THE CONSUMPTION BEHAVIOR AFTER 2008-2009 CRISIS. EVIDENCE FROM ROMANIA

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Abstract
The purpose of this paper is to identify and analyse the main factors that have influenced the consumption behaviour of the Romanians after the 2008-2009 crisis and, consequently, the types of goods bought by them. To reach this purpose, the study involved both an extensive investigation of the specialized literature and an empirical research, based on a structured survey, conducted on a sample of 288 people form N-E part of Romania. The results indicate that most of the respondents are influenced by the quality in buying durable goods and by the price-quality ratio in the case of the non-durable ones.

Keywords: consumption behaviour, price, brand, quality, income

JEL classification: E21

1. Introduction
The preferences of the consumers may influence to a greater extent the economic activity. As van Dijk, Antonides and Schillewaert (2014) noticed, very often, companies are using consumers as partners in the process of products’ innovation. Prahalad and Ramaswamy (2004) have named this partnership ‘co-creation’ because both parties interact and share information in order to create value. However, the consumers’ options influence not only the development of new products and services and the qualitative and functional improvement of the existing ones, but also the disappearance of the goods from the market. Considering these aspects, we find it important to identify the main factors that may determine changes in the consumption behaviour.

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The economic literature presents various factors that influence the consumption decisions, three of them being mentioned by most of the analysts (Boyle and Lathrop, 2009; Hervé and Mullet, 2009; Diaz, 2013). They are: the products’ quality, the level of the prices and the incomes. Apart from these well-known determinants, some other studies have presented two more elements that proved to significantly determine the consumption behaviour: the individuals’ ability to take the purchasing risk (Yeung and Morris, 2006; Hira, 2012) and the brand name (Goldsmith et al., 2010; Paasovaara et al., 2012).

Taking into consideration all these aspects, our study analyses, the way in which the consumer’s choice is influenced by the following factors: the price and income sensitiveness, the role played by price in determining the perceived quality of the goods, the perceived value and also the brand name. We have paid a particular attention to the consumers’ ability of taking the risks in their decisions, trying to underline that this capability does not depend only on the products’ features or on the individuals’ characteristics, but also on the economic, financial, social and cultural environment in which the purchasing act takes place.

The paper is structured in two main parts. In the first one, we underline some main aspects, identified in the specialized literature, related to the factors that may influence the consumption behaviour. In the second part of the paper we present the results of a structured interview conducted on a sample of 288 people from the North-Eastern urban area of Romania, between December 2016 and February 2017, in order to see what products’ characteristics particularly determine their purchasing behaviour, what types of goods they usually buy (white labels or strong brand names) and if their decisions are correlated with the socio-demographic variables or they are influenced by the economic and financial situation.

2. Literature review and hypothesis development

The price sensitivity reflects how buyers will react to price differences between alternative options. To analyse the consumers’ reaction to these price differences, Chen and Sadeque (2007) have conducted an empirical study regarding the impact of the white label products on different categories of consumers. Their conclusion is that goods with white labels, much cheaper than the well-known branded ones, are mainly designed for price sensitive consumers. We find the same idea at Burton et al. (1998), who argue that these individuals will guide their consumption decisions only according to
price because they believe that private brands offer equivalent quality at lower prices (Goldsmith et al., 2010). However, even though the low price is one of the most important factors that influence the purchase decisions (Hervé and Mullet, 2009), it was noticed that the income level has a significant impact on the degree of price sensitivity, which diminishes as the income increases (Batra and Sinha, 2000). Furthermore, a study conducted by Kell (2005) shows that consumers' price sensitivity depends not only on the current level of income but also on the individuals’ optimism or pessimism of their future financial situation. As it was expected, the persons with a low sensitivity to price changes proved to be those who currently have a high level of the income and who are also foreseeing a prosperous future financial situation. Another finding made by Kell (2005) is that elderly people, less educated and those from rural areas have a higher sensitivity to price than active people, those with a higher level of education or individuals from urban areas. The analysis of the consumers’ behaviour on socio-professional categories revealed that business people, managers as well as experts from various fields have a lower sensitivity to price. The same trend was observed in the case of students (Kell, 2005).

Eric Marder (1997), analysing the sensitivity degree of different consumers for various products’ categories, found that individuals are tempted to change more their demand when the prices increase for durable goods than for the commodities, with an immediate usage (Marder, 1997). Thus, he found that in about 95% of cases when the price of durable goods increased, the demand for these products diminishes. In the case of the goods with immediate usage, the decrease in the demand, due to the price increase, occurs only in 66% of the cases.

The consumers’ perceived value of the products was investigated by Metrick and Zeckhauser (1996), using mathematical analysis. Considering two producers, H – which makes high quality goods, noted Q_H, and L – whose products have a low quality, Q_L, the analysis starts from the hypothesis that: 0 < Q_L < Q_H ≤ 1 and 0 < α < 1, where α = Q_L / Q_H. Knowing that the prices of the two producers are P_H and P_L, and the perceived values of the two types of products are V_H and, respectively, V_L, then the consumers will decide (Metrick and Zeckhauser, 1996):

(1) To buy the product that has a high quality, produced by H, if:

\[ V_H Q_H - P_H \geq V_L Q_L - P_L, \text{ meaning } V_H \geq \frac{(P_H - P_L)}{Q_H - Q_L} \]

and

\[ V_H Q_H - P_H \geq 0, \text{ meaning } V_H \geq \frac{P_H}{Q_H} \]

(2) To buy the product that has a low quality, produced by L, if:
\[ V_L Q_L - P_L \geq V_H Q_H - P_H, \text{ meaning } V_L \leq (P_H - P_L) / (Q_H - Q_L) \]
and
\[ V_L Q_L - P_L \geq 0, \text{ meaning } V_L \geq P_L / Q_L \]
(3) Not to buy any product, if none of the above mentioned conditions are fulfilled.

From the analysis of Metrick and Zeckhauser (1996) we may conclude that the perceived value of a product is determined both by the ratio of its price and quality and by the relationship between this ratio and that of the products with different quality levels (lower or higher).

The quality of a product is often determined by consumers according to some features they associate with that good. These may be related to some intrinsic properties, regarding the physical composition, or to the extrinsic attributes, such as price, brand name or advertising.

The economic literature from the second half of the 20th century pointed out that the price is the most relevant indicator of a product quality (Shapiro, 1968; Griliches, 1971). It was shown that when more goods are heterogeneous in terms of quality and there are significant differences between their prices, the consumers will correlate the monetary sacrifice with the level of the quality.

However, some recent studies have underlined that the relationship between price and quality differs very much from one product to another, even in the case of the same consumer. A more radical view can be found at Boyle and Lathrop (2009), who considers that there is a weak correlation between ‘objective measures of price and quality’. Moreover, price becomes an insignificant indicator in assessing the quality when a number of other elements, such as brand name or reputation of a company, are taken into account (Ramsøy and Skov, 2014). In this case, a strong brand name is a guarantee of the quality, adding an additional value to the product in the moment of taking the purchasing decision (Low and Lamb, 2000). Meanwhile, in the case of the white labels that are not familiar to the consumer and about which he does not have sufficient information, price may be considered an indicator of the quality (Richardson, Jain and Dick, 1996).

While some authors argue that, in assessing the quality of a product, the brand name plays a more important role than the price (Plantes and Finfrock, 2008), others consider that there is a positive correlation between price, the way in which the quality is perceived and the loyalty to a particular brand (Snoj, Korda and Mumel, 2004). The same idea can be found at Low and Lamb (2000) who argue that, for branded products, an increased price reflects a high quality, which justifies the tendency of some consumers to pay a higher
price for these goods (Low and Lamb, 2000). Moreover, it was found that a higher quality of the branded products will generate long-term customer loyalty, no matter what the price of these goods is (Jiang, 2004).

Most of the analysts define the risk perceived by individuals in taking the consumption decisions by making reference to two other concepts: the uncertainty and the implicit consequences resulted from the choices made by the buyers. These consequences refer both to the functional performances of the purchased goods and to the invested time, effort and money to achieve the established objectives (Mitchell, 1999). The uncertainty can be regarded from two points of view: from a cognitive perspective, resulting either from the lack of knowledge or of limited intellectual capacities of the individual, or in terms of organizational theory. In this last case, the uncertainty is no longer considered a cognitive feature of the decision maker, but a characteristic of the environment in which he acts (Zey, 1997).

Considering all these opinions mentioned above, the hypotheses for our empirical study are:

H1. In purchasing durable goods, consumers take into consideration the quality and the brand name of the products; in the case of non-durable goods, they are looking more for the quality and for the relationship between quality and price.

H2. A large part of the consumers usually purchase branded durable goods; in the case of non-durable products, they prefer both white labels and branded goods.

H3. The economic and financial situation and the socio-demographic variables influence the purchasing decisions.

3. Trends in the Romanians’ consumption behaviour

3.1. Objectives of the study

The main objectives of this empirical study are:

1. Identifying those characteristics with a significant importance for consumers in purchasing durable and nondurable goods. In this case our attention was focused on the importance given not only to the price and quality, but also to the brand name.

2. Determining the main type of products purchased by the respondents, from the brand’s point of view (white labels or brand names). This objective was considered for both non-durable and durable goods.
3.2. Methodology and sample

The instrument used in this survey was the questionnaire. Before being applied to the respondents, it was pre-tested on a sample of 20 persons. The questionnaire included both multiple choice and open questions.

The data were analysed with the help of SPSS program. Quota sampling method was used for surveying 300 people.

After tabulating the data, the sample used in the research included only 288 people from urban area (12 questionnaires being invalid), living in one of the six counties of North-Eastern region of Romania: Iasi, Vaslui, Botosani, Suceava, Bacau and Neamt. The quotas were established by taking into account the total population of each of these counties as well as the gender and age distribution. Data were collected between December 2016 and February 2017.

The sample was established by taking into account only the active population, aged between 18 and 65. The percentage of the individuals from each age group corresponds to the percentages provided by the 2016 Statistical Yearbook for North-Eastern region, namely 29.2% for the age group 18-29 years, 24.6% for 30-39 years’ category, 19.9% for people between 40 and 49 years, 19.5% for the age group 50-59 years and 6.8% for 60 and 65 years’ category (National Statistics Institute, 2016).

From the point of view of the last form of education graduated or in process of being graduated, we notice that 28.82% of the respondents (83 people) have an undergraduate education (most of them - 19.44% - are high school graduates), 6.94% attended a post-secondary school or a vocational school, 40.28% (116 individuals) are enrolled in university or have already a bachelor's degree. The remaining 23.96% (69 respondents) have opted for postgraduate studies (Masters or PhD). Although, as it can be seen, the education level of the surveyed people is relatively high, the predominant level of the income is medium to low: the percentage of the people who has a monthly income of up to 2250 RON (equivalent to approximately 500 EUR) is over 60%.

3.3. Results and discussions

A first analysis was focused on identifying the importance given by the surveyed people to price, quality, price-quality ratio, brand name or other attributes of the products, in the acquisitions of both non-durable and durable goods. For both categories of products it was found that, regardless of income, age, gender, place of residence or occupation, a large proportion of the
respondents believes that the relationship between price and quality is a decisive factor in their buying choices, being the first criterion for selecting non-durable goods (for approx. 32.3% of the respondents) and the second for the durable products (for 23.61%). In the case of the durable goods, the quality is ranked on the first place by more than 30% of the respondents, the price being considered a third important decision factor. Unlike the durable goods, in the process of buying the non-durable products, the price is a decisive factor, more important than the quality, reason for which the quality is ranked on the third place and the price on the second one. Surprisingly, the brand name is not a feature as important as the price, quality or price-quality ratio, being situated only on the fourth place among the factors that influence the consumption decisions of the respondents, both for durable and non-durable goods. For both types of goods, approximately 15% of those surveyed consider that, the least important elements are design, colour, reliability, packaging, warranty period or country of origin of the product.

According to these results, we have to partially reject the first hypothesis: \textit{H1. In purchasing durable goods, consumers take in consideration the quality and the brand name of the products; in the case of the non-durable goods, they are looking more for the quality and for the relationship between quality and price.}

The correlation analysis between the responses of the individuals regarding the order of importance of these features and their income levels shows that the majority of the people that earn less than 1350 RON (equivalent to approx. 300 EUR) per month consider the price a significant variable – placing it on the first or second place – in the acquisition of both durable and non-durable goods. At the same time, for the respondents whose monthly income is over 3150 RON (approx. 700 EUR), the price is a less important factor – being situated on the third or, respectively, fourth place – in influencing the buying decision of both categories of goods. For this group, quality had an important place in the decision of purchasing non-durable goods. In the case of durable products, next to the quality, another decisive factor in the choices made by these respondents proved to be the brand name, most of them (26.15%) situating it on the second place.

It was also noticed that there is a significant correlation between the age of the individuals and their responses regarding the order in which they consider important the products’ characteristics. Thus, most of those aged between 50 and 59 years have indicated that price is the second factor that influences the consumption decision (28.6%), after price-quality ratio
(34.4%), both for the non-durable and durable products. For most of the people aged between 60 and 65 years, the price is the most important characteristic in their purchasing decisions (approx. 45%), on the second last or even on the last place being the brand name. At the opposite pole there are the young people, about 40% of those aged between 18 and 29 years considering that the brand name is the second or even the first factor that is influencing their purchase decision.

We can also notice some gender differences in ranking the options regarding the characteristics that determine the buying decisions. Over 30% of men consider quality the most important factor in purchasing both durable and non-durable goods. In their decisions, a significant role is also played by the brand name, especially in the case of the durable goods. Meanwhile, most of women considered quality to be on the first place only in the case of durable goods (more than 35%), for the non-durable ones being more important the price-quality ratio or just the price.

Regarding the effective purchases of the respondents, it has to be mentioned that in the case of the non-durable goods both branded and private labels products are predominant, 38.5% of people buying both types. In the case of non-durable goods, 34.1% are buying white label products and 27.4% branded products. The situation is different for the durable goods: 49% of the respondents are purchasing branded products, 45.5% both branded and white label goods and only 5.5% white label products.

Considering these results, we can argue that the second hypothesis we have assumed is confirmed: 

\( H_2. \) A large part of the consumers usually purchase branded durable goods; in the case of non-durable products, they prefer both white labels and branded goods.

Some significant correlations were found between the importance given by the consumers to the four considered variables (brand, price, quality and price-quality ratio) and the effective purchases of durable and non-durable goods. Thus, most of the people (over 55%) who consider quality a very important aspect for durable goods buy branded products. In contrast, those for which quality is a less relevant aspect are buying not only branded durable goods but also white label products, or only these last ones. We also notice that most of the respondents that consider the relationship between price and quality a decisive factor in the purchase decisions buy not only branded products but also white label ones. The values of the chi square test, applied on the two variables (importance of the price-quality ratio and the brand of the product), are significant in this respect: \( \chi^2 (1, n=288)=16.578, \ p=0.027, \)
This strong relationship wasn’t unexpected since most of the respondents buy non-durable goods both branded and with white label, and the main factor that influence the purchase decision in the case of these products is the ratio between price and quality. The chi square test shows that there is a relevant association between consumers’ choices regarding the importance of the brand and the type of goods purchased: $\chi^2 (1, n=288) = 17.204$, $p=0.015$, $\phi=0.335$. These results confirm the fact that most of the people who consider the brand an important factor in the purchase decision do buy especially branded products.

A significant relation was also found between the importance given by the respondents to the price and the brand of the purchased products, both in the case of the non-durable goods (the values of the chi square test being $\chi^2 (1, n=288) = 19.981$, $p=0.011$, $\phi=0.29$) and of the durable ones ($\chi^2 (1, n=288) = 24.527$, $p=0.002$, $\phi=0.334$). Thus, in the case of the non-durable goods, we notice that when the price is an important element in taking the decisions, the consumers are primarily focused on the white label products. Regarding the durable goods, however, even if the choices made by some individuals are based on price, they opt not only for the white label products but also for the branded ones. In this case, the explanation may be that, next to price, another important element in the decision is the quality.

The analyses we have developed revealed the fact that the level of the income could explain the type of the products purchased by the respondents. Since over 60% of the surveyed people have a monthly income of up to 2250 RON (approx. 500 EUR), it is not surprising that 72.6% of them are buying either white label or from both categories non-durable products.

However, in order to interpret the links between the importance given by the respondents to the above mentioned characteristics – brand, price, quality, price-quality ratio or other elements – and the type of the products which are prevailing in their purchase (branded or white labels), it is also important to analyse the way in which the price and the brand are associated with the product quality.

The data analysis revealed that a large part of the respondents (over 85%) believes that branded durable products also have a high quality. However, 68% of these persons consider that the direct relationship between quality and the brand name is not always valid, but only in some cases. Regarding the non-durable goods, only 11% of the respondents are convinced that the brand is always a guarantee of the quality, 64% stating that this only happens sometimes; however, the rest of the individuals, approximately 25%, do not
have this certainty. We noted the existence of a significant relation between
the responses regarding the link between brand and quality of the non-durable
goods, on one hand, and income level, on the other hand (by applying the \(\chi^2\)-
test, the values of the coefficients were \(p=0.003\) and \(\phi = 0.35\)). This
correlation explains why most of those with a monthly income of more than
3150 RON (approx. 700 EUR) consider that the non-durable branded goods
always have a superior quality, while the respondents with monthly incomes
below 1350 RON (approx. 300 EUR) are sceptical about this direct link.
However, in the case of the durable goods, it was found that the level of the
income does not significantly influence the people’s perception regarding the
relationship between price and brand name (the value of the \(p\) coefficient,
resulted from the \(\chi^2\)-test, was 0.15). Thus, regardless of the income level, most
of the respondents said that, sometimes, the brand name reflects the quality of
the products.

We also noticed the presence of a correlation between the level of
education and the association of the quality with the brand name, in the case of
the durable goods: \(\chi^2 (1, n = 288) = 23.423, p = 0.04, \phi = 0.253\). Thus, most
of those who finished a post-graduate type of education believe that the brand
name is always a guarantee for the quality of the durable products, while
almost all of those who have only primary or secondary education do not see
any connection between the two characteristics.

After processing and statistically interpreting the responses gave by the
individuals, we see that the majority of those surveyed (approx. 80%) be
lieves that the durable goods with high price also have a superior quality.
However, 73% of the respondents doubt this statement, believing that, this is
only sometimes true. In the case of the non-durable goods, 44.4% of those
surveyed think that only sometimes a high price reflects a high quality and
only 8% of respondents are convinced that the price always reflects the quality
of the products. We noted that around 47.6% of the people are sceptical about
the presence of a direct link between the price level of the non-durable
products and their quality.

These results can partially be explained with the help of the fact that,
during recent years, there were successive and sustained increases in the prices
of various categories of food, due to the augmentations of the fuel, gas or
electricity’s costs. Meanwhile, we see a downward trend of the wages,
especially those of the employees from the public sector, fact confirmed by
results obtained in the survey conducted by us. While approximately 15% of
those surveyed said that between 2009 and 2016 their income was reduced by
over 20%, 27% of the people said that the percentage of reduction was between 10 and 20%. About 14% of the respondents had faced a decrease in income up to 10% since 2009. The results indicate that less than 20% of the surveyed people had an increase in their income since 2009.

A correlation analysis showed that the variation of the income level has significantly influenced the effective purchases of goods, from the application of the $\chi^2$ test resulting the following values: $\chi^2 (1, n=288)=23.14$, $p=0.001$, $\phi=0.351$. Therefore, we can say that a great majority of the people who suffered a decrease in the level of the income after 2009 purchased non-durable white label products and durable goods both branded and with white label. Unlike these people, a large part of the respondents with an income that has remained constant or even increased during the period 2009-2016 are buying branded durable or non-durable products.

Considering these results, it is not surprising the fact that there is a significant correlation between the changes in the income level and the way in which the respondents perceive the relationship between price and quality ($\chi^2 (1, n=288)=32.49$, $p=0.005$, $\phi=0.295$): the great majority of the individuals that do not consider that there is a direct link between the price level of the non-durable products and their quality is represented by the people whose incomes were reduced by over 10%. However, in the case of the durable goods, it was found that the variation of the income does not significantly affect the perception of the people regarding the relationship between price and quality (the $\chi^2$-test showed a value for the $p$ of 0.35). Thus, regardless of the percentage of the income’s variation, most of the respondents answered that, sometimes, the price reflects the quality of the products.

A final significant analysis of this study revealed that over 65% of the respondents believe that the 2008-2009 crisis has negatively influenced their income, consumption and savings. Thus, most of them consider that before 2009, due to the higher revenues, they were able to save more and buy a larger amount / more often durable goods. Some respondents have also said that, since 2009, not only they couldn’t save but also they have spent much of their savings, previously accumulated, in order to have the same living standard. About 8% of the respondents said that, in recent years, while their income has diminished, they have reduced their savings and the acquisitions of durable goods and they have also decreased the purchases of the non-durable goods. We note that among these respondents there are those who said that they are mostly buying white label durables or non-durable goods, their incomes diminishing more than 10%.
Considering these aspects, as well as some of the analysis conducted before, regarding the existence of a correlation between the income, the level of the education, the age, the gender of the respondents, we may say that the third hypothesis we have formulated is confirmed: H3. *The economic and financial situation and the socio-demographic variables influence the purchasing decisions.*

4. Conclusions

The analyses we conducted show that only two of the three hypotheses we have formulated were confirmed, respectively the second and third one, the first one being only partially accepted. According to our results, most of the respondents consider that the main characteristics of a durable product that influence their buying decisions are the quality, followed by price-quality ratio, price and brand name. In the case of the non-durable goods, a large part of the consumers are sensitive, first of all, to the price-quality ratio and, after that, to the price, quality and brand name. For both types of products, the last place is occupied by some other elements, such as the design, the colour, the reliability, the packaging, the warranty period or the country of origin of the product. The responses regarding the order of importance of the products’ features seem to be closely correlated to the income of the consumers, to their age and also to their gender.

Regarding the main types of the products bought by the respondents, we notice that, in the case of the durable goods, the branded products prevail, even if the percentage of the persons who buy them is very similar to those who said that they buy not only branded durable products but also white label ones. In the case of the non-durable goods, both types of the products are bought by most of the surveyed people; however, the percentage of these persons and of those who buy only white label non-durable goods is also close. The level of the income proved to be the major factor that has influenced the consumers’ purchases.

When interpreting the results it is very important to mention the fact that a large part of the respondents consider that the price and the brand name can be associated with the quality of the products only in some cases. While the responses referring to the relationship between the brand name and the quality are correlated to the level of the education of the individuals and also to their incomes, the link between price and quality seems to be influenced by the variations that occurred in their incomes’ level, since 2009.
Moreover, a large part of the respondents believe that the 2008-2009 crisis has negatively influenced their income, consumption and savings. Therefore, we may assume that there is a strong link between all the consequences of the crisis and the individuals’ responses to our questionnaire.

5. References


