Providing Endowments to Improve Bargaining Outcomes for Microentrepreneurs in Ghana

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Sector(s): Firms

Location: Hohoe, Ghana

Sample: 229 firms

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Data: openICPSR

Research Papers: Gotta Have Money to Make Money? Bargaining Behavior and Financial Need of Micro...

Partner organization(s): New York University Accra

Bargaining over prices is a common practice between microentrepreneurs and their potential buyers in low- and middle-income countries, but the process can lead to pricing disparities depending on the bargaining behavior of the seller. Researchers randomly provided more or less cash to garment-making firm owners in Ghana before a bargaining game to evaluate the impact of endowment on the negotiated sale price of a good. Microentrepreneurs that received more cash before the game negotiated for and received higher prices than those who were assigned less cash initially.

Policy issue

Microenterprises are the most common type of firm and the largest source of employment in low- and middle-income countries, yet they face important barriers to their profitability and growth. Bargaining between the seller and buyer is commonly used to determine the pricing of goods and services from microenterprises. However, the selling price may be an important factor in a microentrepreneur's profits, and lower profits could reduce a firm owner's opportunities for future investments and growth. Moreover, the household finances of a firm owner could alter their bargaining behavior, raising concerns about whether microentrepreneurs need to already have sufficient household liquidity in order to make money. Previous evidence has suggested that increased financial liquidity can lead to increased risk-taking, ability to cope with shocks, and overall business profitability.[1] Firm owners with higher liquidity may act as tougher bargainers as a result, as they can better tolerate the risk of a customer walking away. Can a firm owner's financial needs impact their ability to bargain, in turn affecting the selling price of their goods and services?

Context of the evaluation

In Ghana, microenterprises are numerous and the owner is often the sole employee. As in other low-income country contexts, prices for goods are frequently determined through bargaining, where the buyer and seller go back and forth until either both parties agree upon a final price or one of the parties walks away. The participants of this study included garment-making firms

from the town of Hohoe in southeast Ghana. Residents of Hohoe are considered to be middle-income by Ghanaian standards, and the garment-making industry in Hohoe is similar to other garment industries across Ghana. Among the participating firms, the average monthly profit in 2014 was GH¢293, or around US$65 at the time of the study in 2018. Additionally, participants had an average of about nine years of education and nine years of experience as business owners, and 75 percent of firm owners were women.



A study participant uses the tablet-based bargaining app

Hardy, Kagy, and Song (2022)

Details of the intervention

In 2019, researchers conducted a randomized evaluation to examine the effect of household liquidity on microenterprise owners' bargaining behavior. Garment-making microentrepreneurs participated in a bargaining game with a tablet over an order for a child's shirt. Researchers instructed the firm owners that they would be playing against a computer, and that it would behave like a human buyer while trying to negotiate the lowest price for a child's shirt. If the firm owner and the tablet settled on a price, the firm owner would receive that amount in cash. Before the game, the research team randomly assigned the participants into two groups:

1. High endowment group (116 people); Firm owners received GHS 25 (USD$5.54 at the time of study) immediately before the game began.
2. Low endowment group (113 people); Firm owners received GHS 5 (USD$1.109) before the game.

These endowments were meant to mimic a random, positive financial shock to the microentrepreneur, who could keep the money in addition to anything negotiated during the game regardless of the bargaining outcome. The difference of GHS 20 (USD$4.44) was approximately worth one day of wages among the participating firm owners. After receiving the endowments, the firm owners would attempt to reach a mutually agreed upon price through multiple rounds of offering and counteroffering. The maximum possible offer that the tablet could make to purchase a garment was GHS 30 (USD$6.66), and the tablet followed a fixed bargaining protocol.

Before the bargaining exercise, researchers also gathered information on the firm owners' per capita household liquidity by asking them how much cash they could collect in a week if money was urgently needed for their family. Researchers also assessed the quality of the firm's garments. They found observational evidence for a robust relationship between per capita household liquidity and bargaining behavior across firms and within firms over time.

Results and policy lessons

Owners of garment-making microenterprises with lower household liquidity agreed to lower sale prices during the bargaining process, suggesting that the prior wealth of microentrepreneurs who participate in bargaining may impact how much they are able to earn.

Final agreed upon price: Microentrepreneurs that received the high endowment negotiated a final sale price of GH¢0.92 (USD$0.20) higher on average than those who received the low endowment. This difference reflects a 12.2 percent increase in the price that high endowment firm owners received from the sale compared to an average of GH¢13.26 (USD$2.94) for one garment.

First price offered: Similarly, microentrepreneurs in the high endowment group offered higher initial prices at the beginning of bargaining. The higher endowment group on average provided an initial offer of GH¢1.19 (USD$0.26), or 6.8 percent, more than their low endowment peers, who offered GH¢17.45 (USD$3.87) on average as their first price.

Number of bargaining rounds: Providing firm owners with more liquidity also increased the number of counteroffers traded with the tablet before settling on a final price. The negotiations of firm owners in the high endowment group lasted 10 percent longer on average than those of low endowment firm owners.

Together, these results suggest that microentrepreneurs with greater financial resources can achieve higher sale prices when bargaining with buyers. The researchers did not examine whether these higher sale prices are also associated with differences in quantity of garments sold nor production cost, which could affect firm profits. However, they did note that price was likely the main determinant of profitability in this setting. Thus, poorer microentrepreneurs may be more likely to make lower profits and have lower ability to make future investments in their business, such as a new sewing machine, potentially contributing to a cycle of poverty.

Hardy, Morgan, Gisella Kagy, and Lena Song. 2022. "Gotta Have Money to Make Money? Bargaining Behavior and Financial Need of Microentrepreneurs." *American Economic Review: Insights* 4 (1): 1–17. https://doi.org/10.1257/aeri.20200723.

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1. Field, Erica, Rohini Pande, John Papp, and Natalia Rigol. 2013. "Does the Classic Microfinance Model Discourage Entrepreneurship among the Poor? Experimental Evidence from India." *American Economic Review* 103 (6): 2196–2226; Battaglia, Marianna, Selim Gulesci, and Andreas Madestam. 2019. "Repayment Flexibility and Risk Taking: Experimental Evidence from Credit Contracts." *VOX EU CEPR Columns*, January 6. https://voxeu.org/article/repayment-flexibility-and-risk-taking.