

# Does Hagglng Provide Utility in Information Asymmetric Markets? Evidence from Sales Tactics

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## Research

**Keywords:** Hagglng Provide, Asymmetric Markets, hypothesis

**Posted Date:** July 7th, 2021

**DOI:** <https://doi.org/10.21203/rs.3.rs-672317/v1>

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# Abstract

Economic theory has largely focused on the purely economic motive of haggling: to reach a better price, and a small body of research at the noneconomic. Even in the discussion of the noneconomic, which veers towards psychological ideas of motivations for haggling, I contend that there remains an angle unexplored: that the act of haggling itself provides economic utility to buyers.

This idea generates the main hypothesis of the research: in certain markets, there are customers more likely to purchase a good they have haggled for to a certain price than a copy they have not haggled for, at the same price. In certain markets, therefore, one of the factors of the utility function of a good is the utility gained from haggling for it. The research aims to explore this idea from the economic perspective, develop a model and posit possible implications. Analysis is based on data collected from shopkeepers in Dhaka's 'Nilkhet': from structured interviews with bookstore salesmen, and an FGD with apparel store owners which reside in markets prone to haggling. Based on the analysis, a new model on haggling has been developed that tries to explain the pricing in haggling markets. The data suggests that price in information asymmetric markets is set based not only on the bargaining power of producers (a la information asymmetry), but also on the set expectation that customers will haggle and seek haggled purchases. In these markets, utility from the act of bargaining is recognized and creates an additional buffer to the price. The price buffer adds to the previously 'intended' price, and is a mechanism by which market recognizes customers' utility from haggling and charges them for it. It not only accounts for the noneconomic aspect to haggling but, in what ends up being one of the most unexpectedly powerful suggestions of the research, also factors in how shifts in consumer behavior could have resulted in such markets mostly disappearing from developed economies around the world

## Introduction

Haggling has been defined and observed by researchers in the past, but analysis has heavily leaned towards the idea of consumers bargaining for better value in their purchases. While psychological motivations for haggling have been explored, research has been mostly abstract and unexplained in economic terms. Bargaining models fail to account for noneconomic motivations for haggling and consumer mindsets. Price discrimination models speak of per-customer pricing, but fail to follow up on how haggling or its behavioral effects affect the consumer surplus. This research finds its place in a visible gap that can be observed, existing in the current body of work, through the behavioral economics tradition.

The paper combines a quantitative and qualitative approach, elaborating on each respectively in their discussion sections, and surmises its findings in a model presented at the end of the discussion.

The goal of this paper is to uncover, in a cogent manner, whether the act of haggling provides utility to consumers in markets with information asymmetry. Based on the data, a core objective of the paper is to develop a model that better explains the differential effect of utility from haggling on pricing in haggling

markets. The paper intends to be revealing for consumer behavior in haggling markets and shed light on paths to possible future work.

The act of haggling can be defined as the bargaining between two parties in reaching an optimal price that satisfies both parties. The foremost question this paper tackles is: does haggling provide utility to consumers in information asymmetric markets? The secondary question is: can the phenomenon be described or accounted for in a simple economic model?

Building on principles in accepted literature, haggling can be seen as an intersection of a few dimensions of microeconomics. In their seminal book on bargaining, Rubin and Brown (1975) define bargaining as negotiating the terms of a purchase agreement or contract to establish an agreement between parties settling what each shall give and take or perform and receive in a transaction between them. However, the authors draw a distinction between bargaining and negotiation: to negotiate is to bargain with others until a transaction is settled. Kassaye (1990) forwards the accepted notion that bargaining situations in consumer markets take on the form of people trying to purchase at a lower price. Haggling takes on the properties of all the aforementioned situations. Uchendu (1967) defines it as 'a process of price formation which aims at establishing particular prices for specific transactions, acceptable to both buyer and seller, within the "price range" that prevails in the market'. How does it originate? Market imperfections often allow sellers to charge consumers different prices (Pigou, 1922). Haggling could arise from situations in which producers can charge prices on a per-customer basis, and result in bargaining situations in which both parties attempt to maximize their surplus. The market imperfection of information asymmetry, specifically, can result in the consumer not knowing what the price of a certain good should be, and requires them to initiate an 'information search' to find out more (Stigler, 1961). Armstrong (2006) forwards the idea that even as markets become non-monopolistic and competitive, information available affects the extent of price discrimination and consumer surplus in an industry. However, authors do admit that consumer surplus is not good enough an indicator of consumer welfare, nor is its direct analysis sufficient to explain interactions in markets (Kassaye, 1990), (Rubin & Brown, 1975). Indeed, Jones, Philip & David (1997) discovered from a set of almost forty in-depth interviews several noneconomic motivations for haggling. They argue that psychological drives such as the needs for achievement, dominance and affiliation are drivers for the haggling process. Even in the study of game theory, Terhune (1968) discovered that these needs can significantly affect the outcome of a value payoff game. Here you can say that the published literature either have not addressed the issues you are presenting in this paper or you are presenting a new model on this subject area.

## **Method And Methodology**

A semi-structured in-depth interview was used to collect responses on haggling behavior and possible connection to sales tactics from 20 shopkeepers in the 'Nilkhet' book market (Nilkhet, Dhaka-1205) of Dhaka. This segment of respondents was chosen based on the product homogeneity in the market and absence of reference prices. Purposive sampling was used to select respondents. Confidentiality was assured to participants. The survey was qualitative in nature to draw out valuable information on

behavioral phenomena that numbers often fail to describe, but a quantitative aspect was kept to ensure validity of data.

For the bookstore interviews, responses to four broad interview questions were appropriated to a 5-point Likert scale based on agreement with a statement. Discrete numerical values set to levels of agreement were as such: +2 for strong agreement, +1 for agreement, 0 for neutral, -1 for disagreement and -2 for strong disagreement. Alongside, focus group discussions (FGDs) were performed with two groups of apparel store owners in the Mohammadpur Krishi Market. Statistical tests were performed with the IBM SPSS statistics software suite to measure the validity of the data and assess the computed information. The results were used to test the following general hypothesis (rather than four hypotheses for each question, which would reveal little):

**H<sub>0</sub>: The act of haggling does not provide utility to customers in information asymmetric markets**

**H<sub>1</sub>: The act of haggling provides customers with utility in information asymmetric markets**

The alternate hypothesis H<sub>1</sub> being accepted and the null hypothesis H<sub>0</sub> being rejected in the scenario all four research questions produce a statistically significant positive value.

The data and statistical analysis serve to back up the theoretical analysis presented later in the paper, which, along with a new model forwarded by the paper, is the crux of the work. The strength of the research lies in the qualitative analysis and discussion of results and proposed theory, but a quantitative aspect has been used to establish a foothold of authenticity for said work. Qualitative methods are better suited to draw out nuances in relatively mathematically obscure phenomena, and for better understanding human interactions. This is backed up by the fact that consumer studies often draw heavily on qualitative analysis. Although the data are from the study of specific markets, I purport that the principles of the research extend to the general. The research does not draw any distinctions based on the type of goods themselves.

## **Quantitative Findings and Data Analysis**

Level of agreement to the following statements were quantized on a 5-point Likert scale. The statements and their mean agreement values are the following:

Table 1: *Response Means, Error and Confidence*

\*LCIB is the lower confidence interval boundary at a confidence interval of 95%

The tests were all statistically significant with a near-zero alpha value for a 95% confidence level. The lower interval boundaries have been tabulated besides the mean to indicate that even the lowest

statistically suggested value at a 5% alpha indicates agreement.

The research finds that there is, on average, agreement to the statements that support the main hypothesis of the research: that the act of haggling provides utility to consumers in an information asymmetric market. Beyond statistical analysis, qualitative data (FGD and interview comments) was studied to paint a rich picture of haggling behavior. This is extended upon in the discussion.

**Table 1: Response Means, Error and Confidence**

Statement	Mean	Standard Error	LCIB*
Haggling over product prices is commonplace	1.80	0.117	1.56
Customers are likely to buy a product they've haggled for	1.40	0.197	0.99
Customers are likely to buy a product if a low fixed price is set from the beginning	1.25	0.228	0.77
Prices are set to reflect customers' tendency to haggle for lower prices	1.25	0.176	0.88

## Discussion

The data suggests that price in information asymmetric markets is set based not only on the market imperfection, but also on the expectation that customers will haggle and seek haggled purchases. While price information asymmetry allows price discrimination and higher prices like many market imperfections do, the final price does not lay on this alone. Utility from the act of bargaining is recognized and creates an additional buffer over this increased price. The price buffer adds to the previously 'intended' price (ie. The price that would have existed in a non-haggling market), and is a mechanism by which market recognizes customers' utility from haggling and charges them for it. The utility is not gone uncharged by a market. Prices are based on anticipation that customers will more likely buy if they get to haggle for a good.

A resultant view might follow that: the mechanism results in consumer surplus falling and producer surplus gaining an edge. This logic does not hold in the light of haggling truly producing a kind of utility for the consumer. The argument can be made that the market is simply charging the consumer for this through elevated prices from the get-go. Indeed, this paves the way for the next point of contention: how are non-hagglers accounted for? Interviews and focus group discussions, sellers often identified two distinct groups of consumers. The majority being those looking to haggle, and a minority of customers ('five percent', one storekeeper went as far to stress) who perform their shopping searching different prices, but not participating in haggling. A very important point of contention, considering that the vast majority of haggling markets have been replaced by markets with fixed prices in developed economies;

most consumers are non-hagglers. This is discussed in the next section with the help of a haggling model.

### Haggling Market-Price Model

In a haggling market with multiple sellers, a seller is faced with two options: charge an elevated price that will satisfy the haggling customer and their need to bargain, or offer a lower fixed price which will appeal to the customer who conducts their search without haggling. Based on this assumption, the following model can be used to describe haggling in markets, with the behavioral effect of gaining utility from bargaining considered:

Figure 1: *Haggling Market Price Model*

Where,

**Haggling Buyers** are buyers who in their information search, and product search, will act on opportunities to haggle – we will assume that they gain utility from the act of haggling (the *extent* and *success* are not relevant in our purview)

**Non-Haggling Buyers** are buyers who will not act on opportunities to haggle in their information and product search, choosing to instead take the price information at face value and continue the search

$M_0$  is a market with primarily haggling buyers and a market imperfection of information asymmetry

$M_1$  is a market with information asymmetry but in which most buyers refuse to haggle in their search

$M_2$  is a market without the market imperfection of information asymmetry (and therefore cannot house haggling situations, see assumptions below)

$P_0$  is the market price without market imperfections and non-haggling buyers dominant

$P_1$  is the market price with the market imperfection of information asymmetry and non-haggling buyers dominant

$P_2$  is the upper price level of prices sellers will ask of haggling buyers in a market with information asymmetry and haggling buyers dominant

$x + y$  is the range of prices sellers will negotiate with those whom are identified as hagglers

$y$  is the range of prices sellers will offer to those they identify as non-hagglers

The model assumes markets exist in which haggling negotiations occur, that they must contain information asymmetry about product prices, and that such markets can seat two types of consumers: haggling buyers and non-haggling buyers. Non-hagglers perform information searches in the market but

do not partake in haggling. An additional assumption is that sellers cannot identify whether a consumer is a haggler or a non-haggler. I *do not assume* anything about the factors that result in the formation of these two separate groups, nor is it in the purview of my data collection (inferences however, I feel can be drawn later). Finally, I propose, that the market can develop in multiple stages, each which bring about a change in price levels and buyer-seller interactions.

I propose that an early market stage  $M_0$  exists in which haggling buyers (those who gain utility from the act of haggling) are the dominant consumer group; price and information asymmetry exists. The market price range reflects the demand for haggling. As most buyers are hagglers, consumers will face price levels ranging from  $x + y$  (that is,  $P_2$  to  $P_0$ ), with the range  $x$  being dominant. This range  $x$  represents the previously postulated 'price buffer'. When faced with a consumer, sellers have the choice of a) offering an elevated price to take advantage of/defend against possible haggling 4 b) offering a fixed price to a non-haggler who will search without participating in haggling. Sellers must 'bet' – they do not have prescience. Wrong "bets" can result in losing a non-haggler. The market, over time, develops into  $M_1$  in which non-haggling buyers become dominant and only a minority gain utility from purchases. I infer that a change in consumer mindset results in this transition from  $M_0$  to  $M_1$ , but inference is not central to building my case. In this case, the prices offered move to a wedge in which sellers choose to what extent they will try to wield the power to discriminate, as offered by information asymmetry. In the market  $M_1$ , a seller risks losing a customer by offering an elevated price as non-haggling buyers are dominant. They reflect demand for purchasing without utility gained from haggling. The dominant consumer type, non-hagglers, will carry their information search and be offered fixed prices within the range  $y$ . In the final market stage  $M_2$ , information asymmetry disappears and the market price settles at  $P_0$ , the 'ideal' equilibrium price. Bargaining disappears from the market. Compared to haggling markets in developing economies, equivalent markets have transitioned to this final stage in developed economies, brought about by what can be hypothesized as a shift in consumer mindset and resolved market imperfections. It remains to be explored what kind of factors result in hagglers evolving into non-hagglers as an economy develops.

## Conclusion

The paper finds that consumers do indeed gain utility from being able to haggle for a purchase in information asymmetric markets, but that this can change with a shift in consumer culture/mindset. The fact that consumers can gain utility from haggling has clear implications on price levels and market interactions. Profound, broader changes may result from changes in their mindset as well as market development stages in regards to bargaining. Haggling is likely symptomatic of underdeveloped markets and consumer culture, and tapers off as markets and their consumers evolve.

That said, the main limitation of the research exists in it being the independent study of a sole student author and the resource and time constraints that naturally follow. The work is self-funded and produced, which limits the dataset from being particularly large. Furthermore, multiple geographies could not be

directly explored in the work and secondary sources were used to understand patterns in other countries. These can be resolved in future studies to answer more questions.

For one, if negotiations create behavioral discrepancies, how is the producer's selling behaviour affected during bargaining? Are there significant economic effects as a result? In terms of the markets themselves, how do markets behave as they transition between stages of development? When does the change occur in which sellers find it, on average, more profitable to offer straight fixed prices? What implications does haggling and its disappearance have on producer and consumer surplus? Should utility from bargaining be considered in surplus calculations? Are there direct examples of haggling markets transitioning across the globe?

These are just some questions which can further elucidate the interesting phenomenon of haggling, its producing utility for consumers, and its presence and absence across markets and economies. In closing, I believe that the paper provides a convincing example of the concept of utility from nonfinancial and noneconomic drives in typically economic interactions: a concept that can shed a peculiar, but revealing light on oft-studied topics. We stand only to benefit from considering such behavioural mechanisms in future economic research.

## **Declarations**

### **Ethics approval and consent to participate**

All interviews were consensual, and it was made clear that they were conducted for research purposes. Data was stripped of personally identifying elements as they were not necessary for analysis. Research did not meet the criteria for requiring any formal regulatory approval.

### **Consent for publication**

The author, Prottay Hasan, consents to the paper 'Does Haggling Provide Utility in Information Asymmetric Markets? Evidence from Sales Tactics' being published open-source in the Journal of Economic Structures.

### **Availability of data and materials**

Data used in the research is primary data collected for the research paper. A questionnaire was developed for the research paper and is attached in an appendix.

### **Competing interests**

The author has no competing interests/not applicable.

## Funding

The study is self-funded by the author/not applicable.

## Authors' contributions

The author is the sole contributor to the research paper, with the exception of reviewed literature whose credit goes to the authors of the respective papers.

## Acknowledgements

The author thanks the Dr. Abdul Wohab for his suggestions in creating the final manuscript.

## References

- Armstrong, M. (2006). Recent developments in the economics of price discrimination. *Cambridge University Press*.
- Armstrong, M., & Vickers, J. (2001). Competitive price discrimination. *RAND Journal of Economics*, 579-605.
- Evans, K. R., & Beltramini, R. F. (1987). A theoretical model of consumer negotiated pricing: An orientation perspective. *Journal of Marketing*, 58-73.
- Jones, A. M., Philip, J. T., & David, L. M. (1997). Noneconomic motivations for price haggling: An exploratory study. *NA - Advances in Consumer Research*, 24, 388-391.
- Kassaye, W. W. (1990). The role of haggling in marketing: An examination of buyer behavior. *Journal of Consumer Marketing*, 53-62.
- Pigou, A. C. (1922). *The economics of welfare, 4th edn*. London, UK: Macmillan.
- Rubin, J. Z., & Brown, B. R. (1975). The social psychology of bargaining and negotiation. *New York: Academic Press*.
- Stigler, G. J. (1961). The economics of information. *Journal of Political Economy*, 213-225.
- Terhune, K. W. (1968). Motives, situation and interpersonal conflict within Prisoner's Dilemma. *Journal of Personality and Social Psychology*, 1-24.
- Turnovsky, S. J., Shalit, H., & Schmitz, A. (1980). Consumer's surplus, price instability and consumer welfare. *Econometrica*, 135-152.

## Figures

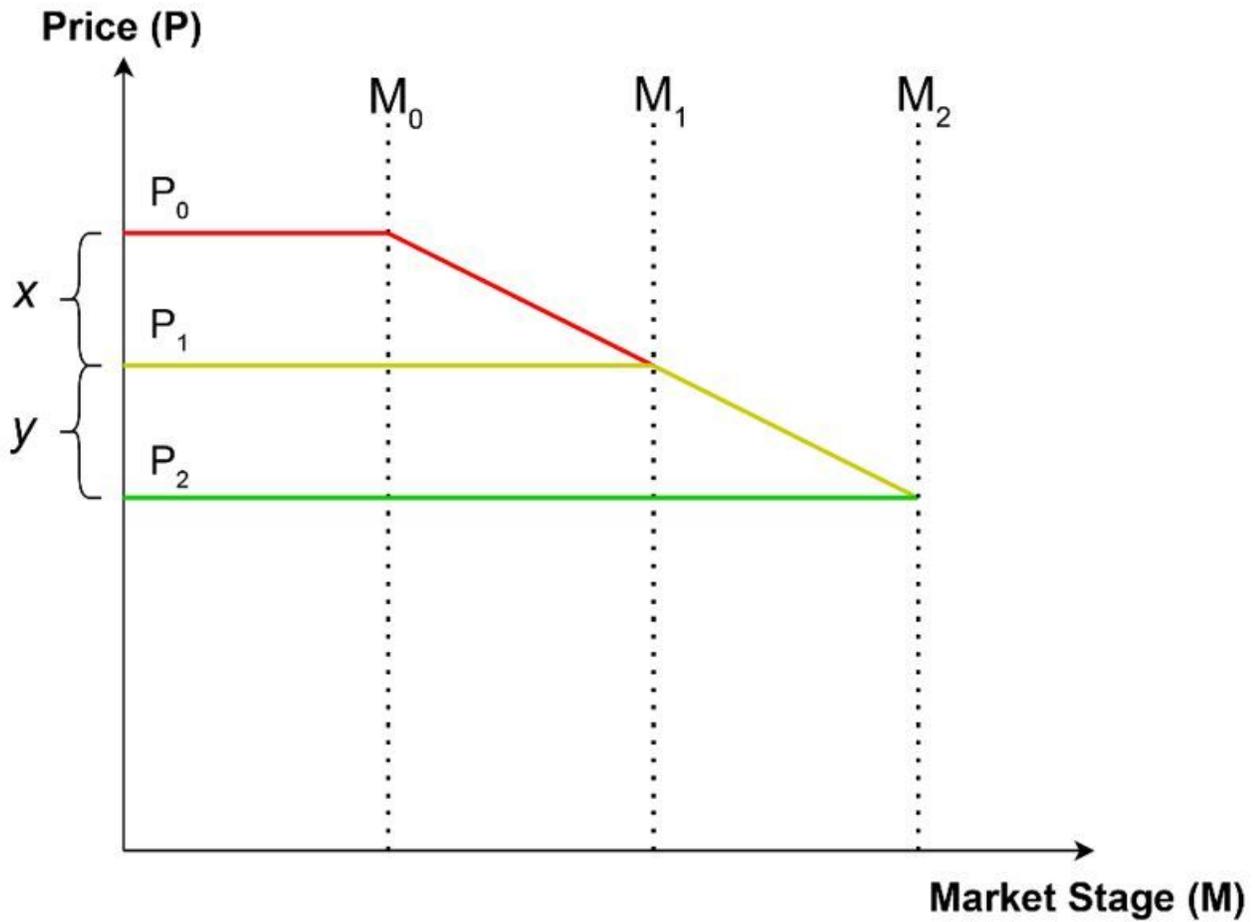


Figure 1

Hagglng Market Price Model