

***EVOLUTION OF DISPOSABLE INCOMES  
AND CONSUMPTION EXPENDITURES OF  
THE POPULATION IN THE REPUBLIC OF  
MOLDOVA DURING THE PANDEMIC  
PERIOD***

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*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 mecanismelor de aplicare a instrumentelor inovatoare orientate spre creșterea durabilă a bunăstării populației 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".*

**Abstract**

*Restrictive measures following the COVID-19 pandemic adversely affected the well-being of the population, so that the disposable income of the population and their consumption expenditures suffered. One year has*

*already passed since the first restrictive measures established in the Republic of Moldova. During this period, a series of researches were carried out to establish the evolution of these basic components of the population's well-being, such as disposable income and consumption expenditures. This article provides an analysis of statistical data of the National Bureau of Statistics of the Republic of Moldova on these indicators, and also on data from a questionnaire conducted by authors the previous year on the evolution of population perception on changes in consumer spending during the pandemic. Research results have shown that the population has prioritized spending on basic goods over other goods and services.*

**Key words:** *disposable income, consumption expenditures, COVID-19, pandemic, Republic of Moldova.*

**JEL Classification:** *I31, J31, D31.*

### **Introduction**

The COVID-19 pandemic affected not only the health of the multitudes of people, but also their socio-economic status. The UN International Labour Organization estimates that the global impact of the COVID-19 pandemic has affected the equivalent of 255 million jobs by 2020 due to job losses or reduced work schedules. According to the organization, this impact was about 4 times greater than the global financial crisis of 2009 (UN News, 2021).

As a result of these losses, they led to an 8.3% reduction in global revenues before the support measures, which is equivalent to 3.7 trillion US dollars or about 4.4% of global gross domestic product. Eurostat data showed a reduction of final consumption expenditures by 17.3% in 2020 compared to 2019 (Eurostat, 2020).

According to a worldwide management consulting company (McKinsey & Company, 2020), which did a study on consumer sentiment and behaviour due to COVID-19 crisis in 45 countries, people from such countries as: Japan, Italy, Spain, France, UK, South Africa in general were less optimistic about country's economic recovery after COVID-19, while people from countries like Mexico, US, India, China, Indonesia were more optimistic about the country's economic recovery. The people from Germany were more optimistic in the first months of the pandemic, but to the end of the year they became more ambivalent. Also ambivalent were people from Brazil during

the 2020 year, although to the end of the year they became a little more optimistic. As in other countries, in the Republic of Moldova the population has become more attentive to consumption behaviour, as we will show later.

### **1. Research methodology, data**

In this paper as research methods were used: the review of existing studies on disposable incomes and consumption expenditures of the population, the statistical analysis of disposable incomes and consumption expenditures and a survey on the assessment of changes in consumer expenditures of the population during the pandemic. Since the research is focused on the population of Republic of Moldova, the source of data for the statistical analysis was the Household Budget Survey Research on incomes of the National Bureau of Statistics of Moldova.

The survey on consumer expenditures' changes covered a sample of 862 persons from the Republic of Moldova from different social and demographic groups, with an in-depth study in Chisinau (Colesnicova et al, 2021). Among those who were surveyed by gender: 47.3% - women, 52.7% - men; by age group: less than 35 years - 39.2%, 35-50 years - 42.9%, more than 50 years - 17.9%; by region or place of residence: from the North Region - 14.6%, Chisinau Municipality - 15.1%, Center Region - 27.1%, South Region - 37.8%, ATU Gagauzia - 5.3%. Respondents answered 12 questions. Consumer expenditure data was 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. This has made possible to find out consumers' short- and medium-term plans.

### **2. Literature review**

In the scientific literature in the previous year and in the current one appeared numerous papers which analyze the impact of COVID-19 on the incomes and expenditures of the population.

Reduction of household consumption expenditures has been shown in (Hacioglu, Känzig & Surico, 2020). (Li et al, 2020), (Bachas et al, 2020) have demonstrated that this reduction affected more the low-income households. Income shocks had affected more the younger households (Hanspal, Annika & Wohlfart, 2020). Another study (Anderson et al, 2020) found that the

decrease of expenditures is a „virus-induced drop”, irrespective of status of the mandate of social distancing. An interesting observation by this study is that the social distancing attenuates the drop in high health risk persons, but reinforces it in the low health risk persons.

According to (Bachas et al, 2020) the decline in spending is characteristic of the first months of the recession, caused by the pandemic itself, rather than by labour market disruptions. Some studies have shown an increase in non-essential expenditures following stimulus payment: (Li et al, 2020), reduction in labour market disruptions for low-income households (Bachas et al, 2020).

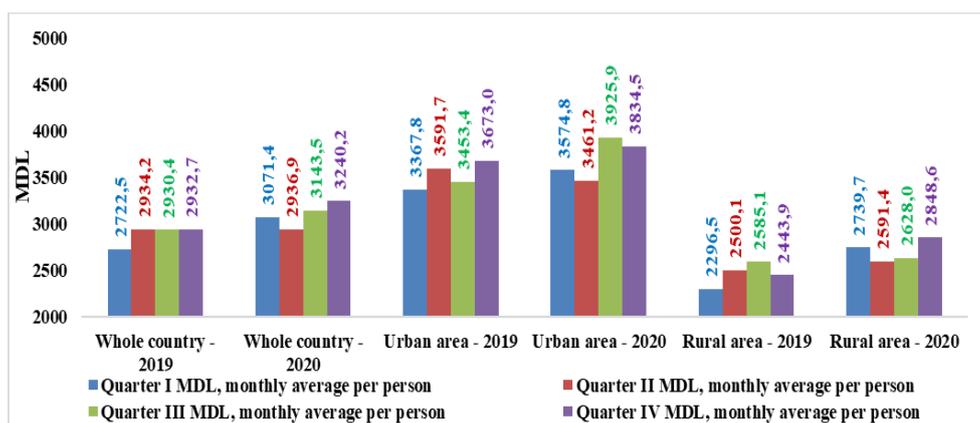
### **3. Analysis of the evolution of disposable incomes of population during the COVID-19 pandemic period in the Republic of Moldova**

The first case of COVID-19 in the Republic of Moldova was identified on March 7, 2020. The authorities set up a state of emergency from 17 March 2020 to 15 May 2020 which affected mostly the HORECA sector, they were closed and could only make product deliveries. The restrictions were attenuated (like opening under special working schedule) in subsequent states of emergency in public health.

It should be noted that when appeared a new spike of COVID-19 cases in November 2020 was adopted a state of emergency in public health from 30 November 2020 to 15 January 2021. These two periods are important not only from medical viewpoint, but also from consumer behaviour, which will be seen in the following analysis.

In total, in the country in the second quarter of 2020, the average monthly disposable income per capita decreased compared to the first quarter of 2020 by 134.5 MDL or by 4.4%, reaching 2936.9 MDL (about the same level as in the second quarter of 2019).

However, in the following quarters the average monthly disposable income per capita in the country not only returned, but also increased above the level of the first quarter of 2020 (in the third quarter: +7.0% compared to the second quarter and in the fourth quarter: +10.3% compared to the second quarter). In urban areas, the growth between the second quarter of 2020 and the third quarter of the same year is stronger (+464.7 MDL or +13.4%) than in rural areas (+36.6 MDL or +1.4%) (*Figure 1*).



**Figure 1. Disposable incomes average monthly per capita in Republic of Moldova in the years 2019 and 2020 on whole country and by places of residence, MDL**

Source: realized by authors based on data of NBS of Moldova (NBS, 2021)

At the growth of the disposable incomes have contributed more the social protection payments in urban area (+1.9 p.p. in Quarter II of 2020 and +3.7 p.p. in Quarter IV of 2020) and remittances in the last three quarters of 2020, the share of which compared to the 2019 year has grown steadily during the 2020 year (from +1.2 p.p. in Quarter II of 2020 to 1.5 p.p. in Quarter IV in 2020). For the urban population the share of income from employment has grown compared to 2019 only in the Quarter III of 2020, while reducing in other quarters, especially in the last quarter of 2020. For the rural population the share of income from employment in 2020 has reduced compared to 2019, whilst still being higher than in 2019 in any quarter (*Table 1*).

**Table 1. The difference of the shares of types of sources of disposable incomes average monthly per capita in Republic of Moldova between the years 2019 and 2020 by quarters on the whole country and by places of residence, %**

	Whole country				Urban				Rural			
	Q I	Q II	Q III	Q IV	Q I	Q II	Q III	Q IV	Q I	Q II	Q III	Q IV
Employment	1.1	0.0	2.0	-2.9	-2.2	-2.9	2.8	-5.7	5.3	3.3	0.2	1.2

	Whole country				Urban				Rural			
	Q I	Q II	Q III	Q IV	Q I	Q II	Q III	Q IV	Q I	Q II	Q III	Q IV
<b>Self-employment in agriculture</b>	-1.1	0.6	-1.5	-0.3	-0.1	0.3	-0.1	-0.2	-2.9	0.4	-1.9	-1.2
<b>Self-employment in non-agricultural sector</b>	0.8	-1.0	-0.2	0.5	0.4	-0.4	1.0	0.2	1.3	-1.5	-1.3	0.6
<b>Property income</b>	0.0	-0.1	-0.9	0.5	0.0	-0.2	-0.8	1.2	-0.1	0.0	-1.0	0.0
<b>Social protection payments</b>	1.2	-0.4	-0.9	2.6	2.2	1.9	-3.5	3.7	0.0	-2.6	1.5	1.5
<b>..pensions</b>	-0.2	0.5	-0.4	0.4	1.0	1.2	-1.9	1.4	-1.5	-0.1	1.2	-0.7
<b>..child allowances</b>	-0.2	0.4	-0.3	-0.1	-0.3	1.1	-0.5	-0.1	-0.2	-0.2	-0.2	0.0
<b>..social support</b>	-0.1	0.1	0.3	0.3	0.0	0.3	0.0	0.3	-0.1	0.0	0.6	0.3
<b>Other incomes</b>	-2.1	0.9	1.5	-0.6	-0.4	1.1	0.8	0.7	-3.8	0.4	2.4	-2.1
<b>..remittances</b>	-1.4	1.3	1.8	0.5	-0.2	1.2	1.3	1.5	-2.8	1.2	2.6	-1.0

Source: calculated by authors based on data of NBS of Moldova (NBS, 2021)

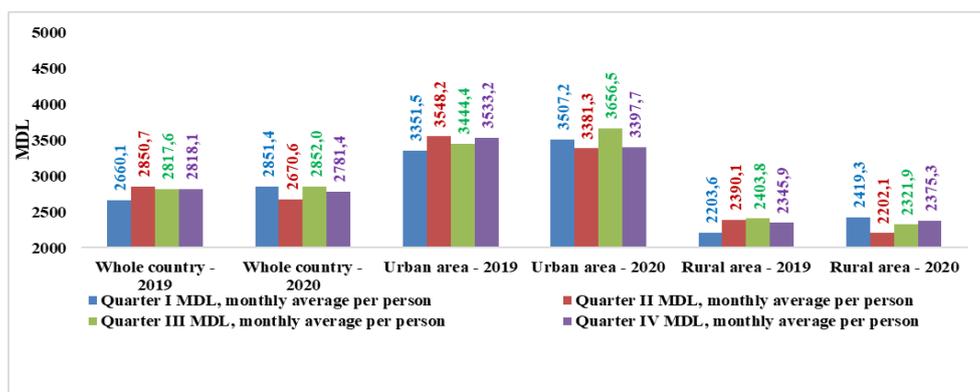
In the rural population a reduction of the share of income from self-employment in agriculture took place in Quarter III of 2020 and from self-employment in non-agricultural sector in Quarter II and Quarter III of 2020. However, in the Quarter III of 2020 compared to the same Quarter of 2019 the share of income from social protection payments and remittances has grown (*Table 1*).

#### 4. Analysis of the evolution of consumption expenditures of population during the COVID-19 pandemic period in the Republic of Moldova

Unlike the disposable income, the consumption expenditures of the population have a little different evolution. So, in the first quarter of 2020 the average monthly consumption expenditures per person in Republic of Moldova amounted to 2851.4 MDL, which is more by 7.2% compared to the same quarter of the previous year (*Figure 2*).

In the second quarter of 2020 the expenditures have reduced by 180.8 MDL or by 6.3% and amounted to 2670.6 MDL (which is also smaller by 6.3% or by 180.1 MDL than the value for the same quarter of 2019). In the third quarter of 2020 the average monthly consumption expenditures per

person practically returned to the level of the first quarter of the 2020 year. There is also a decrease of this indicator in the fourth quarter of 2020 compared to the previous quarter of the same year by 2.5% or by 70.6 MDL. There are discrepancies in the evolution of consumer spending between areas of residence. Thus, in rural areas, these expenditures between Quarter I and II of 2020 decreased more strongly (-9.0% or -217.2 MDL) than in urban areas (-3.6% or -125.9 MDL). The return of expenditure levels in the third quarter was higher in urban areas (+275.2 MDL or + 8.1%) than in rural areas (+119.8 MDL or + 5.4%). The fourth quarter of 2020 marked a further decrease compared to the previous quarter in the level of expenditures for urban dwellers (-258.8 MDL or -7.1%), while in rural areas there was a small increase (+53.4 MDL or + 2.3% ), the level was still below that of the first quarter of 2020 (2419.3 MDL) (*Figure 2*).



**Figure 2. Consumption expenditures average monthly per capita in Republic of Moldova in the years 2019 and 2020 on whole country and by places of residence, MDL**

*Source:* realized by authors based on data of NBS of Moldova (NBS, 2021)

The pandemic restrictions have caused some changes in the structure of consumption expenditures.

On the whole country people have increased the share of food expenditures, especially in the Quarter II of 2020 (+4.3 p.p. compared to 2019), but in the following quarters of 2020 the difference of the shares of food expenditures between 2019 and 2020 has reduced, these expenses still

remaining a higher priority than in 2019, especially for the urban population (Table 2).

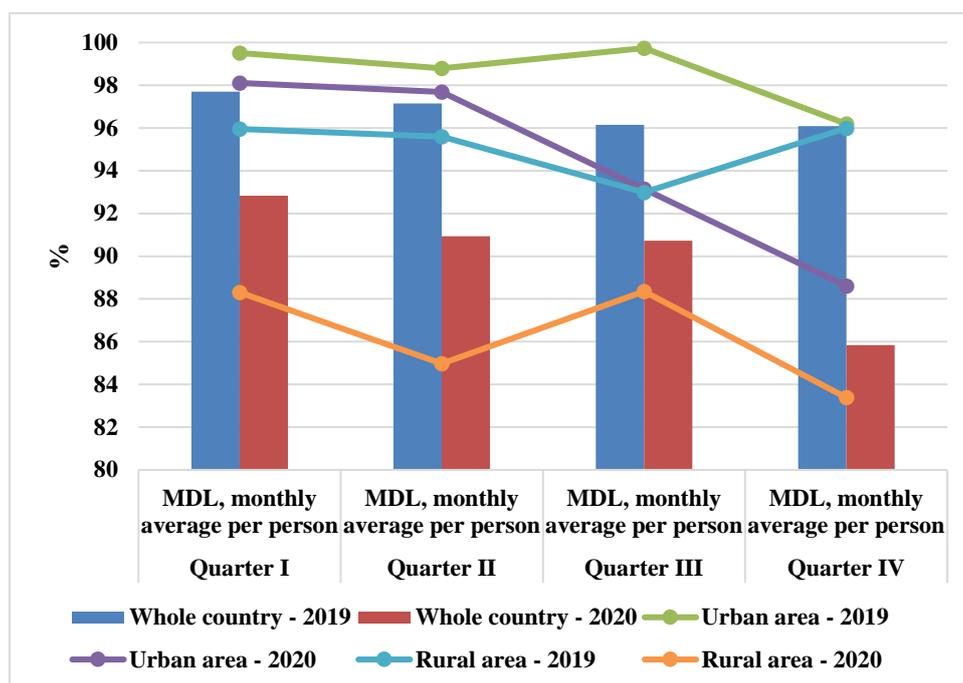
**Table 2. The difference of the shares of types of consumption expenditures average monthly per capita in Republic of Moldova between the years 2019 and 2020 by quarters on the whole country and by places of residence, %**

	Whole country				Urban				Rural			
	Q I	Q II	Q III	Q IV	Q I	Q II	Q III	Q IV	Q I	Q II	Q III	Q IV
<b>Food</b>	1.4	4.3	3.2	2.7	2.5	3.8	2.7	3.7	0.4	5.0	4.1	1.5
<b>Alcoholic beverages, tobacco</b>	0.0	0.5	0.0	0.2	0.3	0.8	0.3	0.7	-0.4	0.1	-0.2	-0.4
<b>Clothing and footwear</b>	0.0	-1.6	-1.3	-0.4	-0.4	-1.8	-1.5	-0.5	0.2	-1.4	-1.2	-0.1
<b>Household maintenance</b>	-0.8	1.2	-0.1	-0.5	-1.2	1.6	-0.7	-0.2	-0.3	0.6	0.6	-0.7
<b>Dwelling equipment</b>	0.9	0.6	0.2	0.3	1.4	1.4	0.6	-0.2	0.6	0.0	-0.2	0.7
<b>Medical care and health</b>	-0.9	-1.4	-0.5	0.4	-1.1	-1.3	-0.2	1.2	-0.5	-1.4	-0.8	-0.4
<b>Transport</b>	-0.5	-1.0	0.2	-1.3	-0.8	-1.2	1.9	-2.3	-0.1	-0.8	-1.7	-0.2
<b>Communication</b>	-0.1	0.2	0.2	0.5	-0.4	0.2	-0.1	0.6	0.1	0.2	0.5	0.4
<b>Entertainment</b>	-0.7	0.0	-0.5	-0.7	-0.8	0.2	-0.9	-1.3	-0.4	-0.3	-0.2	-0.1
<b>Education</b>	-0.3	-0.5	-0.5	-0.3	-0.5	-0.6	-1.1	-0.2	-0.1	-0.3	0.1	-0.3
<b>Hotels, restaurants, cafes etc.</b>	0.7	-1.7	-0.3	-1.2	0.7	-3.0	-0.4	-1.8	0.6	-0.6	-0.5	-0.4
<b>Miscellaneous</b>	0.0	-0.5	-0.7	0.3	0.1	-0.1	-0.8	0.5	-0.1	-1.0	-0.5	0.1

Source: calculated by authors based on data of NBS of Moldova (NBS, 2021)

The lockdowns of Quarter II and Quarter IV had made urban population to make a higher prioritisation of food expenditures in these periods. The rural population increased more their share of food expenditures in the quarter II and quarter III, but as they could harvest agricultural products, in the quarter IV their share of food expenditures had reduced by more than for the urban population in the same period.

While the share of food expenditures increased, the shares of some other types of expenditures have decreased (clothing and footwear; transport; hotels, restaurants, cafes etc.) (*Table 2*).



**Figure 3. The ratio of consumption expenditures average monthly per capita to disposable incomes average monthly per capita in Republic of Moldova in the years 2019 and 2020 on whole country and by places of residence, %**

Source: calculated by authors based on data of NBS of Moldova (NBS, 2021)

Making a ratio by dividing consumption expenditures to disposable incomes it can be seen that at the country level in the Republic of Moldova between the quarters of 2020 this ratio not only was lower than in the same periods in 2019, but also decreased much more strongly during this period. If this ratio decreased between the quarters of 2019 from 97.7% in the Quarter I to 96.1% in the Quarter IV, in 2020 this ratio decreased from 92.8% to

85.8%. The decrease of this ratio in 2020 in urban areas was stronger (from 98.1% to 88.6%) than in rural areas (from 88.3% to 83.4%) (*Figure 3*).

### **5. Analysis of the survey's data on the assessment of changes in the consumption expenditures of the population of the Republic of Moldova during the COVID-19 pandemic**

The authors have elaborated a questionnaire on the assessment of changes in the consumption expenditures of the population of the Republic of Moldova during the COVID-19 pandemic, the results of which are presented in a more detailed manner in (Colesnicova et al, 2021), whilst here a summary will be given. The survey has been conducted between September and October 2020. According to the data of the survey, in 90% of the groups of products and services there is a reduction in consumer demand, and in a few groups the increase is associated with self-isolation or health problems. A reduction is expected in the whole category of "Food", with the exception of the subgroup "Fresh products", and consumers who increase their expenses do so only to accumulate supplies during the period of self-isolation. A major decrease in all segments is expected in the "Luxury clothing and articles" group, except for children's clothing and clothing or footwear repairs. In the "Durable Goods" category, the largest decrease had mobile electronic devices and stationary and household electronics, and the smallest - the furniture and interior goods. Consumers either planned to buy earlier or buy for fear of rising prices. In "Other consumer goods" group, most respondents mentioned a reduction of their expenses for cosmetics, make-up, perfumery; games and toys; household products, while a significant number of respondents stated that they increased their spending on hair, face and body care products. Among the expenditures for goods and services in the "Medicine and health care" group, several respondents mentioned a significant increase in expenditures for over-the-counter medicines and for vitamins and nutritional supplements, which proves that in the context of COVID-19 evolution the population wish to strengthen the immune system and prevent or fight respiratory infections. The population's fears about the pandemic, as well as the increased prioritization of restrictive measures to control COVID-19 infection by the authorities have reduced the increase in public spending on health services, prevention and diagnosis and other services in the "Medicine and Health" group of services, which also can be seen in the *Table 2*. In the group of "Housing" products and services about a third of respondents said

they increased their spending on utilities, and a quarter of those surveyed - those for mobile communications services, which is evident in the increase in the number of working remotely. For home internet, cable television, rent, construction and renovation of the house, purchase of real estate, mortgages and other products and services 3-4 people out of 10 have reduced their expenses. In the groups of services related to entertainment and travel, a sharp decline is expected. Spending more time at home due to restrictions on fighting the new type of coronavirus has led some respondents to spend more on a range of "Sports and Recreation" products and services (sports equipment, sports nutrition, online video services, food delivery, books) or for easy recreation with restrictions outside the home (parks), while most respondents reduced their expenses for other products and services to which access has been restricted or contact with other persons would be practically unavoidable (visits or subscriptions to fitness centers, swimming pools; restaurants; travel; spas; cinemas; concerts; as well as other leisure and recreation products and services). Thus, recreation and entertainment services will suffer greatly: cinemas (56% of respondents reduced their expenses), restaurants (59%), spas (51.7%), concert halls (56%), leisure and recreation (54%). In the "Transport" group of services, 4-5 respondents out of 10 reduced their expenses for such services as air transport, hotels, public transport, car sharing, international train travel, and in the case of taxi services 2-3 out of 10 people increased expenditures. Thus, the population preferred to use personal transport and taxi services during the pandemic period to reduce the risk of infection. Isolation and fear of illness are cited as the main reason (up to 60% of cases), and the same reason is indicated in the refusal to use public transport throughout the country. On average, 57% of respondents intend to spend less on public transport, 45% on taxis and 46% on car sharing.

### **Conclusions**

COVID-19 pandemic has hit in the world countries not only the health of people, but also their disposable income and their consumption expenditures. In the Republic of Moldova in the lockdown in the second quarter of 2020 not only the disposable income has reduced, but also consumption expenditures had a decrease, while in the following quarters of 2020 the disposable income showed an increase the consumption expenditures had a lower increase, but relative to the income they have

decreased. Thus, people have become more attentive to the amount of expenditures, but also their directions. The source of income that suffered more, especially during the lockdowns in the Quarter II and III of 2020 was the one from employment, while social payment benefits and remittances had a bigger share in disposable income of population. People have reduced the share of expenditures for clothing and footwear; transport; hotels, restaurants, cafes etc., while the share of food expenditures has increased for them. In circa 90% of the groups of products and services there is a reduction in consumer demand, and in a few groups the increase is associated with self-isolation or health problems. Subsequent lockdowns, if they will occur, will most likely affect the disposable income of the population and also and especially consumer expenditures, with the population having more control over the latter.

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