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Consumer perception towards private label brands in the Republic of Serbia

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***Abstract**: Private label brands have an important role in modern economy-oriented consumption. Private label brands have large market shares in developed countries with market share rates that often exceed 50% of the total market share. This means that every second or at least every third purchased product is some kind of private label brand. The market of the Republic of Serbia is also moving in this direction, with increasing consumer awareness of the benefits that these brands provide to them. The importance that private label brands have for the identity of trade companies and their positions on the market has become irreplaceable. As part of the work, the results of a survey conducted on respondents in two cities in the Republic of Serbia were analyzed to examine their perceptions of private label brands. The research results were analyzed by the factor analysis as a statistical technique for data reduction. Also, non-parametric tests are done to determine statistical significance of differences between different sample groups regarding to private label brands in Serbia. The aim of the paper is to clarify the concept of private label in modern*

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trade, to point out some prejudices about products under these brands and to additionally clarify consumer perceptions of private label brands.

***Keywords**: Private label, factor analysis, trade, Republic of Serbia, market.*

Percepcija privatnih robnih marki u Republici Srbiji od strane potrošača

***Apstrakt**: Brendovi trgovinskih robnih marki imaju važnu ulogu u savremenoj ekonomski orjentisanoj potrošnji. Brendovi trgovinskih robnih marki imaju veliki tržišni udeo u razvijenim zemljama sa stopama tržišnog udela koji često prelaze 50% ukupnog tržišnog udela. To znači da je svaki drugi ili barem svaki treći kupljeni proizvod neka vrsta trgovinske robne marke. U ovom pravcu se kreće i tržište Republike Srbije, uz sve veću svest potrošača o prednostima koje im ovi brendovi pružaju. Značaj koji brendovi trgovinskih robnih marki imaju za identitet trgovačkih kompanija i njihove pozicije na tržištu postao je nezamenljiv. U okviru rada analizirani su rezultati ankete sprovedene na ispitanicima u dva grada u Republici Srbiji kako bi se ispitala njihova percepcija brendova trgovinskih robnih marki. Rezultati istraživanja su analizirani faktorskom analizom kao statističkom tehnikom redukcije podataka. Takođe, urađeni su i neparametarski testovi kako bi se utvrdila statistička značajnost razlika između različitih grupa uzoraka u pogledu brendova trgovinskih robnih marki u Srbiji. Cilj rada je da razjasni pojam trgovinske robne marke u savremenoj trgovini, da ukaže na neke predrasude o proizvodima pod ovim brendovima i da dodatno razjasni percepciju potrošača o brendovima privatne robne marke.*

***Ključne reči**: Robna marka, faktorska analiza, trgovina, Republika Srbija, tržište.*

1. Introduction

The distribution chain power shift from producers to trading companies, and especially to retailers, is a predominant characteristic of modern trade. The struggle of producers for a place on retail shelves has intensified significantly and is becoming a necessary condition for existence of these producers. Therefore, it should not be surprising how much importance and which position private label brands have achieved in today's global market by offering an excellent ratio of lower prices and standardized quality (Božić & Aćimović, 2016).

Private label products represent products under the name of a particular trade chain, as opposed to national brands of manufacturers. These products are usually priced lower, have a less attractive design, and occupy a significant part of the retailer's assortment.

Different consumers have different perceptions of these products. For some, purchasing products under private label brands is a smart choice because it represents a good price-quality ratio, while for other consumers, this choice is not a good one because they believe that products under private label brands do not offer satisfactory quality. Through this paper, the authors tried to discover more about Serbian consumers' perceptions of private label brands, since this topic is becoming increasingly relevant due to the noticeable trend of increasing retail prices. The authors were also interested in which brands Serbian consumers buy the most.

The paper has both theoretical and practical contributions. The theoretical contribution is reflected in the fact that no similar research has been conducted in the Republic of Serbia so far, where the concept of a private label brand is relatively new and consumer perceptions of these products are still developing. Also, the work in this regard can serve as a theoretical basis for some future research through surveys on this topic. The practical contribution is reflected in the fact that domestic retailers get a clearer picture of the attitude of domestic consumers towards products under their brands and, in accordance with this knowledge, retailers can adjust their brand policy (lower prices, attractiveness of the packaging, shelf positioning, etc.). Considering this work, retailers also get a clearer picture of which private label brands in Serbia are more recognizable compared to others, which may indicate the necessary rebranding measures for these retail chains.

The paper is structured as follows. In the first section, authors emphasized the importance of the private label brands for modern global market, a brief overview of the origin and role of the private label brands to this day is also shown. The nature of the private label as a business arrangement between the producer and the trading company is explained. Also, empirical data on market shares held by private label brands in some of the most developed countries in Europe are shown along with the explanation of roles and market shares held by private label brands when it comes to individual fast moving consumer goods categories.

In the second section, the authors highlighted importance that private label brands have for individual trading companies. The causes and motives that would encourage consumers to buy products under private label brands are also analyzed, as well as those that would negatively affect them in terms of buying products under these brands. At the end of the section authors analyzed the issue of the quality of these products in relation to national brands.

In the third section, which is the result of the research carried out by the authors, are given the results of the factor analysis, which includes a total of 35 individual variables in the form of questions from a survey conducted on a sample of 158 respondents from two cities in the Republic of Serbia. This research aimed to analyze the perceptions of consumers towards private label brands. The variables were derived from already published scientific papers that conducted similar research. As part of the factor analysis which is carried out to group the variables into factors, total of 8 different factors was obtained. Each factor has been given significant factor weights from different variables.

Since the private label brands have a significant share in the sales of modern trade and considering that there are gaps in the economic literature in this area, it is believed that this paper will contribute to a better understanding of the concept of the private label brands and their role in contemporary trade.

2. Literature review

Despite the fact that private label brands as a retail concept have been present in the market for decades, there are still unfilled gaps in the contemporary retail literature. Ndlovu compared consumer perceptions on private label brands in Europe and Africa, concluding that perception of consumers on private label brands in Europe has improved leading to larger market shares. On the other hand, in Africa there seems to be lack of improvement in the perceptions of private label brands compering to national brands (Ndlovu, 2019). Other research focused at the consumer’s perceptions towards private label and its implication on repurchase intention Suresh Kumar (2016), considered factors such as perceived price, perceived quality, perceived risk, and private label or store label loyalty for the independent variables, private label was chosen for the moderating variable while repurchase intention was chosen for dependent variable. As a result of his research, perceived price, quality and risk were proven to significantly influence label intention, while label intention was confirmed to influence repurchase intention. Further research, determined the factors and variables that significantly influence and shape the consumer’s perception and attitude towards the purchase of private label products (Valaskova, Kliestikova & Krizanova, 2018), highlighting that consumers are interested in buying private label products mainly because of their low price, while 20 % of respondents consider the quality as the important factor of influence. Authors also proved that demographic features (age, gender, education, income, and status) can also determine the consumer attitudes to private label products.

In 2020. authors Gangwani, Mathur and Shahab created a model which illustrates the influence of consumer perceptions towards private label familiarity, affective perception, perceived quality, perceived value, and perceived risk perceptions including functional risk, financial risk, and social risk perceptions on store loyalty (Gangwani, Mathur & Shahab, 2020). The study found that favourable consumer perceptions of apparel private label brands of retail department stores significantly influence the consumer to be loyal to the store.

In 2022. authors Mumin and Phang focused their research on Gen Y consumer's perceptions and preferences towards private label brands. Their analysis confirmed that both store and individual characteristics such as perceived risk, private label brand image, and familiarity with private label brands have significant relationships with the attitude towards purchasing private label brands, while consumer innovativeness did not appear to be a key consideration in forming private label brand-related attitude (Mumin & Phang, 2022; Ćelić at al., 2020).

A research conducted on a slightly larger scale, including 10.000 respondents focusing on quality comparison between private labels and manufacturer brands among Hungarian consumers' reveal that more than half of the respondents (52.3%) believe that the quality of private label products is comparable to that of manufacturer-branded products, while 14.7% even consider it superior (Szucs & Foldi, 2024).

The research conducted among Serbian consumers analyzed private label policies of leading domestic retail chain as well as the share of private label brands in different assortment categories of these chains (Končar, Vukmirović & Katai, 2010). However, research papers on the topic of private label brands omits to provide clear analysis of consumer perceptions towards private label brands. Identified literature gap was the primary focus of this research, formulating a research question: Is it possible to construct an instrument measuring perception of private label aspects. Furthermore, the results of this research were subjected to non-parametric statistical tests in order to determine the existence of statistically significant differences in perceptions between respondents by gender and employment status.

3. The specifics of the private label arrangement and the role of the private label in modern retail

The growing importance of the private label is related to the second half of the 20th century and is considered as one of the main features of the trade revolution (increased power of the retailer in relation to other participants in the distribution chain). However, the concept of the private label originated much earlier in the 19th century in the clothing market. The company "Brooks Brothers" sold clothes such as shirts and summer suits under its own private label. Not long after that, these brands also took part in the food market, for example the company "Atlantic and Pacific Tea Company" created four brands of tea such as "Cargo", "High Cargo", "Fine" and "Finest" (Long, 2022).

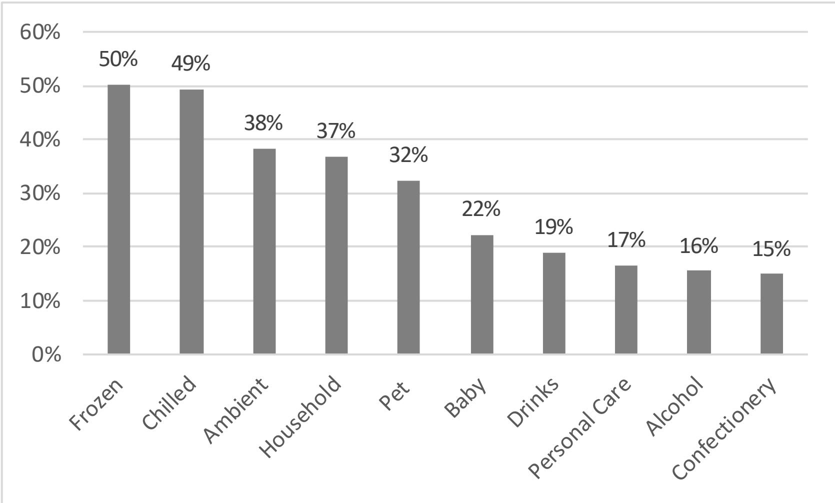
The idea of the private label is to distinguish a retail chain or wholesaler in relation to the competition and other national brands. In this sense, retailers are said to represent a "manufacturers without factories", but it is necessary to note that a large number of wholesalers also have their own private label brands, for example the German wholesale chain "Metro - cash and carry", which has a whole range of wholesale private label brands such as "Aro", "Rioba", "Metro chief", "Metro professional", "Tarrington house", "Sigma", "Metro premium", "Fine life" etc. (Metro Cash & Carry Srbija, 2024).

Thus, be it retail or wholesale, a private label is the result of a specific arrangement between the trading company on the one hand and the producer or packaging company (in the case of, i.e. imported generic products) on the other. The two basic elements of these arrangements are the wholesale price paid buy trading company and the quantity of private label products that trading company can purchase. Since private label brands still draw their competitive advantage (especially in the food sector) from price, it is clear that retailers strive for extremely low wholesale prices charged by the producers. Producers therefore gain a very low profit (margin) per unit of the product, which further implies the importance of the quantity of products that are the subject of a specific arrangement (Končar, Vukmirović & Katai, 2010). From the producer's point of view, since the wholesale price is extremely low (and very often defined as fixed by contractual clauses, which creates additional risk for the producer), it is necessary that this quantity is profitable. In this sense, the position of the producer is more difficult if the products of the private label brand are food products, because in that case the trading company is limited in terms of purchased quantities, not that much due to limited storage capacity, but due to the shelf life of these products (expiring dates of products). On the other hand, trade companies (retailers and wholesalers) very often impose extremely large financial penalties in case of late or non-fulfilling deliveries by the producers. In a theoretical case, these penalties are so large that it would be more profitable for the trade companies to charge them from the producers in comparison to successfully fulfilled delivery of products under private label brands by the producers. Also, the nature of these arrangements (between trade companies and producers) is such that the producer very often agrees to sell private label products to the trading company on a commodity credit which shifts the burden of financing of these supplies from the trading company to the producer. Considering everything that is previously said about nature of these arrangements, the claim that the private label concept is one of the main features of the trade revolution, which took place at the end of the 20th century, gains its practical verification.

In the modern global retail market, the research conducted by "Nielsen" is quite representative, covering as many as 19 countries. In most of the countries, 15 out of 19, every third product purchased by the final consumer is a private label product. The largest market share of private label brands, 52% was achieved in Spain, which practically means that consumers in this country buy more products under private label brands than products under national brands. In Germany, the share of private label brands in total retail sales reached 45%. According to the research, the market share of private label brands in consumption has reached its national maximum in time period observed in: the Netherlands, Turkey, Norway, Sweden and Belgium. The largest increase in the market share of private label brands in the total market share was recorded in Turkey, where the increase of share was 26%. Also, growth was recorded in Scandinavian countries, the market share of private label brands in Finland, Norway and Sweden was above 30% (Sharoff, 2019).

Further “Nielsen“ research shows that (in the second quarter of 2022) the share of private label brands in the total global sales of trading companies was 19.4%. Taking the individual world regions into account, the largest share achieved by the private label brands in the total sales was in Western Europe with a 36% of a total share, followed by Eastern Europe 14.7%, North America 14.4%, Asia 6.1%, Africa 6.1%, while the smallest share achieved by the private label brands in the total sales of trading companies was recorded in the South America where it was only 2.3% (NielsenIQ, 2022).

Figure 1: The share of private label value per each FMCG category in Europe



Source: (Ozbun, 2024).

Considering the fact that the share of the private label products in the total sales of trading companies was largest in Europe, authors presented the share of these brands in the individual categories of Fast moving consumer goods (FMCG). The global FMCG market will reach a value of 18,96 trillion dollars in 2032 (Skyquestt, 2024) with an estimated global compound annual growth rate 3.8%, compared to previously estimated CAGR of 5.1% (Marić, Vukmirović, Nuševa, Vučenović, & Macura, 2024). As it can be seen in figure 1, the category with the largest share of private label brands in the total sales in Europe was frozen food with a share of 50%, the second largest share was recorded in chilled food with a 49% of total share. The smallest share of private label brands was achieved in the category of alcoholic beverages, around 16%, and in the category of confectionery products, around 15% (Ozbun, 2024).

4. Consumer perceptions towards private label brands and market analysis of private label brands in the Republic of Serbia

For an individual trading company, the consumer's perception of company's private label brand is inseparable from the consumer's perception of the trading company that owns that brand. Consumer satisfaction with specific private label brand will be transferred to the perception of the entire trading company. This is particularly evident when it comes to private label brands that contain the name of a trading company in their name.

Specific policy is commonly used in practice, i.e. “Maxi“ a Serbian supermarket chain owned by the "Ahold Delhaize“ offers several private label brands as a part of broader strategy to increase the share of private label sales. Some private labels are named as chains, such as "Delhaize" private label brand, following practice of other global trade chains that use this approach including the British "Tesco", the American "Kroger" and the German "Aldi". (Lovreta & Petković, 2013). Chosen strategy makes the brand policy of a trading company extremely sensitive due to this relationship of perceptions (Končar, Vukmirović, & Leković, 2011).

Considering the entire trade sector, consumer perception of private label brands is much more complex. Research conducted by the company "Smart Plus Research LLC" in a sample that included 1.000 respondents in the Republic of Serbia shows that "private label brands are bought because of affordable prices, as well as because of the excellent price-quality ratio" (Smart Plus Research, 2023). Consumers were asked to name a factor that would further encourage them to buy private label products. As many as 36.3% of respondents believe that an additional price reduction would encourage them to buy, 34.2% believe that additional promotion of these products would encourage them, about 32.1% of respondents believe that it is necessary to improve the quality of these products, about 20% believe that they would be encouraged if these products occupy relatively more space on the shelves compared to national brands, 17.6% of respondents believe that it is necessary to increase the reliability of these products, 16.4% of respondents believe that they would buy more products under the private label brands if the attractiveness of the packaging of these products was increased, 14.9% of them believe that they would buy more if different private label brands were available in other retail chains. Even 12.3% of respondents claim that there is nothing that would make them buy these products more often (Smart Plus Research, 2023).

Although in the research of "Smart Plus Research LLC“ the quality of private label products as a factor that would further encourage the purchase is not in the first two places, this factor is very often emphasized as the reason why consumers prefer to buy national brands instead of private label brands. Research conducted by the "Consumer advisor", which is an association for consumer protection in the Republic of Serbia, shows that there is no fundamental difference in quality between more expensive national brands and more affordable brands under the private label. As part of the research, "Consumer advisor" compared the composition and nutritional values of food products under national brands and under private label brands, both produced by the same producers. The research showed that there is no difference between the composition of these two categories (national brands and private label brands) of products. "Even the line-up order of ingredients was exactly the same" (Consumer advisor, 2015). In this regard, the claim of producers, who produce for trade companies under private label brands, that the reason for the lower prices of these products is a changed recipe, in the sense of a lower participation of higher quality ingredients, no longer seems to be true. The research of the "Consumer advisor“ has shown that products under national brands and under private label brands are actually the same products with different packages.

This association also points out that "due to the harmonization of domestic and European regulations, the obligation to highlight (on the product) who is the real producer of the product has been abolished in the domestic trade law." (Consumer advisor, 2015). This can be concerning considering that research carried out by "Smart Plus Research LLC" showed that as many as 25% of surveyed consumers often check the declaration of products under private label brands to see who is the actual producer of these products (Smart Plus Research, 2023).

5. Research methodology

The survey consisted of three parts. The first part generated information about demographic and regional characteristics of respondents. Second part offered 35 statements measuring perception towards private label characteristics on 5-degree Likert scale. While the third part focused on ranking previously chosen and given specific brands of individual trading companies most frequently bought in Serbian market.

The sample for examining the perception of products under private label brands in the Republic of Serbia was obtained through social networks, online platforms and live by filling out an online Google survey. Most of the respondents were students from the University of Novi Sad. The sample included 158 respondents, mostly women, under the age of 25, from the cities of Novi Sad and Subotica. The survey has been carried out from March to June 2024. The SPSS (Statistical package for social sciences) was used for data analysis in both factor analysis and non-parametric tests.

In the sample of 158 respondents who filled out the questionnaire, female respondents dominate with 114 respondents (72.15%), the number of male respondents is 43 (or 27.22%), while one person did not declare the gender. When it comes to the age of the respondents, the sample consists of people of a younger age. It should be mentioned that all respondents are under the age of 30, therefore the description of the sample according to this feature was not analyzed.

Employment status in the sample of 158 people revealed that the unemployed respondents dominate. As many as 140 (88.6%) are unemployed, 9 respondents (5.69%) from the sample are employed in the public sector, while another 9 respondents (5.69%) are employed in the private sector. Education status in the sample of 158 respondents was distributed as: completed high school dominated with 136 respondents (86.07%), only 2 people (1.26%) have completed 2-3 years college, 16 people (10.12%) have completed four-year bachelor studies, 4 of them (2.53%) have completed master's academic studies. However, there are no respondents with completed PhD studies in the sample.

The instrument included 35 questions based on a Likert scale (absolutely disagree, disagree, neutral, agree, absolutely agree). All 35 questions, or statements, were derived from previously published scientific papers as it is shown in Table 1 in order to create the instrument. Table 1 presents in detail the journal articles used for forming potential variables, collecting statements that were used as items in the analysis. Authors used three most suitable scientific papers as a primary source (Fernando, 2019; Tochanakam & Munkunagorn, 2011; Burton, Neremeyer & Folse, 1998).

Chosen items, or 35 questions, were subjected to exploratory factor analysis to group individual variables (questions) into factors.

Table 1: Review of the literature and factors used as items in current research

Name od the factor	No of derived variables	Papers, authors and year of publication
Private label awareness	3	"The role of Loyalty in Private label Consumer based Brand Equity" Joao Tavares Fernando, 2019.
Private label loyalty	4	
Colectivistic culture	3	"Consumer behavior towards private label brands: A study of Thai undergraduate students' experience" Kedyanee Tochanakarn & Pongsatorn Munkunagorn, 2011.
Private label risk	3	
Private label price	4	
Quality	2	
Private label attitude	2	
Percieved low quality of private label	2	
Private label attitude	6	"A Scale for Measuring Attitude Toward Private Label Products and an Examination of Its Psychological and Behavioral Correlates" Scot Burton, Richard G. Neremeyer and Judith Anne Garretson Folse, 1998.
Percieved low quality of private label	4	
Private label loyalty	2	

Source: Authors.

The second part of the research included determining the respondents' preferences for specific brands of individual trading companies (the respondents were asked to rank specific brands from 1 – most favorite to 7 – least favorite of all available for ranking). Based on this part of the survey the existence of a statistically significant difference in brand preferences was examined between the respondents of different gender and employment status. The non-parametric statistical test "Mann-Whitney U Test" was used to determine a statistically significant difference by gender, while the non-parametric statistical test "Kruskal-Wallis Test" was used to determine the statistically significant difference in preferences according to employment status.

6. Results

6.1. Factor analysis

The first step of the factor analysis is the decision whether it is justified to use it. The decision was made on the basis of the Kaiser-Meier-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity (Sig.) indicators.

Table 2: Results of justification of factor analysis.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.818
Bartlett's Test of Sphericity	Approx. Chi-Square	2582.178
	df	595
	Sig.	0.000

Source: Authors.

Considering that the KMO coefficient is greater than 0.6 (in this case 0.818) and that the significance for Barlett's test is less than 0.05 (in this case it is 0.000), it can be concluded that the data obtained by the survey is suitable for carrying out factor analysis. Also, it should be mentioned that the Correlation Matrix table showed that there is a significant number of correlations (connections between individual questions) greater than r=0.03, and therefore it can also be considered that the results of the survey are suitable for conducting factor analysis (Pallant, 2017).

Table 3: The structure of factors according to characteristic values and the total percentage of variance explained.

Total Variance Explained			
	Initial Eigenvalues		
Component	Total	% of Variance	Cumulative %
Private label attitude	7.679	21.940	21.940
Percieved low quality of private label	4.152	11.863	33.803
Private label loyalty	2.896	8.273	42.076
Private label price	2.234	6.382	48.458
Private label awareness	1.639	4.684	53.142
Quality	1.336	3.817	56.959
Private label risk	1.328	3.795	60.754
Colectivistic culture	1.143	3.267	64.021

Source: Authors.

Considering the data from the table 3 below, it can be seen that the 8 factors have characteristic values greater than 1, i.e. that the total variance of all variables explained by a given factor is greater than 1. These 8 factors (components) together explain 64.02% of the total variance, with the first factor explaining a total of 21.94%, the second factor explaining 11.86%, the third factor explaining 8.27%, the fourth factor explaining 6.38%, the fifth factor explaining 4.68%, the sixth factor explaining 3.81%, the seventh factor explaining 3.79%, while the eighth factor explains a total of 3.26% of the variance of the sample. All other factors individually explain less than 3% of the variance and will not be considered.

Table 4: Variables and factor weights for the associated factor.

	Component							
	Private label attitude	Percieved low quality of private label	Private label loyalty	Private label price	Private label awareness	Quality	Private label risk	Colectivistic culture
Smart shopper PL	0.804							
Most for the money PL	0.756							
Its a good deal	0.704							
I prefer PL	0.631							
Great value for money	0.604							
I seek PL	0.603							
I love PL								
Less expensive PL		0.864						
Low quality PL		0.855						
Risky purchase PL		0.800						
National brands are better		0.785						
Poor quality		0.677						
Afraid of PL quality		0.641						
I am loyal to PL			0.744					
PL despite same features			0.669					
I respect PL buyers			0.636					
Best buy for all categories			0.602					
PL makes me feel good			0.539					
PL makes sense to buy								
Price importance of little things				0.800				
Price preference				0.785				
Finding a lower prices				0.734				
Cheapest prices when buying				0.691				
PL recognition					0.772			
PL design					0.716			
Logo of PL					0.609			
Price primary reason								
High quality importance						0.820		
Quality sacrifice for price						0.798		
Information about new products							0.709	
Being sure before buying							0.681	
Risky things avoidance							0.636	
Others opinions								0.788
Sense of belonging								0.595
Shopping with family								
Extraction Method: Principal Component Analysis.								

Source: Authors.

Table 4 shows variables grouped together forming a significant factor and weights assigned to it (above 0.6). The first factor named "Private label attitude factor" was given high factor weights by the variables "Smart shopper PL" (0.804), "Most for the money PL" (0.756), "It's a good deal" (0.704), "I prefer

PL" (0.631), "Great value for money" (0.604) and "I seek PL" (0.603). The mentioned variables refer to the consumer's attitude towards private label brands.

The second factor named "Perceived low quality of private label factor" was given large factor weights by the variables "Less expensive PL" (0.864), "Low quality PL" (0.855), "Risky purchase PL" (0.800), "National brands are better" (0.785), "Poor quality" (0.677) and "Afraid of PL quality" (0.641). The variables mentioned refer to the perception of products under private label brands as lower quality products.

The third factor named "Private label loyalty factor" was given large factor weights by the variables "I am loyal to PL" (0.744), "PL despite same features" (0.669), "I respect PL buyers" (0.636), "Best buy for all categories" (0.602) and "PL makes me feel good" (0.539). The mentioned variables refer to the loyalty of consumers towards the private label brands.

The fourth factor named "Private label price factor" was given high factor weights by the variables "Price importance of little things" (0.800), "Price preference" (0.785), "Finding a lower prices" (0.734) and "Cheapest prices when buying" (0.691). The mentioned variables refer to the importance of the price of the product when purchased by the consumer.

The fifth factor named "Private label awareness factor" was given large factor weights by the variables "PL recognition" (0.772), "PL design" (0.716) and "Logo of PL" (0.609). The mentioned variables refer to the possibility of easy recognition of symbols, packaging, but also the products under private label brands.

The sixth factor named "Quality factor" was given high factor weights by the variables "High quality importance" (0.820) and "Quality sacrifice for price" (0.798). The above-mentioned variables refer to the importance of quality as a factor when purchasing products.

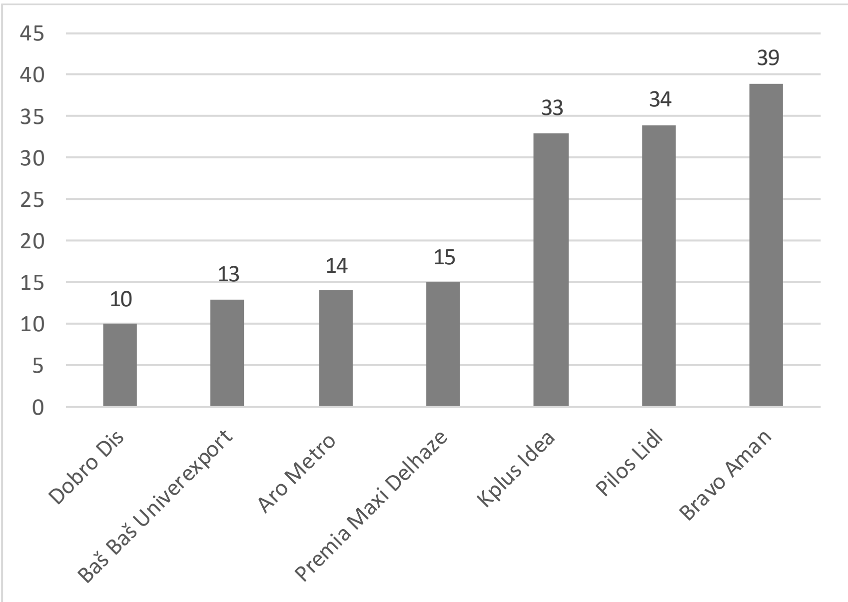
The seventh factor named "Private Label Risk factor" was given large factor weights by the variables "Information about new products" (0.709), "Being sure before buying" (0.681) and "Risky things avoidance" (0.636). The variables mentioned refer to risky situations and consumers' willingness to expose them to greater risk during the purchase process.

The eighth factor named "Collectivistic Culture factor" was given high factor weights by the variables "Other's opinions" (0.788) and "Sense of belonging" (0.595). The mentioned variables refer to cultural and social perceptions of the purchase process by consumers. It is necessary to mention that the variables "I love PL", "PL makes sense to buy", "Price primary reason" and "Shopping with family" did not give significant factor weights (above 0.600) to any of the analyzed factors.

6.2 Non-parametric tests

From a sample of 158 respondents, respondents were asked to rank a total of 7 brands of different trading companies from the best perceived brand (rank 1) to the least favorite perceived brand (rank 7). The results of this research were subjected to non-parametric statistical tests to determine the existence of statistically significant differences in perceptions between respondents by gender and employment status.

Figure 2: Private label brands of different trading companies ranked in ascending order.



Source: Authors.

As it is shown in the Figure 2, the best-ranked private label brand is the "Bravo" brand of the "Aman" retail chain, with as many as 39 (24.68%) respondents recognizing and ranking this brand as the best. The brands that are also ranked in the first 3 places are the brand "Pilos" of the trade chain "Lidl" with 34 (21.51%) respondents who ranked it as the best and the brand "K plus" of the trade chain "Idea" with 33 (20.88 %) of respondents who ranked it as the best. All other brands were not ranked as the best by at least 10% of respondents from the sample.

Table 5: Statistical significance of differences in individual private label brand preferences by gender

Hypothesis Test Summary				
	Null Hypothesis	**Test**	**Sig.**	**Decision**
1	The distribution of Best ranked private label brand is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	0.903	Retain the null hypothesis
Asymptotis significances are displayed. The significance level is .05				

Source: Authors

As it is shown in the Table 5, there is no statistically significant difference in the ranks of individual private label brands of different trading companies according to gender P-value=0.903 > α=0.05. The best-ranked brand by both genders is the "Bravo" private label brand of the "Aman" retail chain (28 female respondents and 11 male respondents). The second best-ranked brand by both genders is the "Pilos" brand of the trading company "Lidl" (24 female respondents and 10 male respondents).

Table 6: Statistical significance of differences in individual private label brand preferences by employment status

Hypothesis Test Summary				
	Null Hypothesis	**Test**	**Sig.**	**Decision**
1	The distribution of Best ranked private label brand is the same across categories of Employment.	Independent-Samples Kruskal-Wallis Test	0.887	Retain the null hypothesis
Asymptotis significances are displayed. The significance level is .05				

Source: Authors

Table 6 presents results of the second Independent Samples Kruskal-Wallis test leading to the conclusion that there is no statistically significant difference in the ranking of individual private label brands of different trading companies according to employment status, P-value=0.887 > α=0.05. The best-ranked brand by unemployed respondents (35 respondents) and respondents who are employed in the private sector (2 respondents) is the "Bravo" private label brand of the "Aman" trading company. The best ranked brand of respondents employed in the public sector (4 respondents) is the brand "Pilos" of the trading company "Lidl".

7. Conclusion

Although "Smart Plus Research's" research showed that private label brand products are purchased due to their affordable price, the share of these products in the overall sales of trading companies clearly indicates that these items are not only purchased by price-oriented customers. This further implies the reliability and quality that these products provide (it is clear that private label brand products are in most cases just differently packaged national brand products). On the other hand, although private label brand arrangements, as a specific type of business contract, are usually associated with better conditions for traders, a large number of producers find it as a profitable business model based on long-term cooperation (a lot of producers produce only private label brand products under the names of the trade chains).

Considering the conducted factor analysis, as many as 31 out of 35 variables gave high factor weights for a total of 8 factors. This confirms the justification of the conducted factor analysis together with the fact that this research registered many high correlations between individual pairs of variables.

Analysis of the ranks of the best perceived private label brands by gender, level of disposable income and employment status, have not proven to be statistically significantly different that does not undermine the importance of conducted research. Filling the gap in literature and conducting the research in the Serbian market was an important step in the right direction. The main contribution of the research was establishing the relevant instrument for measuring perceived aspects of product labels at domestic markets, as well as providing insights into rankings of the most commonly available private labels.

However, there were some limitations that authors faced during the research. Primarily, respondents were not familiar with the term private label brand. Some of the survey participants needed clarifications about the topic, which was immediately provided. Next limitation was related to private label brand names. Some of the participants were not familiar with them, or even mixed them with national brand names, that was timely and adequately explained by interviewers. Further, some younger participants of the survey did not have extensive experience with private label brands in their purchasing experience. However, the conducted analysis is certainly a step forward considering that up to now no similar research of top-ranked private label brands on the market of the Republic of Serbia has been conducted, which fulfills the main objective of the research.

References

Božić, V., & Aćimović, S. (2016). *Marketing logistics.* Belgrade: Faculty of economics in Belgrade. (the original is in Serbian)

Burton, S., Lichtenstein, D., Netemeyer, R., & Garretson, J. (1998). A Scale for Measuring Attitude Toward Private Label Products and an Examination of Its Psychological and Behavioral Correlates . *JOURNAL OF THE ACADEMY OF MARKETING SCIENCE*, 293-306.

Fernando, J. T. (2019, Septembar). The role of Loyalty in Private label Consumer based Brand Equity. *ISCTE Business school*.

Gangwani, S., Mathur, M., & Shahab, S. (2020). Influence of consumer perceptions of private label brands on store loyalty - evidence from Indian retailing. *Cogent Business & Management*, 1-19.

Končar, J., Vukmirović, G., & Leković, S. (2011). The trends of private label development under conditions of recession and retail trade increase in the Repubic of Serbia. *Technics Technologies Education Management*, 796-800.

Končar, J., Vukmirović, G., & Katai, P. Z. (2010). Private label development in the Republic of Serbia. *Business and Economics Horizons*, 105-110.

Kumar, S. (2016). Consumers` perceptions towards private label and its implications on repurchase intention: a case of giant`s customers in Cikarang, Indonesia. *International journal of managerial studies and research*, 94-99.

Long, T. (2022, December). *History Shows How Private Labels and Self-Preferencing Help Consumers.* Retrieved from: Information Tehnology & Inovation Foundation: https://www2.itif.org/2022-private-labels.pdf

Lovreta, S., & Petković, G. (2013). *Trade marketing - fourth edition.* Belgrade: Faculty of economics in Belgrade. (The original is in Serbian)

Marić, R., Vukmirović, G., Nuševa, D., Vučenović, S., & Macura, N. (2024). THE FUNCTIONING OF RETAIL STORES OF FMCG IN CIRCUMSTANCES OF CRISES IN THE REPUBLIC OF SERBIA. *Strategic management and decision support systems in strategic management* (str. 175-182). Subotica: Faculty of Economics in Subotica, University of Novi Sad.

Metro Cash & Carry Serbia. (2024, 07 04). *Metro private label brands*. Retrieved from: Metro.rs: https://www.metro.rs/asortiman/metro-robne-marke?itm_pm=cookie_consent_accept_button. (The original is in Serbian).

Mumin, S., & Phang, I. (2022). Gen Y's Attitude, Perception, Preference, and Intention towards Private Label Brands (PLBs). *Jurnal of marketing advances and practices*, volume 4, issue 2.

Ndlovu, G., S. (2019). Prevailing perceptions and the growth of private label brands in Africa and Europe: An overview. Journal of economics and behavioral studies, 76-83.

NielsenIQ. (2022, September 16). *Private label share around the globe*. Retrieved from: Nielseniq: https://nielseniq.com/global/en/insights/analysis/2022/how-inflation-is-impacting-private-label-sales-trends-globally/

Ozbun, T. (2024, 01 30). *Share of private label value in Europe in 2021, by category*. Retrieved from: Statista: https://www.statista.com/statistics/379890/private-label-value-share-by-product-category-europe/

Pallant, J. (2017). *SPSS Survival Manual, Sixth edition.* Belgrade: Micro Book.

Consumer advisor. (2015, 12 06). *How often you pay even 30% higher price just in order to by national brand?* Retrieved from: https://potrosackisavetnik.com/koliko-cesto-placate-i-preko-30-vise-samo-da-bi-kupili-markiran-proizvod/ (The original is in Serbian).

Ćelić, Đ., Drašković, Z., Uzelac. Z. & Petrov, V. (2018). Differences in attitudes toward internet usage - empirical study from Serbia. International Scientific conference "Strategic management", 17-24.

Sharoff, B. (2019, 06). Each third product is Private label. (The original is in Serbian)

Skyquestt. (2024). *FMCG Market Insights.* Retrieved from: https://www.skyquestt.com/report/fmcg-market

Smart Plus Research. (2023). Quantitative research. Retrieved from: Smart Plus Research: https://www.smart-plus.rs/kvantitativna-istrazivanja/ (The original is in Serbian).

Szucs, S. R., & Foldi, K. (2024). Consumer perception of private label products in Hungary. *European Scientific Journal*, Vol. 20, No. 25.

Tochanakarn, K., & Munkunagorn, P. (2011, May). Consumer behavior towards private label brands: A study of Thai undergraduate students' experience. *Master Thesis*.

Valaskova, K., Kliestikova, J., & Krizanova, A. (2018, September). Consumer perception of private label products: an empirical research. *Journal of Competitiveness*, 149-163.