

https://doi.org/10.15407/econforecast.2022.02.108

**JEL: D12, E21** 

Tatiana Colesnicova<sup>1</sup> Mihail Ciobanu<sup>2</sup>

## CONSUMPTION EXPENDITURES OF MOLDOVAN CITIZENS DURING THE COVID-19 PANDEMIC PERIOD: GENDER ANALYSIS

In 2020 due to the spread of the SARS-CoV-2 virus which has motivated the declaration of COVID-19 pandemic were implemented various restrictive measures to curb it's spread and protect the population from infection. These measures have restricted in some ways the economic activities, in which reductions of costs were necessary, including: decreasing personnel costs, costs for rent and administrative expenditures; reduction of work/production program; postponement of current and/or strategic investments or even total suspension of economic activity. Consequently, this triggers a decrease in the disposable income of the population, which in turn determines diminished consumption expenditures. Even if the disposable income of some part of population has stayed the same or has grown during the pandemic period, the fears of the directions of the future social and economic developments can also have constrictive effects on the consumption expenditures. Also, it is known that gender differences do exist in the consumption behavior. Like the other countries, the Republic of Moldova has not escaped such developments, too. Therefore, the main purpose of this paper is to reveal the directions of the changes in the evolution of the consumption expenditures of the population of Republic of Moldova in gender aspect. In order to achieve this goal a short literature review was done to identify the main findings in the changes in the consumption behavior during the pandemic. While in the scientific literature there are a few research studies that bring to light some aspects of the evolution of consumption during COVID-19 pandemic in

<sup>&</sup>lt;sup>1</sup> **Colesnicova, Tatiana Vladimirovna** – PhD in Economics, Associate Professor, Coordinating Scientific Researcher, Head of Department of Social Research and Living Standard, National Institute for Economic Research, Republic of Moldova, ORCID: https://orcid.org/0000-0001-9663-6991, e-mail: ctania@gmail.com

<sup>&</sup>lt;sup>2</sup> **Ciobanu, Mihail Sergeyevich** – PhD student, scientific researcher, Department of Social Research and Living Standard, National Institute for Economic Research, Republic of Moldova, ORCID: https://orcid.org/0000-0003-1193-6018, e-mail: ciobanu.mihail.s@gmail.com



Republic of Moldova, they have a qualitative character and focus on general consumption behavior or if they have a quantitative nature they center on specific groups of products and services and are not gender-sensitive, not to mention the scarcity of such studies. Hence, this paper intends to cover these gaps by offering a gender analysis of the consumption expenditures of Moldovan citizens over a large variety of products and services which were put in groups: food; clothing and luxury objects; long-term goods; other consumer goods; medicine and health care; housing; sports and leisure; transportation. The data was collected from a sociological survey done by the authors. The analysis of the survey's data has shown that in general a greater share of men has increased their expenditures than women, while a greater share of women has reduced their spendings than men on most types of products and services.

**Keywords**: consumption expenditures, gender, COVID-19 pandemic, Republic of Moldova

#### Introduction

The reduction of gross domestic product (GDP), i.e. total production, consumption, investment and exports - leads to increasing poverty, stratification of society, deteriorating quality of life, which threatens social, political and international tensions. In most countries of the world the main role in GDP growth is played by an important component - consumption. It was consumption that was hit by the COVID-19 pandemic and the quarantine introduced in connection with this. People are forced to stay at home and, as a result, earn less and, accordingly, spend less. The HoReCa sector, namely shops, restaurants, cafes and hotels, did not work and continue to work not at full capacity, tourism and mass events, including sports and entertainment, are prohibited for periods. In France and Germany, for example, it decreased by 6% in the first quarter of 2020 (i.e. during the first wave of coronavirus infection) compared to the same period in 2019, although disposable income increased on average due to state aid in these countries.

Measures to combat COVID-19 have had serious negative consequences for the European economy. In the first quarter of 2020, EU GDP fell by 3.8% and 3.3% in the Euro area, the largest decline in GDP since the beginning of such estimates in 1995. For comparison, US GDP over the same period fell by 1.2% compared to the previous quarter. The largest reductions in GDP were observed in France (-5.8%), Spain (-5.2%), Italy (-4.7%), and in Bulgaria and Finland there was a slight increase in GDP of 0.3% and 0.1%, respectively. In Germany, the fall in GDP was -2.2%. For the first time since 2013, the number of employees decreased by 0.2% both in EU and in Euro area. Household spending and private investment have fallen to historic lows [1].



COVID-19 coronavirus infection was first recorded on December 31, 2019 in the Chinese city of Wuhan and in early January 2020 the Chinese authorities first announced the spread of a new type of virus in the city of Wuhan. Since then, the number of coronavirus infections has increased worldwide. According to the latest WHO data, more than 478 million cases of COVID-19 have been reported worldwide and more than 6.1 million people have deceased with the disease (Fig. 1). In the case of Moldova were reported more than 511 thousands people infected and more than 11.4 thousands deaths associated with the infection (Fig. 2).

The coronavirus pandemic has forced people around the world to reconsider their consumer priorities, give up excess and buy the essentials. Demand for the crisis has grown and continues to grow for basic necessities - food and medicine.

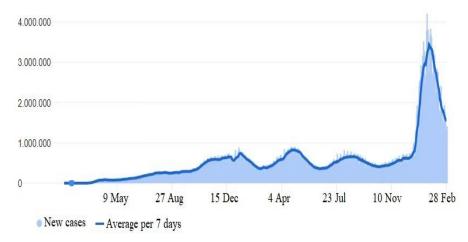


Figure 1. Spread of coronavirus infection (COVID-19) worldwide, recorded cases

Source: JHU CSSE COVID-19 Data [2]

According to a study conducted by the consulting company Boston Consulting Group (BCG) in 2020 - global sales of luxury items in 2020 in the pandemic are to fall by 35-45% and their recovery to pre-crisis levels is possible only by 2023. According to a BCG survey, amid the pandemic, even consumers who spend more than 37 000 Euros a year on luxury goods, which account for 31% of the luxury market, have felt the effects of the crisis and changed their attitudes towards spending. For example, about 60% of luxury consumer analysts surveyed say that economic uncertainty prevents them from shopping and investing as previously planned, which is 3% more than the world average [3]. However, the global luxury goods market in 2021 began to recover from the crisis caused by the COVID-19 pandemic. This is stated in a joint study by consulting company Bain and the association of Italian manufacturers of luxury goods Fondazione Altagamma. In 2021, experts in this study expected global sales of luxury goods to



reach about 1.1 trillion Euros. This is still by 10% less than in 2019, but by 13-15% more than in 2020. Analysts have cited China's and Western economic recovery, especially the United States, growing online sales and increased demand from the younger generation, which will account for up to 70% of all luxury sales by 2025.

According to the report, the luxury industry returned to growth in the II<sup>nd</sup> and III<sup>rd</sup> quarters of 2021 compared to 2019 and in the IV<sup>th</sup> quarter the market showed a growth of 1% compared to the same period in 2019, so the year ended on a positive note. According to the results of the year, the most popular markets will be the United States with a share of 31% and China (21%), as well as Dubai and Saudi Arabia. Other regions, including Europe and Asia (excluding China), have not yet reached pre-pandemic sales levels.

Another important trend, the authors call the rapid pace of recovery in the market of personal luxury items. In this segment, the largest increase was shown in the sale of jewelry, designer clothes, watches, bags and accessories. Demand for designer furniture and household goods recovered more slowly, and collectible alcohol came in third. According to the results of 2021, the market for luxury personal goods grew by 29% and reached 283 billion Euros (by 1% more than in 2019). The authors of the report predict that this figure may increase to 360-380 billion Euros by 2025 with an annual increase of 6-8% [4].

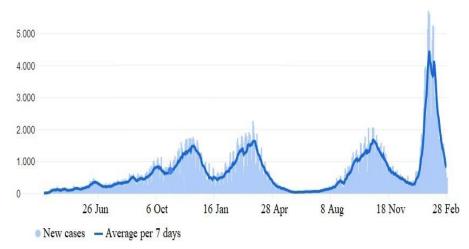


Figure 2. Spread of coronavirus infection (COVID-19) in the Republic of Moldova, recorded cases

Source: JHU CSSE COVID-19 Data [2]

According to the Association of European Automobile Manufacturers (ACEA), in 2020 the number of registrations of new cars in the European Union decreased compared to 2019 by 76.3%. Most car dealers did not work, so the number of new cars sold decreased from 1 143 046 units (April 2019) to 270 682 units (April 2020). This is a record drop in demand for automotive products in the European Union. The biggest losses were in Italy and Spain, where the number of



registered cars fell by 97.6% and 96.5%, respectively. In Germany, demand decreased by 61.1%, in France - by 88.8%. In general, according to the ACEA, from January to April 2020, demand for new cars in Europe fell by 38.5%. The statistics were severely marred by the "coronavirus" in March and April [5].

According to the World Tourism Organization, in Europe when the World Health Organization (WHO) declared COVID-19 a public health emergency of international importance, international tourism was banned in 83% of destinations, in the North and South America - by 80%, in the Asia-Pacific region - by 70%, in the Middle East - by 62%, in Africa - by 57%. Restrictions on international tourist traffic, imposed in connection with the pandemic in all countries without exception, have led to huge losses in the tourism industry. In March 2020 alone, the number of international tourists fell by 67 million and resulted in economic losses of \$ 80 billion [6].

## Experience in the study of consumer spending: economic theories and current research

There are several economic theories related to consumer behavior. One of these economic theories of assessing consumer behavior is the theory of marginal utility, which considers the behavior of the consumer as the search for the greatest utility in the acquisition of certain material goods. The founders of this theory are: William Stanley Jevons - English professor of logic, philosophy and political economy, Marie-Esprit-Léon Walras - French economist, leader of the Lausanne school of marginalism, Carl Menger - Austrian economist, founder of the Austrian school of economic theory, Eugen von Böhm-Bawerk - Austrian economist and statesman, one of the main representatives of the Austrian economic school. Another economic theory of the elasticity of consumption and demand is based on the calculation of the elasticity of income and price and shows by how many percent change in demand or consumption for one percent change in these factors. The founders of estimating the elasticity of consumption and demand are Alfred Marshall - an English economist, one of the founders of the neoclassical direction in economic science, the head of its "Cambridge school" and Paul Anthony Samuelson - American economist, winner of the Nobel Prize in Economics "for scientific work that developed the static and dynamic economic theory and contributed to the general level of analysis in economic science".

The theory of rational consumption considers the possibility of determining the target reference points of the consumer, which can be physiological needs - food, functional household processes - durable goods, social requirements - clothing. The founders of this theory are: Stanislav Gustavovich Strumilin - Soviet economist and statistician, Vasily Sergeyevich Nemchinov - Soviet economist, statistician, one of the founders of the economic and mathematical direction of Soviet economic science.



A separate section of these theories is consumer behavior in times of crisis situations. Near all current researches are based on most famous theories of motivation elaborated by Sigmund Freud and Abraham Maslow. The first theory is based on the recognition of certain psychological forces that shape human behavior and are not always consciously realized. The second theory proceeds from the hierarchy of human needs and explains why people are driven by different needs at different times.

In prior crisis situations and pandemic periods - economic, social and behavioral science research focused mostly on preventive and health behavior, while consumer behavior received less attention [7][8]. Many current researches from different countries are focusing on the analysis of panic buying and herd mentality behaviors, changes in consumer spending models in the period of coronavirus (COVID-19) pandemic [9][10][11][12]. An increasing number of scientific researches has investigated the psychological impact of the COVID-19 pandemic on adults, adolescents and children, men and women [13][14].

With regard specifically to the Republic of Moldova there are a few studies that analyzed different aspects of the COVID-19 pandemic impact on consumer behavior. From those few three were done in the National Institute for Economic Research (NIER): 1) The family with children during the pandemic – study by the Demographic Research Center of NIER [15]; 2) Food consumption in the Republic of Moldova during the COVID-19 pandemic – study by the Department of Agri-Food Economics and Rural Development of NIER [16]; 3) Assessing the changes in the consumption expenditures of the population of the Republic of Moldova during the pandemic - study by the Department of Social Research and Living Standard of NIER [17], the results of which will be presented thoroughly in this paper. The study about family with children during the pandemic is highlighting the problems that Moldovan families faced during the COVID-19 pandemic with identification of their specific needs and establishing the effects of the pandemic on the well-being of children and families. The results of this study that was in form of sociologic survey shows that families with children even after quarantine have difficulties to cope with expenses and problems due to salary instability, depletion of savings and it was a little easier when quarantine was lifted. Also, they minimized family expenses due to insecurity. There is also deliberation on the decision to make certain expenses and families were accessing credits/loans and used savings that were intended for other purposes but not daily expenses to cover essential costs. The study on food consumption in the Republic of Moldova during the COVID-19 pandemic was also done in form of sociological survey. Data obtained from the study shows that during the pandemic, there was an increase in awareness of Moldovan population on the importance of healthy food and the growing trend towards eating more such food. The study also has shown a growth in purchasing vegetables and fruits and reduction in the consumption of unhealthy food. People did more food purchases online.



# Analysis of the consumption expenditures of the Moldovan population by gender

The existing statistical data on consumption expenditures of the Moldovan population by gender per household in the country are given by the National Bureau of Statistics (NBS) of Moldova.

The data is based on Household Budget Survey. There are two gendersensitive indicators: the amount in Moldovan Lei (MDL) of the consumption expenditures by destination of the expenditure (Fig. 3) and the share in percents of the consumption expenditures by destination of the expenditure (Fig. 4).

The amount of total consumption expenditures per man as a head of household in the Republic of Moldova in 2020 was 2791.6 MDL, which is by only 0.6% more than in 2019. In comparison with the amount for women as heads of household in 2020 (2790.1 MDL, which is by 0.7% less than in 2019) the amount for men was only by 1.5 MDL higher, while in 2019 the gap between women and men was a bit higher in the favour of women, by 35.3 MDL or by 1.3%. If taking in account the index of consumer prices, the expenditures in real terms have reduced for households with heads of household of both genders. Thus, the closing of the gap was done by a bigger reduction in real terms of women's expenditures than those of men.

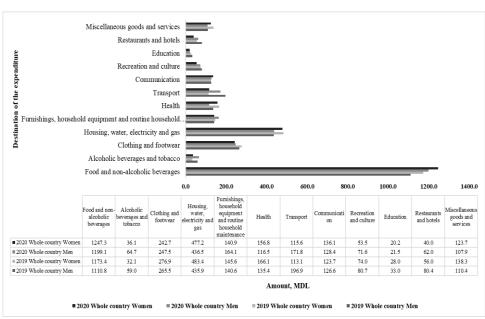


Figure 3. The amount in Moldovan Lei (MDL) of the consumption expenditures by destination of the expenditure by gender of the household head

Source: Elaborated by authors based on the data of NBS [18]

### Consumption expenditures of Moldova...

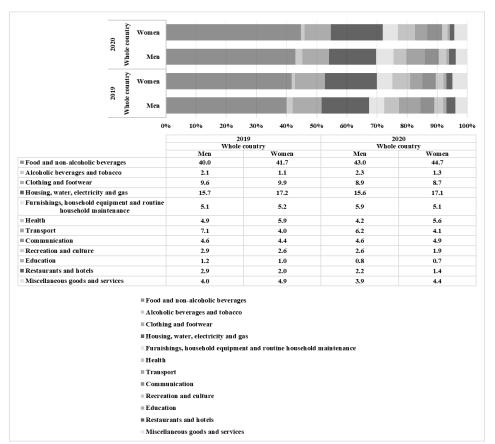


Figure 4. The share in percents of the consumption expenditures by destination of the expenditure by gender of the household head

Source: Elaborated by authors based on the data of NBS [18]

If we look at the destinations of consumption expenditures by gender structure, we see that the gap between women and men from 2019 to 2020 for food and non-alcoholic beverages initially in favor of women (+62.6 MDL) has decreased so it was in favor of men (-28.6 MDL), similar directions of changes are seen for: housing, water, electricity and gas expenditures (from +47.5 MDL in favor of women to -23.2 MDL in favor of men); health expenditures (from +30.7 MDL in favor of women to -56.2 MDL in favor of men). An opposite situation was for transport expenses (from the gap of -83.8 MDL in favor of men to +7.7 MDL in favor of women) and for restaurants and hotels expenses (from the gap of -24.4 MDL in favor of men to +15.8 MDL in favor of women).

A higher amount of consumption expenditures per household with woman household head than for man for 2019 as for 2020 was recorded for: clothing and footwear expenses (+11.4 MDL in 2019 to +40.7 MDL in 2020, increasing in favor of women), in similar way for furnishings, household equipment and routine household maintenance expenses (+5.0 MDL in 2019 to +40.3 MDL in 2020, increasing in favor of women). While the gap between men and women for alcoholic beverages and tobacco that was in favor of men in both years (-26.9



MDL in 2019 and -4.8 MDL in 2020) has reduced, it has increased for communication expenses (-2.9 MDL in 2019 and -18.1 MDL in 2020) and for education expenses (-5.0 MDL in 2019 and -22.0 MDL in 2020).

The gap between the share of expenses on food and non-alcoholic beverages for households with women as household heads was higher than for men in 2020 by 1.7 percent points (p.p.), which is similar to 2019. A higher gap for women compared to men also is recorded for housing, water, electricity and gas expenses (+1.5 p.p. in 2020 as in 2019). The gap between women and men for health expenses that was higher for women has increased from 2019 to 2020 (from +1.0 p.p. to +1.4 p.p.). For alcoholic beverages and tobacco expenses this gap was lower for women than men (-1.0 p.p. in both years), also lower for women was the gap for expenses on restaurants and hotels (-0.9 p.p. in 2019 and -0.8 p.p. in 2020). While the gap between women and men for transport was lower in 2019 (-3.1 p.p.), it reduced a bit in 2020 (-2.1 p.p.).

# Methodology of the survey about the changes in the consumption expenditures of the population of the Republic of Moldova

With regard to the study on the assessing the changes in the consumption expenditures of the population of the Republic of Moldova during the pandemic done by the Department of Social Research and Living Standard of NIER its purpose is to determine the changes in the evolution of consumption expenditures in Moldova across a bigger diversity of products and services. It is based on a sociological questionnaire. The survey was conducted in September-October 2020, which aims to assess the attitudes of Moldovan consumers during the pandemic and identify their willingness to spend during this period. 862 respondents from all over the Republic of Moldova from different social and demographic groups participated. Of those surveyed by gender, 47.3% were women, 52.7% were men; by age group: less than 35 years - 39.2%, 35-50 years - 42.9%, more than 50 years - 17.9%; by region/place of residence: from the Northern Region - 14.6%, Chisinau Municipality - 15.1%, Central Region - 27.1%, Southern Region - 37.8%, ATU Gagauzia - 5.3%. The survey data is representative for the country and the statistical error is +/-5%. Respondents answered 12 basic questions, from which 8 questions were about the changes in the spending of 8 different groups of consumption products and services, 1 question about the place of procurement of products and services and 3 questions about the region of residence, age group and sex. Consumer spending data were structured and analyzed into 8 categories of products and services: food; luxury clothing, footwear and articles; durable goods; expenses for various goods; medicine and health; housing costs; sports and recreation; transport.

#### **Results and discussion**

The respondents of the survey were asked how their spending on food procurement has changed during the pandemic (Fig. 5.). The question included 8 positions: fresh produce; grocery (dry products); frozen and canned products; baby food; tobacco products; alcohol; non-alcoholing beverages and pickles. A large



share of respondents - over 30% - indicated that their spending on fresh produce had increased, with no significant differences between women and men. In the case of other positions for about a quarter of respondents, food procurement costs increased. There were no differences in the purchase of such products as grocery (dry products) and baby food between men and women where the expenses for these products increased. Basically, the same can be said about non-alcoholing beverages and pickles. In the case of frozen and canned products, more women than men reported increases in spending (32.4% vs. 25.1%), the opposite for alcohol (women - 12.3% vs. men - 22.0%) and tobacco products (women - 16.2% vs. men - 22.5%). Among the respondents who mentioned insignificant decrease in spending on food procurement, men had much higher shares than women in practically all positions (grocery (dry products) - 30.8% vs 14.7%; frozen and canned products - 29.5% vs 20.6%; baby food - 28.6% vs 15.7%; tobacco products - 31.3% vs 17.6%; alcohol - 31.3% vs 15.2%; non-alcoholing beverages - 29.5% vs 19.1% and pickles - 31.3% vs 20.1%). If we compare the share of men and the share of women who declared that they had significant decrease in spending on food procurement major differences were recorded for: frozen and canned products (men - 24.2% vs women - 12.3%); baby food (men - 24.2% vs. women - 11.3%); non-alcoholing beverages (men - 22.0% vs women - 15.2%), and in the case of other types of food the differences are not essential.

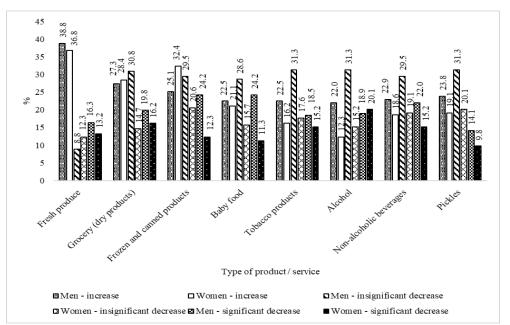


Figure 5. The share of answers to the question "How have your spending on food procurement changed during the pandemic?"

Source: Authors' calculations based on the survey data

The respondents were also asked how their spending on clothing and luxury objects has changed during the pandemic (Fig. 6.). The answers to the question



referred to the following types of products or services: children's clothing; sports equipment and clothing; women's / men's clothing; men's / women's footwear; clothing / footwear repair; leather / fur products; bags and other fashion accessories; jewelry. Among the respondents who mentioned that pandemic expenditures increased for these types of products or services, men had a significantly higher share than women in all positions: children's clothing (men - 22.9% vs. women - 15.2%); sports equipment and clothing (men - 22.9% vs. women - 15.7%); women's / men's clothing (men - 22.5% vs. women - 16.2%); men's / women's footwear (men - 21.1% vs. women - 15.2%); clothing / footwear repair (men - 19.4% vs. women - 13.2%); leather / fur products (men - 18.9% vs. women - 12.7%); bags and other fashion accessories (men - 21.1% vs. women - 13.2%); jewelry (men - 17.2% vs. women - 8.3%).

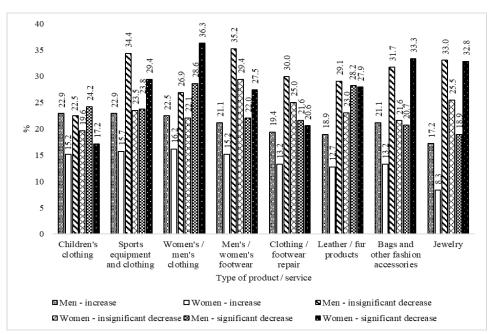


Figure 6. The share of answers to the question "How have your spending on clothing and luxury objects changed during the pandemic?"

Source: Authors' calculations based on the survey data

Practically the same, in the case of the respondents who had an insignificant decrease of the spending for this group of products or services, men had higher weights than women: sports equipment and clothing (men - 34.4% vs women - 23.5%); men's / women's footwear (men - 35.2% vs. women - 29.4%); clothing / footwear repair (men - 30.0% vs. women - 25.0%); leather / fur products (men - 29.1% vs. women - 23.0%); bags and other fashion accessories (men - 31.7% vs. women - 21.6%); jewelry (men - 33.0% vs. women - 25.5%). An opposite situation was for the shares of respondents that declared they had significant decrease in spending in such groups of products or services, with the exception of children's



clothing where men had a bigger share than women (24.2% vs 17.2%), women had higher shares than men for most other products: sports equipment and clothing (29.4% vs. 23.8%); women's / men's clothing (36.3% vs. 28.6%); men's / women's footwear (27.5% vs. 22.0%); bags and other fashion accessories (33.3% vs. 20.7%); jewelry (32.8% vs. 18.9%).

Essential changes were found also in the answers of the respondents who were asked how their spending on long-term goods has changed during the period of pandemic (Fig. 7.). The list of long-term goods included: furniture & interior; mobile electronic devices; stationary and home electronics; scooters, bicycles; cars and other types of automobiles. From the respondents that mentioned they had an increase in the spending of long-term goods men had bigger shares than women for furniture & interior (30.0% vs 16.2%), for scooters, bicycles (22.5% vs 12.7%), for cars and other types of automobiles (20.3% vs 11.3%), while the shares for both genders were nearly similar for mobile electronic devices (24.7% for men and 25.5% for women) and for stationary and home electronics (23.3% for men vs 20.1% for women).

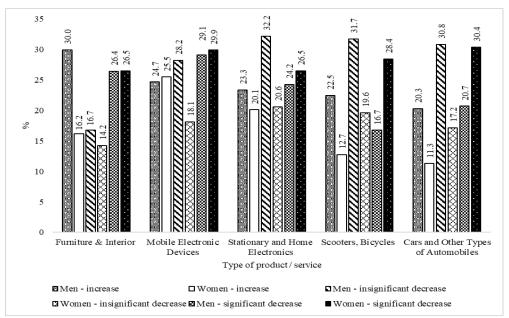


Figure 7. The share of answers to the question "How have your spending on long-term goods during the pandemic changed?"

Source: Authors' calculations based on the survey data

Between the respondents with an insignificant decrease in the spending of this group of products, also men had a higher share than women: mobile electronic devices (28.2% vs 18.1%); stationary and home electronics (32.2% vs 20.6%); scooters, bicycles (31.7% vs 19.6%); cars and other types of automobiles (30.8% vs 17.2%). A different situation is found between the respondents with a significant decrease of spending for some long-term goods – women's share is bigger than



men's share: scooters, bicycles (28.4% vs 16.7%); cars and other types of automobiles (30.4% vs 20.7%).

Another question of the survey was about how the spending of respondents on other consumer goods has changed during the pandemic (Fig. 8.). Other consumer goods referred to hair, face and body care; cosmetics, makeup, perfumery; games and toys; household products. Surprisingly, but from the people who indicated that they had an increase in the spending on other consumer goods also a bigger share had men compared to women even for such goods as: hair, face and body care (32.2% vs 21.6%); cosmetics, makeup, perfumery (26.4% vs 15.7%); games and toys (23.3% vs 14.2%). Such also is the case with the respondents that had an insignificant decrease of the spending on such type of goods: cosmetics, makeup, perfumery (32.6% for men vs 24.0% for women); games and toys (30.8% for men vs 19.1% for women); household products (33.5% for men vs 23.5% for women).

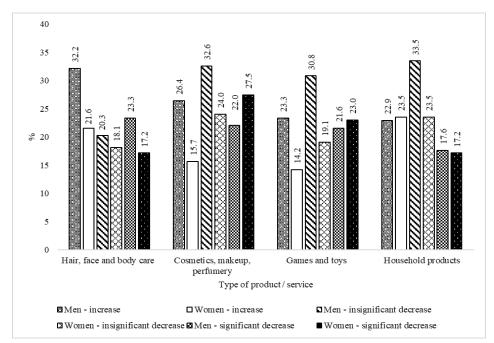


Figure 8. The share of answers to the question "How have your spending on other consumer goods changed during the pandemic?"

Source: Authors' calculations based on the survey data

From the people who had a significant decrease in the spending of hair, face and body care men's share was 23.3%, higher than for women (17.2%), though for cosmetics, makeup, perfumery the situation is opposite (27.5% for women versus 22.0% for men), while the shares between men and women were mostly similar for games and toys (21.6% for men vs 23.0% for women) and for household products (17.6% for men vs 17.2% for women).



At the question about how their spending on medicine and health care changed during the pandemic consumers had to choose from over-the-counter medicines; vitamins and nutritional supplements; prescription drugs; medical insurance; prevention and diagnosis to medical services (Fig. 9.). For respondents who had an increase in the spending on the medicine and health care men had a significantly bigger share than women only for medical insurance (26.9% vs 17.6%) and for the prevention and diagnosis (29.1% vs 24.0%), while for other types of products in this group the differences in the shares were not significant over-the-counter medicines (35.2% for men and 37.3% for women); vitamins and nutritional supplements (32.6% for men and 34.3% for women); prescription drugs (28.6% for men and 29.4% for women); medical services (27.3% for men and 26.5% for women).

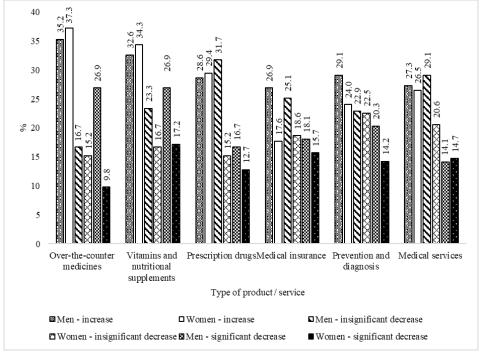


Figure 9. The share of answers to the question "How have your spending on medicine and health care changed during the pandemic?"

Source: Authors' calculations based on the survey data

From the people who said they had an insignificant decrease in their spending on medicine and health care similar shares between men and women were for overthe-counter medicines (16.7% vs 15.2%) and for prevention and diagnosis (22.9% vs 22.5%), while for other products and services men had a bigger share: vitamins and nutritional supplements (23.3% vs 16.7%); prescription drugs (31.7% vs 15.2%); medical insurance (25.1% vs 18.6%); medical services (29.1% vs 20.6%). From the respondents who had a significant decrease in their spending on medicine and health care men had bigger shares than women for over-the-counter medicines



(26.9% vs 9.8%); for vitamins and nutritional supplements (26.9% vs 17.2%) and for prevention and diagnosis (20.3% vs 14.2%), while no major difference was between genders for prescription drugs (16.7% for men vs 12.7% for women); medical insurance (18.1% for men vs 15.7% for women) and for medical services (14.1% for men vs 14.7% for women).

Moldovan consumers were also questioned about how their housing spending changed during the pandemic (Fig. 10.). In the list of products and services were included: communal services, home Internet, cable TV, mobile communication services, rent, construction and renovation of real estate, purchase of real estate, mortgages.

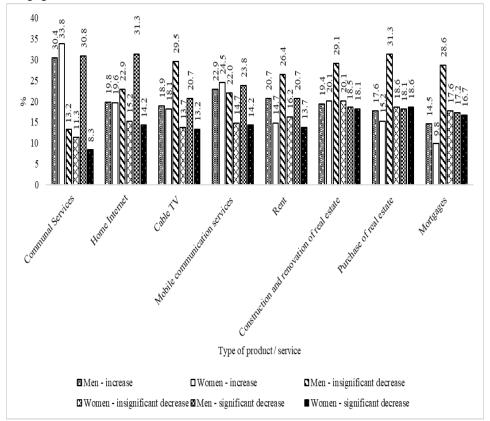


Figure 10. The share of answers to the question "How have your housing spending changed during the pandemic?"

Source: Authors' calculations based on the survey data

From the respondents who had an increase in the spending for rent men had a share of 20.7% while women had a share of 14.7%, for other housing spendings the share of men or that of women was more or less similar: communal services (30.4% for men vs 33.8% for women), home Internet (19.8% for men vs 19.6% for women), cable TV (18.9% for men vs 18.1% for women), mobile communication services (22.9% for men vs 24.5% for women), construction and renovation of real



estate (19.4% for men vs 20.1% for women), purchase of real estate (17.6% for men vs 15.2% for women), mortgages (14.5% for men vs 9.8% for women).

Men and women had a similar share in the respondents that declared they had an insignificant decrease in the spending for communal services (13.2% for men vs 11.3% for women), while for the other products/services men had a higher share than women: home Internet (22.9% for men vs 15.2% for women), cable TV (29.5% for men vs 13.7% for women), mobile communication services (22.0% for men vs 14.7% for women), rent (26.4% for men vs 16.2% for women), construction and renovation of real estate (29.1% for men vs 20.1% for women), purchase of real estate (31.3% for men vs 18.6% for women), mortgages (28.6% for men vs 17.6% for women).

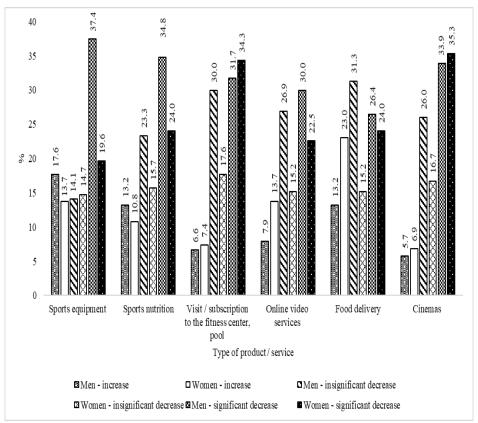


Figure 11. The share of answers to the question "How did your spending on sports and leisure change during the pandemic?" (part 1)

Source: Authors' calculations based on the survey data

From the people that had a significant decrease of expenses in most housing products/services men had bigger share than women: communal services (30.8% vs 8.3%), home Internet (31.3% vs 14.2%), cable TV (20.7% vs 13.2%), mobile communication services (23.8% vs 14.2%), rent (20.7% vs 13.7%), while there were similar shares in some cases: construction and renovation of real estate



(18.5% for men vs 18.1% for women), purchase of real estate (18.1% for men vs 18.6% for women), mortgages (17.2% for men vs 16.7% for women).

At the question how did their spending on sports and leisure change during the pandemic the Moldovan respondents had to choose from a long list of products and services (Fig. 11., Fig. 12.). The list included: sports equipment; sports nutrition; visit / subscription to the fitness center, pool; online video services; food delivery; cinemas; books; restaurants; travel; spa lounges; parks; concerts; recreation and entertainment. Compared to the answers to the other groups of products and services the answers to this group of sports and leisure products and services has a little different picture.

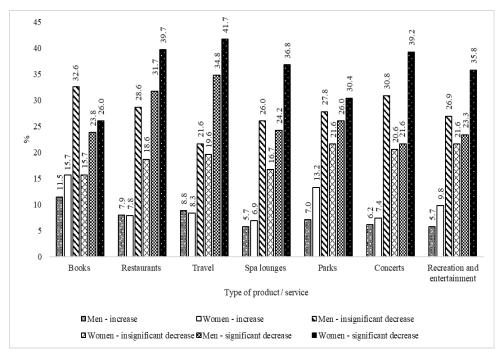


Figure 12. The share of answers to the question "How did your spending on sports and leisure change during the pandemic?" (part 2)

Source: Authors' calculations based on the survey data

Between the respondents that had an increase in the spendings for sports and leisure women had bigger shares than men in spendings for: online video services (13.7% vs 7.9%), food delivery (23.0% vs 13.2%) and parks (13.2% vs 7.0%), while similar shares between women and men were found for: sports nutrition (23.3% for men vs 15.7% for women); visit / subscription to the fitness center, pool (30.0% for men vs 17.6% for women); online video services (26.9% for men vs 15.2% for women); food delivery (31.3% for men vs 15.2% for women); cinemas (26.0% for men vs 16.7% for women); books (32.6% for men vs 15.7% for women); restaurants (28.6% for men vs 18.6% for women); travel (21.6% for men vs 19.6% for women); spa lounges (26.0% for men vs 16.7% for women); parks



(27.8% for men vs 21.6% for women); concerts (30.8% for men vs 20.6% for women); recreation and entertainment (26.9% for men vs 21.6% for women). In the case of respondents who answered that they had a significant decrease in their expenses for sports and leisure products and services the picture of answers by gender was much more diverse. While men had higher shares than women for: sports equipment (37.4% for men vs 19.6% for women); sports nutrition (34.8% for men vs 24.0% for women) and online video services (30.0% for men vs 22.5% for women), women had bigger shares than men for: restaurants (39.7% for women vs 31.7% for men); travel (41.7% for women vs 34.8% for men); spa lounges (36.8% for women vs 24.2% for men); concerts (39.2% for women vs 21.6% for men); recreation and entertainment (35.8% for women vs 23.3% for men), but nearly similar shares for both genders were found for: visit / subscription to the fitness center, pool (34.3% for women vs 31.7% for men); food delivery (24.0% for women vs 26.4% for men); cinemas (35.3% for women vs 33.9% for men); books (26.0% for women vs 23.8% for men) and parks (30.4% for women vs 26.0% for men).

Another question was about how respondents changed their transportation costs during the pandemic (Fig. 13.).

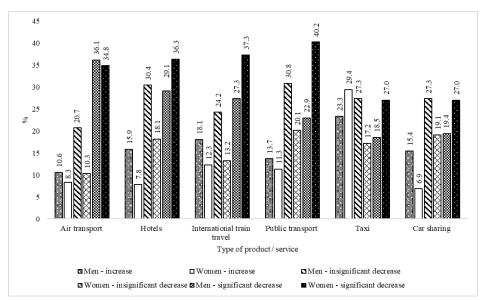


Figure 13. The share of answers to the question "How have your transportation costs changed during the pandemic?"

Source: Authors' calculations based on the survey data

It concerned: air transport, hotels, international train travel, public transport, taxi and car sharing. Women had a smaller share than men from those respondents that had an increase in the expenses for hotels (7.8% for women vs 15.9% for men), for international train travel (12.3% for women vs 18.1% for men) and for car sharing (6.9% for women vs 15.4% for men), while for both genders nearly similar shares are found for: air transport (8.3% for women vs 10.6% for men),



public transport (11.3% for women vs 13.7% for men), taxi (29.4% for women vs 23.3% for men). From respondents that indicated that had insignificant decrease in the expenses for all types of transportation costs men had higher shares than women: air transport (20.7% for men vs 10.3% for women), hotels (30.4% for men vs 18.1% for women), international train travel (24.2% for men vs 13.2% for women), public transport (30.8% for men vs 20.1% for women), taxi (27.3% for men vs 17.2% for women) and car sharing (27.3% for men vs 19.1% for women).

With the exception of air transport the expenses for which significantly decreased for a nearly the same share of men as women (36.1% for men vs 34.8% for women), for other transportation expenses from respondents that had significant decreases in them shares of women far exceeds the shares of men: hotels (36.3% for women vs 29.1% for men); international train travel (37.3% for women vs 27.3% for men); public transport (40.2% for women vs 22.9% for men); taxi (27.0% for women vs 18.5% for men) and car sharing (27.0% for women vs 19.4% for men).

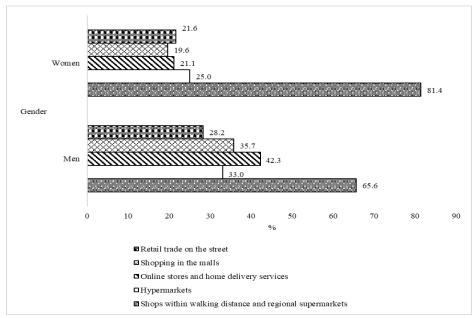


Figure 14. The share of answers to the question "Where did you mostly go shopping in the first half of 2020?"

Source: Authors' calculations based on the survey data

The Moldovan people were asked where did they mostly went shopping in the first half of 2020 (Fig. 14.). The majority of them of both genders in most of the cases went shopping to the shops within walking distance and regional supermarkets, the share of women (81.4%) exceeding vastly the share of men (65.6%).



A third of men respondents (33.0%) went to hypermarkets, much more than in the case of women (25.0%). A surprising finding is that men two times more frequently purchased products and services from online stores and home delivery services than women (42.3% for men vs 21.1% for women). Also men 1.5 times more frequently went shopping in the malls than women (35.7% for men vs 19.6% for women). Buying from retail trade on the street was more often done by men (28.2%) than by women (21.6%).

#### **Conclusions**

The coronavirus has changed the lives of millions of people around the world, has had a negative impact on business development, a huge number of companies have ceased operations. Experts call the current situation unprecedented. Every day there are forecasts about how long the pandemic will last, how deep the markets will fall and how fast they will recover. And yet no one knows exactly what the future holds for us.

Crises vary in depth, and the magnitude of the fall depends on various factors, including which area is on the rise. So once cars gave way to airplanes, then the oil industry strengthened, and in recent years, IT companies have had the largest growth. Now they are approaching their limit, and it looks like the pandemic will bring businesses in the field of health care, pharmaceuticals and medicine to the first place.

In the case of Republic of Moldova as in other countries during the pandemic the consumers had changed their spending behavior. The survey's data has shown that for those respondents that had increases in their spendings during the pandemic a bigger share of men than women was recorded for: tobacco products; alcohol; furniture & interior; scooters, bicycles; cars and other types of automobiles; hair, face and body care; cosmetics, makeup, perfumery; games and toys; medical insurance; prevention and diagnosis; rent; hotels; international train travel; car sharing and a smaller share of men than women for: frozen and canned products; online video services; food delivery; parks, while there were no major differences by gender for: fresh produce; grocery (dry products); baby food; non-alcoholic beverages; pickles; children's equipment and clothing; women's/men's sports men's/women's footwear; clothing/footwear repair; leather/fur products bags and other fashion accessories; jewelry; mobile electronic devices; stationary and home electronics; household products; over-the-counter medicines; vitamins and nutritional supplements; prescription drugs; medical services; communal services; home internet; cable TV; mobile communication services; construction and renovation of real estate; purchase of real estate; mortgages; sports equipment; sports nutrition; visit/subscription to the fitness center, pool; cinemas; books; restaurants; travel; spa lounges; concerts; recreation and



entertainment; air transport; public transport; taxi. For the respondents that have declared they had an insignificant decrease in their consumption expenditures a higher share of men than women were found for such products and services as: grocery (dry products); frozen and canned products; baby food; tobacco products; alcohol; non-alcoholic beverages; pickles; sports equipment and clothing; men's / women's footwear; clothing/footwear repair; leather/fur products; bags and other fashion accessories; jewelry; mobile electronic devices; stationary and home electronics; scooters, bicycles; cars and other types of automobiles; cosmetics, makeup, perfumery; games and toys; household products; vitamins and nutritional supplements; prescription drugs; medical insurance; medical services; home Internet; cable TV; mobile communication services; rent; construction and renovation of real estate; purchase of real estate; mortgages; sports nutrition; visit/subscription to the fitness center, pool; online video services; food delivery; cinemas; books; restaurants; travel; spa lounges; parks; concerts; recreation and entertainment; air transport; hotels; international train travel; public transport; taxi; car sharing and no major differences between genders for products and services like: fresh produce; children's clothing; women's/men's clothing; furniture & interior; hair, face and body care; over-the-counter medicines; prevention and diagnosis; communal services; sports equipment. For the respondents that have indicated they had a significant decrease in their expenditures men had a higher share than women for: frozen and canned products; baby food; non-alcoholic beverages; pickles; children's clothing; hair, face and body care; over-thecounter medicines; vitamins and nutritional supplements; prevention and communal services; home Internet; cable TV; mobile diagnosis; communication services; rent; sports equipment; sports nutrition; online video services, women had a bigger share than men for: sports equipment and clothing; women's/men's clothing; men's/women's footwear; bags and other fashion accessories; jewelry; scooters, bicycles; cars and other types of automobiles; cosmetics, makeup, perfumery; restaurants; travel; spa lounges; concerts; recreation and entertainment; hotels; international train travel; public transport; taxi; car sharing and no significant differences between men and women for: fresh produce; grocery (dry products); tobacco products; alcohol; clothing/footwear repair; leather/fur products; furniture & interior; mobile electronic devices; stationary and home electronics; games and toys; household products; prescription drugs; medical insurance; medical services; construction and renovation of real estate; purchase of real estate; mortgages; visit/subscription to the fitness center, pool; food delivery; cinemas; books; parks.



With regard to the place of shopping the majority of respondents of both genders in most cases went to buy in shops within walking distance and regional supermarkets, where the share of women is much bigger than the share for men. A third of male respondents visited hypermarkets, which was much more than women. Men were twice as likely to buy goods and services in online stores and home delivery services compared to women. Also, men went shopping in shopping malls 1.5 times more often than women and men were more likely to shop on the street than women.

### Acknowledgments

This paper has been elaborated and funded in the framework of the Scientific Project for the period 2020-2023, registered in the State Register of projects in the field of science and innovation of the Republic of Moldova with the code 20.80009.0807.29 Proiect Program de Stat "Perfecționarea mecaniselor de aplicare a instrumentelor inovaționale orientate spre creșterea durabilă a bunestării populaei Republicii Moldova" / Project State Program "Improving the mechanisms for applying innovative instruments aimed at sustainably increasing the welfare of the population of the Republic of Moldova".

#### References

- 1. Agence Europe (2020, May 16). Europe Daily Bulletin, 12488.
- 2. Johns Hopkins University & Medicine (2022). COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). Retrieved from https://coronavirus.jhu.edu/map.html
- 3. BCG (2020, June). True luxury global consumer insights, 7th edition. Retrieved from https://image-src.bcg.com/Images/True-Luxury-Global-Consumer-Insight-2020-PR\_tcm9-252200.pdf
- 4. Bain & Company (2021, November 11). Luxury market rebounds in 2021, set to return to historic growth trajectory. Retrieved from https://www.bain.com/about/media-center/press-releases/2021/luxury-report-2021/
- 5. ACEA (2020, May 19). Press embargo. New passenger car registrations European Union. Retrieved from https://www.acea.auto/files/20200519\_PRPC\_2004-FINAL.pdf
- 6. UNWTO (2020, May 7). International tourist numbers could fall 60-80% in 2020. UNWTO Reports. Retrieved from https://www.unwto.org/news/covid-19-international-tourist-numbers-could-fall-60-80-in-2020
- 7. Laato, S., Islam, A.K.M.N., Farooq, A., Dhir, A. (2020). Unusual purchasing behavior during the early stages of the COVID-19 pandemic: the stimulus-organism-response approach. *Journal of Retailing and Consumer Services*, 57. https://doi.org/10.1016/j.jretconser.2020.102224



- 8. De Groef, A., Hallemans, A., Gebruers, N., Meirte, J., Saeys, W., Truijen, S., Haenen, V., Johnson, C., Meert, L., Peeters, L., Fransen, E., Meeus, M., Durnez, L. (2022, February 12). The impact of COVID-19 lockdown on the general health status of people with chronic health conditions in Belgium: a cross-sectional survey study. *Journal Physiotherapy Theory and Practice*, 1-16. https://doi.org/10.1080/09593985.2022.2036278
- 9. Sheth, J.N. (2020). Impact of Covid-19 on consumer behavior: will the old habits return or die? *Journal of Business Research*, 117, 280-283. https://doi.org/10.1016/j.jbusres.2020.05.059
- 10. Loxton, M., Truskett, R., Scarf, B., Sindone, L., Baldry, G., Zhao, Y. (2020). Consumer Behaviour during Crises: Preliminary Research on How Coronavirus Has Manifested Consumer Panic Buying, Herd Mentality, Changing Discretionary Spending and the Role of the Media in Influencing Behaviour. *Journal Risk Financial Management*, 13, 166. Retrieved from https://www.mdpi.com/1911-8074/13/8/166; https://doi.org/10.3390/jrfm13080166
- 11. Stanciu, S., Radu, R.I., Sapira, V., Bratoveanu, B.D., Florea, A.M. (2020, May). Consumer Behavior in Crisis Situations. Research on the Effects of COVID-19 in Romania. *Annals of Dunarea de Jos University*. Fascicle I: Economics and Applied Informatics, 26: 1, 5-13. Retrieved from https://doaj.org/article/01063ad89b2e497eb7e57027fb05320b; https://doi.org/10.35219/eai1584040975
- 12. Omar, N.A., Nazri, M.A., Ali, M.H., Alam, S.S. (2021). The panic buying behavior of consumers during the COVID-19 pandemic: Examining the influences of uncertainty, perceptions of severity, perceptions of scarcity, and anxiety. *Journal of Retailing and Consumer Services*, 62. https://doi.org/10.1016/j.jretconser.2021.102600
- 13. Migliore, G., Rizzo, G., Schifani, G., Quatrosi, G., Vetri, L., Testa, R. (2021). Ethnocentrism Effects on Consumers' Behavior during COVID-19 Pandemic. *Economies*, 9(4), 160. Retrieved from https://www.mdpi.com/2227-7099/9/4/160/htm; https://doi.org/10.3390/economies9040160
- 14. Muhammad, A., Boeuf, B., Senecal, S. (2021). Does consumer ethnocentrism impact international shopping? A theory of social class divide. *Psychology & Marketing*, 38, 735-44. https://doi.org/10.1002/mar.21461
- 15. Centre for Demographic Research. (2021, May 13). Family with children during the pandemic, Study carried out within the project 20.70086.27/COV "Mitigation of the negative effects of the COVID-19 pandemic on families", (2020-2021). Retrieved from https://ince.md/uploads/files/1620980773\_studiu\_prezentare\_10.05-1.pdf [in Romanian].
- 16. Gutium, T., Ciobanu, M. (2021). The new paradigm of consumer behavior during the COVID-19 pandemic period. *Economica*, 2 (116), 36-46. Retrieved from https://ase.md/files/publicatii/economica/ec\_2021\_2\_v2.pdf; https://doi.org/10.53486/econ.2021.116.036



17. Colesnicova, T., Gutium, T., Ciobanu, M., Gutium, M. (2021). Living standard of the population of the Republic of Moldova. National Institute for Economic Research, Ministry of Education, Culture and Research. Chisinau: NIER.

Retrieved from http://dspace.inco.md/ispui/bitstreem/123456789/1314/1/Nivelul do troi al population.

http://dspace.ince.md/jspui/bitstream/123456789/1314/1/Nivelul\_de\_trai\_al\_populatiei\_Republicii\_Moldova.pdf [in Romanian].

18.National Bureau of Statistics of Moldova (2022). Statistical databank "Statbank", Social statistics, Living standard of the population/ Retrieved from https://statbank.statistica.md/pxweb/pxweb/en/30%20Statistica%20sociala/?rxid=b2ff27d7-0b96-43c9-934b-42e1a2a9a774

Received 29.03.22. Reviewed 16.04.22. Signed for print 10.10.22.

### Тетяна Колесникова<sup>3</sup> Михаїл Чобану<sup>4</sup>

## СПОЖИВЧІ ВИТРАТИ ГРОМАДЯН МОЛДОВИ У ПЕРІОД ПАНДЕМІЇ COVID-19: ГЕНДЕРНИЙ АНАЛІЗ

У 2020 р. через вірус SARS-CoV-2, що викликав пандемію COVID-19, було вжито різноманітних заходів для стримування його поширення та захисту населення від зараження. Цi заходи певним чином обмежили діяльність, необхідно господарську за якої було скорочувати витрати, у тому числі на персонал, на оренду ma адміністративні витрати, згортати робочу/виробничу програму, відстрочувати поточні стратегічні інвестиції або навіть повністю припиняти економічну діяльність. Усе це призвело до зменшення наявних доходів населення і, відповідно, зменшення споживчих витрат. Навіть якщо наявний дохід деякої частини населення у період пандемії залишився на

<sup>&</sup>lt;sup>3</sup> **Колесникова, Тетяна Володимирівна** — канд. екон. наук, доцент, науковий співробітник-координатор, керівник відділу соціальних досліджень та рівня життя, Національний інститут економічних досліджень (вул. Іона Креанга, 45, Кишинів, Республіка Молдова), ORCID: 0000-0001-9663-6991, e-mail: ctania@gmail.com

<sup>&</sup>lt;sup>4</sup> Чобану, Михаїл Сергійович — аспірант, науковий співробітник відділу соціальних досліджень та рівня життя, Національний інститут економічних досліджень (вул. Іона Креанга, 45, Кишинів, Республіка Молдова), ORCID: 0000-0003-1193-6018, е-mail: ciobanu.mihail.s@gmail.com



колишньому рівні або зріс, побоювання щодо напрямів майбутнього соціального та економічного розвитку також можуть впливати на споживчі витрати у бік обмеження. Як і інші країни, Республіку Молдову такий розвиток подій також не оминув. Але головною метою проведеного дослідження стало визначення напрямів змін у еволюції споживчих витрат населення Республіки Молдова саме у гендерному аспекті, адже споживчій поведінці притаманні гендерні відмінності. I хоча в Республіці Молдова проводилися певні дослідження, які висвітлювали окремі аспекти еволюції споживання під час пандемії COVID-19, вони зосереджувалися на загальній споживчій поведінці населення або на конкретних групах продуктів і послуг і не відзначалися гендерною чутливістю. Тож у цій статті викладено гендерний аналіз споживчих витрат громадян Молдови на велику різноманітність продуктів і послуг, які були розподілені на групи: продукти харчування; одяг та предмети розкоші; довгострокові товари; інші споживчі товари; медицина та охорона здоров'я; житло; спорт і відпочинок; транспортування. Дані було зібрано проведеного авторами соціологічного результаті опитування. Аналіз даних опитування показав, що загалом серед чоловіків спостерігалося збільшення витрат, серед жінок – їх зменшення на більшість видів товарів і послуг.

**Ключові слова:** споживчі витрати, стать, пандемія COVID-19, Республіка Молдова