

The Impact of 9-Ending Pricing Strategy on the Consumers' Attitude and Buying Behavior: An Exploration

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Abstract—It is very challenging for a business organization to sustain in the contemporary and the cutthroat global markets. Price of a product or service set by the organization plays a vital role in keeping it sustainable. Therefore, it is very crucial to use a pricing strategy that can facilitate the organization to augment its sales and profitability. The 9-ending pricing strategy is the strategy that has been keeping the organizations sustainable with augmented sales and profit for long. The 9-ending pricing is also called psychological pricing, that plays an imperative role in influencing the perceptions and the psyche of the customers' buying behavior. The 9-ending pricing strategy is a strategy that specializes in inflicting psychological impacts on the consciousness of the consumers' buying behavior. In this study the impact of 9-endings has been illustrated through a conceptual framework. By reviewing a good number of literatures it has been found that socio-demographic factors like gender, age, level of education, employment status, profession, marital status, family size, income, lifestyle and psychological patterns like representativeness of outlets for product & service, availability of products and anchoring heuristics are the factors which influence the consumers' perception which determine the selection of 9-ending prices and decides their attitude that leads to consumers' buying behavior. Results show that consumers who are more price conscious are more likely to choose 9-ending prices. Indeed, low involved buyers (especially those with a low hedonic and symbolic concern profile), low educated, low income and younger buyers are prone to choose the 9-ending option. This study contributes the manner in which consumers process 9-ending prices that can be implications for large retailers, policy-makers, researchers, pricing managers, and our understanding of how consumers make inferences from pricing information.

Keywords: 9-Ending prices, Consumers' behavior, Strategy, Influence, Organization, and Psychological prices.

1. INTRODUCTION

The 9-ending pricing strategy is a pricing strategy, based on the assumption that certain prices have psychological effects on the buyers' perception. This strategy has been practiced by the marketers and the business organizations to influence the consumer decision making process since 1875. This strategy was used first by Melville E. Stone, who started the Chicago Daily Newspaper to compete with the Nickel Papers of the day with a purchase price of only one cent. However, there

was a problem that there were not enough pennies in the general circulation to purchase his newspaper. Therefore, Stone colluded with the retailers who used to give the advertisements of their product or service in his newspaper. He also persuaded them to lower the price of their product or service by one cent (e.g. \$0.99 instead of \$1.00). The retailers who agreed with Stone to aid in this effort observed that the practice of 9-ending pricing strategy augmented their sales by 60% and the sales of Stone's Newspapers increased too [18], except with an issue in providing one-cent penny as change. The solution was to ship a barrel of pennies in from Philadelphia to provide to customers as change.

The retail prices are often planned as '9-ending prices', a little less than a round numeral (e.g. \$2.99 instead of \$3.00). The customers tend to perceive 9-ending prices as being significantly lower than they actually are. Because \$2.99 is perceived to be near to \$2.00 thus lower than \$3.00. Thus, the price such as \$2.99 is associated with spending \$2.00 rather than \$3.00. The 9-ending pricing strategy is an art of scheming prices to appeal to consumers' emotions and psyche in order to influence their purchasing behavior. [28]. The Pricing strategy is a play on the perception of the customers. That is, it is the consumers' perception of the price that influences them to purchase a product or service, and not the actual money price.

In several situations, the psychology of pricing and price perception are more significant than the actual price of the products or services. The business organizations which understand the role psychology plays in on the perceptions of the consumers remain with sustainability in the market and make profits, especially in retail markets. Pricing is a multi-stage technique, so, after producing a product, the crucial query that needs to be solved is: "How much amount should business organizations charge on the customers for a product or service?" This query is not solved by only manufacturers, but also wholesalers and most especially the retailers. This is important to consider that customers behave differently if the price is broken into parts, or the product or service is bundled with another item. The Customers process prices differently,

and they might never know what is in their minds when they consider prices and how this influences their decision making process. Customary economic thinking assumes that business organizations are always capable and the customers are always cogent. However, consumers behave differently, sometimes even illogically when offered with a variety of triggers. While setting prices, it is important to keep in the mind that perception plays a big role in customers' purchasing decisions. If a right pricing strategy is used for a product or service in the market, and such a strategy is persuaded with robust promotional and placement or distribution programs, the business organizations can leverage sales and experience business growth [35]. However, sometime an inappropriate pricing strategy can be very costly for the business organizations. There are different pricing strategies that are used by firms. However, one of the most commonly used pricing strategies which is widely applied for consumer goods across different product categories in retail shops and newspaper advertisements is the '9-ending' pricing strategy.

The 9-ending or psychological pricing strategy is a common practice in the marketplace that uses certain odd and even digits as price endings (Examples: \$.99 in \$4.99 and \$0.00 in \$3.00), and has the power to influence consumers' perception of the price of the product [24]. Though the actual origin of 9-ending pricing is not very clear [9, 10], however, it is assumed that this pricing strategy has its origin in Chicago, USA. However, the 9-ending pricing strategy has been practiced for more than 100 years [34]. Since the use of 9-ending pricing in retailing has become common in many countries. Even though the results have been to some extent contradictory across product categories, the success of 9-ending prices seem to be valid, especially regarding low-priced products which are purchased regularly. The fundamental assumptions of 9-ending pricing is that, prices set just below the nearest round Fig. produce a higher demand than the expected demand at that level. This indicates that the purchasing probability for just-below price is positioned well to the right of estimated demand curves that generates a kink in the demand curves at these points [2]. The 9-ending prices are also known as psychological prices, magic prices, charm prices, odd prices, irrational prices, intuitive prices or rule-of-thumb prices in the literatures related to 9-ending pricing strategy and consumer buying behavior [17]. These are not rooted in strict mathematical calculations or long standing economic theory [21]. The economists who study consumers' behavior are of the view that consumers are price takers and accept prices at face value or as given by the producers. Marketers acknowledge that consumers often vigorously assess price information, decoding prices in terms of their knowledge from previous buying experience, formal communications (advertisements and sales promotions), informal communications (friends, colleagues, family people), and point of purchase [20]. There are two distinct effects associated with 9-ending pricing strategy and consumers' buying behavior [2]. The first one is the 'Level effect' which is

also known as underestimation effect. It highlights the behaviors or fundamental processes that lead buyers to twist their perception of the price. For instance, one frequent hypothesis concerning level effects is that buyers are inclined to rounding numerals down, making a buyer thinks that \$28.99 is much lower than \$ 30.00

The second is the 'Image effects' which leads a buyer to form perceptions about the product or service, store or competition, on the basis of the right hand digits of the price of the products or services. For instance, buyers may think that a product with a price that ends in 9 is on a special offer.

Each of the suggested level effects is a depiction of the way buyers' process information regarding the digits of the price of the products (i.e., their mental processing), totally unrelated to business behavior. Alternatively, the image effects focus on buyers' perceptions of the organizational behavior. Customers may, deliberately try to discover organizations' intentions when decoding certain prices, or they may, over time, subconsciously realize the correlation between price endings and quality or discounted products.

2. RATIONALE OF THE STUDY

The contemporary business market is global and at the same time highly competitive. Therefore, an appropriate pricing strategy should be used by the business organizations to sustain and grow in today's market. This paper studies the available literatures on 9-ending pricing or psychological pricing and finds how the socio-demographic factors such as age, income, lifestyle, level of education, employment status, profession, marital status, gender, family size and the psychological patterns such as representativeness of the outlets for product & service, availability of the products and anchoring heuristics of customers influence them to choose 9-ending pricing strategy that decide their decision making process.

3. LITERATURE REVIEW

A number of research studies have demonstrated the effects of 9-ending pricing strategy and consumer decision making process. In this study an attempt has been made to review the studies associated with 9-ending pricing strategy that is practiced by the business organizations, especially dealing in FMCG and Home Appliances in retail stores and advertisements to influence consumers' buying behavior as the consumers are influenced by socio-demographic factors such as , income, lifestyle, level of education, employment status, profession, marital status, gender, family size and the psychological patterns such as representativeness of the outlets for product & service, availability of the products and anchoring heuristics.

Since, a good number of marketing researchers, as far back as the 1930, have examined the extent to which the 9-ending pricing strategy has been used in the marketplace [36, 37, 33, 21, 10, 29]. All these studies have identified a numeral digit combination like 95, 99, and 00 as the principal price endings used by business organizations depending on price level, market segment, and product category. Especially 00-ending price is used for high-priced and high-quality product or service by the upscale organizations; whereas 95-ending price is used for mid-priced or average quality product & service and 99-ending price tends to be used extensively for low-priced and low-end organizations [25, 36, 37, 10]. In studying literatures on the psychology of pricing, the contributions of Tomas Bata cannot be ignored. In the erstwhile Czechoslovakia, many buyers referred to this pricing strategy as 'batavska cena' or 'Bata price' attributable to Tomas Bata, the Czech manufacturer of footwear. Tomas Bata began to use this practice in 1920 [2]. This pricing system used by Tomas Bata gave the ending price strategy for a product or service, is almost always a number 9. Even today, the 'Bata price' method is used in Bata Shops all over the world.

Actually the application of 9-ending pricing in retail sectors is so extensive that its effectiveness is generally assumed guaranteed [17]. The term 9-ending is used in several ways. It can refer to the application of ending prices in odd numbers (Examples: 1, 3, 5, 7, 9); that is, ending prices in numerals other than zero; or that of pricing just below a zero numeral (Examples: \$1.99, \$6.99 or \$8.95). The latter is the application of the most commonly referred to when the term is used [12]. One of the uses of psychological pricing is the price-ending numeral. Buyers believe that, prices ending in uneven, rather than even numbers (Examples: \$9.99, \$199,999) are a better deal or a better price than even numbers (e.g. \$10 or \$200,000). If the products, to be priced are in a price 'band' (such as online auctions, cars or other sales listings), and if the listing price is in the odd price range, say \$99,000, it will appear in a lower price band than the \$100,000 listing and will be viewed as a product of better value. The challenge with this strategy is that, products ending in odd numerals are also often thought as being lower in value. Therefore, it is significant for marketers and retailers to define the right strategy for pricing specific product or service [7].

The frequent use of 9-ending prices suggest that, such a price ending is important in the development of marketing strategies, especially for retailer of fast moving consumer goods. Previously, the retailers had a presumption that pricing a product or service just below a round numeral is beneficial [17]. Although, some researchers have doubts on the success of such a practice, but its use has not been ceased [8, 14]. A number of researchers have tested the impact of 9-ending prices on consumers' buying behavior [32, 34, 14]. Mixed results indicate that, this pricing strategy will influence some consumers' perception of a product or store quality and/or value. Also, some studies have found conflicting results, with

some products supporting, prices with round figures while some products in which 9-ending pricing strategy is used would generate much higher sales.

In a study by Suri, Manchanda and Lee [39], it was found that prices ending with numeral 9 were less common and less accepted as a fair price in retail shops in Poland's compared to countries like the USA. Also, Rudolph [29] found that out of 3025 retail stores-advertisements in newspapers 64% of the prices ended in odd digits. In another exploratory research on retail food prices it was found that prices ending in 9 were the most popular. Although, prices ending in digit 5 were found to be the second largest in terms of popularity by [41]. Also, Friedman [10] found that, about 80% of retail prices ended with 9s and 5s. Additionally, another extensive analysis of scanner data from a major supermarket also showed that more than 80% of the prices in the shops ended with numeral 9 [6]. A more recent research by Harris and Bray [16] discovered that 64% of prices in the United Kingdom ended with a digit-9 and other research with internet based shops also showed a 9-ending price [4]. Also, the same trends were found in other researches in retail shops in western economies [31, 15]. Nine-ending pricing or psychological pricing is a common and perhaps overused marketing technique in Western markets [26]. Up to 65% of all prices end with a digit-9 either in the USA [30, 33, 37), in New Zealand [13] and in European markets such as Poland [38] or Finland [1]. The essential assumption which encourages retailers to apply those prices is that consumers may underestimate the value of 9-ending prices or psychological prices for two main reasons. First by encircling down 9-endings and by considering that 9-ending prices are the cheapest options. These effects are respectively called level effects [40] and image effects [31]. However, separate identification, does not account for their relative significance. In addition, previous empirical studies indicate great variability about the impact of 9-endings on perception [15], recall [5, 34], choice [3, 23] or sales [37]; including effects that are substantial, medium, weak, or even negative in some situations. In turn, there is a compelling need to explain under which processes and conditions 9-ending prices are effective. A recent study at IIM Bangalore by Avinash G. Mulky, Prahalad M and Venkateswaran K N in 2014[19] on price endings and consumers' perceptions reveals that for Indian consumers digit 9-ending price indicates higher value and also that the product is on sale and the consumers remember the price ending with the digit 9.

4. OBJECTIVE OF THE STUDY

Through a theoretical inquiry the study aims to examine the impact of 9-ending prices on consumers' attitude and buying behavior.

5. DATA AND METHODOLOGY

The data for this study have been taken from the secondary sources. A great number of journals, publications, working papers, books and unpublished articles have been reviewed for the purpose. The whole of the study is based on the conceptual framework which has been framed on the basis of the socio-demographic factors and psychological patterns found in the various studies based on psychological pricing strategies and an attempt has been made to show, how consumers' socio-demographic factors and psychological patterns lay impact on their attitude and buying behavior.

6. CONCEPTUAL FRAMEWORK & DISCUSSION

Our conceptual framework is presented in Figure-1 and is elaborated upon in the following sections.

6.1. Socio-Demographic Factors

The factors which influence the buyers socially are called socio-demographic factors. These influence the buyers to go for 9-ending prices or psychological prices to buy a product or service. These factors include age, income, lifestyle, level of education, employment status, profession, marital status, gender, and family size [11]. Gerontologists and psychologists specialized in cognitive ageing have generally demonstrated that relative to younger adults, older adults appear to exhibit greater use of schema-based as opposed to detailed processing strategies [27]. In other words, older buyers rely more on heuristics than younger buyers. The low educated and high income buyers are also expected to engage in heuristic information processing because, they have less ability to actively process the information and less motivation to do so. The shoppers, who are relying on a heuristic process of the information, ought to be more sensitive to 9-endings. Therefore, while little attention has been directed to exhibit the effect of age, income, lifestyle, level of education, employment status, profession, marital status, gender, family size for 9-endings choice (with the exceptions of Harris & Bray, 2007; and Mace, 2008) [16, 22]. Low educated, low income, younger shoppers, female shoppers, moderate life style people, and the customers of big family generally go for 9-ending options.

6.2. Psychological Patterns

The psychological patterns like representativeness of the outlets for product & service, availability of the products and anchoring heuristics influence the customers to go for 9-ending options. The representativeness and the availability of the products influence the customers with a positive attitude that leads them to buy the products and service of 9-ending prices. The anchoring heuristics refer to the customer's tendency to accept and rely on, the first piece of information received before making a purchase decision. That first piece of

information is the anchor and sets the tone for everything that follows. For example, a retailer might suggest a price for a product and the customer will try to negotiate down from that price, even if the price suggested is more than the previous value.

7. 9-ENDING PRICING & CONSUMERS BUYING BEHAVIOR

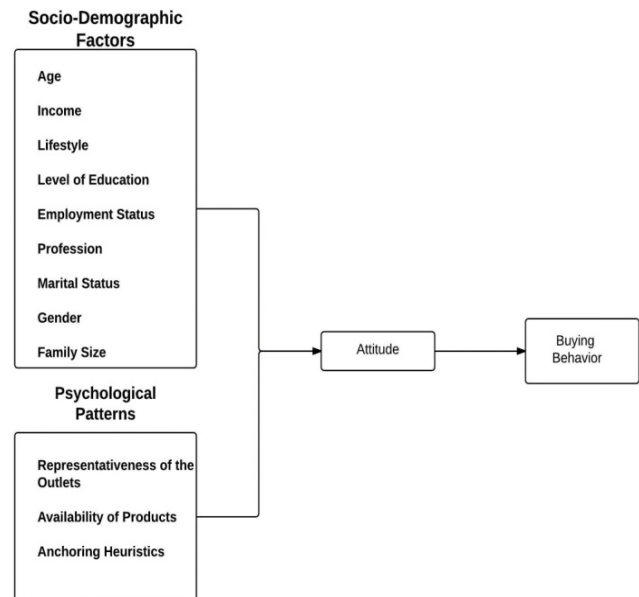


Fig. 1: Showing the Framework of

The socio-demographic factors such as age, income, lifestyle, level of education, employment status, profession, marital status, gender, family size influence the psyche of the buyers which lays impacts on their attitude to go for 9-ending price and this leads to buying behavior. In the other hand the psychological patterns such as representativeness of the outlets, availability of products and anchoring heuristics also influence the attitude of customers, which makes the customers buy 9-ending priced products or services.

8. FINDINGS

The 9-ending prices have a greater influence on the consumers' buying behavior. The results indicate that, the consumers who are more price conscious are more likely to choose 9-ending prices. Indeed, low involved shoppers (especially those with a low hedonic and symbolic involvement profile), low income, low educated and younger shoppers are prone to choose the 9-ending option. It is also found that the magnitude of this 9-ending price effects depends upon the price level of the products and the positioning of the brands. Overall, like Bamgartner and Steiner (2007) [3], we argue that consumers are heterogeneous in their preferences for 9-ending prices. If extension of this

idea is done, then results are found that, the involvement of consumers, especially with hedonic and symbolic profiles, has direct and indirect effects on 9-ending preferences. The Socio-demographic factors of consumers like age, income, and lifestyle, level of education, employment status, profession, marital status, gender and family size affect only indirectly to the preference for 9-endings through the mediation of price consciousness. The 9-ending prices or psychological pricing effects are mostly due to a conscious process of price which means that consumers are more likely to choose the 9-ending price option because they consider that it makes them save money. The 9-ending price effects are stronger for the higher priced product category and to a lesser extent for Intermediate brands. The psychological patterns like representativeness of the outlets for product & service, availability of the products and anchoring heuristics do lay impacts on the attitude of consumers, which leads them to buy the products or services.

9. CONCLUSION

It is concluded that the psychological pricing strategy is an augmentative strategy that companies can adopt to leverage their brands and sales volume in the potential markets. This paper elaborates the theoretical, conceptual and practical aspects of the psychological perception of price on consumers' buying behavior. It has provided ways about, how psychology is applied by marketers in the pricing of goods and services. The psychological pricing or 9-ending price influences perceptions of the consumers on different categories of goods such as FMCG & Home Appliances and determines their purchasing habits. The study concludes that, socio-demographic factors like age, income, lifestyle, level of education, employment status, profession, marital status, gender, family size and the psychological patterns such as representativeness of the outlets for product & service, availability of the products and anchoring heuristics of consumers influence them to choose the 9-ending price that lays impact on their attitude which make them to buy the products or service.

10. LIMITATIONS

The present study has some inherent literatures. Since, there are limited studies have been done on 9-ending prices to declare that this strategy influences consumers' buying behavior in India. The present study is based on mostly the studies done in other countries. Further the study uses only secondary data solely based on the researches fully available on the topic. There may be instances where important papers could have been missed out.

11. IMPLICATIONS

The implications of 9-ending prices for the marketing of a product or service cannot be overemphasized. The managers of business organizations, especially of retail outlets should

realize that 9- endings can have a significant influence on the level of sales of products. Predictable wisdom suggests that, if a particular pricing strategy, i.e. 9-ending pricing strategy generates higher sales and revenue, and then this should be used continuously by the managers. The managers of retail stores should be conscious that, it is possible for buyers to have a preference for round prices, rather than odd ones especially when they have difficulties in forming a reference price. Also, the managers must take cognizance of the possibility that odd pricing strategy tends to elicit a discounted-price image when round prices are used. That is to say that, the effect of 9-ending pricing strategy is more effective when it is used for fast moving consumer goods and the even pricing strategy has a potential of being efficient for luxury or high-end consumer products. The psychological pricing or 9-ending price has a tendency of providing significant implications for the positioning of retail goods.

The marketers must be aware that, the psychological pricing or 9-ending pricing technique alone does not sell a product or service. Having a strong sales rapport or relationship with customers also contributes in the selling of the products, but psychological pricing or 9-ending price also complements the selling strategies. The pricing decisions need to include a thorough competitive intelligence and research, a strong understanding of the market and most importantly, the culture of buyers. The 9-ending pricing may be the best fit for a retail business, but care must be taken to ensure that the pricing strategy decisions are thoroughly tested to examine its viability in the market before it is implemented. The results of this review paper can be implemented by the marketers to understand the psychology of the consumers and their buying behavior that is influenced by the socio-demographic factors like age, income, lifestyle, level of education, employment status, profession, marital status, gender, family size and the psychological patterns such as representativeness of the outlets for product & service, availability of the products and anchoring heuristics. This paper would also be beneficial for academicians, researchers, marketers, government agencies and various business organizations. The current study can provide fruitful insight to the researchers who want to study the effect of this pricing strategy on consumers.

12. SCOPE FOR FUTURE RESEARCH

As there is a dearth of research studies on 9-ending pricing strategy in India because most of the studies on this strategy have been done in western countries and so there is definitely having the scope of research in this domain. The model can be validated by empirical research relating to the impact of 9-ending pricing strategy on consumers' attitude and buying behavior.

REFERENCES

- [1] AALTO-SETALA, V. (2005): How do markets behave? The adjustment of price-endings. *Journal of Product & Brand Management*, 14 (7), 455-459.
- [2] ASAMOAH, E. S., & CHOVANCOVÁ, M. (2011): The influence of price endings on consumer behavior: An application of the psychology of perception. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*.
- [3] BAUMGARTNER, B., & STEINER, W. J. (2007): Are consumers heterogeneous in their preferences for odd and even prices? Findings from a choice-based conjoint study. *International Journal of Research in Marketing*, 24 (4), 312-323.
- [4] BERGEN, M., KAUFFMAN, R.J. and LEE, D., 2004: Store quality image and the rational inattention hypotheses: an empirical study of the drivers of \$9 and 9c price endings among internet-based sellers. A Paper Presented at the Informa Conference on Information Systems and Technology (CIST-2004), Informa, Denver, United States.
- [5] BIZER, G. Y., & SCHINDLER, R. M. (2005): Direct evidence of ending-digit drop-off in price information processing. *Psychology & Marketing*, 22 (10), 771-783.
- [6] BLATTBERG, R.C. and WISNIEWSKI, K.J., 1989: price-induced patterns of competition. *Marketing Science*, Vol. 8, pp. 291-309.
- [7] BLINDER, A.S., 1998: Asking about prices. Russell Stage Foundation.
- [8] BRAY, J. and HARRIS, C., 2006: The Effect of 9-Ending Prices on Retail Sales: A Quantitative UK Based Field Study. *Journal of Marketing Management*, Vol.22, pp. 601-617.
- [9] DAELYMPLE, D.J. and THOMPSON, D.L., 1969: Retailing-An Economic View. USA: The Free Press.
- [10] FRIEDMAN, L., 1967: Psychological Pricing in the Food Industry. In: *Prices: Issues in Theory, Practice, and Public Policy*. Almarin, P. & Williamson, O.E. (Eds), Philadelphia: University of Pennsylvania Press, 187-201.
- [11] Gaston-Breton, C. (2011). Consumer Preferences for 99-ending prices: the mediating role of price consciousness.
- [12] GENDALL, P., 1998: Estimating the effect of odd pricing. *Journal of Product and Brand Management*, Vol.7, No.5, pp. 421-432.
- [13] GENDALL, P., HOLDERSHAW, J., & GARLAND, R. (1997): The effect of odd pricing on demand. *European Journal of Marketing*, 31 (11/12), 799-813.
- [14] GEORGOFF, D.M., 1972: Odd-even retail price endings. East Lansing: Bureau of Business and Economic Research. Graduate School of Business Administration, Michigan State University.
- [15] GUÉGUEN, N., & LEGOHEREL, P. (2004): Numerical encoding and odd-ending prices: The effect of a contrast in discount perception. *European Journal of Marketing*, 38 (1/2), 194-208.
- [16] HARISS, C. and BRAY, J., 2007: Price endings and consumer segmentation. *Journal of Product and Brand Management*, Vol.16, No.3, pp. 200-205
- [17] HOLDERSHAW, J., GENDALL, P. and GARLAND, R., 1997. The widespread use of odd-pricing in the retail sector. *Marketing Bulletin*, Vol.8, pp. 53-58.
- [18] <http://www.cbc.ca/radio/undertheinfluence/the-psychology-of-price-1.2801793>
- [19] <http://tejas.iimb.ac.in/articles/08.php>
- [20] KOTLER, P. and KELLER, K.L., 2005: *Marketing Management*. 12th Ed., Prentice Hall.
- [21] JKREUL, L. M., 1982: Magic numbers: Psychological aspects of menu pricing. *Cornell Hotel and Restaurant Administration Quarterly*, Vol.23, No.1, pp. 70-75.
- [22] MACE, S. (2008). Assessing and explaining the impact of 99-ends on sales with store-level scanner data. Proceedings from the 37th EMAC Conference, Reykjavik (Iceland).
- [23] MANNING, K. C., & SPROTT, D. E. (2009): Price Endings, Left-Digit Effects, and Choice. *Journal of Consumer Research*, 36 (2), 328-335.
- [24] NAGLE T.T. and HOLDEN, R.K., 1995: *The Strategy and Tactics of Pricing: A Guide to Profitable Decision Making*, (2nd Ed.). Englewood Cliffs, NJ, Prentice Hall.
- [25] NAIPAUL, S. and PARSIA, H.G., 2001: Menu price endings that communicate value and quality, *Cornell Hotel and Restaurant Administration Quarterly*, Vol.42:1, 26-37.
- [26] Nguyen, A., Heeler, R. M., & Taran, Z. (2007): High-low context cultures and price-ending practices. *Journal of Product & Brand Management*, 16 (3), 206-214.
- [27] Phillips, L. W., & Sternthal, B. (1977). Age differences in information processing: a perspective of the aged consumer. *Journal of Marketing Research*, 444-457.
- [28] PRIDE, W.M. And FERELL, O.C., 1997: *Marketing Concepts and Strategies*, (10th Ed.), New York, Houghton Mifflin Co.
- [29] RUDOLPH, J.J., 1954: Pricing for today's market. *Printers' Link*, 247 (May 28), 22-24.
- [30] SCHINDLER, R. M. (2009): Patterns of price endings used in the US and Japanese price advertising. *International Marketing Review*, 26 (1), 17-29.
- [31] SCHINDLER, R. M. 2001: Relative price level of 99-ending prices: image versus reality. *Marketing Letters*, Vol. 12 No. 3, pp. 239-247.
- [32] SCHINDLER, R. M. and KIBARIAN, T. M., 1996: Increased consumer sales response through use of 99-ending prices. *Journal of Retailing*, Vol. 72: 2, 187-199.
- [33] SCHINDLER, R. M., & KIRBY, P. N. (1997): Patterns of rightmost digits used in advertising prices: implications for nine-ending effects. *Journal of Consumer Research*, 24 (2), 192-201.
- [34] SCHINDLER, R.M. and WIMAN, A.R., 1989: Effects of odd pricing on price recall. *Journal of Business Research*, Vol. 19 (November), 165-177.
- [35] STIVINGS, M.A., 1996: An economic theory of price endings. PhD dissertation, University of California, Berkeley.
- [36] STIVING, M.A., 2000: Price-Endings: When prices signal quality. *Management Science*, Vol.46:12, 617-629.
- [37] STIVING, M., & WINER, R. S. (1997): An empirical analysis of price endings with scanner data. *Journal of Consumer Research*, 24 (1), 57-67.
- [38] SURI, R., ANDERSON, R. E., & KOTLOV, V. (2004): The use of 9-ending prices: contrasting the USA with Poland. *European Journal of Marketing*, 38 (1/2), 56-72.
- [39] SURI, R., MANCHANDA, R.V. and LEE, S. 2004: A Wxed price vs a price discount: effect of cultural differences on the effectiveness of price presentation format. In: Hung, K. And Monroe, The use of 9-ending prices K.B. (Eds), *Advances in Asian Consumer Research*, Vol.3, Association for Consumer Research, Provo, UT.
- [40] THOMAS, M., & MORWITZ, V. (2005): Penny Wise and Pound Foolish: The Left-Digit Effect in Price Cognition. *Journal of Consumer Research*, 32 (1), 54-64.
- [41] TWEDT, D. W., 1965: Does the 9 fixation in retail pricing really promote sales? *Journal of Marketing*, Vol. 29, October, 54-55