

Oryginalny artykuł naukowy
Original Article

Data wpływu/Received: 30.09.2020

Data recenzji/Accepted: 10.11.2020/30.11.2020

Data publikacji/Published: 31.12.2020

Źródła finansowania publikacji: Narodowe Centrum Nauki (Preludium 17, 2019/33/N/HS4/01530)

DOI: 10.5604/01.3001.0014.8080

Authors' Contribution:

(A) Study Design (projekt badania)

(B) Data Collection (zbieranie danych)

(C) Statistical Analysis (analiza statystyczna)

(D) Data Interpretation (interpretacja danych)

(E) Manuscript Preparation (redagowanie opracowania)

(F) Literature Search (badania literaturowe)

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**PURCHASE DECISIONS IN THE AGE OF CRISIS.
IMPACT OF COVID-19 PANDEMIC ON CONSUMER
CHOICES**

**DECYZJE ZAKUPOWE W DOBIE KRYZYSU. WPŁYW
PANDEMII COVID-19 NA WYBORY KONSUMENTA**

Abstract: Recently, we are facing a global COVID-19 pandemic crisis, present in Poland from March 2020. Many scholars pointed out that the COVID-19 crisis is a new field of research opportunity. In present paper the author presented results of online survey amongst

polish consumers conducted between August, 7 and August 28 (N=206). The author also compare declared consumer behavior at the outbreak of pandemic and declared consumer behavior after 6 months period of time. The results shows that at the beginning of pandemic in Poland, more than a half (60%) of people were afraid about financial stability. This number decreased during 6 months period to 40,3%. Second, the fear of losing a job or income caused that some people are more incline to save and limited their purchases but more often at the outbreak of pandemic then at the time of survey. Also 36,4% of respondents confirmed that resign from some purchase during COVID-19 pandemic.

Keywords: COVID-19, crisis, consumer behavior, purchase decision, saving decision

Streszczenie: W ostatnim czasie mamy do czynienia z globalnym kryzysem pandemicznym COVID-19, obecnym w Polsce od marca 2020 roku. Wielu naukowców wskazało już kryzys COVID-19 jako nową dziedzinę badań. W niniejszym artykule autorka przedstawiła wyniki badań ankietowych przeprowadzonej wśród polskich konsumentów w okresie od 7 do 28 sierpnia (N=206). Autorka porównała również deklarowane zachowania konsumenckie w momencie wybuchu pandemii z deklarowanymi zachowaniami konsumenckimi po upływie prawie 6 miesięcy. Wyniki przeprowadzonego badania sugerują, że na początku pandemii w Polsce ponad połowa (60%) osób obawiała się o swoją stabilność finansową. Odsetek ten spadł w ciągu 6 miesięcy do 40,3%. Po drugie, strach przed utratą pracy lub dochodów spowodował, że część konsumentów jest bardziej skłonna do oszczędzania i ograniczania zakupów, ale częściej w momencie wybuchu pandemii niż w czasie obecnym. Również 36,4% respondentów potwierdziło, że zrezygnowało z dokonania niektórych zakupów podczas pandemii COVID-19.

Słowa kluczowe: COVID-19, kryzys, zachowania konsumenckie, decyzje zakupowe, decyzje dotyczące oszczędzania

Introduction

An unexpected events, such as economic or biological crisis, armed conflicts or natural cataclysms exert significant impact of the human society¹. During financial crisis in 2007, the major US financial institutions and banks had collapsed and effect on other industrialized economies around the world. The crisis put powerful European and Asian economies to deep recession². It can be observed decline of production and growing unemployment³.

Many market researches recognized that the global economic crisis has determined many changes in the consumer behavior. The study carried out in 2009 in

¹ S. Stanciu, R.I. Radu, V. Sapira, B.D. Bratoveanu, A.M. Florea, *Consumer Behavior in Crisis Situations. Research on the Effects of COVID-19 in Romania*, "Annals of the University Dunarea de Jos of Galati: Fascicle: I, Economics & Applied Informatics" 2020, 26(1), p. 5.

² V. Sharma, J. Sonwalkar, *Does consumer buying behavior change during economic crisis?* "International Journal of Economics & Business Administration" 2013, 1(2), p. 34.

³ P. Pavlínek, J. Ženka, *The 2008–2009 automotive industry crisis and regional unemployment in Central Europe*, "Cambridge Journal of Regions, Economy and Society" 2010, 3(3), p. 350.

Unites States by Booz & Company (involved 2000 consumers) indicated that 65% of American consumers use coupons more often, prefer to buy at low prices and take attention on saving. Consumers admitted that they need more reasons to justify the purchase, regardless of price segment of the particular product. They also avoid to buy product with higher price despite they clearly perceive quality advantage. If they are loyal to some brands they rather wait for a bargain price or discount coupons. Purchase behaviors also varied with reference to differences in demographics, income, gender, ethnicity and age. A study made in 2009 by Euro RSCG C&O, in partnership with Harris Interactive (sample of 2400 respondents) in France, U.S. and UK showed that before being interested in the price of products, consumers are asking questions about their usefulness. Vast majority of respondents consider whether they really needed the product before the purchase (64%), if the product could be find at a lower price (60%) and if they really can afford to acquire (59%). Surprisingly the research showed that consumers put quality first then the lower price. During the crisis they looked for healthy products (42%), were interested in sustainable and responsible products (47%). Moreover, the results of an online survey conducted by Market Probe International (in 2009 and 2010), on 5700 adults in 7 markets (SUA, Brazil, UK, France, Netherlands, Japan, China) gave proof that consumers in the post-crisis period are characterized by high sensitivity to risk. Although the economy slowly started to recover, consumers have learned to avoid risk in decision making process⁴.

In the age of crisis, the new financial circumstances foster panic and uncertainty among consumers. Many consumers around the world are afraid about their financial and material safety. They face the threat of reduced earnings or unemployment and many household lost their lifetime savings⁵. Similarly, the possibilities of a pandemic cause considerable public concern. Information spread in the media does not improve the situation. A major challenges of public health institutions is to control people's sources of information about pandemics and building a trust in the information they receive from public sources⁶. In early 2003, The SARS crisis in Hong Kong tittered a series of physical damage to inventories, economic and social infrastructure. Enterprises had to deal with disruption of the flow of goods and services. The crisis led to short and long-term negative aftermath in overall economic conditions. The SARS crisis in Hong Kong dramatically changed consumer behavior. Consumers change their shopping habits. One of them was a clear rise in on-line shopping in response to the spread of the virus⁷. The civilization has witnessed

⁴ L. Voinea, A. Filip, *Analyzing the main changes in new consumer buying behavior during economic crisis*, "International Journal of Economic Practices and Theories" 2011, 1(1), p. 16-18.

⁵ V. Sharma, J. Sonwalkar, *Does consumer buying behavior...*, p. 35.

⁶ I. Tilikidou, A. Delistavrou, *Pro-environmental purchasing behaviour during the economic crisis*, "Marketing Intelligence & Planning" 2014, 32(2), p. 161.

⁷ P.W. Forster, Y. Tang, *The role of online shopping and fulfillment in the Hong Kong SARS crisis*, In "Proceedings of the 38th Annual Hawaii International Conference on System Sciences" 2005, IEEE, p. 271-272.

thousands of epidemics, including diseases from bubonic plague to smallpox, SARS for respiratory diseases, Ebola, HIV and recently SARS-CoV2 (COVID-19)⁸.

Abovementioned COVID-19 appeared in December 2019 in Wuhan, Hubei Province, China⁹, and spread subsequently through Asia to Europe and America¹⁰. The novel disease was first official recognized and named as coronavirus by the World Health Organization On February 12, 2020. At the end of January 2020, the WHO confirmed more than 10 000 cases of COVID-19 in China whereas on February 13, noted 13 332 new cases first reported in Hubei¹¹. The dynamically spreading virus has reached approximately 1 197 405 confirmed cases and affected 181 countries by the 5th April¹². In Poland, first confirmed cases appeared 4th March and in the end of march reach to 2 311 cases. At the beginning of the month, there were several to dozen cases a day, and at the end of the month, about 100-200 new cases. To comparison, in August 26, it was notes 63 802 infected people and the daily balance fluctuates between 548 and 843 new cases a day (period between August, 1 and August, 26)¹³. From the economic perspective, COVID-19 pandemic brought threat of an impending crisis and recession. In subsequent countries were introduced a social distancing, self-isolation and travel restrictions. The consumer needs for some commodities and manufactured products has decreased what was the reason of workforce reduction across all economic sectors. In contrast, demand for medical supplies has significantly increased. It can be observed also panic-buying and stockpiling of food products¹⁴.

Present paper focus on impact of COVID-19 pandemic on consumer behavior, especially on propensity to buy and propensity to save. The author carried out an online survey amongst Polish consumer. An article is organized as followed. First section constitutes the theoretical framework of presented issue. Second part contain description of research method and the sample. Then results are presented. The paper is ended with final conclusions. Presented research as well as publication were funding from Polish National Science Centre (Preludium 17, 2019/33/N/HS4/01530)

⁸ S. Stanciu, R.I. Radu, V. Sapira, B.D. Bratoveanu, A.M. Florea, *Consumer Behavior in Crisis...*, p. 5.

⁹ Z.Y. Zu, M.D. Jiang, P.P. Xu, W. Chen, Q.Q. Ni, G.M. Lu, L.J. Zhang, *Coronavirus disease 2019 (COVID-19): a perspective from China*, "Radiology" 2020, p. E15.

¹⁰ S. Stanciu, R.I. Radu, V. Sapira, B.D. Bratoveanu, A.M. Florea, *Consumer Behavior in Crisis...*, p. 6.

¹¹ Z.Y. Zu, M.D. Jiang, P.P. Xu, W. Chen, Q.Q. Ni, G.M. Lu, L.J. Zhang, *Coronavirus disease 2019...*, p. E15-E16.

¹² A. Hoseinpour Dehkordi, M. Alizadeh, P. Derakhshan, P. Babazadeh, A. Jahandideh, *Understanding epidemic data and statistics: A case study of COVID19*, "Journal of Medical Virology" 2020, p. 1.

¹³ Report WHO, www.medicover.pl/koronawirus/koronawirus-statystyki-who, retrieved 27.08.2020.

¹⁴ M. Nicola, Z. Alsafi, C. Sohrabi, A. Kerwan, A. Al-Jabir, C. Iosifidis, M. Agha, R. Agha, *The socio-economic implications of the coronavirus pandemic (COVID-19): A review*, "International Journal of Surgery" 2020 (London, England), 78, p. 185.

1. Purchase decision making and saving decision making

Understanding customers' decision-making processes play a pivotal role in prediction of their future intentions and behaviors¹⁵. There are five stages of buyers purchase decision making and its implementation. This process includes: problem recognition, information search, alternative evaluation, purchase decision and post-purchase evaluation.

Problem recognition take place when consumer noticed a difference between ideal state and reality. After that, consumer start to search for information allowing him to resolve the problem. Consumer may act in two ways. First, he can try to recall own experiences and knowledge. Second, he can utilized external sources such as references from friends and family or let be guided by commercial information's like advertising. After that, consumer may develop a criteria to evaluate various alternative options and make a decisions¹⁶. Post-purchase is important stage because it has a great impact on customers future purchase decisions and behaviors. Post purchase evaluation can led to following outcomes: positive direction, cognitive dissonance, and negative direction. When customer is satisfied by the purchase made the organization can benefit by customer loyalty and positive word of mouth. Satisfaction is achieved when expectations are met or even exceed. Cognitive dissonance describe situation when there is a discrepancy between beliefs and action. Customers is unsure of the outcome of the purchase decision (positive or negative). It has not a clear direction. Negative outcomes occur when consumer is aware that he made an incorrect choice¹⁷.

Consumers not always followed by abovementioned steps of traditional model. They frequently move between stages and their behavior does not represent a clear structure¹⁸. Sometimes, customer continue to purchase a product from the same seller where he buy first time. Consumer update the information's and appraisals through sequential purchases¹⁹. Some research confirmed that vast part of purchases is unplanned or impulsive. It can be distinguish four types of unplanned pur-

¹⁵ H. Han, K. Ryu, *The theory of repurchase decision-making (TRD): Identifying the critical factors in the post-purchase decision-making process*, "International Journal of Hospitality Management" 2012, 31(3), p. 786.

¹⁶ K. Shirin, H.H. Kambiz, *The effect of the country-of-origin image, product knowledge and product involvement on consumer purchase decisions*, "Chinese Business Review" 2011, 10(8), p. 602.

¹⁷ H. Fouad, W. Kortam, *The impact of perceived quality of after-sale services on post-purchase evaluation outcomes of passenger automobiles customers in Egypt*, "International Journal of Business and Emerging Markets" 2017, 9(2), p. 153, 155.

¹⁸ S. Karimi, C.P. Holland, K.N. Papamichail, *The impact of consumer archetypes on online purchase decision-making processes and outcomes: A behavioural process perspective*, "Journal of Business Research" 2018, p. 76.

¹⁹ C.M. Chiu, E.T. Wang, Y.H. Fang, H.Y. Huang, *Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk*, "Information Systems Journal" 2014, 24(1), p. 89.

chases: pure unplanned, suggestive unplanned, reminder unplanned and planned unplanned. Pure unplanned purchase decision it has never been considered previously and is divergent from regular consumer buying pattern. Suggestive unplanned results when an individual made a decision under influence of marketing stimuli. Reminder unplanned happened when an individual is reminded of desire for a product after it is presented. Planned unplanned when an individual seeks and leverages marketing promotions to make an as yet undetermined purchase. Although all impulse purchases are unplanned, however unplanned purchases are not always a result of impulsive decisions²⁰.

Consumer's approach to making choices' are characterized by mental orientation defined as decision-making style²¹. The meaningful part of literature on consumer decision-making styles is based on the seminal work of Sproles and Kendall from 1986. They described the eight-factor model²².

Table 1. Consumer decision-making styles

Tabela 1. Style podejmowania decyzji przez konsumenta

Perfectionism	Consumer's search for the highest or very best quality in products. Respondents scoring high on this dimension could be expected to be careful, systematic or comparison shoppers.
Brand consciousness	Consumers who are oriented towards buying the more expensive, well-known national brands, believing that a higher price means better quality. They also prefer best-selling, advertised brands.
Novelty-fashion consciousness	Novelty seekers, who find seeking out new things pleasurable. Novelty seekers are likely to shop less carefully and more impulsively and are less price sensitive.
Recreational shopping consciousness	Consumers who view shopping as recreation and entertainment. These consumers find shopping a pleasant activity and shop just for the fun of it.
Price-value consciousness	Consumers look for sale prices, appear conscious of lower prices in general and are likely to be comparison shoppers. They are also concerned with getting the best value for their money.
Impulsiveness, carelessness	Consumers behaviors is characterized by careless and impulsive shopping. Those scoring high on this dimension do not plan their shopping and appear unconcerned about how much they spend.

²⁰ E. Van Steenburg, I. Naderi, *Unplanned purchase decision making under simultaneous financial and time pressure*, "Journal of Marketing Theory and Practice" 2020, 28(1), p. 99.

²¹ G. Walsh, T. Hennig-Thurau, V. Wayne-Mitchell, K.P. Wiedmann, *Consumers' decision-making style as a basis for market segmentation*. *Journal of Targeting*, "Measurement and Analysis for Marketing" 2001, 10(2), p. 119.

²² T. Tarnanidis, N. Owusu-Frimpong, S. Nwankwo, M. Omar, *A confirmatory factor analysis of consumer styles inventory: Evidence from Greece*, "Journal of Retailing and Consumer Services" 2015, 22, 165-166.

Confused by over-choice	This trait characterizes consumers who are confused about the quality of different brands and by the information available. High scorers on this characteristic have difficulties making choices.
Brand-loyal, habitual	Consumers who have favorite brands and stores and have formed habits in choosing these repetitively.

Source: G. Walsh, T. Hennig-Thurau, V. Wayne-Mitchell, K.P. Wiedmann, *Consumers' decision-making style as a basis for market segmentation*, "Journal of Targeting, Measurement and Analysis for Marketing" 2001, 10(2), p. 118.

The eight-factor model has been examined across different countries and populations, in developed countries as well as in developing countries. According to research, Sproles and Kendall model is applicable to the US, New Zealand, the UK but the application is not prevalent. For example the price-value conscious characteristic is inapplicable to consumers in China, Greece, India, South Korea and Germany. In China, the dimension of impulsiveness was not established due to its poor reliability estimates. Six out of the eight characteristics were applicable to the Greek consumer groups studied by Tarnanidis, Owusu-Frimpong, Nwankwo and Omar (2015), namely high quality conscious, recreational consciousness, brand conscious, novelty conscious, impulsive conscious, and confused by over-choice²³.

Consumers frequently limit their current consumption and decide to allocate a part of their income to savings, in order to achieve financial goals²⁴. Saving is like a choice between spending money today or giving it to a stranger years from now. Presumably, the degree to which individuals feel connected to their future selves should make them appreciate that they are the future recipients and thus affect their willingness to save²⁵.

Consumers often change of proportion between their consumption and savings with reference to the information received about their future income. It allow them to make rational decisions about whether and how much to save²⁶.

Over the years, allocation of time, effort and money were consider from the point of view the life-cycle framework²⁷. In the life-cycle model people are perceived as completely rational. Saving can be predicted based on the stage of a consumer's life. Young people willingly borrow to pay for consumption because they expect higher

²³ T. Tarnanidis, N. Owusu-Frimpong, S. Nwankwo, M. Omar, *A confirmatory factor analysis...*, p. 166.

²⁴ G. Ülkümen, A. Cheema, *Framing goals to influence personal savings: The role of specificity and construal level*, "Journal of Marketing Research" 2011, 48(6), p. 4.

²⁵ H.E. Hershfield, D.G. Goldstein, W. Sharpe, J. Fox, L. Yeykelis, L.L. Carstensen, J. N. Bailenson, *Increasing saving behavior through age-progressed renderings of the future self*, "Journal of Marketing Research" 2011, 48(SPL).

²⁶ G. Ülkümen, A. Cheema, *Framing goals to influence personal savings...*, p. 4.

²⁷ M. Browning, T.F. Crossley, *The life-cycle model of consumption and saving*, "Journal of Economic Perspectives" 2001, 15(3), p. 3.

income in the future. People in middle-aged save for retirement because they income in the future will decline. Oldest people probably spend these savings because they are in the end of their lives²⁸.

Besides the life-cycle theory of savings there is also the permanent income hypothesis. The permanent income hypothesis posits that consumption is proportional to an individual's estimation of permanent income. Consumers adjust their buying behavior to the level of expected permanent income over the life time. When the perceived permanent income level changes, individuals change their consumption level. The prospect of decrease of future permanent income is a primary motive to save²⁹. Traut-Mattausch and Jonas (2011) confirmed that saving behavior are correlated with income and feeling of financial satisfaction. Their research showed that people with higher income are more incline to save money. Low-income people have a low ability to save and similarly people dissatisfied with earnings do not see the possibility to save³⁰. Research conducted by Pandey and Swasdpheera (2012) has shown that people are willing to save in order to take care for themselves, their children and parents when they are concern about insecure future. The subject admitted that they can tighten their belt to prepare for the uncertainty. Majority of consumers stated that the unstable political situation as well as poor economic situation in the country influence their willingness to save. Some respondents pointed out that the political situation was never drive their willingness to save if it has no effect on the economic situation³¹.

Despite the rational approach is widely acknowledge, significant number of research has shown that the ability to save money is not only influenced by economic factors³². From the perspective of psychological research savings is influenced by set of personality traits such as ability to delay gratification, self-control, risk aversion³³. Explanations as to why people save their money also concentrate on relatively unchangeable traits of a consumer, such as age, the level of education, personality traits and individual differences, for instance level of self-control or time perception³⁴.

2. Research method and the sample

Present paper focus on impact of COVID-19 pandemic on consumer behavior, especially on propensity to consume and propensity to save money. In order to meet

²⁸ E. Traut-Mattausch, E. Jonas, *Why do people save?*, "Journal of Psychology" 2011, 219(4), p. 246.

²⁹ I.M. Pandey, P. Swasdpheera, *Phenomenology of willingness to save: a study of Thai salaried individuals*, "Journal for International Business and Entrepreneurship Development" 2012, 6(1), p. 85.

³⁰ E. Traut-Mattausch, E. Jonas, *Why do people save?...*, p. 246, 250.

³¹ I.M. Pandey, P. Swasdpheera, *Phenomenology of willingness to save...*, 95.

³² J. Rudzinska-Wojciechowska, *If you want to save, focus on the forest rather than on trees. The effects of shifts in levels of construal on saving decisions*, "PLoS ONE" 2017, 12(5).

³³ E. Traut-Mattausch, E. Jonas, *Why do people save?...*, p. 246, 250.

³⁴ J. Rudzinska-Wojciechowska, *If you want to save...*

the assumed goals the author carried out an quantitative study with use CAWI method amongst polish consumers. The Computer-Assisted Web Interview (CAWI) Method is the result of the evolution of previously used methods such as Paper and Pencil Interviews (PAPI) and Computer Assisted Telephone or Personal Interviews (CATI/CAPI). In the CAWI method a research questionnaire is available online for respondents to fill out³⁵. This survey method allow to collect quantitative data cheaper and quicker in comparison to abovementioned traditional methods³⁶. The author created an online questionnaire on Survio.com and distributed an invitation to participate the survey through Facebook users. A snowball sampling technique was used. The participants were encouraged to send the survey further to as many people as possible. Virtual snowball sampling facilitates the access and can expand sample size and the scope of the study. Respondents can answer a questions at a convenient time for themselves. In addition, this method allow reduce costs and minimize the period to collect a data³⁷. As result the author obtain non-random sample of participants with access to the internet. Research involved only respondents at the age of 18 and more. Data were collected between August, 7 and August 28. Finally collected 206 correctly completed questionnaires.

At the beginning of the survey, the respondents were informed about the purpose of the survey and about the anonymous nature of participation. The questionnaire was organized as followed. The first section covered self-reported consumers' behavior at the beginning of pandemic, when they learn about COVID-19 and number of daily new cases was relatively small. Section two of the survey contained questions about present consumers' behavior (near 6 months after the outbreak of an pandemic). The author wanted to investigate if more aware consumers about the nature of the pandemic show different behavior. For half a year, consumers were attacked with information about the virus from various media. Significant impact exert social media which have great potential to spread a news³⁸. Probably they searched for information about this new disease and exchange information with friends and family.

When it comes to questions about consumer behavior, the possible answers were to be rated in the 5-point Likert scale. Respondents could select responses from "strongly disagree" to "strongly agree", with the intermediate option "hard to say". Then a question was asked about the resignation from any purchase during the COVID-19 pandemic due to fear of losing income or job. The questionnaire was ended with demographics questions. Demographic information are resented in table 2.

³⁵ P. Sowa, B. Pędziński, M. Krzyżak, D. Maślach, S. Wójcik, A. Szpak, *The computer-assisted web interview method as used in the national study of ICT use in primary healthcare in Poland-Reflections on a case study*, "Studies in Logic, Grammar and Rhetoric" 2015, 43(1), p. 127.

³⁶ T. Wójcicki, *Application of the CAWI method for the holistic support of innovation transfer to business practice*, "Problemy Eksploatacji" 2012, p. 177-178.

³⁷ F. Baltar, I. Brunet, *Social research 2.0: virtual snowball sampling method using Facebook*, "Internet Research" 2020, p. 62.

³⁸ A.K. Chan, C.P. Nickson, J.W. Rudolph, A. Lee, G.M. Joyn, *Social media for rapid knowledge dissemination: early experience from the COVID-19 pandemic*, "Anaesthesia" 2020, p. 4.

Table 2. Respondents' demographic profiles

Tabela 2. Dane demograficzne respondentów

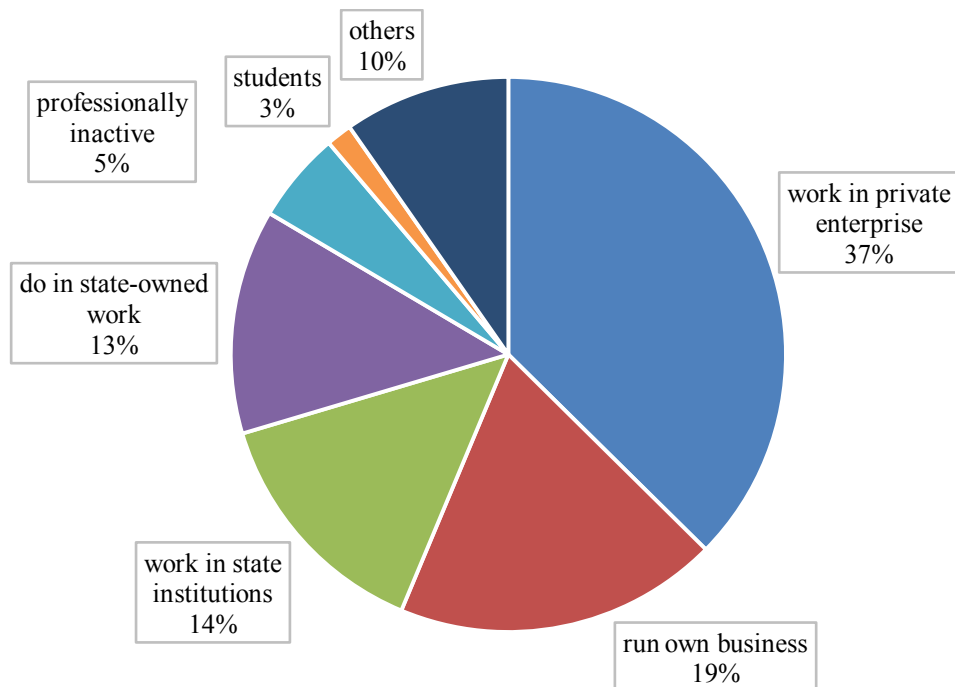
Gender	
female	65,5%
male	34,5%
Age	
18-24	4,4%
25-30	13,6%
31-40	53,4%
41-50	13,1%
51-60	10,2%
61 and more	5,3%
Population size of respondent place of residence	
up to 1 000	9,7%
1 001 – 10 000	29,1%
10 001 – 50 000	17,4%
50 001 – 150 000	13,1%
150 001 – 500 000	23,8%
more than 500 000	6,8%

Source: own elaboration.

Respondents were also asked about occupation (figure 1). The most of them (37,4%) work in private enterprise and run own business (18,9%). Little less respondents represent state institutions (14,1%) and do in state-owned work (13,1%). The research sample also included professionally inactive (5,3%) and students (1,5%).

Figure 1. Respondents' occupation

Rysunek 1. Praca zawodowa respondentów

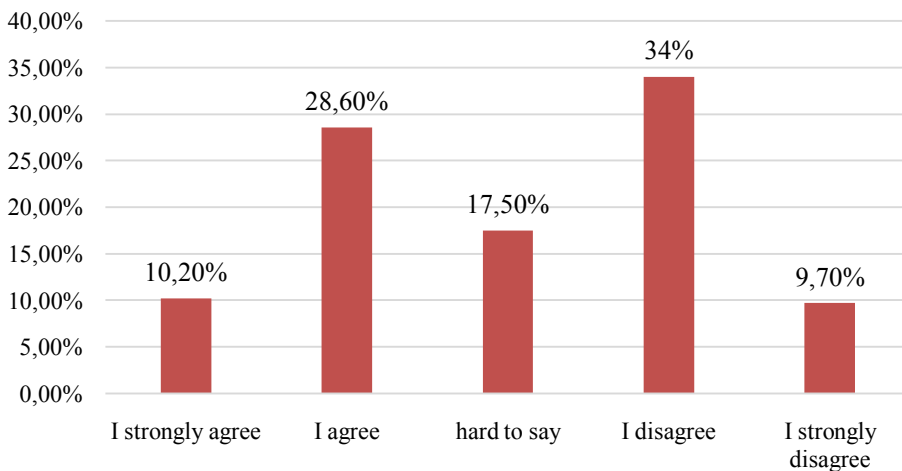


Source: own elaboration.

3. Results

In present study the author investigate customer behavior in the age of COVID-19 pandemic crisis. Previous research show that pandemic caused fear of losing an income. The author also asked a question about this issue (*at the time of the beginning of the pandemic in Poland, which fell at the turn of March and April, when the restrictions were introduced, did you feel a threat of loss of income?*). Amongst respondents, 41% agreed with this statement and 19% strongly agreed. It is mean that more than a half (60%) were afraid about financial stability. As was mentioned before, the first section covered self-reported consumers' behavior at the beginning of pandemic, when they learn about COVID-19 and number of daily new cases was relatively small. Consumers were asked if they agree with following statement: *Due to the introduction of restrictions at the turn of March and April related to the outbreak of the COVID-19 epidemic, I limited my expenses to the purchase of necessary products such as food products, medicines, etc.*, and 38,8% admitted that they limited some purchases whereas 43,70% did not. Results are presented on figure 2.

Figure 2. Limiting expenses at the beginning of COVID-19 pandemic – question 1
Rysunek 2. Ograniczanie wydatków na początku pandemii COVID-19 – pytanie 1

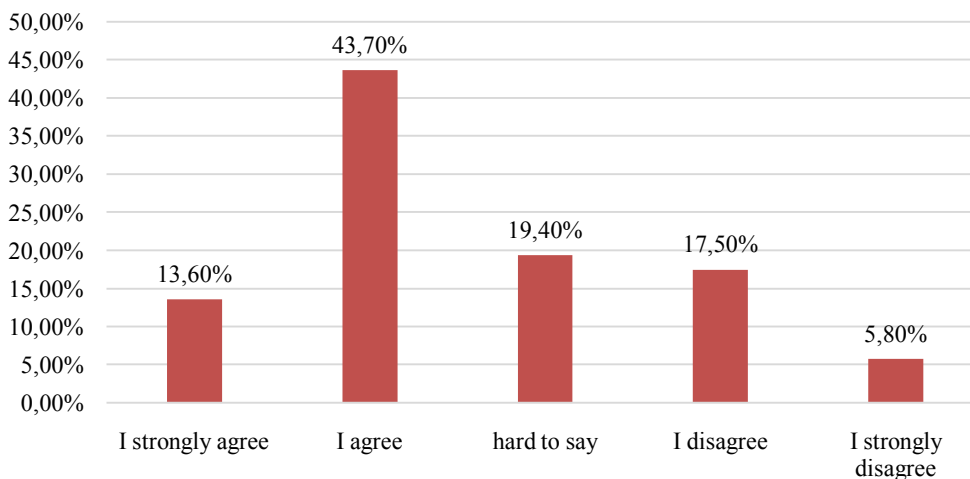


Source: own elaboration.

After that the authored used a next statement regarding limiting purchases (*Due to the introduction of restrictions at the turn of March and April related to the outbreak of the COVID-19 epidemic, I tried not to spend money on products that I do not need in my daily life*). While

38,8% admitted that they limited some purchases to necessary products, much more participants (57,3%) stated that they tried to not spend money on products that they do not need in daily life. In this case did not agree only 23,3% of consumers. Figure 3 shows great increase in limiting purchases.

Figure 3. Limiting expenses at the beginning of COVID-19 pandemic - question 2
Rysunek 3. Ograniczanie wydatków na początku pandemii COVID-19 – pytanie 2



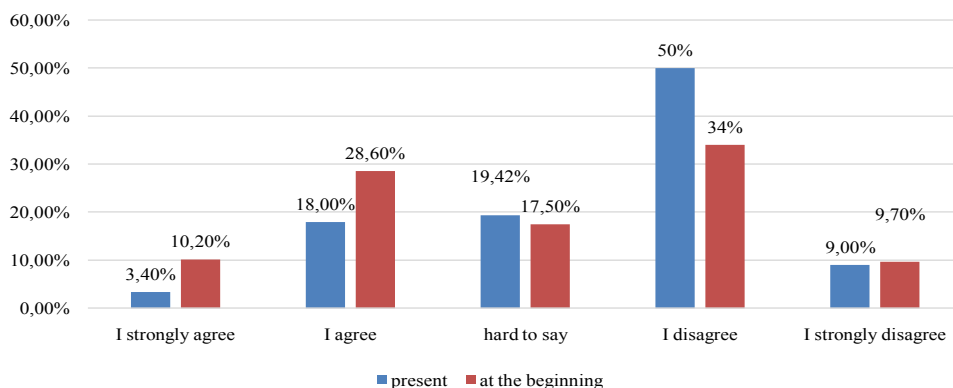
Source: own elaboration.

When it comes to the savings, only 37,4% of consumers confirmed that they save more money during the pandemic than before. Nevertheless, consumers group which denied that save more money included only 3,4% more participants (40,8%).

Section two of the survey included questions about present consumers' behavior. After 6 months (approximately) after the outbreak of an pandemic people 40,3 % of people are still afraid of losing their income. However it is much less than at the beginning of the pandemic (41%). About a third of the respondents (31,01%) feel safely.

Consumers were asked about purchases at the time of completing the survey, i.e. August 2020. They had to rate what extent they agreed with the statement: *currently, when the COVID-19 pandemic is still present, I am limiting my spending to the purchase of necessary products such as food products, medicines, etc.* Only 21,4% of consumers declared that they buying only necessary products because of pandemic in August. Definitely disagree with this statement 9% and disagree up to 50%. It can be concluded that the respondents currently do not limit their consumption only to basic goods. Sequentially, it can be assumed that they feel safer than during the outbreak of the pandemic. Figure 4 represent the differences between the answers pertaining to the beginning of pandemic and present time.

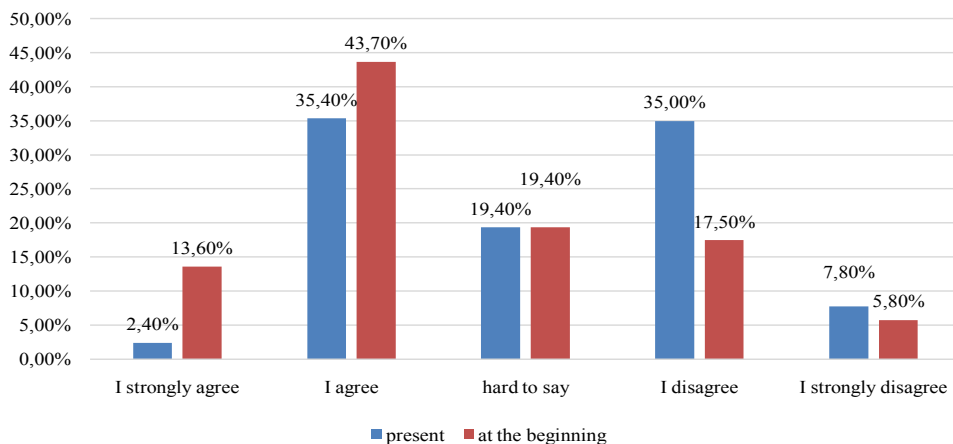
Figure 4. Limiting expenses at the beginning of pandemic and present – question 1
Rysunek 4. Ograniczanie wydatków na początku pandemii oraz obecnie – pytanie 1



Source: own elaboration.

In this section, respondents were also asked to confirm second statement about limiting purchases: *currently, when the COVID-19 pandemic is still present, I try not to spend money on products that I do not need in my daily life.* This statement was supported by 37,8% consumers and 42,8% of consumers disagree with the statement. It can be observed the same trend as in previous questions. It can suspect that after 6 months of pandemic, people feel more safe and are more willing to buy various goods. They less often limited their purchases to products that they need in daily life because of COVID-19. Figure 5 represent the differences between the answers pertaining to the beginning of pandemic and present time.

Figure 5. Limiting expenses at the beginning of pandemic and present – question 2
 Rysunek 5. Ograniczanie wydatków na początku pandemii oraz obecnie – pytanie 2



Source: own elaboration.

Currently, when the COVID-19 pandemic is still present, 21,4% of respondents declared that save more (money) than before the pandemic. More than a half of consumers (51%) did not confirm that they now save more than before the crisis. At the beginning of pandemic people were more inclined to gather financial resources (37,4%).

In last questions in questionnaire consumers were asked about the resignation from purchase any product during the pandemic due to fear of losing their job or income. Although more than a half (63,6%) declared that they not resign from any purchase because of pandemic crisis however 36,4% confirmed it.

In order to better show differences in two analyzed period, the results was gathered in table below (table 3).

Table 3. Comparison of two period of crisis

Tabela 3. Porównanie dwóch okresów

		outbreak of pandemic	present time
I limited my expenses to the purchase of necessary products such as food products, medicines, etc.	Yes	38,8%	21,4%
	No	43,7%	59%
I tried not to spend money on products that I do not need in my daily life	Yes	57,3%	37,8%
	No	23,3%	42,8%
I save more money during the pandemic than before	Yes	37,4%	21,4%
	No	40,8%	51%

Source: own elaboration.

Conclusions

An unexpected events, such as economic or biological crisis has determined many changes in the consumer behavior. Recently, we are facing a global COVID-19 pandemic crisis, present in Poland from March 2020. Many scholars pointed out that the COVID-19 crisis is a new field of research opportunity. Consumers have experienced the house arrest to protect health, they adopt new technologies to facilitate work and everyday duties and probably change consumption habits³⁹. In present paper the author presented results of online survey amongst polish consumers conducted between August, 7 and August 28 (N=206). The author also compare declared consumer behavior at the outbreak of pandemic and declared consumer behavior at present time. The results led to some conclusions.

First of all, COVID-19 exert influence on consumer behavior in general. At the beginning of pandemic in Poland, more than a half (60%) of respondents were afraid about financial stability. This number decreased during 6 months period to 40,3%. Second, the fear of losing a job or income caused that some people are more incline to save and limited their purchases. Additionally, 36,4% of respondents confirmed that resign from some purchase during pandemic crisis because fear of losing their job or income.

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³⁹ J. Sheth, *Impact of Covid-19 on Consumer Behavior: Will the Old Habits Return or Die?* „Journal of Business Research" 2020, 117, p. 283.

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