## Price fairness judgments are selectively sensitive to information about marginal profit Tadeg Quillien

#### Introduction

- $\rightarrow$  Theory: Judgments of (un)fairness in social exchange are the output of a system designed to maximize payoff from social interaction, by comparing a given offer to the parties' bargaining power, and bargaining for a better offer if the current one is too low.
- → Because bargaining for a better offer is costly, signals of unfairness should not be promiscuously delivered, but sent only when their expected benefits are positive.
- $\rightarrow$  We explore implications for people's moral intuitions in the following paradigm (adapted from [1]), in which production costs of a seller change because of exogenous causes :

"A local grocer has been selling lettuce at a price of \$1 per head. Suppose that, due to a transportation mixup, there is a local shortage of lettuce and the wholesale price has increased. The grocer has bought the usual quantity of lettuce from his supplier at a price that is 30 cents per head higher than normal. The grocer raises the price of lettuce to customers by 30 cents per head, at \$1.30 instead of \$1."

 $\rightarrow$  How fair is the grocer?

#### Hypotheses

A seller who makes a high marginal profit can better afford to absorb a new cost.

 $\rightarrow$  H1: Giving people information about the seller's initial marginal profit should influence their fairness judgments. Sellers making a high marginal profit should be judged as less fair than those who make a low marginal profit.

In order to demonstrate that the effect reflects a specific solution to this subproblem of social exchange, and is not due to a more general dislike of people who make large profits, we make the second prediction:

 $\rightarrow$  H2: In a situation in which seller and buyer must allocate a gain in surplus (COST DECREASE scenario), then the marginal profit of the seller should have a lesser impact on fairness judgments than when they must allocate a loss (COST INCREASE scenario, as the one above).

because the seller in the COST DECREASE scenario is assured of still making a profit, so can afford to treat the customer better, no matter the level of profit he initially makes.

Additionally:

 $\rightarrow$  H3: People should judge a selfish seller to be less fair in the COST **DECREASE compared to the COST INCREASE scenario.** 

## Center for Evolutionary Psychology, UCSB

#### Methods

We use a 2 \* 2 between-subjects design, with the Type of Change (Increase vs Decrease in cost) and the seller's Profit as predictors.

Participants read one of the following four vignettes, and rate the fairness of the seller's reaction to the change in cost (on a 1-7 likert scale, with 1 = very unfair, and 7 = very fair). In all vignettes the seller chooses to allocate the change in surplus in the way that favors him the most.

(COST INCREASE) "A small factory produces and sells tables at a price of \$200 per table. It makes a [\$4 / \$50] profit on each table it sells. Because of changes in the price of materials, the cost of making each table has recently *increased* by \$20. The factory increases the price for each table by \$20."

(COST DECREASE) "A small factory produces and sells tables at a price of \$200 per table. It makes a [\$4 / \$50] profit on each table it sells. Because of changes in the price of materials, the cost of making each table has recently *decreased* by \$20. The factory does not change the price at which it sells its tables."





Type of Cost Change (Error bars = SE) Interaction: F(1, 387) = 8.83, p = .003

H1-3 are supported



Cost Increase

### The entitlement effect is limited in scope

It has been suggested that high fairness ratings in Cost Increase scenarios reflect a general folk principle of fairness that sees firms as entitled to their reference profit [1]. Here we test the plausibility of this account. We conduct an additional study to see whether a firm is entitled to transfer a new cost in its entirety to a potential employee in order to keep making the same profit. We also include a symmetrical Cost Decrease scenario.

Subjects (N=89) read one of the two following stories and rate the fairness (on a 1-7 scale) of the wine producer's reaction to the tax change:

(COST INCREASE) "A wine producer hires temporary workers every year during the harvest season. This year, the government has established a new tax, and the wine producer has to pay \$0.75 more in taxes per hour worked, for each person working. When the time comes to hire workers, the wine producer pays a wage that is \$0.75 less per hour compared to last year's wage."  $\rightarrow$  Average fairness rating: **3.02** (SD = 1.61)

# (COST DECREASE)

same wage as the year before."  $\rightarrow$  Average fairness rating: **3.45** (SD = 1.50)

 $\rightarrow$  Price fairness judgments are not (only) based on a general notion of equality.

 $\rightarrow$ They are selectively sensitive to the seller's marginal profit, taking this information into account only in situations where it is a cue to his ability to meet the buyer's potential demands.

 $\rightarrow$ The entitlement of firms to their usual profit in their interaction with customers doesn't carry over to their interaction with employees, suggesting that it doesn't reflect a wide-ranging norm of fairness (contra Kahneman, Knetsch & Thaler [1]).

 $\rightarrow$ This pattern of results is consistent with the idea that judgments of fairness are the product of a system designed to motivate agents to maximize their payoff from social interaction given the parties' outside options [2][3].

[1] Kahneman, D., Knetsch, J. L., & Thaler, R. (1986). Fairness as a constraint on profit seeking: Entitlements in the market. *The American* economic review, 728-741. [2] Baumard, N., André, J. B., & Sperber, D. (2013). A mutualistic approach to morality: The evolution of fairness by partner choice. *Behavioral* and Brain Sciences, 36(01), 59-78. [3] Friedman, D. (2004). Economics and evolutionary psychology. In R. Koppl (ed.), Evolutionary Psychology and Economic Theory (pp. 17-33),

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"A wine producer has been hiring temporary workers every year during the harvest season. This year, the government has decided to lift a tax, and the wine producer will save \$0.75 in taxes per hour worked, for each person working. When the time comes to hire workers, the wine producer pays the

#### **General Conclusion**

#### References

#### **Acknowledgments/Contact**