

APPENDIX

Appendix A: Deviations from the Pre-Registration Plan

As with many pre-registered field experiments, ours deviated in certain ways from pre-registration. These deviations do not compromise the experimental design or results, but we acknowledge them in the spirit of transparency. We pre-registered our experimental design and hypotheses prior to the start of our field study in 2018. Our initial study included two field experiments. In the pre-registration, we indicated that we would sell vegetables in one experiment and packaged goods in another. Both experiments were included in the same pre-registration plan. The first deviation from the pre-registration is that we split the analysis into two papers, which was not initially planned. The present paper solely focuses on the packaged goods experiment. Based on the suggestions from colleagues, we realized that the two experiments answered fundamentally different questions, and we decided to split the paper in two, one for each field experiment. The current paper focuses on customer approach and the female earnings advantage, whereas the other paper focuses on the role of business characteristics on the gender profit gap. That paper does not use any data from the present study, as they are two separate experiments, albeit on a related topic.

As a result of the split, some of the descriptions of the experimental design in the pre-registration apply only to the vegetable experiment:

1. The pre-registration states that “To incentivize vendors to sell, they keep the day’s profits and are only charged for the vegetables they are able to sell.” This stipulation applied only to the vegetable experiment. As we describe in the present paper, confederate sellers were paid a fixed wage without commission, so they had no financial incentive to engage in vocal marketing, bargaining, or small talk. We made this decision prior to launching the packaged goods experiment. Similarly, one of these pre-registered outcome variables, “Daily Profit”, relates only to the vegetable experiment. In the packaged goods experiment, sellers did not earn profits. All sellers sold goods at the same standardized prices, which we report as “total sales” in the present paper (labeled “daily revenues” in the pre-registration).
2. Our cadre of confederate sellers is slightly smaller than we hoped due to funding and logistical constraints: we planned to hire 60 confederate sellers but ended up with 44.
3. We eliminated one aspect of the study listed in the pre-registration due to safety concerns. Initially, we planned to “decrease the price of the packaged goods sold by women for a randomly chosen part of the day.” The smallest denomination of cash is 5 Rs, so we reduced prices by this amount. For some relatively cheap goods, this meant cutting the price in half. Word spread quickly among customers in the market, and a large crowd gathered around our research stalls, leaving our research team feeling unsafe. Prioritizing their safety, we decided to drop this aspect of the study. These observations were part of a pilot and are not included in the present study.

Appendix B. Bargaining Backlash

We found—unexpectedly—that women did not experience a “backlash” for declining to lower their prices. This finding suggests that women are not always penalized for violating gender stereotypes in certain negotiations. As discussed above, we anticipate that women in our setting did not experience backlash because bargaining over manufactured snacks is not as common as haggling over other non-standardized items, like produce. We hope that future research builds on this finding to specify when women are *not* penalized for violating gender stereotypes related to negotiations.

Table for Appendix B. Likelihood of walking away after bargaining.

	Walk away after bargaining (1)	Walk away after bargaining (2)
Female Seller	0.60 (0.310)	0.16 (0.402)
<i>p</i> -value	0.055	0.695
Controls	No	Yes
N	1,281	1,281

Note: N = 1,281 customer-seller interactions, including the first transaction of the day. Logistic regression. The control variables include order of client approach, whether the previous transaction was successful, time of the transaction, time since the last client, and total number of seller-days (per seller). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

We estimated these models at the transaction level and included controls that could affect the transaction. We emphasize that the standard errors are wide, and it is possible that this analysis is underpowered due to the low level of bargaining. However, it is also possible that this lack of a “bargaining backlash” stems from the nature of sellers’ products in our experiment. The packaged snacks that vendors sold had prices printed on the packaging by manufacturers, making sellers’ prices appear more standardized and less amenable to bargaining. If female sellers had declined to bargain over products that appeared less standardized and more amenable to bargaining (e.g., fresh produce), then we suspect a bargaining backlash would emerge.

Future research should also examine the conditions under which bargaining might erode or amplify women’s earnings advantage. In our study, a small proportion (9%) of customers attempted to bargain and sellers declined all requests. We estimate that women would have had to lower prices by more than 100% at each request to neutralize their sales advantage, an unrealistic expectation. However, the female earnings advantage we document might differ for different types of products. For instance, women’s earnings advantage might disappear if women sold products for which customers regularly requested discounts and if female sellers gave larger discounts than male sellers. Conversely, the same situation could amplify women’s earnings advantage. If more customers approached women because they hoped to negotiate, but requested only minor discounts, then women would likely continue to out-earn men. While our study can not test these possibilities, future research should compare sales outcomes across different types of products and explore the impact of relaxing the no-bargaining protocol.

Appendix C: Heterogeneity Analysis by Customer Gender

Our theory and empirical analyses revolve around customers' responses to market sellers based on sellers' gender. Yet it is possible that customer-seller interactions are also patterned by customers' gender. Observing such differences could shed light on the types of customers driving our main effects. We emphasize, however, that these analyses are less reliable than our experimental results. In our experiment, we randomly assigned male and female sellers to identical stalls; we did not randomly assign male and female *customers* to visit the stalls. Such an experimental design would have allowed us to focus on customer gender effects, but that was not the aim of our study.¹⁰ Thus, we present the customer-gender effects as illuminating, descriptive trends.

Using the limited, non-randomized data available, we find that male and female customers are equally likely to approach and buy from male and female sellers. In terms of the proportion of customers who approach sellers of each gender, on an average day, 36.34% of the female sellers' customers were women. For male sellers, the same figure is 36.49%. These proportions are not significantly different ($p = 0.968$). However, because we do not know the gender composition of the market on any given seller-day, we treat these findings as suggestive. Nevertheless, based on observable customer-gender compositions, it does not appear as if male and female customers are more or less likely to approach male or female sellers.

In terms of bargaining attempts, while female clients bargain roughly identically with male and female sellers (10% and 13%, respectively, $p=0.342$), we find that male customers attempt to bargain more with female sellers (12%) compared to male sellers (4%), a difference that is statistically significant ($p<0.001$). Because these results are observational, we do not wish to over-interpret them. Nevertheless, they suggest that customers' tendency to bargain with women may be driven by male customers' reluctance to bargain with other men and willingness to bargain with women.

Table for Appendix C. Bargaining Attempts (%) by Customer and Seller Gender

	Total (All Clients)	Male Clients	Female Clients	N
Male Sellers	6%	4%	10%	485
Female Sellers	12%	12%	13%	728
<i>p</i> -Value	$p < 0.001^{***}$	$p < 0.001^{***}$	NS ($p = 0.342$)	

Note: Two-tailed analyses. * $p < .05$; ** $p < .01$; *** $p < .001$. $N = 1,213$ customer-seller interactions for which the clients did not come as a mixed-gender pair or group (for example, as a couple). In total, we recorded 1,281 interactions but focus on the 1,213 for which the clients' gender was either male or female. This is why there is a small discrepancy with the other tables, as we focus on the sample for which the gender was not mixed.

¹⁰ We do not know the customer-gender composition of the market. We attempted to gather these data but found that logistical constraints made it nearly impossible. The markets have multiple entry points, making it difficult to accurately count customers.

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Appendix D: Table of descriptives

	Mean	SD	Min	Max
Total revenue (Rs)	80.9	78.9	0	500
Talked about topic unrelated to the sale	0.5	0.5	0	1
Mean Bargain	0.1	0.02	0	0.7
Female Seller	0.5	0.5	0	1
Number of customers	10.6	6.39	2	34
Total # of Seller-Days (per seller)	11.5	10.17	1	26
Married	0.35	0.48	0	1
Market	1.65	0.47	1	2