JEL M20; M31

MANAGEMENT OF CONSUMER BEHAVIOUR BASED ON THE EFFECT OF ODD PRICING TECHNIQUE

Omarov Elvin
PhD student, Simon Kuznets Kharkiv National University of Economics / Management and Business Department, Kharkiv, Ukraine
Fil. Dr. Jan-U. Sandal Institute/ Kløverveien, Norway

***Abstract* — The paper is devoted on investigation the effect of most commonly used psychological pricing method, odd pricing technique, which is not unanimously supported by scholars. Moreover, this paper tries to find underlying reasons for contradictory results of empirical researches conducted in the field of odd pricing.**

***Key Terms* — price, pricing method, odd pricing technique, consumer behaviour.**

One of the main and commonly used on the market psychological pricing methods is the odd pricing technique. Tactical method of odd pricing technique is based on setting prices lower than a rounded sum of the purchase. For example, the price of one pack of milk is 9,99 UAH, package of cheese – 24,9 UAH, of the camera – 1199 UAH. This strategy is used by various shops and is popular for several reasons: price of 9,99 UAH psychologically perceived as the sum in the range of 10 UAH, that can not be said about the price of 10,05 UAH. Such prices buyers can perceive as evidence of careful analysis by enterprise of its prices and its desire to establish a minimum level of prices. In addition, buyers, while getting change can perceive such prices as lower or reduced ones.

Prices with odd pricing effect helps customers to stay in their price limit and, nevertheless, to buy the product they want. Managers have long assumed that establishing the price on the product just lower than the rounded numeric is advantageous. This practice continues in spite of the growing number of scientists, who are questioning the efficiency of usage of such pricing method.

As the use of odd pricing technique in the retail trade has become widespread in many countries, various explanations by scientists are offered for common usage of psychological prices. One of the possible explanations is that customers see the odd price as much cheaper than it really is in relation to the nearest rounded figure. According to this explanation consumer perceive the price of 5,99 UAH as being closer to five than to six. Such delusion is causing increased reaction by the buyer, as price of the product perceived to be lower. The background for such explanation is that humans' capacity for storing information is limited. According to Brenner and Brenner [5], customers are continuously receiving flows of information in the process of purchasing, therefore humans' mind stores only the most valuable information, namely the first digits in the price. Thereby, after seeing the price of the product 5,99 UAH, customer will flashback the price of 5 UAH in the first order, than maybe the price of 5,90 UAH, but on rare occasions customer is recalling the exact price of 5,99 UAH. The reason why consumers are rounding 5,99 UAH to 5 UAH instead of truncating it to 6 UAH is based on time required for processing memory. Rounding upward requires additional resources of human mind, comparing to the more straightforward decision of storing only the first digits from the price. In addition, as in most cases of purchasing process customers are faced with the widespread variety of products, information regarding the price amount should be stored during the limited period of time one after another. In attention and memory terms,

cheapest way to perceive information is to remember only first digits of the price.

According to Spann, Fischer, and Tellis [4], strategy of using of odd prices is based on the fact that customers try to spend as little time as possible on price analysis. The more digits in the number, the longer it is necessary to read and analyse the digits in the price, therefore while reading the price, the highest part of attention is paid on the first digits, but not on the last ones. As an example, customer needs to analyse the price, which is recorded as 1743.99. The first figure carries more than 50% of the information, because 1000 - it's more than 50% of the total price amount, so the client will read and soberly assess this number. The second figure (700) carries about 40% of the information from the price label, so client will also carefully read and evaluate this number. The third figure (40) carries in itself only 2% of information from the price, therefore it is noticeably less important. In this case, the perceived price for the customer is either 1740 or 1700, depending on his or her limits of price perception.

After determining the perceived parts of the price, seller can proceed to increase profits by changing all the least relevant figures to the maximum, or in other words to nines. After the increase of irrelevant for customer digits, the perceived price for customer does not change, and consequently, the demand or sales of this product do not decrease. In the example above, this is 99 after the comma in the number 1743,99. From the total price of the product, amount of 0.99 does not affect the client's decision to buy the product or not, and this part of the price turns directly into profit.

Notwithstanding, present explanation seems to be rationale, it is hard to prove or disprove the assumption that customers are typically just ignoring some parts of the price amount, as people are naturally denying this assumption. As some of them will state, that they are rounding price with odd pricing technique upwards, others will state that they are remembering all digits that are written on the price label. Furthermore, it is difficult to believe that customers are tending to eliminate some parts of the price, as ignored amount of money can represent significant value for them.

Consumers, despite the required additional effort for rounding odd prices upward or remembering all digits from the price, are aware about circumstances of ignoring last digits from the price. Consumers may be fully aware that they should round odd prices upward or process all of the digits, and perhaps they often do so when there are no other tasks making demands on the consumer's limited processing capacities.

Though the effect of psychological prices is fairly robust, some authors have noticed situations where effect was attenuated or even erased. Thomas and Morwitz have stated in their research that “Odd pricing effect has lower influence on the price perception by the customers, if changes of rightmost digit in the price does not shift leftmost digit” [5 p. 11]. In this way, the effect of changing the price from 19,00 UAH to 18, 99 UAH is significantly lower than the effect of changing the price from 20, 00 UAH to 19, 99 UAH. As in the first case, the usage of odd pricing does not alter the shift of leftmost digit as in the second case.

Schindler and Schindler and Wiman [2] in their researches have found support for an effect of psychological prices on the long-term memory of the customers, nevertheless, authors have failed to find evidence for an immediate effect of odd pricing technique during the purchasing decision.

Another study [1], which supports positive effect of odd pricing technique on demand was done by Anderson and Simester. As the outcome of experiments, authors have noticed the effect of psychological prices for some products and have stated that this effect is dependent on purchasing situation. For the merchandise, that consumer saw the first time and perceived it as new one, the effect of odd pricing technique was higher than on the accustomed products.

Anderson and Simester have made two different explanations for the outcomes of their research. First elucidation lies in the assumption that consumers, while seeing new product, are trying to interpret price ending in order to classify the expensiveness of the merchandise. Odd priced products considered to be perceived as less expensive than even priced goods. Second explanation states that consumers are processing information regarding the price in

imperfect way. Despite the first explanation by the authors seems to be logical and rational one there is no answer in that study why exactly digit 9 have such effect on the customers and what is source of consumer belief that products, which priced with odd pricing technique, are more favourable.

Most of researches done in the field of odd pricing effect converge to the idea that influence of psychological pricing technique is strongly dependent on how rational the customers are in the process of purchasing. This, in its turn, depends on the concentration of the customer on the price and time, which consumer spends on perceiving price of the product. Unfortunately, during the experimental researches it is mostly impossible to restore the same amount of mental resources that customer is paying on prices in different purchasing situations. Whereby in the laboratory researches consumers usually are paying more attention and making their purchasing choice basing on rational arguments (more detailed you can see it in [3]).

Moreover, in the majority of experiments done by researchers in the field of psychological pricing, tested products with different price endings were shown one by one for a certain period of time, which is not happening in everyday purchasing situations in the shops and supermarkets. Thereby, customers had enough time for paying full attention to each product and evaluation of the price, therefore customers were making rational assumptions regarding the price of the product.

Experimental study, done by Launspach and Burmann [4], have included time pressure on the customers during the purchasing process. Nevertheless, in their experiment consumers were aware in advance that they are taking part in the experiment, moreover buyers were exactly knowing that researchers are studying the effect of odd pricing technique on their choice. This fact possible have increased customers' motivation to make "right" choices and concentrate their attention on each digit in the price more carefully.

Therefore most of empirical studies done by researchers in the field of odd pricing technique may all have contained situations, in which subjects of the experiments, or consumers, were more careful in perceiving information regarding the price, were more rational in evaluating the price amount and rounding odd pricing endings upward, or were clearly remembering all digits in the price. Possible it is the reason, why studies of effect of odd pricing technique on the demand are not able to show similar to each other results and authors cannot converge to one unique opinion.

References

1. Anderson E. T. Effects of $9 Price Endings on Retail Sales: Evidence from Field Experiments / Eric T. Anderson, Duncan Simester // Quantitative Marketing and Economics. – 2013. – №1 (January). – P. 93 – 110.

2. Johnson, M. D. The Effects of Price Bundling on Consumer Evaluations of Product Offerings / M. D. Johnson, A. Herrmann, H. H. Bauer. // International Journal of Research in Marketing. – 1999. – 16. – P. 129 – 42.

3. Lepeyko T. I. Factors influencing consumer behaviour management / T. I. Lepeyko, J. U. Sandal, E. Sh Omarov. // Proceedings of the International Congress on Business and Marketing'18. – 2018. – 1. – P. 195 – 212.

4. Manning, K. C. Price Endings, Left-Digit Effects, and Choice / K. C. Manning, D. E. Sprott. // Journal of Consumer Research. – 2014. – 36. – P. 328 – 335.

5. Stiving, M. An Empirical Analysis of Price Endings with Scanner Data / M. Stiving, R. S. Winer. // Journal of Consumer Research. – 2007. – 24. – P. 57 – 67.

Authors

Omarov Elvin, PhD student, Simon Kuznets Kharkiv National University of Economics;

Affiliated research fellow, Fil. Dr. Jan-U. Sandal Institute.

(omarovelvin@gmail.com).

Manuscript received 24 January 2019.

Published as submitted by the author(s).