa Bolton, Associate Editor

We document a novel driver of consumer behavior: pay ratio disclosure. Swiss corporation performance data gathered during a legally mandated pay ratio referendum reveals that salient high pay ratios are associated with decreased firm sales (Pilot Study). An incentive-compatible field experiment shows that, when ratios are revealed, consumers avoid firms with high ratios relative to competitors (Study 1). Finally, the effect of high pay ratios also depends on consumers' political ideology: Democrats and Independents show decreased purchase intentions for products sold by firms with high ratios, whereas Republicans are unaffected (Study 2).

Keywords Pay ratio; Wage fairness; Purchase intention; Customers

Introduction

The relative rise in executive pay compared with that of the average worker has contributed to increased income inequality in the United States (Kim, Kogurt, & Yang, 2015). In 1978, the average CEO made \$1.5 million annually, compared to an average of \$16.3 million in 2014, after adjusting for inflation—an increase of over 900% (Mishel & Davis, 2015). Over the same time, the average worker's wages increased by just 11%, from \$48,000 to \$53,200 (Mishel & Davis, 2015). While research has identified several causes of increased CEO pay (Kim et al., 2015), it has not definitively linked it to significantly better firm performance (Carpenter & Sanders, 2002; Chang, Dasgupta, & Hilary, 2010). In fact, CEO pay increased twice as quickly as the US stock market between 1978 and 2014 (Mishel & Davis, 2015). The impact of CEO-to-worker pay ratios on employee morale and firm performance has long been of interest. Management guru Peter Drucker, for example, argued that the pay ratio of annual CEO compensation relative to the average worker's annual salary should be capped at 25:1, and that greater disparity would lead to employee resentment and decreased morale, negatively affecting company performance (McGregor, 2013).

We explore the effects of high pay ratios from a different perspective—that of consumers—for two primary reasons. First, consumers estimate the ratio between CEO pay and average unskilled worker pay to be about 30:1, while they consider a ratio of 7:1 to be ideal (Kiatpongsan & Norton, 2014), both of which are far lower than the actual average pay ratio across US firms, which is estimated to exceed 300:1 (AFL-CIO 2016). This mismatch between ideals and reality suggests that informing consumers about firms' high pay ratios may impact their attitudes toward firms. Second, the US Securities and Exchange Commission (SEC) adopted section 953(b) of the Dodd Frank Act as a

Received 2 December 2016; accepted 20 January 2018 Available online 30 January 2018

Correspondence concerning this article should be addressed to Bhavya Mohan, University of San Francisco, 2130 Fulton St., San Francisco, CA 94117. Electronic mail may be sent to bhavya. mohan@gmail.com

formal rule, which would require that from 2018 onwards, public companies in the United States disclose the total annual compensation of the CEO compared to the median compensation of all other employees (United States Securities and Exchange Commission 2015). This imminent mandated disclosure suggests that consumers will in fact become more informed very soon, making an investigation of the effects of pay ratio disclosure especially timely.

Conceptual Background

We propose that disclosing a high CEO-to-worker pay ratio can decrease product desirability by negatively affecting consumers' perceptions of fairness. Fairness plays a critical role in shaping consumer perceptions; generally speaking, individuals prefer equitable distributions of outcomes (Adams, 1965). Fairness increases individuals' happiness (Tabibnia, Satpute, & Lieberman, 2008) and reduces negative affect (Sanfey, Rilling, Aronson, Nystrom, & Cohen, 2003), while creating a fair distribution of resources by narrowing possession gaps increases satisfaction and reduces envy (Ordabayeva & Chandon, 2011). Research on price fairness shows that cueing total labor costs incurred by a firm can increase perceptions of fairness, but that some wage-related costs are perceived as unfair, such as "educating consumers about the large bonuses paid to a firm's senior executive" (Bolton, Warlop, & Alba, 2003, p. 486). Finally, many consumers are willing to pay a premium to ensure fair treatment for a firm's workers (Crever & Ross, 1996; Hiscox, Broukhim, & Litwin, 2015; Paharia, Vohs, & Deshpandé, 2013; Peloza, White, & Shang, 2013; Prasad, Kimeldorf, Meyer, & Robinson, 2004). Building on this previous research, we propose that disclosing a large differential between CEO and average worker pay can diminish perceptions of fairness-leading to diminished desire to purchase from such high pay ratio

While disclosing high pay ratios may diminish firm perceptions in some consumer segments, it may not do so with all segments. Indeed, individuals' traits and beliefs influence the impact of corporate social responsibility initiatives on consumer behavior (Sen & Bhattacharya, 2001). In the context of fair pay, liberal Americans are more likely to both prefer and support policies that decrease gaps between Americans: compared to conservative Americans, liberal Americans prefer lower CEO-to-worker pay ratios and support increases

in the minimum wage (Kiatpongsan & Norton, 2014; Kuziemko, Norton, Saez, & Stantcheva, 2015). Given the central role political ideology plays in consumption (Crockett & Wallendorf, 2004; Hirschman, 1993) and the fact that different persuasive messages appeal differently to different political affiliations (Kidwell, Farmer, & Hardesty, 2013; Winterich, Zhang, & Mittal, 2012), we propose that political ideology moderates the impact of pay ratios on product desirability, such that high pay ratios will affect the purchase behavior of liberal consumers more than conservative consumers.

Overview of Studies

One pilot study and two experiments examine when and why companies with high pay ratios may risk losing sales. Using Swiss firm performance in the period of a national referendum for a legally mandated pay ratio cap, we first show that salient high pay ratios are associated with worse firm sales performance (Pilot Study). Next, in an incentivecompatible field experiment, we show that consumers are less likely to purchase from firms with high pay ratios relative to their competitors (Study 1). We then examine the role of political ideology in moderating consumer purchase response to high pay ratio disclosure, and assess perceptions of fairness as a mediating construct (Study 2). We finally discuss the practical implications of our results for companies and policy-makers, and suggest directions for future research.

Pilot Study

We use field data to offer an initial correlational examination of the relationship between pay ratios and consumers' purchase decisions, leveraging discussions in Switzerland regarding legislation to limit pay ratio in the country. In 2009, Swiss citizens started a public initiative ("1:12für gerechte Löhne") aiming to cap the ratio of CEO pay to lowest worker pay at 12:1 (Hooper, 2013). This initiative was accepted for a public referendum in mid-2011 (Schweizerische Bundeskanzlei 2011), and while the referendum did not pass, nearly 35% of voters were in favor of this very low ratio. For our purposes, consumer behavior while this referendum was in the public eye allows a preliminary examination of the effect of increased awareness of pay ratios

consumers' choices between firms with higher and lower ratios.

Methods

Data and procedure. We obtained data on the pay ratio of 27 Swiss companies for the period between 2004 and 2014 from Travail Suisse (www.travailsuisse.ch; data for other Swiss companies was not available from Travail Suisse). In addition, we obtained sales data for the same 27 companies in the Swiss market for the same period-23 from the companies' annual reports and four from the companies' public relations departments because they were not publicly listed. We lagged the data by 1 year since the pay ratio is recorded and published on Travail Suisse 1 year after a focal observation, which resulted in 297 cases. For 43 cases, we were not able to obtain sales data for that year, reducing the final sample to 254 cases.

We used a measure of press coverage to capture public awareness of the referendum. We obtained the number of articles referencing the pay ratio initiative published in the top three Swiss newspapers, as a measure of the salience of pay ratios, which were publicly available via Travail Suisse.

Results

To examine the interactive effect of pay ratio and the referendum initiative on company performance, we used company sales as the dependent variable, pay ratio as the independent variable and the number of newspaper articles published on the initiative (a proxy for public awareness) as the moderator. We used a mixed-effects model nested in companies with an AR1 error correction to account for autocorrelation of the time-series-structured data.

The results support our account for the data: Companies with a low pay ratio performed significantly better than companies with a high pay ratio when more newspapers articles were published about the referendum ($\beta_{\text{PayRatio}} = .03$, SE = .03, t = 1.14, p = .26, $\beta_{\text{NumberArticles}} = -.01$, SE = .01, t = -0.64, p = .52, $\beta_{\text{PayRatio} \times \text{Number Articles}} = -.05$, SE = .02, t = -2.15, p < .05, $SD_{\text{RandomIntercept}} = 0.001$). Using a simple dummy for the years prior to 2009 (coded as "0") and starting in 2009 (coded as "1") confirmed this result ($\beta_{\text{PayRatio}} = .09$, SE = .03, t = 2.83, p < .01, $\beta_{\text{Dummy2009-2014}} = -.01$, SE = .01, t = -0.14, p = .89, $\beta_{\text{PayRatio} \times \text{Dummy2009-2014}} = -.08$, SE = .03, t = -2.35, p < .05, $SD_{\text{RandomIntercept}} = 0.001$).

To test the robustness of the results, we used the companies' industry (e.g., food retailer) and a dummy for the period between 2008 and 2009 (the years of the financial crisis) as controls. The latter variable was included to control for the possibility that media attention to pay ratios might correlate with media attention to the recession and economic concerns. If pay ratio correlates with prices in the marketplace, companies with higher prices could have suffered a greater drop in sales over the recessionary period. This effect on sales could have biased the results. However, the results again supported our prediction ($\beta_{PayRatio} = .03$, SE = .03, t = 1.11, p = .27, $\beta_{\text{NumberArticles}} = -.01$, SE = .01, t = -0.68, p = .50, $\beta_{\text{PayRatio} \times \text{NumberArticles}} = -.05$, SE = .02, t = -2.14, p < .05, $SD_{\text{RandomIntercept}} = 0.001$).

Finally, to further illustrate the results, we calculated the rates by which sales increased. From 2009 (the start of the referendum) to 2014, the sales of companies with a low pay ratio (yearly median split, for illustrative purposes) increased by a yearly average of 8.75%, whereas the sales of companies with a high pay ratio increased by a lower yearly average of 6.28%.

Discussion

The Pilot Study provides preliminary evidence that a high pay ratio negatively impacts company sales—especially when such information is publicized and thus more salient to consumers. Of course, while these correlational results are consistent with our theorizing, they preclude a causal interpretation. Studies 1 and 2 test the effects of pay ratio disclosure with experimental methodology to demonstrate causation.

Study 1: Field Study

The key objective of Study 1 is to examine whether revealing a high pay ratio affects consumers in a realistic, incentive-compatible context designed to minimize demand effects. In this field study, we present pay ratio information for a firm alongside pay ratio information for a competitor, using screenshots from actual news articles. The article snapshots in our field study were directly informed by information presented in recent news articles about estimated CEO pay ratios at two competing firms (Adams, 2014; Huhman, 2015; Smith, 2015). Indeed, firms competing in the same industry can have dramatically different pay ratios—in 2014, Gap Inc.'s pay ratio was

estimated at 705:1 while Urban Outfitters was just 3:1 (Chamberlain, 2015)—which we used to inform our stimuli.

Methods

Design and procedure. We recruited consumers (N = 476) via Facebook advertisements invited participants to test fashion products. We only targeted consumers who were interested in fashion to increase their likelihood of participating. The style of our advertisements was based on a real campaign from a large fashion brand (i.e., Prada), but the brand was unrelated to the retailers consumers choice between during the experiment. If consumers clicked on the advertisement, they were automatically redirected to a self-created website, called "One Click Opinion." On the right side of the website, consumers were only able to click on "Facebook" (bringing them to a Facebook site established for "One Click Opinion") or on "Contact" (bringing them to a website where they could contact us via

On the first page, consumers were told they could choose between \$50 gift cards from two different retailers; the retailers were not revealed to avoid self-selection prior to the experimental manipulation. Participants were told that 10 people would be randomly chosen to receive one of the gift cards. This incentive-compatible gift card choice was designed to gauge participants' realistic preferences.

Consumers were randomly assigned to one of two conditions in the between-subjects field experiment, where pay ratio was either revealed or not revealed. Regardless of condition, consumers saw information about two US clothing retailers, Gap Inc. and Urban Outfitters. In the "revealed" condition, consumers were shown information about the retailers' pay ratios in the form of article snapshots (Adams, 2014; Huhman, 2015; Smith, 2015), to provide them with information about the retailers' pay ratios in a realistic format (screenshots of the stimuli are in the Appendix). The snapshots revealed that the CEO of Urban Outfitters makes three times the salary of the average employee, alongside the absolute salaries informing the ratio (\$68,487 vs. \$19,808). The snapshots also revealed that the CEO of Gap Inc. makes 705 times the salary of the average employee alongside the absolute salaries informing the ratio (\$16,064,312 vs. \$22,800). In the "not revealed" condition, consumers saw

screenshots of general information available on both retailers' websites. The position of the retailers on the left or right side of the page was randomized. Consumers could either press "proceed," or they were automatically redirected to the next page after 40 s.

On the next page, consumers were asked to choose their preferred gift card. The gift cards of both retailers were shown next to each other, in the same order as the manipulation. In all, 123 consumers (attrition rate of 74.15%) arrived on this site. Attrition did not significantly differ between conditions as revealed by a logit regression ($M_{\text{Revealed}} = 73.77\%$, $M_{\text{NotRevealed}} = 74.57\%$; $B_{\text{Revealed}} = -0.04$, $\chi^2 = -0.04$, p = .84). After consumers had inspected the two \$50 gift cards, they were asked to choose which they would prefer to receive. To verify consumers' participation, they had to indicate an email address. This email address was also used to debrief them and to distribute the gift cards to the winners. The website was pre-tested to guarantee it was realistic, and based on the pretest we changed the design such that it was more appealing and that no technical issues existed for users (see Methodological Details Appendix, Supporting Information). Consumers learned about their participation in the experiment after making their choice between gift

Dependent measure. The dependent variable was whether consumers preferred the gift card of the retailer with the high pay ratio (Gap Inc.; coded as "0") or the retailer with the low pay ratio (Urban Outfitters; coded as "1"). Moreover, we tracked the time consumers spent on the site with the manipulation to verify that participants read the information about the retailers and spent a similar amount of time engaging with the site regardless of condition.

Results

Choice. A logistic regression with the choice of the gift card showed that consumers in the "revealed" condition were significantly more likely to prefer the gift card from the retailer with the low pay ratio than those in the "not revealed" condition ($M_{\rm Revealed} = 56.25\%$, $M_{\rm NotRevealed} = 32.20\%$; $B_{\rm Revealed} = 1.00$, $\chi^2 = 7.0$, p < .01). Neither the significance nor the direction of the results changed when controlling for the time participants spent examining the companies (the manipulation; $B_{\rm Revealed} = 0.97$, $\chi^2 = 6.6$, p < .01).

Discussion

This experiment provides evidence that revealing high pay ratios can affect consumers' real-world choices. Using a field experiment offers support for the notion that consumers' choices were not driven by mere demand effects, as they were not aware of their participation in a study and made a consequential choice about a \$50 gift card. Moreover, we based the stimuli on published online articles to increase external validity.

Study 2: Pay Ratios and Political Beliefs

In Study 2, we explore a potential moderator of the effect of disclosing a high pay ratio on consumers' willingness to buy—namely, whether consumers will respond differently to such disclosure based on their political ideology. We examine whether high pay ratios are more likely to decrease product desirability for liberal consumers than conservative consumers. Study 2 also assesses perceived wage fairness as an exploratory mediator of the effect of disclosing a high versus low pay ratio on product desirability.

Methods

Design and procedure. Participants (N = 253, $M_{\rm Age} = 33.5$, 57.7% male) completed this experiment on Amazon Mechanical Turk in exchange for \$0.30. We again varied the pay ratio such that participants were randomized to see a product sold by a retailer with either a low (5:1) or a very high (2,000:1) pay ratio. These ratios reflect the range of pay ratios for companies in the S&P 500 (Chamberlain, 2015).

Participants were told to envision the following scenario: "Imagine that you are looking to purchase a new set of towels, to replace a worn out set you currently have. You find a set of 2 high-quality, 100% Turkish cotton towels that you like, at a price point that is below your budget." In the high pay ratio condition, participants were told "You learn that the retailer pays the average employee \$22,400. The retailer pays the CEO \$48,000,000. The ratio of the CEO's salary to the average employee's salary is 2000/1." In the low pay ratio condition, participants were told "You learn that the retailer pays the average employee \$22,400. The retailer pays the CEO \$112,000. The

ratio of the CEO's salary to the average employee's salary is 5/1."

Measures. Participants indicated their willingness to buy on a 7-point scale (1: Not at all likely, 7: Very likely): "Given the opportunity, how likely are you to purchase the towel from this retailer?" Participants indicated their perception of wage fairness on a 7-point scale (1: Not at all fair, 7: Very fair): "How fair do you think the wages that this retailer pays its employees are?"

In addition, participants were asked to report their political party from four choices (Democrat, Republican, Independent, Other). In all, 47 participants (18.6%) identified as Republican, 112 (44.3%) identified as Democrat, 83 (32.8%) identified as Independent and 11 (4.3%) identified as Other. Due to the small sample of those identifying as Other, we did not include those 11 participants in our analysis. Finally, as a secondary measure of political ideology, participants stated their beliefs about inequality on a five-point scale from the International Social Survey Programme (2009): "Differences in income in the United States are too large (1: Strongly agree, 5: Strongly disagree)." A full analysis of this measure is in the Methodological Details Appendix, Supporting Information.

Results

Willingness to buy. We first conducted a t test to examine whether a high versus low pay ratio affected participants' willingness to buy. The analysis revealed that willingness to buy for the high pay ratio retailer was significantly lower than for the low pay ratio retailer ($M_{\text{Low}} = 5.21$, SD = 1.53 vs. $M_{\text{High}} = 4.24$, SD = 1.87; t(240) = 4.04, p < .01).

Next, we conducted a 2 (Pay ratio: High vs. Low) by 3 (Political belief: Republican, Democrat, Independent) ANOVA on willingness to buy. We observed a significant effect of pay ratio (F(1,236) = 12.33, p < .01), a significant effect of political belief (F(2, 236) = 6.95, p < .01), and a marginally significant interaction between political belief and pay ratio (F(2, 236) = 2.50, p = .08). Planned contrasts revealed that in two of the subgroups by political belief (Democrat and Independent) willingness to buy differed significantly between the high and low pay ratio retailers, with participants more willing to buy in the low pay ratio condition (Democrat: $M_{Low} = 4.89$, SD = 1.58 vs. $M_{High} =$ 3.79, SD = 1.78; t(236) = 3.53, p < .01; Independent: $M_{\text{Low}} = 5.55$, SD = 1.52 vs. $M_{\text{High}} = 4.26$, SD = 1.88; t(236) = 3.55, p < .01). In the Republican subgroup, this difference was not significant ($M_{Low} = 5.36$, SD = 1.32 vs. $M_{High} = 5.36$, SD = 1.68; t(236) = 0.01, p = .99).

Wage fairness. We conducted a 2 (Pay ratio: High vs. Low) by 3 (Political belief: Republican, Democrat, Independent) ANOVA on perceived wage fairness. We observed a significant effect of pay ratio (F(1, 236) = 35.82, p < .01), a significant effect of political belief (F(2, 236) = 8.41, p < .01), and a significant interaction between political belief and pay ratio (F(2, 236) = 3.69, p < .05). In the Democratic and the Independent subgroups, perceived wage fairness significantly differed between the high and low pay ratio retailers (Democratic: $M_{\text{Low}} = 3.36$, SD = 1.73 vs. $M_{\text{High}} = 2.18$, SD = 1.36; t(236) = 3.79, p < .001; Independent: $M_{Low} = 4.30$, $SD = 1.92 \text{ vs. } M_{\text{High}} = 2.12, SD = 1.33; t(236) = 6.04,$ p < .001), while this difference was not significant the Republican subgroup $(M_{Low} = 4.28)$ $SD = 1.57 \text{ vs. } M_{\text{High}} = 3.59, SD = 2.11; t(236) = 1.36,$ p = .15).

Moderated mediation with political beliefs as modera-We conducted a moderated mediation tor. analysis, with pay ratio as the independent variable, wage fairness as the mediator and willingto buy as the dependent variable. Participants' political beliefs served as the moderator of the effect of pay ratio on wage fairness. A 5,000-sample bootstrap analysis revealed that the test of the equality of indirect effects was significant, as the 95% bias-corrected confidence interval excluded zero (B = -0.38, SE = .17, 95% CI [-0.75, -0.06]), indicating that political beliefs attenuated the indirect effect via wage fairness. For Republicans, the indirect effect via wage fairness was non-significant (B = -0.36, SE = .29, 95% CI [-0.97, 0.21]), whereas this effect was significant for Democrats (B = -0.61, SE = .17, 95% CI [-0.97, -0.30]) and Independents (B = -1.13,SE = .22, 95% CI [-1.57, -0.70]; Preacher & Hayes, 2008).

Discussion

Study 2 shows that, as in the previous studies, many consumers—both Democrats and Independents—respond negatively to high pay ratios; however, Republicans remain largely unaffected. This study also provides initial evidence that fairness perceptions play a role in the negative effect of disclosing a high pay ratio on product desirability, and that the differential effect between political beliefs is linked to Republicans' belief that income differences are not too high in the United States

(see Methodological Details Appendix, Supporting Information).

General Discussion

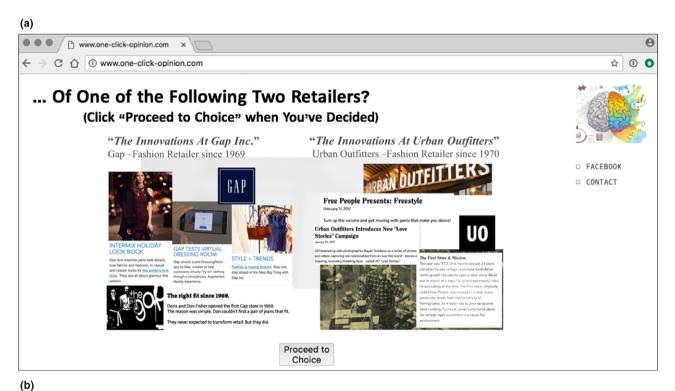
One pilot study and two experimental studies show that pay ratio disclosure can affect consumer purchase intentions and that this effect is driven by perceptions of wage fairness. Examining field data from Switzerland, firms with high pay ratios perform worse than firms with low ratios when consumers are exposed to the pay ratio issue in the media (Pilot Study). An incentive-compatible field experiment shows that firms may lose sales when high pay ratios relative to their competitors are revealed (Study 1), while an additional experiment identifies political ideology as a key boundary condition of the effects of pay ratio disclosure (Study 2).

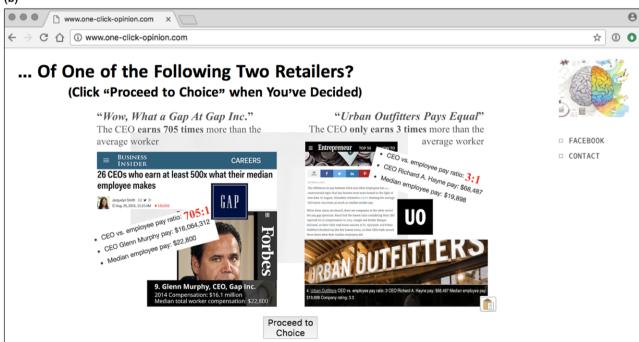
Our research provides an initial understanding of the effect of disclosing high pay ratios, but there is much room for future research on when and why this effect arises. We demonstrated a mediating role for wage fairness, but future research can explore how wage fairness and price fairness perceptions are interrelated in driving our effects (Campbell, 1999; Kahneman, Knetsch, & Thaler, 1986; Xia, Monroe, & Cox, 2004). Additional work can also examine whether pay ratio disclosure affects perceptions of other firm attributes, such as product quality (Milgrom & Roberts, 1986). Another interesting avenue for future research is the role of the presentation format, and whether presenting ratios is more likely to spur fairness considerations than presenting equivalent absolute salary information (Saini & Thota, 2010). In addition, the role numeracy plays when consumers are presented with pay ratio information framed in different ways warrants further investigation (Reyna & Brainerd, 2008). Finally, it is plausible that other types of disclosure signaling wage unfairness could also affect consumer purchase intentions, such as the gender wage gap within a company. Thus, future research could further explore the repercussions of ratio disclosure on consumer behavior in other wagerelated contexts.

Our results have clear implications for firms facing imminent regulations requiring pay disclosure. In addition, we believe these results—and future related work—may have societal implications: pay ratio disclosure may be one way to reduce income inequality, by consumers putting pressure on firms to reduce extreme income inequality within their own ranks.

Appendix

Study 1: The two website manipulations: the (A) non-revealed condition and the (B) revealed condition





References

- Adams, J. S. (1965). Inequity in social exchange. *Advances in Experimental Social Psychology*, 2, 267–299. https://doi.org/10.1016/s0065-2601(08)60108-2
- Adams, S. (2014). The companies with the biggest CEO wage gaps. *Forbes*. Retrieved from https://www.forbes.com/pictures/mkl45ejmmj/9-glenn-murphy-ceo-gap-i/#570b408c6ec7 (accessed 5 March 2017)
- AFL-CIO. (2016). *Executive paywatch*. Retrieved from https://aflcio.org/paywatch (accessed 10 December 2016)
- Bolton, L. E., Warlop, L., & Alba, J. W. (2003). Consumer perceptions of price (un) fairness. *Journal of Consumer Research*, 29, 474–491. https://doi.org/10.1086/346244
- Campbell, M. C. (1999). Perceptions of price unfairness: Antecedents and consequences. *Journal of Marketing Research*, 36, 187–199. https://doi.org/10.2307/3152092
- Carpenter, M. A., & Sanders, W. G. (2002). Top management team compensation: The missing link between CEO pay and firm performance. Strategic Management Journal, 23, 367–375. https://doi.org/10.1002/(issn) 1097-0266
- Chamberlain, A. (2015). CEO to worker pay ratios: Average CEO earns 204 times median worker pay. *Glassdoor Economic Research Blog*. Retrieved from https://www.glassdoor.com/research/ceo-pay-ratio/ (accessed 20 March 2016)
- Chang, Y., Dasgupta, S., & Hilary, G. (2010). CEO ability, pay, and firm performance. *Management Science*, 56, 1633–1652. https://doi.org/10.1287/mnsc.1100.1205
- Creyer, E. H., & Ross, W. T. Jr (1996). The impact of corporate behavior on perceived product value. *Marketing Letters*, 7, 173–185. https://doi.org/10.1007/bf00434908
- Crockett, D., & Wallendorf, M. (2004). The role of normative political ideology in consumer behavior. *Journal of Consumer Research*, 31, 511–528. https://doi.org/10.1086/425086
- Hirschman, E. C. (1993). Ideology in consumer research, 1980 and 1990: A Marxist and feminist critique. *Journal of Consumer Research*, 19, 537–555. https://doi.org/10. 1086/209321
- Hiscox, M. J., Broukhim, M., & Litwin, C. S. (2015). Consumer demand to fair trade: New evidence from a field experiment using ebay auctions of fresh roasted coffee. Harvard University Working Paper.
- Hooper, J. (2013). Swiss divided as 1:12 executive pay referendum nears. Retrieved from www.theguardian.com/business/2013/nov/14/swiss-divide-1-12-executive-pay-referendum (accessed 5 November 2015)
- Huhman, H. (2015). 3 ways to address the salary chasm between CEOs and employees. *Entrepreneur*. Retrieved from https://www.entrepreneur.com/article/251494 (accessed 5 March 2017)
- International Social Survey Programme. (2009). *ISSP 2009 Social Inequality IV*. Retrieved from http://www.gesis.org/en/issp/issp-modules-profiles/social-inequality/2009/ (accessed 1 May 2015)

- Kahneman, D., Knetsch, J., & Thaler, R. (1986). Fairness as a constraint on profit seeking: Entitlements in the market. *The American Economic Review*, 76, 728–741.
- Kiatpongsan, S., & Norton, M. I. (2014). How much (more) should CEOs make? A universal desire for more equal pay. *Perspectives on Psychological Science*, 9, 587–593. https://doi.org/10.1177/1745691614549773
- Kidwell, B., Farmer, A., & Hardesty, D. M. (2013). Getting liberals and conservatives to go green: Political ideology and congruent appeals. *Journal of Consumer Research*, 40, 350–367. https://doi.org/10.1086/670610
- Kim, J., Kogurt, B., & Yang, J. (2015). Executive compensation, fat cats, and best athletes. *American Sociological Review*, 80, 299–328. https://doi.org/10.1177/0003122415572463
- Kuziemko, I., Norton, M. I., Saez, E., & Stantcheva, S. (2015). How elastic are preferences for redistribution? Evidence from randomized survey experiments. *American Economic Review*, 4, 1478–1508. https://doi.org/10.1257/aer.20130360
- McGregor, J. (2013). What's the right ratio for CEO-to-worker pay? Retrieved from http://www.washington post.com/blogs/on-leadership/wp/2013/09/19/wha ts-the-right-ratio-for-ceo-to-worker-pay/ (accessed 15 February 2015)
- Milgrom, P., & Roberts, J. (1986). Price and advertising signals of product quality. *Journal of Political Economy*, 94, 796. https://doi.org/10.1086/261408
- Mishel, L., & Davis, A. (2015). CEO pay has grown 90 times faster than typical worker pay since 1978. Economic Policy Institute. Retrieved from http://www.epi. org/publication/ceo-pay-has-grown-90-times-faster-than-typical-worker-pay-since-1978 (accessed 1 June 2017)
- Ordabayeva, N., & Chandon, P. (2011). Getting ahead of the Joneses: When equality increases conspicuous consumption among bottom-tier consumers. *Journal of Consumer Research*, 38, 27–41. https://doi.org/10.1086/658165
- Paharia, N., Vohs, K. D., & Deshpandé, R. (2013). Sweatshop labor is wrong unless the shoes are cute: Cognition can both help and hurt moral motivated reasoning. *Organizational Behavior and Human Decision Processes*, 121, 81–88. https://doi.org/10.1016/j.obhdp. 2013.01.001
- Peloza, J., White, K., & Shang, J. (2013). Good and guilt-free: The role of self-accountability in influencing preferences for products with ethical attributes. *Journal of Marketing*, 77, 104–119. https://doi.org/10.1509/jm.11. 0454
- Prasad, M., Kimeldorf, H., Meyer, R., & Robinson, I. (2004). Consumers of the world unite: A market-based response to sweatshops. *Labor Studies Journal*, 29, 57–79.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891. https://doi.org/10.3758/ brm.40.3.879

- Reyna, V. F., & Brainerd, C. J. (2008). Numeracy, ratio bias, and denominator neglect in judgments of risk and probability. *Learning and Individual Differences*, 18, 89–107. https://doi.org/10.1016/j.lindif.2007.03.011
- Saini, R., & Thota, S. C. (2010). The psychological underpinnings of relative thinking in price comparisons. *Journal of Consumer Psychology*, 20, 185–192. https://doi.org/10.1016/j.jcps.2010.02.003
- Sanfey, A. G., Rilling, J. K., Aronson, J. A., Nystrom, L. E., & Cohen, J. D. (2003). The neural basis of economic decision-making in the ultimatum game. *Science*, 300, 1755–1758. https://doi.org/10.1126/science.1082976
- Schweizerische Bundeskanzlei. (2011). *Eidgenösssiche volksinitiative* 1:12 Für gerechte löhne. Retrieved from https://www.admin.ch/opc/de/federal-gazette/2011/3725.pdf (accessed 10 December 2015).
- Sen, S., & Bhattacharya, C. B. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. *Journal of Marketing Research*, 38, 225–243. https://doi.org/10.1509/jmkr.38. 2.225.18838
- Smith, J. (2015). 26 CEOs who earn at least 500x what their median employee makes. *Business Insider*. Retrieved from http://www.businessinsider.com/companies-where-ceo-earns-over-500-times-what-employee s-make-2015-8 (accessed 5 March 2017)

- Tabibnia, G., Satpute, A. B., & Lieberman, M. D. (2008). The sunny side of fairness: Preference for fairness activates reward circuitry. *Psychological Science*, 19, 339–347. https://doi.org/10.1111/j.1467-9280.2008.02091.x
- United States Securities and Exchange Commission. (2015). *SEC adopts rule for pay ratio disclosure*. Retrieved from https://www.sec.gov/news/pressrelease/2015-160.html (accessed 1 September 2015)
- Winterich, K. P., Zhang, Y., & Mittal, V. (2012). How political identity and charity positioning increase donations: Insights from moral foundations theory. *International Journal of Research in Marketing*, 29, 346–354. https://doi.org/10.1016/j.ijresmar.2012.05.002
- Xia, L., Monroe, K. B., & Cox, J. L. (2004). The price is unfair! A conceptual framework of price fairness perceptions. *Journal of Marketing*, *68*, 1–15. https://doi.org/10.1509/jmkg.68.4.1.42733

Supporting Information

Additional supporting information may be found in the online version of this article at the publisher's website:

Appendix S1. Methodological Details.