THE ASSORTMENT STRUCTURE AND THE PRICE LEVELS AS A FACTOR OF MARKETING CHANNEL COMPETITIVENESS–EMPIRICAL EVIDENCE FROM THE REPUBLIC OF SERBIA

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THE ASSORTMENT STRUCTURE AND THE PRICE LEVELS AS A FACTOR OF MARKETING CHANNEL COMPETITIVENESS – EMPIRICAL EVIDENCE FROM THE REPUBLIC OF SERBIA

Abstract

In this paper, the authors point out the differences in the structure of the product assortment of retailers who show their offers on the Web, with the aim of proving that the structure of the assortment may be a factor of marketing channel competitiveness that the consumers recognize and that makes them opt for a certain marketing channel. On the same basis we aim to compare the prices of representative product categories, in order to determine the impact of prices on marketing channel competitiveness, without taking other factors of channel competitiveness into consideration. Based on the conducted research, we can conclude that having a number of categories of products in the assortment presents a competitive advantage for the retailer in the traditional marketing channel since retailers with electronic sales have a more diverse assortment in their retail store than online. Compared to "pure play" electronic retailers, the structure of assortment measured in number of categories of products that are on offer in e-stores is not significantly different between "pure play" and "bricks and clicks" electronic retailers. On the other hand, if we look at the price levels, there is a difference in prices of product categories on websites of "brick and click" retailers since prices in retail stores are higher than prices in the traditional retail store of the same retailer. However, offers on the website of "pure play" electronic retailers are higher compared to "brick and click" retailers.

Keywords: Retailers, "brick and click", "pure play", assortment, product category, prices

1. Introduction

The electronic market in the Republic of Serbia is underdeveloped and characterized by growth of sales and the number of Internet users who become customers and accept this kind of purchasing product. There is a noticeable evaluation of competitiveness of buying on the Internet, from the aspect of both supply and demand, in relation to the difficulties that are still present and in the process of removing (implementation of electronic payments, expanding offers, post sales service, the geographical coverage of delivery, etc.). The previously mentioned only justifies the action of following current research in the area and confirms the need to conduct similar researches on the markets of the surrounding countries. Power relations between the participants, with the advent of electronic marketing channels, have been the subject of research in recent years. Dramatic change caused by e-tailing is a shift between retailers and consumers (Dunne et al., 2014). Special emphasis is put on the consumers that become picky and look for better offers, due to the fall in buying power. In order to attract customers to their offers, retailers are forced to provide comparative advantages over the competition (retail stores and competitors on the Web) through products in their assortment and lower product prices. Wang, Song and Yang (2013) indicate that the Internet is likely to increase the power of consumers, as price comparisons across firms can be performed quickly and easily, which affects the increase of price competition. According to the authors, online prices for homogenous products are often found to be lower compared to those in conventional channels, which may cause sales to shift from the traditional to the online channel. Although this kind of shifting seems economically rational in the conditions of development of electronic retailing in Serbia, consumers rarely switch to electronic marketing channels, even though they do recognize the advantages, due to numerous barriers caused by the underdeveloped and not so credible payment system, slow delivery, impossibility of getting insight into products before buying them, etc.

Brynjolfsson and Smith (2000) emphasize that from an economic perspective, price levels are a particularly useful measure of efficiency. Authors Tang and Xing (2001) find that there is superior pricing efficiency in online markets compared to offline markets. When it comes to competitiveness in Serbian marketing channels, we assume that there are significant differences in prices of assortments of electronic and traditional retailing by the same retailers. Also, there is an assumption that electronic retailing is more competitive than traditional retailing because it has lower prices in the Republic of Serbia. Wallace, Giese and Johnson (2004) drew the conclusion that price is generally an important competitive issue in satisfying customers, when multichannel customers switch to another retailer; the causes focus on single-channel failures and competitive advantage, particularly the price advantage, therefore the price is an important factor in the competitiveness of retailers in all marketing channels.

Keisidou, Sarigiannidis and Maditinos (2011) show the magnitude of online shopping adoption that varies between the developed and developing countries, and understanding the opportunities this new market has to offer is crucial for any business that wants to participate in it and be competitive.

20 "pure play" electronic retailers and 20 "brick and click" electronic retailers (with electronic stores and largest retail store formats) from the Republic of Serbia took part in researching the impact of the assortment structure on channel competitiveness. Within the research of product prices as a factor of channel competitiveness, 10 representative products of a specific product category were taken into account, which makes 200 products covered by the above retailers in their electronic store, or in the retail store for "brick and click" retailers.

2. Review of previous research

Literature in the area of offers on the Web and prices as factors of competitiveness shows that the greatest interest of research is in pricing channel competitiveness as a factor in choosing an electronic marketing channel. The subjects of previous analysis were consumers and their buying decisions in traditional retailing in relation to electronic retailing (Balasubramanian et al., 2005; Degeratu et al., 2000; Keisidou et al., 2011; Lowengart, Tractinsky, 2001). Analysis of product categories includes mainly individual product categories and differences in the traditional and the electronic marketing channel (Lowengart, Tractinsky, 2001; Levin et al., 2003). Numerous studies are related to the comparison of offers in different marketing channel and multi-channel effects (Wallace et al., 2004; Laroche et al., 2005; Kwon, Lennon, 2009; Min, Wolfinbarger, 2005; Wang et al., 2013).

Balasubramanian, Raghunathan and Mahajan (2005) analyze how price sensitivity gains in importance online. They also note the importance of further understanding of consumer goals in accordance with the characteristics of various channels and the relevance of specific channel characteristics may differ according to product or service category. Price sensitivity analysis of Degeraty, Ragaswamy and Wu (2000) shows that online consumers obtain more information about both price and non-price attributes, and more information on prices could increase consumer price sensitivity for undifferentiated products.

One of the first studies involving consumer choice in online and traditional channels and the impact of the product is the research of Degeraty, Ragaswamy and Wu (2000). Based on supermarkets in the traditional marketing channel, in their paper they questioned whether increasing availability of comparative price information online makes consumers more price-sensitive. They propose a conceptual framework to assess the relative impact of brand names, prices, and other search attributes on consumer choices within a specific product category. In conclusion they state concerns that online consumers will focus on price and this will result in strong price competition, which their results prove (at first glance).

Keisidou, Sarigiannidis and Maditinos (2011) emphasize that the majority of studies ignore the effect of different product type importance, and conclude that consumers are reluctant and buy online only those products that they really need and consider important. Lowengart and Tractinsky (2001) used the type of product under consideration as one of the dimensions, since consumers may engage in different purchasing decision processes in different product categories.

Kwon and Lennon (2009) came to the conclusion that consumers attribute higher credibility to well-known retailers than to new Internet start-ups, and multichannel retailers must understand similarities and differences in their customers' expectations for their offline and online stores, so that the two channels can be compatible and complement each other. Min and Wolfinbarger (2002) indicate that new businesses would be more efficient than the older offline businesses, offering, inter alia, better prices, thus, competitive advantages as compared to offline counterparts.

Wang, Song and Yang (2013) analyzed studies that indicate a significant substitutive effect between online and traditional channels, and this result was most pronounced among different product categories.

Min and Wolfinbarger investigated whether retailers of specialized goods (which have a narrower line of services and goods in assortment) have greater success in the electronic sale of various goods (various general assortments with many sales lines). According to the basis, "brick and click" have an advantage over the "pure plays". Retailers are divided according to the product categories and specific segments of consumers, or consumer's needs. The findings of Wang, Song and Yang (2013) reveal a significant substitution effect between online and traditional channels, and their result was robust across different product categories. They indicate that there are few studies that have focused on the influence of product type on the substitution effect between online and traditional channels, and conclude that multichannel retailers need to carefully evaluate the use of channel integration in relation to categories of their target products.

Ancarani and Shankar (2004) questioned whether there is a difference in price levels between the three types of retailers ("pure play", "brick and click" and traditional retailers), whether there is a significant variation in individual retailers, whether "pure play" retailers compete more with "brick and click" than "brick and click", and whether multichannel retailer can be differentiated from other multi-channel retailer based on non-price characteristics. When comparing the price levels, the results of Ancarani and Shankar showed that although prices at "pure play" retailers are lower than at the multichannel and traditional retailers, differences in price are not significant. One limitation to the research of Ancarani and Shankar (2004) is a limited number of product categories, and suggests extension to multiple categories.

Research of Brynjolfsson and Smith (2000) shows that the growth of competition is based on price, online prices for homogeneous products are usually lower than traditional channels which can cause moving the sales from the traditional to the online channel, and an implication of their findings suggests that conventional retailers will find it increasingly difficult to compete on price as long as the substantial differences between channels persist. They find that prices on the Internet are 9-16% lower than prices in conventional outlets. The results of their study show that prices for conventional retailers are no higher than prices in a random sample

of conventional retailers. Their null hypothesis has rejected that mean prices on the Internet are equal to mean prices in conventional stores in favor of the hypothesis that Internet prices are lower than conventional prices, and find that average prices are statistically significantly lower on the Internet than in conventional outlets.

Pauwels, Leeflang, Teerlig and Huirigh (2011) came to the conclusion that the online channel has a negative impact on the traditional channel, due to the fact that consumers may not adopt the full information about the product before buying, and draw attention to the fact that offline retailers should use specific activities to target specific product categories and consumer segments, which indicates our assertion that "brick and click" retailers in Serbia do not sell all categories of products online, but only a limited part of the assortment.

Tang and Xing (2001) compare the behavior between online branches of traditional retailers and pure Internet retailers in their research. The pricing policies of these two types of online organizations differ because of the different competitive environment. They found that prices by pure Internet retailers are significantly lower than prices by online multichannel retailers by an average of $3.27 or 14%, and price dispersion is sharply lower among the pure Internet retailers than among the multichannel retailers online. This difference is much lower between "pure play" retailers than among multichannel retailers. They found that the prices at multichannel retailers have an impact on demand in retail stores, and traditional retail stores have higher prices than online retailers, which in turn makes the difference in prices between these two channels affect the internal competition and conflict between channels. Their research suggests that differences in prices can be higher among traditional retailers than online "pure play" retailers.

Yager and Pasi (2001) and Dabaher, Wilson and Davis (2003) used the cluster analysis of product categories in their research. Yager and Pasi (2001) used clustering of a product line into a number of categories, typically defined by price, and their aim was to allow consumers to easily get a good understanding of the issues involved in choosing a product in a given category with this method. Dabaher, Wilson and Davis (2003) came from a large grocery retailer in New Zealand that has both a nationwide network of stores and an online service, and the categories (and brands) available online are exactly the same as what a consumer could get when shopping in one of their traditional stores. In their research they used cluster analysis to select only categories with high penetration and short purchase cycles, and the final categories exhibit a good representation of typical frequently purchased packaged goods categories.

In our paper, by competition between the "brick and click" and "pure play" we consider not only price levels but also the differences in perceiving offers in form of structure of assortment, looking at the number of product categories (assortment width). It is our aim to identify competition among the "bricks and clicks" retailer's channels looking at the prices and product categories in both marketing channels. The subjects of analysis are the largest electronic retailers in the Republic of Serbia in the category of products that are mostly sold on the Web. The analysis will be based on differences in structure of assortment (assortment width) between "bricks and clicks" shown and sold on the Web in relation to the offers in a retail store, as well as the differences in structure of assortment (assortment width) between "pure play" electronic retailers and their competitors who have a traditional marketing channel. The aim of our study is to point out the differences in the prices of the best-selling product categories between "pure play" retailers and "brick and click" retailers in both marketing channels (traditional and electronic). In our research, we tried to check the price-performance ratio in the "brick and click" and "pure play" on the electronic market of the Republic of Serbia, which is developing and does not have strong competition.

3. Methodology

Growth of e-commerce has the potential of realizing the often-stated economic ideals for a truly competitive market (Tang, Xing, 2001). Within the wake of online shopping's exponential growth, many advantages and some perceived disadvantages of online shopping as compared to shopping offline at traditional "brick and mortar" stores have become apparent (Levin et al., 2003). Lowengart and Tractinsky (2001) have used a model that enables to capture the competitive environment of Internet shopping. Berman and Evans (2010) indicate that electronic retailing has greater success and growth in sales in the "click and mortar" retail (multichannel retailers) than "brick and mortar" (retailers with a traditional marketing channel) and "pure play" Web retailers. Thus,

it can be concluded that the "brick and click" retailers are more competitive in relation to the "brick and mortar" and "pure play" retailers.

The subject of investigation would be the product categories as an indicator of retailer's offers, of retail store and electronic store "brick and click" retailers and electronic store "brick and click" compared to the "pure play" retailer. We assume that retailers with the strategy of "brick and click" have a different assortment width in the retail store and the electronic store, as a certain part of the assortment is displayed and sold online, as claimed by the authors Pauwels, Leeflang, Teerlig and Huirigh (2011) in their research. On the other hand, if we make a comparison with "pure play" electronic stores in the structure of assortment (assortment width), there are considerably more products than in the electronic store of "brick and click" retailers. The hypotheses concerning the structure of the retailer's assortment are the following:

H_1: ***There is a statistically significant difference in the structure of the assortment between the electronic store and the traditional store of the same retailer.***

H_2: ***There is a statistically significant difference in the structure of the assortment between electronic stores of "pure play" electronic retailers and electronic stores of "brick and click" retailers.***

If there is a difference in the offers, and if the assortment is considered as a comparative advantage of a channel, or if the offers are better in a retail store, then the consumer would rather opt for shopping in a retail store compared to an online store, which means that the structure of the assortment is a factor of competitiveness of a retail store compared to an electronic store of the same retailer (if we ignore the other factors).

"Pure play" electronic retailers offer a wider and deeper assortment, because, among other things, they sell as electronic broker for other bidders, while the retailer "brick and click" of an electronic store offers only part of its assortment, which means that the structure of the assortment is a competitive factor for "pure play" electronic retailers in relation to the "brick and click" retailers. Wang, Song and Yang (2013) bring insight that compared with traditional channels, online channels carry a wide selection of products. The hypotheses concerning the differences in price levels are as follows:

H_3: ***There is a statistically significant difference in price levels of product categories between the electronic store and the retail store of the same retailer.***

H_4: ***There is a statistically significant difference in price levels of product categories between electronic stores of "pure play" electronic retailers and electronic stores of "brick and click" retailers***.

Brynjolfsson and Smith (2000) indicated the importance of monitoring the price of the electronic market, which was on the rise in that period, with the characteristics of growing competition. The electronic market in the Republic of Serbia, which is in development, is characterized by a consumer who will, in case the consumer estimates that the price of the same product is lower if it is bought electronically (without the cost of delivery), certainly purchase it electronically, which means that the price is a factor of competitiveness of the electronic stores compared to shopping in a retail store of the same retailer. If prices in "pure play" electronic retailers are lower than the "brick and click" retailers, it will induce the consumer to buy in the "pure play" e-store (and that possibility depends on other factors, which are not the subject of this study). An additional hypothesis has the aim to prove that for certain product categories that are mostly sold on the Internet in the Republic of Serbia there is a difference in price in different retail channels:

H_5: ***There is a statistically significant difference in price levels of four product categories between "pure play" electronic retailers, electronic stores of "brick and click" retailers and traditional stores of "brick and click" retailers.***

Research of differences in offers and prices at e-store and retail store "bricks and clicks" retailers and "pure play" electronic retailers was conducted using the t-test. The t-test was used in examining whether there is a statistically significant difference between the arithmetic means of the number of product categories on the website "brick and click" and "pure play", or the retail store and the price level in the retail store and electronic store "brick and click" or on the website of "pure play".

The t-test for dependent samples was used to examine the significance of the difference in the assortment structure in electronic sales as well as traditional channels of trading with the same retailer ("brick and click"). The t-test for independent samples was used to examine the significance of the difference

in the assortment structure and of "pure play" electronic retailers and "brick and click" electronic retailers. The t-test for dependent samples was also used to examine the significance of difference in product prices in electronic and traditional sales of the same retailers. The t-test for independent samples was used to examine the significance in differences between "pure play" electronic retailers and "brick and click" retailers. Analysis of variance (ANOVA) was used to examine the difference in prices of four most selling product categories on the Internet (household goods, clothes and sport apparel, electronic equipment and books, magazines and newspapers) with three retailing channels (retail store, electronic sales of "brick and click" retailer and "pure play" electronic retailers). Scheffé's test was used to examine the difference in prices between individual retail channels for different product categories.

The empirical research was conducted in the period June-August 2015. For data collection, the technique of "desk research" was used for analyzing offers of online electronic retailers, and "field research" was used for listing the prices in retail stores of "bricks and clicks" retailers. The survey included 20 "brick and click" electronic retailers (20 e-stores and 20 retail stores) and 20 "pure play" electronic stores, and 10 categories of products for which prices were listed on the website of "brick and click", "pure play" and in the traditional store, making a total of 200 product price by format (electronic or traditional) retailers. Data were analyzed with the statistical package SPSS 22.0.

4. Empirical data

According to the Statistical Office of the Republic of Serbia, as it is shown in Table 1, products that are mostly sold on the Internet are in the following product categories: clothing and sports apparel, household goods, electronic equipment and books including magazines and newspapers. The largest electronic retailers sell these categories of products in Serbia. Other product categories have a share of less than 10% (Statistical Office of the Republic of Serbia, 2015)[1], and thus are excluded from the research. Compared to the best-selling product categories on the Web, it can be seen that the habits of consumers in Serbia when buying on the Web do not differ from the habits of consumers on the Web in general, and in comparison to the market in developed countries where electronic retailing is much more developed. According to Berman and Evans (2010), categories of products that are mostly sold via the Web in 2012 are: clothing and sports equipment 12.5%, computer hardware and software 11.1%, car kits 9.2%, 8.8% electronic equipment, furniture and household equipment 8.0%, devices and tools 5.0%, etc. If we consider the product categories in e-retailing, according to Laudon and Traver in 2015, the most sold were: mass merchant products, computers and electrical goods, office equipment, apparels, accessories, books, CDs and DVDs, household goods, etc. Based on the analysis of the categories of products that are sold at electronic stores and data collected during the study, conclusions can be made about the sale of "pure play" and "brick and click" electronic retailers.

Table 1 ***Product categories that are the most ordered via the Internet in the last 12 months in the period 2007-2015 in the Republic of Serbia – in percentage***

Year / Product category	2007	2008	2009	2010	2011	2012	2013	2014	2015
Clothing and sports apparel	4.90	20.40	22.90	19.80	21.10	36.70	29.60	50.10	44.70
Household goods and DIY (furniture, toys etc.)	20.50	13.10	12.60	19.00	29.20	17.70	20.10	15.90	14.90
Electronic equipment (including video cameras)	14.40	26.30	14.40	10.30	23.80	11.50	19.10	23.10	16.40
Books/magazines/newspapers	37.10	32.00	10.90	23.90	14.20	13.30	15.10	12.10	10.30

Source: Statistical Office of the Republic of Serbia, 2015

"Pure play" electronic retailers are predominantly engaged in the sale of household goods (this group includes furniture, toys and baby equipment) in the Republic of Serbia. The second largest retailers are specialized retailers that cover a certain specific segment of consumers (such as hobbyists), or a specific product category (e.g. boats, tires, personalized products, personalized business gifts, etc.). The success of the coverage of a specific segment of consumers has been realized by Wang, Song and Yang (2013) and they came to the conclusion that there may be advantages to specializing on the Internet because the Web aggregates niche markets and offers consumers products that they may not be able to buy easily offline. All these best-selling product categories are present when it comes to the "bricks and clicks" retailers. In recent years, the electronic retail of food products has been developing among the largest retail company in Serbia, with limited market delivery of the product to the consumer's home. However, their share in the total electronic retail is negligible, and therefore will not be a subject of analysis.

The descriptive statistical method was used to get a basic insight into gathered data. The results are shown in Table 2. When it comes to the prices of products, "pure play" electronic retailers have the lowest prices (AS=6571) valued in dinars, and the smallest range in prices of different products (R=117489) valued in dinars, while prices and range of products are higher with "brick and click" electronic retailers (AS = 16854; R = 479813) valued in dinars, and traditional "bricks and clicks" retailers (AS = 17872; R = 479988) valued in dinars. When it comes to the product assortment structure, the greatest number of product categories is owned by traditional retailers (up to 48) where the modal value of the number of categories is 19. Electronic sales of traditional retailers follows (Max = 41; MOD = 8) with electronic retailers in the third place (Max = 19; MOD = 5).

Table 2 Descriptive statistics for the variables used in the study

		N	Min	Max	Range	AS	SD	Mode
Prices	Electronic retailing /click and brick	200	186.00	479999	479813	16854	43078	-
	Traditional retailing	200	10.79	479999	479988	17872	43231	-
	Electronic retailing /pure players	200	0.49	117490	117489	6571	13227	-
Number of product categories	Electronic retailing / click and brick	20	3	41	38	11.1	9.55	8
	Traditional retailing	20	6	48	42	21.55	10.80	19
	Electronic retailing /pure players	20	4	19	15	10.7	4.53	5

Source: Authors' research

The modal value is used with categorical data (counting, frequencies) instead of mean value which would not be justified to use here. Since Mod presents the most frequent category it means that out of 20 "brick and click" retailers, most of them have 8 categories.

5. Results and discussion

Using empirical data we examine whether there is a statistically significant difference between the arithmetic means of the number of product categories on the "brick and click" and "pure play" websites, as well as a difference between the number of product categories in the retail store, and a difference between the price levels in the retail store and electronic store "brick and click" or on the website of the "pure play" retailer.

Differences in the assortment structure are shown in Table 3 and suggest that there are significant differences in the assortment structure between electronic and traditional retailing of the same retailers ("brick and click") ($t(19) = -5.55$, $p < .001$), where traditional retail stores have a more diverse product assortment ($AS_{dif} = -10.45$).

Table 3 Differences in the assortment structure between electronic and traditional retailing of the same retailers ("brick and click" retailer)

AS_{cs}	SD_{cs}	AS_{ct}	SD_{ct}	AS_{dif}	r	p_r	T test	df	p_t
11.10	9.55	21.55	10.80	-10.45	.69	.001	-5.77	19	**.000**

** CS – electronic retailing; CT –traditional retailing; r – correlation*
Source: Authors' research

Looking at the basis of the structure of the assortment, the traditional retail channel is more completive than the electronic channel of the same retailer, and that confirms the first hypothesis.

The results shown in Table 4 show that there are no significant differences in the assortment structure between "pure play" and "brick and click" retailers (t (38) = -0.17, p > .05).

Table 4 Differences in the assortment structure between "pure play" and "brick and click" retailers

AS_{pp}	SD_{pp}	AS_{bc}	SD_{bc}	AS_{dif}	T test	Df	p level
10.70	4.53	11.10	9.55	-0.40	-0.17	38.00	0.866

** PP – pure play; BC – bricks and clicks*
Source: Authors' research

On this basis, there is no significant difference in the structure of the assortment of "pure play" electronic retailers and "brick and click" retailers, and the assortment structure has no importance in competitiveness between these two retailers, so hypothesis 2 is not confirmed.

Differences in prices are shown in Table 5 and they suggest that there are significant differences in prices of assortments of electronic and traditional retailing of the same retailers (t (199) = -7.32, p < .001), where traditional retail stores have higher product prices (AS_{dif}= -1018.10).

Table 5 Differences in prices of assortments of electronic and traditional retailing of the same retailers

AS_{cs}	SD_{cs}	AS_{ct}	SD_{ct}	AS_{dif}	r	p_r	T test	Df	p_t
16854.14	43078.37	17872.24	43231.71	-1018.10	.999	.000	-7.32	199	**.000**

** CS – electronic retailing; CT – traditional retailing; r – correlation*
Source: Authors' research

Electronic retailing is more competitive than traditional retailing because it has lower prices, indicating that hypothesis 3 is confirmed.

Results in Table 6 show that there are significant differences in prices of assortments between "pure and play" electronic retailers and e-sale of "brick and click" retailers (t (398) = 3.23, p = .001) and that "pure play" electronic retailers have higher product prices (AS_{dif} = 10282).

Table 6 Differences in the assortment structure between "pure play" and electronic sales of "brick and click" retailers

AS_{pp}	SD_{pp}	AS_{bc}	SD_{bc}	AS_{dif}	T test	Df	p level
16854.14	43078.37	6571.62	13227.12	10282.51	3.23	398	**.001**

** PP – pure play; BC – bricks and clicks*
Source: Authors' research

Higher prices of "pure play" electronic retailers indicate the competitiveness of electronic sales of "brick and click" retailers, and on the basis of this analysis hypothesis 4 is confirmed.

General effects of differences in prices of four top selling categories on the Internet (household goods, clothes and sport apparel, electronic equipment and books, magazines and newspapers) with three retail channels (retail stores, electronic sales of "brick and click" retailers and "pure play" retailers), and differences between three different retailers types for specific product categories, are shown in Table 7. The results suggest that there are statistically significant differences between three different retailers on the level of each individual category ($p < 0.01$).

Table 7 Differences in prices with the "pure play" retailers, electronic sales of "brick and click" retailers and retail stores for different product categories

Category	F	Df	P
Household products	5.08	2, 145	**0.007**
Clothes and sport apparel	97.25	2, 151	**0.000**
Electronic equipment	99.17	2, 155	**0.000**
Books, magazines and newspapers	41.62	2, 137	**0.000**

Source: Authors' research

Examining price differences in prices with individual retailing channels for different product categories are shown in Table 8. When it comes to household goods prices, electronic sales of "brick and click" (AS_{I-J} = 34382.8, $p < .05$) and retail stores of "brick and click" (AS_{I-J} = 35305.7, $p < .05$) have significantly higher prices than "pure play" electronic retailers, but they do not differ in the height of prices (AS_{I-J} = -922.9.8, $p > .05$). The results are similar for clothes and sports apparel- electronic sales of "brick and click" retailers (AS_{I-J} = 4725.1, $p < .001$) and retail stores of "brick and click" retailers (AS_{I-J} = 5787.6, $p < .001$) have significantly higher prices than "pure play" electronic retailers, while they only marginally differ one from another where "brick and click" retail stores have prices that are a bit higher (AS_{I-J} = -1062.5, $p = .07$). Electronic sales of "brick and click" retailers have significantly higher prices of electronic equipment than do retail stores (AS_{I-J} = -625.8, $p < .01$) and "pure play" retailers (AS_{I-J} = 2226.1, $p < .001$) while retail stores of "brick and click" retailers have higher prices of electronic products than "pure play" (AS_{I-J} = 2851.9, $p < .001$). As for prices of books, magazines and newspapers, electronic sales of "brick and click" retailers (AS_{I-J} = 614.1, $p < .001$) and retail stores of "brick and click" retailers (AS_{I-J} = 713.1, $p < .001$) have significantly higher prices than "pure play" electronic stores but they do not differ in height of prices (AS_{I-J} = -99.0, $p < .05$).

Table 8 Differences in prices among individual retail channels for different product categories

	I	J	AS_I	SD_I	AS_J	SD_I	AS_{I-J}	p
Household goods	1	2	54914.9	75439.5	55837.7	74712.5	-922.9	0.997
	1	3	54914.9	75439.5	20532.0	21217.9	34382.8	**0.027**
	2	3	55837.7	74712.5	20532.0	21217.9	35305.7	**0.022**
Clothes and sports apparel	1	2	8964.7	2720.9	10027.2	2533.3	-1062.5	*0.070*
	1	3	8964.7	2720.9	4239.6	1412.2	4725.1	**0.000**
	2	3	10027.2	2533.3	4239.6	1412.2	5787.6	**0.000**
Electronic equipment	1	2	3507.4	1227.2	4133.2	1209.2	-625.8	**0.008**
	1	3	3507.4	1227.2	1281.3	443.9	2226.1	**0.000**
	2	3	4133.2	1209.2	1281.3	443.9	2851.9	**0.000**
Books/magazines/newspapers	1	2	955.6	466.7	1054.6	516.3	-99.0	0.534
	1	3	955.6	466.7	341.6	231.2	614.1	**0.000**
	2	3	1054.6	516.3	341.6	231.2	713.1	**0.000**

** Legend: 1 – "brick and click"; 2 – retail store; 3 – "pure play" retailers; AS_{I-J} – difference in mean values of the groups*
Source: Authors' research

Based on the above, hypothesis 5 is confirmed, and analyses show that in the category of household products "pure play" retailers have more competitive prices than traditional retailers (in terms of both its retail channels), while in analyses of retail channels of "brick and click" retailers there is no significant price competition between channels. In the category of clothing and sports apparel, the same competition occurs between "pure play" retailers compared to traditional retailers in all retail channels. On the basis of the level of prices of clothing and sports apparel, the electronic retailing is more competitive in that traditional retailing for "brick and click" retailer. Electronic equipment has more competitive prices at "pure play" electronic retailers and electronic stores of "brick and click" retailers rather than in traditional stores. When it comes to books, magazines and newspapers, "pure play" electronic retailing is more competitive than traditional retail sales in both retail channels.

6. Conclusion

In terms of the number of product categories in the retail store and the electronic store it can be seen that there is a difference in the structure of the assortment of the same retailer. In this way, retailers offer a wider range of products in their retail stores, so their traditional channel is competitive regarding the structure of the assortment. The subject of further analysis should be the correlation between turnover of products in the retail store, which are also shown in the electronic store, in order to determine whether the presentation of products on the Web affects the growth of sales in retail stores. Research has shown that the competition between electronic stores, "brick and click" and "pure play" retailers is not significant in terms of the structure of assortment, so it can be considered that the structure of the assortment, in terms of the number of product categories, are not a factor of competitiveness, and indicates that retailers should rely on other strategies to achieve competitiveness on the Web (such as price levels).

Retailers in the Republic of Serbia do offer lower prices for products in their electronic stores compared to retail stores, so we can draw the conclusion that prices are a factor of marketing channel competitiveness to "brick and click" retailers. The subject of future research should be whether this decision has influence on marketing channel cannibalization, and whether consumers recognize the other factors of competitiveness of e-marketing channels that will influence the growth of traffic in the electronic store without affecting the traditional marketing channel. This research has shown that the prices are a factor of competitiveness between the two electronic retailers "pure play" and "bricks and clicks", and that "pure play" retailers offer higher prices than "bricks and clicks" retailers, so if "pure play" want to compete with "brick and click" retailers, they must opt for other factors of competitiveness. The subject to the following research should be the impact of traditional marketing channels on selling on the Web, compared to the "pure play" retailer that has no traditional stores. We also offered insight on price trends of the best selling product categories on the Web in Serbia, which could influence decisions about selling products on the Web by retailers. These conclusions present significant findings that could make the decision of developing electronic sales easier and show the current state of competition between the marketing channels when structure assortment and prices level are taken into consideration. Depending on consumer targeting and the state on the market, retailers can get an idea of both the current and prospective state as well as base their decision on electronic retailing on the findings presented here.

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STRUKTURA ASORTIMANA I RAZINE CIJENA KAO ČIMBENIK KONKURENTNOSTI MARKETINŠKIH KANALA — ISKUSTVA REPUBLIKE SRBIJE

Sažetak

U ovome radu, autori ukazuju na razlike u strukturi ponude maloprodavača koji prikazuju svoj proizvodni asortiman na internetu, s ciljem dokazivanja da struktura ponude može biti čimbenik konkurentnosti marketinških kanala, koju potrošač prepoznaje te utječe na njegovo odlučivanje za određeni marketinški kanal. Na istim pretpostavkama, cilj nam je usporediti cijene reprezentativnih kategorija proizvoda, kako bi se utvrdio utjecaj cijena na konkurentnost marketinških kanala, ako se zanemare drugi čimbenici konkurentnosti. Na temelju provedenoga istraživanja, možemo zaključiti da broj kategorija proizvoda u asortimanu predstavlja konkurentnu prednost za maloprodavača u tradicionalnome marketinškome kanalu u odnosu na elektroničku prodaju, odnosno da imaju različitiji asortiman u svome maloprodajnom objektu u odnosu na asortiman na mrežnoj stranici. U odnosu na *"pure play"* elektronskog maloprodavača, struktura asortimana mjereno brojem kategorija proizvoda koji su u asortimanu na e-trgovinama, ne razlikuje se značajno kod *"pure play" i "bricks and clicks"* elektronskog maloprodavača. S druge strane, ako se osvrnemo na cijene, postoji razlika u cijenama kategorije proizvoda na e-trgovini *"bricks and clicks"* maloprodavača jer su cijene u e-trgovinama veće, nego cijene u tradicionalnom maloprodajnom objektu istoga maloprodavača. Međutim, na e-trgovini *"pure play"* elektronskog maloprodavača cijene su veće u odnosu na *"bricks and clicks"* maloprodavača.

Ključne riječi: maloprodaja, *"bricks and clicks", "pure play"* elektronski maloprodavač, asortiman, kategorija proizvoda, cijene