ORIGINAL PAPER



DOI: 10.26794/2304-022X-2025-15-1-122-137 UDC 338.51(045) JEL D12, D40, D81

Heuristic vs Formalized Pricing in Consumer Markets: The Role of Price Perception Factors

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ABSTRACT

In pricing management the dominating approach is applied on the basis of the classical paradigm of negative correlation between demand and price, which leads to overenthusiastic preference of price sales incentives and discount-bonus programs. However, the actual results of retailing raise doubts about unwavering fairness of this rule and unconditional effectiveness of the corresponding activities. The reason for this presumably lies in irrational perception of prices by customers, which probably needs to use heuristic adjustments in price management to increase retail profits. The objectives of the study is to justify the need of combining two methodological approaches for Russian retailing system when managing pricing — formalized and heuristic — by means of modeling situations of consumer choice of retail purchase and analysis of its determinants. The methodological basis combines the conceptual provisions of economic theory, as well as the theory of consumer's behavioral analysis. Research methods: in-depth interviews with management specialists and experts, who assessed scenario cases, as well as by means of contextual and narrative analyses. Information base of the study consists of modern scientific publications and practical analysis data obtained by means of 110 in-depth interviews conducted in the second half of 2023 and the first quarter of 2024. The research findings show that price management in retailing should take into account the impact of pluralistic nature of irrational price perception and spontaneous customer reactions to prices. Practical significance: this study may facilitate Russian retailers to forecast price reactions of customers and find effective prices; it will be helpful for teaching management disciplines, and may also be in demand in the process of integration of neoclassical and behavioral models in the context of retail pricing management.

Keywords: behavioral economics; pricing psychology; pluralism of price perception; heuristic reaction to price; pricing management; price in marketing mix; retail pricing

For citation: Gerasimenko V.V., Simonov K.V. Heuristic vs formalized pricing in consumer markets: The role of price perception factors. *Upravlencheskie nauki = Management Sciences*. 2025;15(1):122-137. DOI: 10.26794/2304-022X-2025-15-1-122-137

INTRODUCTION

Price is one of the central categories of modern economic and management sciences. Classical economic theory postulates that sellers and buyers, guided by prices based on their capabilities and needs, optimize supply and demand. Prices, in turn, change depending on demand and marginal production costs, leading to the achievement of market equilibrium without any external regulatory intervention. The elegance of this model lies in the simplicity of explaining how free markets naturally arrive at the equilibrium of price and demand. Based on the assumption that consumers tend to seek maximum consumer utility from the goods and services they purchase, the inverse relationship of "price-demand" (according to classical economic theory) can be graphically represented as a demand curve. Marketers put considerable effort into collecting and processing data to model this relationship as accurately as possible in order to set the "correct" prices for their products.

However, retail reports cast doubt on the absolute reliability of the notion that the demand for any product is always well described by a smooth 1 and monotonically decreasing function with respect to price increases. Empirical data suggests the opposite — the actual demand curve (reflecting the actions of real economic agents, rather than idealized perfectly rational actors) is not smoothly downward sloping, but has kinks and inflection points. Moreover, even a small (without changing the price) adjustment of product information can diametrically change buyers' attitudes, which will affect not only the slope of individual sections of the curve but also the sign of the demand function's derivative.

So, since this function is quite unstable, even the slightest changes in framing² or mi-

nor shifts in emphasis and boundaries of the advertising and informational context can cause significant movement; the possibilities of formalized pricing as a scientific and methodological approach are limited. In this regard, based on the classic price-demand relationship, before engaging in modeling price elasticity (considering the irrational characteristics of economic agents' behavior), it is necessary to determine what causes the ambiguity in price perception and what drives people to make a purchase or refrain from it.

The purpose of this study was to justify the need to combine two methodological approaches — formalized and heuristic — in managing pricing in Russian retail through the modeling of situations related to consumer choice in retail purchasing and the analysis of the factors determining it.

The authors set themselves several research tasks (which were subsequently successfully solved):

- 1. Identify the rational and irrational internal motives and rules that (under the influence of the informational context and market situation, as well as the sales environment and conditions for making a purchase decision) a Russian citizen consciously or unconsciously follows when forming a favorable or negative attitude towards the price; identify and examine the underlying perceptual processes,³ affective reactions⁴ and cognitive mechanisms.⁵
- 2. Characterize the multiple perceptions and ambiguous reactions to prices in Russian

 $^{^{\}rm l}$ A function is considered smooth if its derivative is continuous over its entire domain.

² Framing in sales involves the seller creating specific informational frameworks and boundaries related to the

product being sold in order to encourage the decision to purchase it.

³ The process of perception is the formation of a personal impression based on perceived information.

⁴ An affective reaction is an explosive emotional response that reflects an unconscious subjective evaluation of the current situation.

⁵ Cognitive mechanisms activate the inherent patterns of information processing and analysis, methods of knowledge acquisition and modification, and techniques for structuring and conceptualizing specific objects and abstract entities in human consciousness.

retail, thereby confirming the necessity of considering the irrational behavioral aspect in retail through heuristic price planning, as well as outlining an updated approach to pricing in retail trade in our country, prioritizing the heuristic consideration of the effects of pluralistic price perception by economic agents.

- 3. Conduct a study of the evaluative rules and internal mechanisms that Russian retail buyers consciously or subconsciously use when considering price offers and deciding whether to accept or reject them; identify patterns and characterize the underlying psychological reasons that determine the reaction of domestic economic agents to retail prices.
- 4. Show that when managing pricing in Russian retail, one should take into account the effects caused by the ambiguity and irrationality of mass buyers' price perception, as well as their spontaneous reaction to prices.

During the study, answers were obtained to the following research questions:

- What approaches to retail pricing (heuristic, formalized, or any other) are predominantly practiced by Russian retail today?
- What internal rules and mechanisms drive the domestic buyer both in forming an attitude towards retail prices and in making a decision to purchase or refrain from purchasing?
- How do these rules and mechanisms vary and combine depending on the specific situation and circumstances?

ANALYTICAL REVIEW OF SOURCES WITHIN THE FRAMEWORK OF SEARCH RESEARCH

Fluctuations and variations in demand as a consequence of irrational price perception *Not a smooth and continuous demand curve.* The demand function plays a key role in price theory — in particular, it is used to determine price elasticity and calculate the market price that maximizes the seller's revenue. Analysts

engage in computer modeling of the demand function and price sensitivity. University students and business school attendees are taught to primarily focus on demand elasticity when making pricing decisions: it is recommended to raise the price if demand is inelastic; otherwise, it should be left unchanged or lowered.

The demand curve (as it is usually depicted in economics textbooks) is shown by a dashed line in *Fig. 1*. Let's note two of its features. First, it is monotonic, smooth, and continuous, with no "jumps" or special points, and second, it does not account for the dependence of demand on the framing effect in sales.⁶

However, the assumptions of classical theory regarding the nature of the price-demand relationship contradict published facts, which indicate, in particular, that when perceiving numbers and arithmetic sums, the average human mind is guided by certain heuristic irrational approaches. For example, since the reading of numbers for most people occurs from left to right, the quantitative values fixed in the minds of real economic agents turn out to be tied to the extreme left digits of the number [1, 2]. Therefore, 2990 rubles is perceived as a significantly smaller amount than 3000 rubles, whereas the difference between 5000 and 5010 rubles is hardly noticed. The difference in prices is also perceived as more significant if it is easy to calculate in one's head [3]. For example, the difference between 5500 and 4500 rubles seems greater to people than the difference between 5520 and 4470 rubles. Thus, the demand of an average consumer with medium cognitive abilities is significantly different from the demand of the infamous homo economicus endowed

⁶ The framing effect lies in the fact that the format, volume, and setting of presenting information about a product and its price so significantly influence the perception of a potential buyer that the same price offer can elicit either an absolutely positive or a negative reaction.

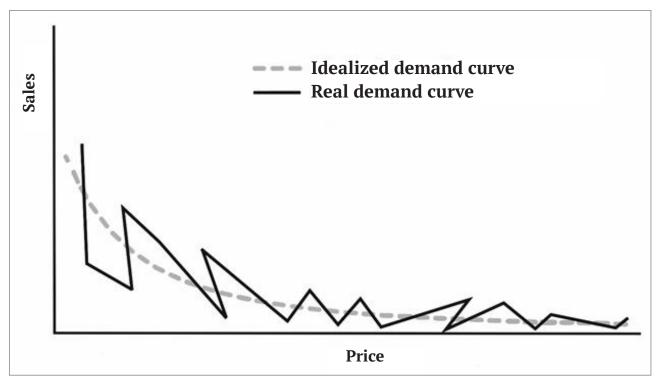


Fig. 1. Demand curves — idealized and actual in retail

Source: developed by the authors.

with extraordinary intelligence. The function describing the price-demand relationship of a rationally behaving real economic agent is far from smooth and continuous — it has bends, breaks, and discontinuities that reflect spontaneous reactions and the peculiarities of reading numerical labels on product price tags (solid line in *Fig. 1*).

Unstable and non-monotonic demand. There is another reason why the canonical price theory based on the classical demand model is sometimes far from practical reliability—it is the instability of demand. Since both the perception of price by economic agents and the corresponding price-demand relationship are highly sensitive to advertising and informational content and the framing effect, even

very small innovations in the packaging and market presentation of a product (box size, portion packaging, label on the packaging, wrapper design, etc.) can provoke a significant change in price elasticity of demand.

A clear illustration of this is the packaging of baked goods in small portions: buyers have started paying attention to the calorie content of food to reduce the consumption of sweets and baked goods, and sellers have found a way to meet this consumer demand by changing the packaging. By purchasing a product containing only 100 calories, one can enjoy their favorite food without the guilt of breaking their diet. As a result, the price sensitivity of demand has noticeably decreased. Sellers now earn almost one and a half times more per unit of weight, as the 100-calorie portions sell quickly, and very few consumers are concerned about the nearly 50% price increase they are paying in the process [4].

⁷ Homo economicus (Latin) — the "economic" person, i.e., a rational individual who, acting sensibly, always strives to maximize the benefits received and, when making choices, bases them on their economic outcomes.

Another factor influencing retail demand is the way the quantity of the product being sold is indicated. Sometimes, using units of measurement such as pieces, servings, packs, boxes, sachets, etc., instead of indicating weight in grams or volume in liters, significantly reduces price sensitivity [5], and the desire to purchase a high-calorie food product increases significantly if it's packaging prominently states that it contains mini-portions.

So, the demand for most goods and services is not invariant even to small changes in the framing within the context and setting of sales. And even very slight shifts in emphasis and boundaries of product information presentation can have very serious consequences, up to a local change in the nature of the pricedemand relationship.

Behavioral economics and heuristic pricing

The poor predictability of retail demand raises the question of whether there is any practical sense in highly precise modeling of price elasticity, which will change radically each time (for example, with the slightest changes in the advertising and informational context). Maybe, first of all, it makes sense to figure out what "hidden springs" influence the price perception of target customers, i.e., to determine:

- What internal rules and motives do economic agents follow when perceiving price?
- What circumstances and conditions in each specific case determine the reaction to the price, and under the influence of what does the choice of one or another decision-making mechanism for purchasing occur?
- Will this help the retailer adjust the price set based on classical principles?

Some scholars consider that the canonical demand model can be modified to account for the framing effect and irrational price perception, and the price-demand relationship can be improved by considering gaps and fluctuations

[6]. In doing so, researchers overlook the fundamental differences between the two approaches to pricing. The first — formalized — approach assumes that economic agents have stable preferences regarding the value of products, striving to achieve maximum utility, while the influence of contextual signals is insignificant [7]. Therefore, the priority is given to considering the benefits of the value proposition for customers. In the case of heuristic pricing, it is assumed that the preferences of economic agents and the important values of products for them are quite variable, as they entirely depend on the nature of the incoming contextual signals and their personal perception [8]. Thus, this pricing approach primarily focuses on the psychological aspects that influence perceived economic value.

Heuristic pricing studies the real behavior of buyers based on spontaneous judgments and decisions. It is not limited by postulates about the nature of the price-demand relationship, nor by axiomatic propositions about the tendency of economic agents towards rational utility and their stable value preferences, but is based on the integration of seemingly disparate ideas aimed at explaining specific behavioral responses to prices [9, 10]. Thus, some researchers assume that people prefer a compromise between the offered prices and product options [11]. Others base their conclusions on the assumption that consumers analyze prices by comparing them to certain "reference" prices for similar goods. Thirdly, some argue that buyers perceive prices according to their feelings regarding the necessity to spend money and incur expenses [12]. Recognizing that all these algorithms, which determine the attitudes of economic agents towards retail prices, work in certain situations and under the influence of specific triggers, heuristic pricing unites various perspectives on the motives of price perception [13].

So, the central postulate of the heuristic approach to pricing is that there are various rules

and mechanisms for making decisions regarding purchases and prices, the application of which varies among economic agents depending on the situation and individual characteristics. For example, an obviously inflated price will deter some from making a purchase, while for others it will serve as confirmation of the product's superior quality and positively influence their decision to buy. Moreover, an individual may perceive the price as unfair, but it is not necessarily the case that this judgment will lead to a refusal to purchase in certain circumstances and situational contexts. Thus, heuristic pricing is based on the understanding that the influence of prices on the purchasing decision is rooted in the knowledge of how the mechanisms and rules, whether consciously or unconsciously, are relied upon by economic agents when perceiving and understanding retail prices.

Psychological principles of decision-making regarding price acceptability and purchasing

When perceiving prices and considering the feasibility of a purchase, people usually follow certain rules that regulate the internal mechanisms influencing their decisions [14]. In this regard, based on the literature on behavioral economics and pricing [15], as well as from the experience of observing the actions of economic agents in various situations and circumstances [16, 17], certain characteristics can be identified in people's behavior when forming their attitudes towards prices and purchases.

- 1. Judgments of buyers regarding the acceptability of prices are pluralistic, diverse, and based on a set of internal rules and mechanisms, selectively used depending on circumstances and context:
- when making and paying for a discretionary purchase⁸ people always hesitate and ex-

perience doubts (and sometimes even strong negative emotions and psychological pain of loss associated with parting with money), especially if they end up spending more than they initially intended and/or can afford [18, 19];

- in the case of a regularly purchased and widely distributed product, the offered price is compared with some benchmark (reference market average) [20, 21];
- when prices seem opaque, and the seller's sincerity is in doubt, they are guided by an internal sense of fairness in the price offer [22, 23];
- if they see the seller's uncertainty, they may try to negotiate a price reduction and/or an installment payment plan [24–27];
- when it comes to purchasing a high-end product from a well-known brand, they assess whether its price is commensurate with the expected consumer utility [28,29];
- when faced with an alternative choice between expensive durable goods with multiple functions and more budget-friendly options, albeit with fewer features, a compromise is sought between the price and the breadth of functionality [30];
- in a situation of rising inflation expectations and allowing for the potential partial destabilization of food supplies, today's Russian consumers are increasingly moving away from the principles of a free market, which are the foundation of classical economic theory and canonical pricing, contradicting the notion that the price-demand relationship is always illustrated by a monotonically descending curve [31].
- 2. There are correlations between the context of purchases and decision-making mechanisms. That is, people tend to associate the nature and conditions of purchases with certain internal rules of price perception. For example, they associate the price of exclusive services and luxury brand products with their consumer utility; purchases in supermarkets and marketplaces with

⁸ A discretionary purchase is made spontaneously at the buyer's personal desire, rather than according to a plan, rules, accepted commitments, and/or necessity.

Table 1

Mechanisms and Rules for Perceiving the Price of a Product and Making Decisions about a Purchase, Inherent in Economic Agents

Rules and mechanisms of price perception	Explanations and notes					
Doubts and worries when paying: am I spending more than I have or planned to spend?	The economic agent evaluates whether he is spending more money than he actually has or can afford, and how he feels deep down about such expenditures. If he feels uncomfortable, morally uneasy (or even pained) parting with money, he refrains from making the purchase					
Price comparison: how does the product's price compare to the market average and the prices of similar products?	The individual weighs whether the price of the product is lower or higher compared to the reference price. If it is higher, the purchase will not take place					
Sense of price fairness: an internal opinion on whether the price is reasonable and justified?	A person decides whether the price is adequate, whether the pricing is understandable and transparent to them, and whether it is worth buying at an inflated price with opaque pricing					
Relevance of bargaining: will the price be a subject of discussion and negotiation with the seller?	In some cases, the price may be at parity, and the economic agent will make the purchase if an acceptable price can be negotiated					
Correlation of price with value: does the price of the product correspond to its expected utility and the benefit that the economic agent will receive by purchasing and consuming it?	The buyer is contemplating whether the price matches the value of the product as he understands it. He is willing to pay more if the value of the product (service) is significantly higher					
Compromise between price and functionality: am I paying for exactly the features and options of the product that I need?	The consumer compares the price with the features and properties of the product they will receive by paying it. They choose the product with the specific options they need at the corresponding price					
Adjustment for supply instability and price increase: will there be another opportunity to buy, and what will happen next with the price?	The economic agent fears that the product will disappear from the market or become more expensive, and strives to make the purchase as quickly as possible					

Source: Developed by the authors.

the ability to compare prices of similar products; and the acquisition of expensive second-hand items with price negotiations. In other words, specific circumstances and the type of product trigger corresponding algorithms for perceiving its price and making a decision about its acquisition.

3. When considering price offers, economic agents tend to use a combination of rules and mechanisms. For example, they may simultane-

ously experience doubts, compare prices, seek a compromise between prices and product functionality, etc., which collectively leads to the final decision.

The aforementioned features of consumer behavior are integrated into *Table 1*.

STUDY DESIGN

- 1. A pool of informational materials has been formed, which includes scientific articles, proceedings of scientific and practical conferences, and online posts by practicing specialists. The criteria for selecting publications were both the relevance to the research topic (search by keywords) and the timeliness.
- 2. Based on the ideas gleaned from the selected materials, a selection of methodological approaches was conducted, and a guide ("roadmap") for interviews with experts was compiled; algorithms for price perception and purchase decision-making were formulated (*Table 1*); and scenario cases were developed to immerse interviewees in various retail shopping and selling situations (*Table 2*).
- 3. To obtain answers to the research questions, a series of in-depth interviews was conducted, involving more than 110 Russian experts, ho are simultaneously retail customers and representatives of retail-related businesses, with an average age of 37 years. Two-thirds of them are women, and 59% of the respondents live in Moscow and the Moscow region. All participants in the study are either current students of additional business education programs or have been such in the past.

Initially, experts as representatives of the business community were required to state which of the approaches to pricing tasks outlined below, in their opinion, predominates in the business practices of Russian retailers:

- application of cost-based pricing (costs plus expected profit according to the established profitability norm);
- the use of the classic price-demand relationship in formalized pricing, associated with the difficulty of collecting and processing reliable data for its modeling;

Heuristic pricing — taking into account the irrational evaluative psychology of economic agents when making purchasing decisions under the influence of the peculiarities of subjective price perception, as well as due to individual internal mechanisms and rules.

Then the interviewees acted as buyers and were presented with seven scenario cases (left column of *Table 2*): each had to match only one of the price decision-making mechanisms (*Table 1*). The question to the experts was formulated as follows: "Which price and purchase decision-making rule will you, as consumers, follow first?" The study was open-ended — participants were informed in advance about its goals and objectives.

THE RESULTS OF THE STUDY AS EMPIRICAL CONFIRMATION OF THE AMBIGUITY OF RETAIL PRICE PERCEPTION

The first part of the study, when experts acted as representatives of the business, showed that 39% of them consider that Russian retail companies typically use formalized pricing based on the classic price-demand relationship. A third of the respondents (33%) considered that heuristic accounting of the psychology of retail buyers is carried out, including the peculiarities of subjective price perception and the presence of internal mechanisms and rules for making purchasing decisions. The remaining

 $^{^9}$ The error is estimated as $\sqrt{Z^2 P(1-P)/n}$ 100%, where n- is the sample size (n=110), Z- is the standardized deviation (at a confidence level of 95% Z = 1,96); P- is the variation for the sample. In the worst-case scenario (when P = 50%) the error is less than 10%, which is quite acceptable for this study, the aim of which was merely to confirm the hypothesis that Russian retail consumers, when considering the same price offers and making decisions regarding the purchase of identical goods and services, are guided by significantly different motivational rules and behavioral criteria.

Table 2

Options of Choice for a Russian Customer Regarding Rules and Mechanisms Decision Making about Price and Purchase, Based on the Case, in%

Rules and mechanisms for decision making Scenario cases	1. Payment doubts	2. Price comparison	3. Feeling the fairness of the price	4. Appropriateness of bargaining	5. Matching price to value	6. Trade-off between price and functionality	7. Adjustment for supply instability and price increases
Desk lamp While browsing the product catalog, you see a vintage table lamp that perfectly matches the interior of your home, and you feel an urge to buy it. The lamp is expensive. You check your cash and find that you have already exceeded your budget, surpassing your average monthly expenses, and the balance on your bank card is lower than usual.	80	0	4	2	10	4	0
Toothpaste While on a trip to the store, you remember that you're running out of toothpaste at home, and you consider two brands of toothpaste that you usually use.	0	68	6	0	18	8	0
Smartphone from the mobile operator You want to change your smartphone. Your mobile operator is running a promotion with a discount on exactly the smartphone you need. However, upon reviewing the details, you realize that the operator's offer is only for new customers, i.e., those who are switching from another provider. Unfortunately, this promotion does not apply to you, and you will have to buy a new smartphone without a discount.	2	12	50	12	10	8	6
Apartment on the secondary market You are looking for an option to buy a property on the secondary market. You have viewed several apartments, and one particularly caught your eye. The realtor confirmed the cleanliness of the documents and the possibility of the transaction. However, in your opinion, the price is somewhat inflated by the seller and could be lower.	2	14	8	56	12	4	4
Banquet at an upscale restaurant You are hosting a banquet at a trendy restaurant. The establishment has excellent cuisine, a pleasant atmosphere, and great service. You are reviewing the menu and placing an order.	10	4	12	4	62	8	0

Table 2 (continued)

Rules and mechanisms for decision making Scenario cases	1. Payment doubts	2. Price comparison	3. Feeling the fairness of the price	4. Appropriateness of bargaining	5. Matching price to value	6. Trade-off between price and functionality	7. Adjustment for supply instability and price increases
New laptop You are choosing between three laptop models. The first has a large screen, a super-powerful processor, and a discrete graphics card. The second has a mediumsized screen, a mid-range processor, and an integrated graphics card. The third has a relatively small screen, a weak processor, and an integrated graphics card. The first laptop is the most expensive, the second is of average price, and the third is the cheapest.	0	4	2	0	8	82	4
Personal car You want to purchase a new car of a specific model in a particular configuration. The dealership you approached for the purchase informed you that there is only one such car left in stock, and it has a minor paint surface damage. The next batch of cars will arrive no earlier than in a couple of months, and by that time, their price in rubles will most likely increase. As an alternative, the dealership offered a car of the same model but in a more expensive configuration and at a higher price.	2	2	4	2	10	12	68

Source: Developed by the authors.

participants (28%) stated that cost-based pricing (costs plus expected profit) prevails among the retailers they are familiar with.

The results of the second part of the study, in which experts acted as buyers, are presented in *Table 2* and *Fig. 2*, where the shares of economic agents willing to follow a particular rule and/or decision-making mechanism regarding price acceptability depending on the situation are indicated. Three important conclusions can be drawn from the obtained data.

Firstly, although the dominant tendencies to use certain decision-making mechanisms

depending on the case largely coincide, there is still no complete unanimity among the interviewed individuals — there is a noticeable range of opinions. For example, in the case of buying an apartment, more than half of the experts (56%) noted the appropriateness of bargaining. However, for 14%, comparing prices was a priority; 12% would first look at the correspondence between price and value, and 8% would start with the fairness of the price. This means that the consumer paths to forming judgments about prices and making purchases are quite varied.

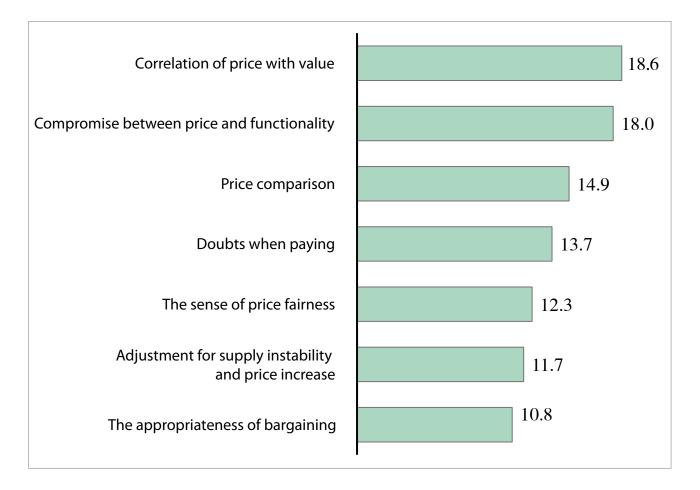


Fig. 2. Frequency of Resorting to Various Mechanisms and Rules Regarding Retail Prices for Decision Making by Russian Economic Agents (in per cent)

Source: Developed by the authors.

Secondly, connections have been established between the specific content and context of the purchase (product or service, discretionary or essential, large or small, etc.) with certain dominant rules of price perception and the most commonly used mechanisms of consumer choice, namely:

- 80% of survey participants, when asked whether to spend on an unplanned purchase of an expensive desk lamp, responded that they would follow the "Doubt at Payment" rule, considering whether they are about to spend more than they can afford and listening to their inner voice, feelings, and emotions;
- when buying toothpaste, 68% of the interviewed will use the "Price Comparison" mechanism and see how the offered product price

compares to the market average and the prices of similar products;

- consider the feasibility of purchasing a smartphone from "their" mobile operator, 50% of the study participants will do so, guided by the "Perception of Price Fairness" according to their personal opinion on whether it is reasonable and justified;
- thinking about the offer to buy an apartment on the secondary market, 56% of experts will inquire about the "Possibility of negotiation", i.e., whether the price will be a subject of discussion with the seller regarding the likelihood of its reduction;
- when ordering a banquet at a trendy restaurant, 62% of experts will follow the "Price-

Value Ratio" rule, weighing whether the requested price matches the level of service and the establishment's image;

- when choosing a laptop, 82% of experts will make a "Compromise between price and functionality" provided that the computer has the required user options and technical specifications;
- when purchasing a new car, 68% of respondents will make an "Adjustment for supply instability and expected price increase", considering whether another opportunity to buy will arise and what will happen with the price.

Thirdly, decision-making mechanisms vary in terms of universality and frequency of application. The rules "Price-Value Correlation" and "Compromise between Price and Functionality" are mentioned more frequently than others. When considering the organization of a banquet, as well as the purchase of toothpaste, an apartment, a car, a desk lamp, and a laptop, respectively 62, 18, 12, 10, and 8% of the study participants will follow the first rule. In contrast, 82, 12, and 8% will follow the second rule.

Overall, the study allows us to draw several general conclusions, namely:

- the perception of retail prices by Russian consumers is pluralistic in nature; it is ambiguous and multifaceted.
- the reaction of an economic agent to a price can arise spontaneously and often occurs irrationally.
- buyers consciously or unconsciously adhere to certain stereotypical approaches and resort to standard decision-making mechanisms regarding prices;
- when forming a personal opinion about the price and feasibility of a purchase depending on the situation and informational context, consumers are guided by various internal motives, emotions, techniques, and restrictive rules, such as payment doubts, price comparison, the

sense of price fairness, the appropriateness of bargaining, correlating price with value, the compromise between price and functionality, adjusting for supply instability and price increases;

• the observed changes in product offerings under current conditions, possible disruptions in individual product supplies, and rising inflation can lead to the formation of an opinion about the lack of alternatives to the current price and push towards accelerating the planned purchase.

CONCLUSION

It can be acknowledged that under modern economic conditions, the principle of utility maximization in rational consumer behavior is good for explaining how free markets reach equilibrium without any regulatory intervention. However, this rule proves insufficient for accounting for the peculiarities of the cognitive processes underlying the perception of retail prices of specific products by mass Russian consumers, which should be taken into consideration in practical pricing.

The main scientific result of the conducted research is the confirmation that the contemporary perception of retail prices by Russian economic agents is ambiguous, individual, and subject to cognitive distortions. It is based on the use of certain internal decision-making rules and the application of a number of characteristic mechanisms, and it significantly depends on the context of the specific case and the presentation of informational content. The final attitude towards the price is formed due to personal psychological traits and tendencies, activated consciously or unconsciously. All this expands the practical basis for price formation in Russian retail and indicates a conceptual direction for further study of the nature of retail prices.

Limitations of the results and directions for further research. The conducted study raises new questions that require further scientific

inquiry. Based on an analytical review of previously published papers, seven mechanisms and rules of perception of retail prices by economic agents were identified and examined. However, it is not obvious that this list is exhaustive and definitive. In addition to the identified seven, other equally important algorithms may be discovered, for example, those related to the use of discount-bonus systems and anchor prices by sellers [32–34].

Another aspect of the problem is identifying the relationship between the mechanisms and principles of decision-making under consideration and how they interact, whether there are any common motives and fundamental factors underlying these mechanisms, and whether there is some initial basis from which all these rules derive. In this regard, it can be assumed that the activation of any fundamental principal triggers others. Moreover, it seems that different consumer psych types have specific characteristics in making price-related decisions — for example, misers may lean towards one mechanism of price perception, while spendthrifts may lean towards another. The assumption that people use different rules depending on the context is intuitively appealing in terms of seeking answers to the posed questions. To approach an explanation of how economic agents link

a particular mechanism of purchase decisionmaking in a specific situation, it would be useful to construct a decision tree that takes into account the rational and irrational components of this process.

And finally, without rejecting the assumptions that economic agents may have sufficiently stable purchasing preferences, are mostly inclined to maximize consumer utility, and are not limited in cognitive abilities, it is advisable to continue exploring the possibility of modifying the classic price-demand relationship by introducing empirical adjustments that take into account the psychological aspects underlying spontaneous judgments about prices and irrational product preferences of domestic retail consumers.

All the issues raised by the authors of the article indicate the need for continued research, the results of which are intended to deepen today's understanding of how retail prices are perceived by Russian economic agents, as well as to assist domestic entrepreneurship in improving retail pricing for consumer goods and services in our country. The results obtained and the conclusions drawn during the work should be used in teaching management disciplines in higher education institutions that prepare specialists for work in the modern economy of Russia.

REFERENCES

- 1. Sokolova T., Seenivasan S., Thomas M. The left-digit bias: When and why are consumers penny wise and pound foolish? *Journal of Marketing Research*. 2020;57(4):771–788. DOI: 10.1177/0022243720932532
- 2. Laurent G., Vanhuele M. How do consumers read and encode a price? *Journal of Consumer Research*. 2023;50(3):510–532. DOI: 10.1093/jcr/ucad005
- 3. Karzhin M. Pricing with psychology in mind: Strategies and examples. Dramtezi.ru. 2023. URL: https://dramtezi.ru/zametki/naznachenie-tsen.html (accessed on 17.11.2024). (In Russ.).
- 4. Chakravarti A., Thomas M. Why people (don't) buy: The go and stop signals. London: Palgrave Macmillan; 2015. 223 p. DOI: 10.1057/9781137466693
- 5. Monnier A., Thomas M. Experiential and analytical price evaluations: How experiential product description affects prices. *Journal of Consumer Research*. 2022;49(4):574–594. DOI: 10.1093/jcr/ucac010

- 6. Polman E., Maglio S.J. Improving the generalizability of behavioral science by using reality checks: A tool for assessing heterogeneity in participants' consumership of study stimuli. *Perspectives on Psychological Science*. 2023;18(4):955–975. DOI: 10.1177/17456916221134575
- 7. Hydock C., Wathieu L. Not just about price: How benefit focus determines consumers' retailer pricing strategy preference. *Journal of Consumer Research*. 2023;50(3):447–467. DOI: 10.1093/jcr/ucad043
- 8. Thomas M. Heuristic price theory: A model of pluralistic price evaluations. *Consumer Psychology Review*. 2023;6(1):75–91. DOI: 10.1002/arcp.1087
- 9. Bogatyrev S. Y. Theory of behavioral pricing. *Audit i finansovyi analiz = Audit and Financial Analysis*. 2019;(6):98–105. (In Russ.).
- 10. Solov'ev P.V. Behavioural pricing. *Aktual'nye problemy i perspektivy razvitiya ekonomiki: rossiiskii i zarubezhnyi opyt.* 2020;(3):129–132. (In Russ.).
- 11. Li H., Xiao Q., Peng T. Optimal pricing strategy of new products and remanufactured products considering consumers' switching purchase behavior. *Sustainability*. 2023;15(6):5246. DOI: 10.3390/su15065246
- 12. George N.L., Krishnan M.R. Pain of paying and different payment paradigms. *New Innovations in Economics, Business and Management*. 2022;4:161–167. DOI: 10.9734/bpi/niebm/v4/15522D
- 13. Hamilton R. Consumer price evaluation strategies: Internal references, external references, and price images in consumer price perception. *Consumer Psychology Review*. 2024;7(1):58–74. DOI: 10.1002/arcp.1093
- 14. Golovkova E.V. The interaction of economics and psychology, the concept of economic psychology. *Sovremennaya ekonomika: problemy i resheniya = Modern Economics: Problems and Solutions*. 2016;(8): 26–32. (In Russ.). DOI: 10.17308/meps.2016.8/1483
- 15. Kummaeva Z. M. S., Ryabicheva O. I. Psychology of pricing. *Sovremennye nauchnye issledovaniya i razrabotki*. 2018;2(11):405–408. (In Russ.).
- 16. Plis K. S., Celik M. E., Kononovich K. D. Pricing psychology as a modern marketing instrument: The experience of international companies. *Aktual'nye problemy ekonomiki i upravleniya*. 2022;(1):456–462. (In Russ.). DOI: 10.52899/978–5–88303–644–5 456
- 17. Gerasimenko V.V., Simonov K.V. Pricing in the Russian exhibition market: Modern trends and range of solutions. *Marketing i marketingovye issledovaniya*. 2018;(1):62–80. (In Russ.).
- 18. Chan E. Y. The consumer in physical pain: Implications for the pain-of-paying and pricing. *Journal of the Association for Consumer Research*. 2021;6(1):10–20. DOI: 10.1086/710245
- 19. Park J., Lee C., Thomas M. Why do cashless payments increase unhealthy consumption? The decision-risk inattention hypothesis. *Journal of the Association for Consumer Research*. 2021;6(1):21–32. DOI: 10.1086/710251
- 20. Kyung E.J., Thomas M. When remembering disrupts knowing: Blocking implicit price memory. *Journal of Marketing Research*. 2016;53(6):937–953. DOI: 10.1509/jmr.14.0335
- 21. Loschelder D.D., Friese M., Schaerer M., Galinsky A.D. The too-much-precision effect: When and why precise anchors backfire with experts. *Psychological Science*. 2016;27(12):1573–1587. DOI: 10.1177/0956797616666074
- 22. Filinkova E.B., Seleznev V.N. Moscow consumers' perception of price. *Vestnik Moskovskogo gosudarstvennogo oblastnogo universiteta. Seriya: Psikhologicheskie nauki = Bulletin of the Moscow Region State University. Series: Psychology.* 2017;(4):120–136. (In Russ.). DOI: 10.18384/2310–7235–2017–4–120–136

- 23. The psychology of pricing: 10 psychological effects of price perception. Eldey Group. 2023. URL: https://eldey.ru/blog/pricing-psychology/ (accessed on 17.11.2024). (In Russ.).
- 24. Malc D., Selinšek A., Dlačić J., Milfelner B. Exploring the emotional side of price fairness perceptions and its consequences. *Economic Research*. 2021;34(1):1931–1948. DOI: 10.1080/1331677X.2020.1860790
- 25. Jindal P., Newberry P. To bargain or not to bargain: The role of fixed costs in price negotiations. *Journal of Marketing Research*. 2018;55(6):832–851. DOI: 10.1177/0022243718818451
- 26. Thomas M., Kyung E. J. Slider scale or text box: How response format shapes responses. *Journal of Consumer Research*. 2019;45(6):1274–1293. DOI: 10.1093/jcr/ucy057
- 27. Cardella E., Seiler M.J. The effect of listing price strategy on real estate negotiations: An experimental study. *Journal of Economic Psychology*. 2016;52:71–90. DOI: 10.1016/j.joep.2015.11.001
- 28. Grubman K. The psychology of pricing: Learning from great brands. Cossa. 2023. URL: https://www.cossa.ru/152/126416 (accessed on 17.11.2024). (In Russ.).
- 29. Shakhanovich D.V., Lymareva O.A. Notion of "quality", "price" and "value" in the subjective perception of consumers. *Ekonomika ustoichivogo razvitiya = Economics of Sustainable Development*. 2016;(2):336–342. (In Russ.).
- 30. Goncharov I.L., Gorelova O.A. Psychology of consumer choice and its influence on pricing in market conditions. *Vestnik universiteta (Gosudarstvennyi universitet upravleniya)*. 2020;(8):110–116. (In Russ.). DOI: 10.26425/1816–4277–2020–8–110–116
- 31. Dashyan S. G., Volkova K. S. Features of consumer behavior in the context of the economic crisis and inflation. In: 36th International Plekhanov readings: Coll. pap. conf. particip. Moscow: Plekhanov Russian University of Economics; 2023:317–321. (In Russ.).
- 32. Medvedeva O.S. Psychological impact of discounts and sales on the buyer. *Kaluzhskii ekonomicheskii vestnik*. 2017;(2):61–65. (In Russ.).
- 33. Yarovova T.V., Eliseev F.A. Study on anchor prices in the pricing psychology modern financial research. *Vestnik Akademii znanii = Bulletin of the Academy of Knowledge*. 2023;(2):287–291. (In Russ.).
- 34. Ye H., Bhatt S., Jeong H., Zhang J., Suri R. Red price? Red flag! Eye-tracking reveals how one red price can hurt a retailer. *Psychology & Marketing*. 2020;37(7):928–941. DOI: 10.1002/mar.21331

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Conflicts of Interest Statement: The authors have no conflicts of interest to declare.

The article was submitted on 21.05.2024; revised on 18.11.2024 and accepted for publication on 13.01.2025.

The authors read and approved the final version of the manuscript.