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Article

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Amfiteatru Economic Journal

Provided in Cooperation with:

The Bucharest University of Economic Studies

Suggested Citation: Burghelea, Cristina; Aceleanu, Mirela Ionela (2014) : Education – Determinant of Consumer's Conditions in an Era of Technological Change, Amfiteatru Economic Journal, ISSN 2247-9104, The Bucharest University of Economic Studies, Bucharest, Vol. 16, Iss. 36, pp. 535-549

This Version is available at:

<https://hdl.handle.net/10419/168842>

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EDUCATION – DETERMINANT OF CONSUMER'S CONDITIONS IN AN ERA OF TECHNOLOGICAL CHANGE

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Abstract

In the era of technological change, consumers face an environment increasingly complex, leading to significant challenges regarding buying and consuming choices and consumer protection. The most important and most influential technological changes in terms of the impact on the consumer, are induced by internet, digitization and globalization. However, the era of technological change also means developing biotechnologies, nanotechnologies, new materials and new energy sources, all these changing people's lives, living conditions, their needs and their behaviour as consumers.

The literature highlights the factors that influence purchasing behaviour and changes manifested in terms of values, stressing the importance of promoting and protecting consumer's rights and interests, The new responsible consumer can become a key driving force of sustainable development only if it is able to capitalize on new opportunities and to counter new risks of modern marketing technologies based on the Internet and mobile communications. This involves the assimilation of new knowledge throughout life to keep up with the accelerating pace of technological innovation and diffusion of e-commerce solutions and mobile commerce.

We study the correlation between the composite index of consumer conditions and the level of participation in lifelong learning programmes in some Member States, based on secondary analysis of the data available at EU level. The results confirm that the consumer's situation is better in countries where the level of participation in lifelong learning programmes is higher. At the same time, however, the correlation is not linear. This shows that the consumer's situation does not depend exclusively on formal continuing education but also other factors such as timeliness and severity of legal and institutional framework of consumer protection, the acquisition of knowledge through informal means, the requirement of different customers in different countries.

Keywords: education, consumer education, lifelong learning, consumer behaviour, technological changes, protection of consumer rights, the new consumer, consumer condition index

JEL Clasification: D11, D18, I21

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Introduction

Consumer education is a growing topic of discussion addressed in recent years amid changes imposed by new technologies, the internet and globalization, making changes in consumer behaviour in the way of consumer decision-making or how to protect consumers.

Amid these changes, some authors suggest greater attention to consumer education to support sustainable and responsible consumption. (Parker, Ninomiya and Cogan, 1999). Parker, Ninomiya and Cogan show that, at present, education has become multicultural and global, which requires the development of curriculum in relation to the requirements of the new economy.

Current status and orientation towards consumer education at European level is found in many European documents and strategies, including the Treaty of Amsterdam (1997) in which education is the overall objective of consumer protection, and the European Consumer Agenda (2012) where European Commission focused on two objectives: to improve the information and education of consumers to increase awareness of consumer rights and develop an effective consumption based on knowledge. (Goldsmith and Piscopo, 2014)

McGregor (2008) show that consumer education is one of the themes discussed in literature, along with consumer policy and consumption sciences, and Fischer (2011) recognizes that consumer education policies suffer from some problems concerning their implementation practice.

The importance of consumer education is reflected in many OECD studies that show that the expansion of online technologies, both at work and during leisure requires the consumer need to develop digital skills. Consumers must have knowledge of digital technology and need to know to protect themselves from online fraud and be aware of their rights and responsibilities. These skills can be developed effectively through education. (OECD, 2009)

In literature, in the current context, consumer education shifts the emphasis from focusing on the consumer, household and market to a more global consumption, which involves the use of natural resources worldwide. (McGregor, 2008, Goldsmith, 2011, Grebitus, 2012). In this sense, consumers should be encouraged to adopt a healthy consumer behaviour and environmentally friendly, which will generate cost savings for themselves and for society.

According to Courvoisier, Sennes, Ricard and Ribeyre (2014) achieving sustainable consumption is based mainly on the investment in education, the authors proposing an increased emphasis on consumer education at university level. They argue that greater attention to environmental problems associated with changing consumer behaviour that characterize the modern world. Currently there is a growing need to increase the role of education in shaping a responsible and sustainable consumer behaviour. (Caeiro, 2012)

A healthy consumer model assumes that individual utility maximization must be completed by integrating cultural, educational, social and environmental, so today's generation needs to not adversely affect the ability of future generations to meet their needs. For this, an important role is to inform and educate the consumer to provide him access to all the data necessary to assess products from an environmental and social perspective. (Popescu, Popescu and Stroe, 2010)

In today's society, which is in constant change, requires constant analysis of consumer attitudes and behaviour so that consumer education should be made consistent with the new changes. (Schroeder and McKinnon, 2007)

Consumer behaviour is changing, mass consumption is replaced by a conscious consumer in a world where consumers understand their rights, and their responsibilities as a citizen-consumer, which requires complex approach to the education of the consumer. (McGregor, 2008)

Consumer protection in unsafe and very dynamic trade conditions that characterizes the new era of technological change (Negrea and Voinea, 2013) requires that the emphasis should be on education, not just on information. What differentiates consumer education from information for consumers is the transferability of skills acquired. Based on these skills, the consumer is able to use existing information about consumption in the present and future decisions. (Dinu, 2011)

Thus, investment in consumer education, both formal and informal, allows the creation of skills and abilities that contribute to the awareness of their rights under consumer protection legislation, and to improve consumer lifestyle, which is a personal, social and economic advantage.

Our paper starts from the analysis of the new consumer in the contemporary economy, consumer of technological change era, a multi-cultural consumer, cybernetic, educated and informed, shifting consumer behaviour and subject to other risks, compared to traditional economy. This paper presents the factors that influence consumer behaviour and consumer decision and emphasizes the role of consumer education on increasing capacity and improving consumer decision model, which is based on a consumer balanced, responsible, able to protect and to adapt quickly to technological change and globalization.

The final part presents a research of the second order, based on Eurostat data and studies regarding the consumer environmental quality, based on consumer condition index at the European Union members. This index is analyzed through composite indices, showing a direct relationship with education and a statistic link of this (consumer condition index) and lifelong learning, which complements the theoretical arguments made in favour of the role of education in adapting to new consumer demands of a society in the era of technological change.

1. The Impact of Technological Change on Consumption and on Consumer Behaviour

Technological changes have brought a number of economic and business environment influences generated by reduced spatial and temporal constraints in communication or transfer of information. These technological changes are more pronounced in the recent years, developing a new reality, the virtual one. The largest impact in this process is the Internet, which has become one of the main way of communication and information for the modern world, which brought a number of changes in consumer behaviour.

In general, consumer behaviour is considered a set of reactions that individuals respond to external stimuli. From a psychological perspective, the consumer behaviour is that which is the objective response for individual, independent of what he declares, of his psychological thoughts and attitudes. Sociologists consider consumer behaviour as its activity in a given

social situation (Mâlcomete, 1979), "those actions of individuals directly involved in obtaining and use of goods and services, including the decision process, that precede and determine these acts". (Engel, Blackwell and Miniard, 1986)

As economic systems were developed amid technological change and globalization, the role of consumer behaviour is changing and becoming more complex. It is of increasing importance how consumers are protected and their rights respected in a trade where the Internet and digitization, in addition to the advantages they create, provide risks for consumers, risks that affects their rights.

Of great importance is how the decision to buy is influenced by new technological changes and the way new customers can protect their rights in this context.

Purchase decision is the result of interaction of a set of factors that contribute to defining and achieving the ultimate goal of the consumer, to better meet the needs and desires. (Stefanescu and Bălătescu, 2010). An interesting classification of these factors is highlighted by Cătoiu I., which takes into account two types of variables that influence consumer behaviour, *observable variables*, that includes economic factors, marketing mix and situational specific (important purchases, reducing time spent shopping) and *variables derived by interferential research*, that includes psychological factors (perception, learning, personality, motivation) and sociological (family, social class, culture). (Cătoiu, 2002)

New era of modern technology and globalization generates new attitudes in consumer behaviour and influences the way how consumers make consumption decisions, as well as the way to protect consumer rights.

Technological changes generate consumer behaviour differences between the real and virtual environment, as well as the purchase decision.

The Internet has allowed the development of new ways of doing business, especially through e-commerce, from which the consumer has many advantages (the ability to buy anything from any part of the world, reduced time, lower costs), but it can face with some drawbacks (the degree of uncertainty, fraud). Consumers that use the virtual environment are able to perform faster purchase transactions and more efficiently. The Internet gives consumers the benefit of getting better quality products by using interconnected networks, which leads to greater consumer satisfaction and greater economy of resources, especially time. (Khan, 2006)

Bătăgan, Mărășescu and Pocovnicu highlights two main advantages of Internet shopping (e-commerce), which are based on the increased number of stores that the consumer can visit, namely: on the one hand, reducing time spent purchasing goods and on the other hand, increased freedom of choice. However, e-commerce brings to the fore the problem of consumer protection and commercial disputes, which may be hindered by the difficulty of determining the location and jurisdiction under which the shopping was done. (Bătăgan, Mărășescu and Pocovnicu, 2010)

However, the Internet generates changing in consumer thinking and decision-making mode buying. For a complex decision to purchase, consumer has the following steps: identifying the need, information and evaluating alternatives, purchase decision and post-purchase behaviour. (Negrea and Voinea, 2013)

The consumer takes purchase decision based on the following aspects: recognition of need, information search, evaluation of alternatives, purchase and post-purchase behaviour. Buying on-line improves the decision-making process and saves consumer time.

Recognizing the need and identifying the consumer wishes to purchase will be made better by the buyer having access to the internet, as it can have access to products which are not available locally and which bring greater satisfaction.

Purchase evaluation of alternatives is more easily achieved in cyberspace, consumer having easier access to information on the strengths and weaknesses of different brands of products.

Post-purchase behaviour is also influenced by modern technology, in that, after use, the consumer can interact electronically with the manufacturer and can be a good mean of advertising online, if consumer is satisfied with the product chosen. (Negrea and Voinea, 2013)

The decision to buy can be influenced by perceived consumer risks, risks that are exacerbated by technological change and the digital economy.

In literature, the main risks that the consumer perceives are classified as:

- operational risk – related to the purchased product functionality;
- physical risk – the risk to consumer health and safety;
- financial risk – the risk that the product is not worth the price in terms of quality or rapid obsolescence;
- social risk – the risk that the choice may not match consumer needs;
- psychological risk – the risk that affect consumer choice in psychological terms;
- time risk – the risk of losing a lot of time in choosing a product. (Schiffman and Kanuk, 2000)

These risks are added to those derived from the use of the Internet in the purchase of goods. These risks are related to unsafe Internet payments, misleading advertising, fake virtual companies, the risk of being caught by other information on the Internet and taken away from the original objective, the use of personal data of the consumer.

These risks generated mostly from developing of information era, require the formation of consumers who know how to interpret relevant information and messages to make prudent choices and to react appropriately in order to protect their rights.

With almost unlimited access to information on the Internet, consumers easily identify desired products, he can inform related to the quality and performance of these products, can compare offers from different suppliers, thus adopting an informed buying decision.

Consumers are increasingly using more and more mobile and online platforms, which exerts a great influence on how the bidders should interact with consumers and attract them. In recent years, the role of the consumer in relation to a company that provides goods, new consumer is more demanding, selective and mature. Increasing its autonomy against the seller is both cause and effect of a major sensitivity to quality, brand loyalty and greater sensitivity to price, which is not seen as an independent variable, but as an element on which consumer pressure can influence.

According to Professor Suciu, the main types of consumers are:

- social consumers – are those who resort to physical stores, they prefer traditional ways of buying
- experimenters – who enjoy trying new things, they are the ones who first used the internet purchasing procedures
- conventional consumers – who suffer from lack of time and do their shopping in a hurry
- consumers focusing on consumer familiarity – they are reluctant to new ideas and to change their consumption behaviour, preferring traditional ways of purchasing
- Consumers interested in the value – focusing on value for money and is quickly adaptable to purchase new facilities, eg e-commerce
- ethical consumers – whose purchasing decisions are relatively independent of selling method, physical or virtual, as long as it is practiced in an honest manner. (Suciu, 2004)

In the context of the new economy, as a knowledge economy and technological developments, it has increasing the number of consumers who use internet shopping, the new consumer is a multi-cultural consumer, cybernetic, educated and informed. Consumers demands and expectations are much higher, but also are affected by stress and lack of time, which makes the development of technologies to make changes in consumer habits and preferences of consumers and influence their purchasing decisions.

New consumer wishes to purchase original products, innovative, distinctive, the main difference between traditional consumer consumption behaviour and the new consumer, being so that the new consumer behaviour is based on the search for authenticity, rather than filling their needs by using mass goods. (Lewis and Bridger, 2000)

Consumer is changing, it may be subject or, on the contrary, the object of the market, and if trained and educated, consumer can aspire to the role of arbiter of the market, especially if he engages in associations and organized movements. (Bostan, Burciu and Grosu, 2010)

In this respect, protecting consumer rights bring forward measures that policy makers need to consider to overcome breaches of consumer rights in the era of technological change. Legal and institutional framework of consumer protection must keep pace with technological change. These measures are focused on health and safety, protection of economic interests, information, education and representation in various organizations, improving consumer safety in the virtual environment.

2. Education – The Factor of Consumer Condition In An Era of Technological Change

Society is rapidly changing and brings major changes in the lifestyle of consumers, consumption habits, the decision to buy, and the protection of consumer rights. These changes are imposed by globalization, digitization and electronic commerce.

The current concerns among the factors that benefit consumers by increasing decision-making capacity and a better protection of their rights, education takes on a role increasingly important. According to studies from literature, an educated person is more responsive to changes in society, to achieve and maintain health, environmental protection, all of which influence in an important and beneficial behaviour. However, an educated person can easily protect himself in economic environment characterized by digitization, globalization and techlogization.

In analyzing the role of education as a factor of the consumer condition in era of technological change, education can be seen from two perspectives: that *education in general*, which refers to the knowledge acquired by the individual through the process of education, during the years of school or *education of consumer*, that relates to informing the consumer to understand the law, which defends his rights.

In the context of technological change and globalization era, the general and specific skills that the consumer acquires through education allow him to benefit from technological change (through the acquisition of knowledge of foreign languages, computer use and Internet) and to prevent or mitigate risks they may face (by acquiring general business and economic knowledge, understanding the value, market mechanisms and competition). In addition to the general education, consumer education ensures the formation of a system of values, rights awareness and specific legislation, the recognition of fair and unfair trade practices, understanding the sources of reliable information, demanding attitude.

Consumer education can be made regardless of the current level of education, but with the higher level of education, the consumer is more receptive to information on education consumption from the point of view of the organizing budget, understanding of rights responsibilities, understanding the effect of consumption of goods on health and the environment.

The ability to use new technologies or to distinguish the significance of the technical characteristics of the products, depends on the level of education of the individual, while demanding attitude towards trade practices related to consumer education. The two types of education complement each other, bringing benefits to consumers and society.

Due to the large amounts of products and services on the market and changes on their quality, consumers are not always able to satisfy their needs efficiently and reliably; technological and commercial development is creating permanently new needs sometimes artificial. Not all consumers can filter critically influences and information they receive from the goods and advertising sector. Consumers need education to understand the difference between a real and an imaginary need, to learn to be selective and to develop the capacity of decision and to protect the consumer. Rapid changes in technology and electronic commerce increases the potential risk of consumption and require the consumer to be aware of the consequences of its consumption. Consumer education raises the awareness of his rights to protection, since the educated consumer will better protect from the risky products on the market and increases the ability of decision when shopping in a digitized market where e-commerce is gaining momentum. (Dinu, Marchevski, Dobrescu and Petrescu, 2010)

In literature, education is one of the factors that influence consumer behaviour, with the social environment, personality, lifestyle, motivations, perceptions, age, income, family environment. (Hill and O'Sullivan, 1997) Complexity of consumer behaviour can be explained just by the many factors that directly or indirectly influence the decision making process of buying and consumption.

Educated and informed consumers can make more easily changes in their own life style and consumption pattern in order to improve their quality of life and environmental protection. Consumers play an essential role in aspects of environmental challenges such as climate change, air and water pollution, land and waste. Environment and climate change requires

better information in some areas, such as energy and transport, consumer actions can have significant consequences. (European Commission, 2007)

Consumer education brings with it a lot of advantages from the individual and social level:

- improving the choice, according to the living and financial conditions, achieving a better management of their own resources
- choosing those goods which do not affect health, healthy lifestyle while reducing costs in the health system
- lifestyle changes, take responsibility and participation in social life
- understanding the economy and the role of the consumer in the economic life
- knowledge of consumer rights and ensure better protection against risk products
- increasing the capacity of the consumer decision, especially in the expansion of e-commerce that offers a wide range of products and services
- supporting environmental protection, by recycling and using organic and eco products (Dinu V., 2011)

Consumers have THE right to be protected by unsafe trade and must accept that they have in turn some responsibilities. To overcome situations where people do not know their basic rights on consumption or are reluctant to act when necessary to defend their rights, education is needed. (Negrea and Voinea, 2013)

The more complex the products that the consumer wants to acquire, the more need for more education and information for consumer to increase the ability to make good and effective decisions. For example, for financial products, that are rapidly diversifying, consumers need financial education to understand basic financial terminology, studies and financial information. (Răbonțu and Chirițescu, 2009)

Consumer education has implications at both micro and macro level, as shown in Figure 1.

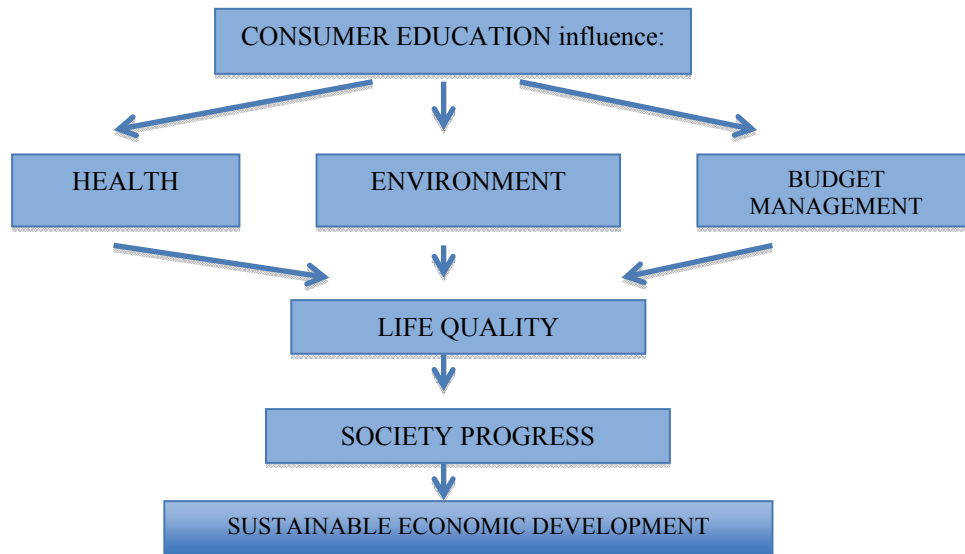


Figure no. 1: Share of consumer education to sustainable development

Source: author idea

First, an educated consumer manages his budget better and has better care of his health. Improved health contributes to increased productivity, and quality of life of the individual.

Secondly, education in general, and consumer education in particular, helps to support qualitative changes in the economy, ensuring sustainable economic development. Sustainable economic development is the manifestation of macroeconomic dynamics which involves, in addition to economic growth, a set of quantitative, structural and qualitative changes in the economy and provides consumer satisfying present without compromising or prejudicing those of future generations, a important role in this case has the attitude towards the natural environment.

An educated consumer is more concerned about environmental protection, both in consum and recycling. Consumer preferences and their buying choices play an important role in protecting the environment, which can be influenced through education and information (for example, labeling), in support of a sustainable society. But only environmentally friendly labeling is not sufficient to guide consumer behaviour towards green products, requiring the involvement of mainstream education to form an environmental behaviour through education. (Dinu, Săvoiu and Tăchiciu, 2012)

All this positively affects the quality of life of the consumer and his family. A better quality of life, based on healthy consumer behaviour, environmentally friendly, contributes to society progress and supports sustainable economic development, which in turn will provide the conditions for increasing the quality of life. This is a two-way relationship, since, on the one hand, the learning is improving the quality of life of the individual, and on the other hand, the learning is affected by the quality of life.

An educated consumer is the one who has a better chance of winning and better stability in the labour market, making more succesful to challenges. (Serban, 2012) It will be more receptive to information on the quality of products consumed and consumption may also support a higher proportion of healthy and environmentally friendly products. This consumer behaviour will also influence the consumer family and can transmit to future generations the importance of education consumption.

However, an educated consumer will generate a greater concern to companies to bring products appropriate to consumer requirements, which will increase competition among bidders and manufacturers, bringing benefits to consumers, market and the economy as a whole.

Thus, an educated consumer, informed, competent, demanding and responsible, contribute to society development and the overall progress that have a determination and a qualitative manifestation par excellence, aimed at both economic, and social.

Education contributes to the development of skills that ensures consumers a healthy lifestyle, participative and sustainable. These skills contribute to enhancing consumer decision-making and awareness of their rights:

- competence of health (nutrition, movement, leisure);
- financial power (budget management, preventing indebtedness);
- media literacy (Internet shopping or via phone);
- information jurisdiction (lifelong learning, the use of information);
- competence of safety (safe use of products and services, rules on hygiene);
- legal competence (knowledge of consumer rights);

- purchasing power (dependencies, influences, needs);
- sustainability competence (resources, environment). (Dinu, 2011)

In the European Union, among concerns of consumer policy for the years 2014-2020, is as main objectives: *increasing the role of education* for consumers and businesses, *reducing vulnerable consumers* affected by the crisis, *analyzing the effects of aging* on behaviour consumer, the *consumer attitude* that dominates the new digital single market.

Thus, there are numerous reasons why consumer education is a priority issue not only at the individual level but also at national and European level:

- the economic and market goods and services are evolving rapidly, is very dynamic and complex
- technological change and globalization bring new ways of consumption and influence consumer decision-making ability and degree of protection
- increasing the level of education and information to consumers not only benefit the individual, but also benefits to society and the economy, such as deleveraging by increasing consumption responsibility
- introduction of consumer education in schools from an early age, involves the formation of adults informed and responsible, decision-making capacity increased
- education means better protecting against fraud, which is growing especially in the virtual environment.

By some consumer studies, which are based on data collected by Eurostat and the information received from Member States and from the European Consumer Centres (ECC) network, we calculate several indicators that are influenced by education level of consumers. These key indicators relate to the implementation of legislation on consumer protection and product safety, the effectiveness of the grievance, and the responsibility and consumer information. The objective is to make a diagnosis of the quality of life of consumers, which will help national authorities and consumer organizations to plan and evaluate their activities. (European Commission, 2013)

One of the indicators calculated in this report (European Commission, 2013, *The Consumer Conditions Scoreboard*) is the Consumer Conditions Index, which is a composite index made up of 12 sub-indicators that capture the main aspects of the consumer environment, such as: the confidence of the consumer, unlawful trade practices, product safety, consumer complaints and resolving them. This index takes values from 1 to 100, the closer 100 shows the highest degree of satisfaction of the consumer for consumption.

According to this study (European Commission, 2013, *The Consumer Conditions Scoreboard*) at EU level, consumer education affects the following sub-indicators:

- *incidence of illicit practices of suppliers* which records the lowest value for consumers with lower levels of education (27%) and highest in those with higher education (44%). This correlation can be explained by the fact that the categories of consumers who have low education levels cannot identify unlawful statements and do not always know their rights.
- *the likelihood that environmental issues are taken into account in procurement decisions* is positively influenced by the level of education. The more educated a person is, the more concerned about the environmental impact of products or services purchased. Romania, from this point of view, is slightly above the EU average.
- *openness to new ways of online consumer* which shows that as level of education increases, it increase the interest of consumers to make purchases online. For example, only

22% of those with no education or primary school, have bought products online, compared to 69% of consumers with higher education. However, these online purchases depend on the size of disposable income, age, type of goods or services traded online. Romania is among the countries whose consumer use least to electronic commerce compared to other EU countries.

Another issue posed by the EU report is knowledge of consumer protection legislation, showing a direct link between level of education and knowledge of consumer protection legislation on consumer rights, people with higher education are more aware of their rights they have as consumers (63%) than those with the lowest level of education (59%). Romania (52%) is below the EU average (60%) to the knowledge of consumer rights protection legislation.

THE Analysis of consumer indicators in the European Union shows that the following indicators have higher values for consumers with higher education to secondary and primary consumers: the average score of consumer confidence in purchasing goods and services on the Internet, the average score of propensity for cross-border purchases, the average score of knowledge of consumers rights, the average score of perceived insecurity products by consumers and the average score of perceived deceptive/misleading advertising to consumers.

Thus, people with a higher education level had the highest score on indicators related to consumer empowerment and their information regarding attitudes towards e-commerce and cross-border shopping. At the same time, they are the most critical in terms of obtaining compensation mechanisms, and those most likely to be confronted with problems and illicit commercial practices (because they can recognize better than other consumers).

Consumer condition is better related to greater the level of its general education and knowledge acquired as the associated technological change. Therefore I followed the link between *consumer condition index* (as measure of the condition of the consumer) and *lifelong learning*, calculated by Eurostat indicator that captures the number of people aged 25-64 who received education/training in the four weeks preceding the survey (as a measure of the acquisition of new knowledge that can be useful in establishing the consumer's consumption decision).

If we correlate the *Consumer Condition Index* with indicator *lifelong learning* we see that there is a direct relationship between changes in these indicators, for many EU countries. This means that an investment in continuous training record an increase in consumer situation index, by increasing the decision making of the consumer to choose a healthy consumer model, an understanding of legal rights and obligations incumbent, and through better adaptation to new consumption patterns imposed by the IT era, constantly diversifying.

The graph below (figure 2) present the two indicators, the *consumer condition index* and *lifelong learning*, in the year 2012 for some Member States of the European Union.

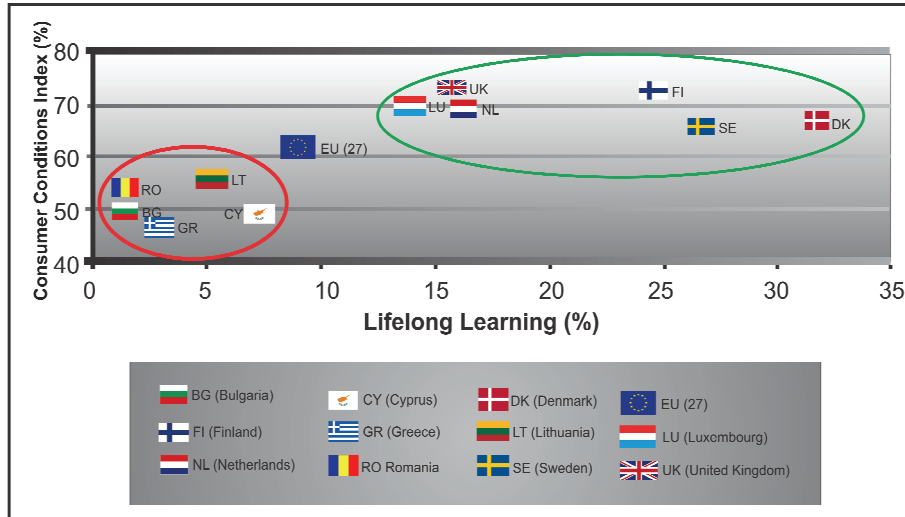


Figure no. 2: Consumer Condition Index and Lifelong Learning, UE, 2012
 Source: based on data from European Commission, 2013

Countries that have the highest values in both indicators are: Finland, UK, Netherlands, Luxembourg, Denmark, Austria and Sweden. Below the EU average, in both indicators, with the lowest values of the 27 EU countries are Cyprus, Lithuania, Greece, Croatia, Bulgaria and Romania. Improving conditions for consumers in Bulgaria allowed to grow consumer condition index compared to previous years. The difficult economic situation in Greece and Cyprus may explain the deterioration of overall scores and hence, lower the ranking until the last places.

The countries represented in the top right of the graph, have the higher level of both indicators (Denmark, Sweden, Finland, Netherlands, UK). There is a close correlation between the two indicators showing a consumer condition index increases as the level of participation in forms of lifelong learning increases.

Countries represented on the left side of the graph, where is also Romania, recorded the lowest values for both indicators, showing that a low Consumer Condition Index is accompanied by a low participation in lifelong learning, which allows us to conclude that in general there is a direct relationship between changes in two indicators.

Romania has made some progress in e-commerce and the law on consumer protection, which has improved consumer condition index for 2012, compared to previous years.

However, Romania has the lowest indicator Lifelong learning (1.4%), but has not the lowest value of the consumer condition index (54%). This situation for Romania, where participation in lifelong learning is the lowest, and the consumer condition index higher than other states in the left side of the graph (Bulgaria, Greece and Cyprus) expresses an atypical situation which, at first glance looks a weak correlation between the two indicators analyzed.

In fact, Romania has better values in the following a number of sub-indicators of consumer condition index that are not directly influenced by the level of education of the consumer: consumer confidence in the protection and respect for their rights, monitoring compliance with consumer protection legislation, monitoring compliance with non-food and food

safety, satisfaction with the way of solving complaints. In sub-indicators where education has a high influence, Romania has lower values (eg consumer awareness of consumer protection legislation, filing of complaints for dealing with problems).

The results for the evolution of these indicators confirm the role of education in preparing consumers who have had to adapt to technological changes. The technological revolution brought by the Internet and digitization will increase further, which implies new challenges for consumers and traditional modes of regulation of their rights.

Investing in consumer education would allow the individual to become a consumer reflexive to make informed choices, to have the ability to obtain, evaluate and use information on the consequences of his consum behavior, to be able to decode media messages and advertising in the context of their own values and their own definitions of what constitutes quality of life, but also in the context of intra and inter generational justice. Education is also an effective tool for the protection of consumer rights by preventing risky financial behavior by promoting reflexivity in consumer behavior and individual skills training necessary for intelligent self-government. (Popescu, Popescu and Stroe, 2010)

Conclusions

In recent years, the need for consumer education has become increasingly evident in Europe, following the completion of the European single market, economic and monetary union, the impact of new technologies on consumption, and increasing cross-border e-commerce.

Consumer behaviour and decision are influenced by many factors, among which education is important. Education allows the consumer to adjust to the requirements of the new era of technological change, the Internet and electronic commerce make the consumer sensitive to the risks that may arise in this trade, affecting his rights and protection.

Our work highlights the role of higher education as a factor of the consumer condition in era of technological changes and by secondary research of the relationship between the two indicators –*consumer condition index* and *lifelong learning*, showing the influence of education on consumer environment. As future research, we will deepen the analysis of correlations between the sub-indicators of the consumer condition index and other indicators on education and quality of life.

Education will provide an increase capacity of decision for consumer through awareness of their rights and enable it to better protect from risky or non-compliance products from the market.

Education in general, and consumers education in particular, will influence consumer behaviour and decisions so that the consumer needs to be able to improve quality of life and to adapt effectively to technological change and globalization.

An educated consumer helps to ensure protection of his rights, in that it can more easily grasp some shortcomings of the tenderers and can intervene and react to them, so the supplier to adjust and provide better and fair conditions to the consumer.

THE Consumer rights policy must adapt better to the realities of the digital age to overcome difficulties on the protection of consumers, mostly occurring in the virtual environment. Virtual environment and technological change allows fast access to lots of information, and an educated consumer can make the difference between harmful and useful information in consumer decision making.

Concerns at EU level aims, in addition to educating and informing consumers and improving safety. These concerns must be applied at the national level, so that results in improved quality of life of consumers to support the creation of a more efficient and sustainable market.

References

- Alsmadi, S. and Alnawas, I., 2012. Consumer Rights Today: Are They in Business or Out of Business? *International Journal of Marketing Studies*, 4(1), pp. 159-167.
- Angelescu, C., Ciucur, D. and Marin, D., 2001. *Dicționar de economie*, Bucharest: Economic Publishing House.
- Bătăgan, L., Mărășescu, A. and Pocovnicu, A., 2010. Drepturile consumatorilor în economia digitală. Studiu de caz al utilizării comerțului electronic în România, *Economie teoretică și aplicată*, XVII, No. 9(550), pp. 63-80.
- Bostan, I., Burciu, A. and Grosu V., 2010. Consumatorismul și politicile privind protecția consumatorului în spațiul comunitar. *Economie Teoretică și Aplicată*, XVII, No. 4(545), pp. 17-32.
- Caeiro, S., Ramos, T.B. and Huisingh, D., 2012. Procedures and criteria to develop and evaluate household sustainable consumption indicators. *Journal of Cleaner Production*, 27, pp. 72-91.
- Cătoiu, I., Balan, C., Balaure, V., Orzan, G. and Popescu, I.C., 2002. *Cercetări de marketing*. Bucharest: Uranus Publishing House.
- Dinu, V., 2011. *Protecția consumatorilor*. Bucharest: ASE Publishing House.
- Dinu, V., Săvoiu, Gh. and Tăchiciu, L., 2012. *Eco-Labeling and Consumers' Education framework*. In: IGWT, 18th IGWT Symposium „Technology and Innovation for a Sustainable Future: a Commodity Science Perspective”, 24-28th September 2012, Rome, Italy.
- Dinu, V., Marchevski, I., Dobrescu, E. and Petrescu, R.,M., 2010. Education and training Needs in the field of Consumer Protection in the Lower Danube Region, *Amfiteatru Economic*, XII (Special number 4), pp. 709-734.
- Engel, J.F., Blackwell, R.D. and Miniard, D.T., 1986. *Consumer Behaviour*. Chicago: The Dryden Press.
- European Commission, 2007. *Strategia UE pentru politica de protecție a consumatorilor, 2007-2013*, Direcția Generală Sănătate și Protecția Consumatorilor.
- European Commission, 2013. *The Consumer Conditions Scoreboard*, 9th edition. [pdf] Available at: <http://ec.europa.eu/consumers/consumer_research/editions/docs/9th_edition_scoreboard_en.pdf> [Accessed 7January 2014].
- Eurostat, 2013. *Lifelong Learning*. [online] Available at: <<http://ec.europa.eu/eurostat>> [Accessed 7January 2014].
- Fischer, D., 2011. Educational organizations as ‘cultures of consumption’: cultural contexts of consumer learning in schools. *European Educational Research Journal*, 10, pp. 595-610.
- Florescu, C. coord., 1992. *Marketing*. Bucharest: Marketer Publishing House.
- Goldsmith, E.B. and Goldsmith, R., 2011. Social influence and sustainability in households. *International Journal of Consumer Studies*, 35, pp. 117-121.

- Goldsmith, E.B. and Piscopo, S., 2014. Advances in consumer education: European initiatives. *International Journal of Consumer Studies*, 38, pp. 52-61.
- Gombert-Courvoisier S., Sennes, V., Ricard, M. and Ribeyre, F., 2014. Higher Education for Sustainable Consumption: case report on the Human Ecology Master's course (University of Bordeaux, France). *Journal of Cleaner Production*, 62, pp. 82-88.
- Grebitus, C., Harmann, M., Piorkowsky, M.B., Pakula, C. and Stamminger, R., 2012. Consumer behaviour towards a sustainable future. *International Journal of Consumer Studies*, 36, pp.121-122.
- Hill, E. and O'Sullivan, T., 1997. *Marketing*. Bucharest: ANTET Publishing House.
- Institutul Național de Statistică, 2012. *Anuarul Statistic al României, 2011*.
- Khan, M., 2006. *Consumer Behavior and Advertising Management*. NewAge International.
- Kotler, Ph., 1997. *Managementul marketingului*. Bucharest: Teora Publishing House.
- Kotler, Ph., Armstrong, G., Saunders, J. and Wong, V., 1998. *Principiile marketingului*, Bucharest: Teora Publishing House.
- Lewis, D and Bridger, D., 2000. *The Soul of the New Consumer: Authenticity-What We Buy and Why in the New Economy*. London: Nicholas Brealey Publishing.
- Mâlcomete, P., 1979. *Dicționar de marketing*. Iași: Junimea Publishing House.
- McGregor, S., 2008. Ideological maps of consumer education. *International Journal of Consumer Studies*, 32, pp. 545-552.
- Negrea, M.T. and Voinea, L., 2013. *Studiul și protecția consumatorului*. Bucharest: ASE Publishing House.
- OECD, 2009. *Consumer Education*. [pdf] Available at: <<http://www.oecd.org/sti/consumer/44110333.pdf>> [Accessed 7January 2014].
- Parker, W.C., Ninomiya, A. and Cogan, J., 1999. Educating world citizens: toward multinational curriculum development. *American Educational Research Journal*, 36, pp. 117-145. [pdf] <http://www-rohan.sdsu.edu/~cjabroad/documents/PDF_files/Cultural_material/Educating_word_citizens.pdf> [Accessed 7January 2014].
- Popescu C., Popescu S.F. and Stroe C., 2010. Consumption for the fulfillment of human life. *Amfiteatru Economic*, XII (28), pp. 530-545.
- Răbonțu, C.I. and Chirițescu, D.D., 2009. Educația și rolul său în protecția consumatorului de servicii financiare din Uniunea Europeană. *Finanțe Publice și Contabilitate Magazine*, XX(7-8), pp. 52-56.
- Schroeder, M. and McKinnon, S., 2007. Learning good judgment: young Europeans' perceptions of key consumer skills. *International Journal of Consumer Studies*, 31, pp. 152-159.
- Stanciu, S., 1993. *Marketing*, Bucharest: Bucharest University Publishing House.
- Stanciu, S., 2002. *Bazele generale ale marketingului*. Bucharest University, [online] <<http://ebooks.unibuc.ro/StiinteADM/sica/index.htm>> [Accessed 7January 2014].
- Suciu, M.C., 2004. *Economie. Noua economie și societatea cunoașterii*. Bucharest: ASE Publishing House, Bucharest.
- Șerban, A.C., 2012. Education and changing labour content – implications on employment. *Actual Problems of Economics*, 10, pp. 536-543.
- Ștefănescu, F. and Bălțătescu, S., 2010. The Romanian consumer and his/her rights: opinions and attitudes. *Amfiteatru Economic*, XII (28), pp. 297-313.