

FRI-ONLINE-1-EM2-01

SAVING AND CONSUMPTION SPENDING IN BULGARIA DURING THE COVID19 PANDEMIC^{35 36}

Associate Prof. Kamelia Assenova

Department of Economics,

University of Ruse “Angel Kanchev”

E-mail: kassenova@uni-ruse.bg; kamelia_a@yahoo.com

***Abstract:** The COVID19 pandemic have had the impact on all sectors of economy and life. The government has imposed restriction in the movement of people and economic activities to protect public health and reduce negative effects of pandemic. The introduced restriction measures changed personal behavior. The peoples reduce desire to go shopping, to the restaurants or theaters and increase desire to save for an uncertain future time.*

The recovery of consumer spending was observed after first lockdown in March in Bulgaria. I third and fourth quarter 2020 they increased. After second period with massive cases of COVID19 in the country, the consumption fallen and recovery during the second quarter of 2021. The main part of consumer spending is for the food (between 35% - 40 %). Spending for health care raised immediately after first lockdown, in opposite - the consumption spending for holiday and culture are with negative rate. The shopping and payment behavior changed – from cash to online trade and payments.

Forced saving – declined consumption spending during the lockdown started sharply increase in households saving. The bank deposits are main assets for Bulgarian households. The main factor for this change is uncertainly in the economy. The distribution of income significantly became on the base of future expectations. The bank deposits of households declined after the begging of first lockdown in March and after it raised to the end of 2020. In the end of second quarter 2021 they are with 20% more compared with same quarter of 2020.

***Keywords:** saving, consumption, COVID 19*

***JEL Codes:** E20, G51, I 15*

INTRODUCTION

The COVID-19 pandemic has strong impacts on all sectors of economy and life. From one side, the Government has imposed restrictions on economic activity to protect public health and introduced economic policies to try to protect households and businesses from the deterioration of their economic live.

From other side, by the introduced restriction measures the people changed their voluntary behaviour. It includes reduced willingness to go to shops or restaurants due to health concerns for themselves or for others, or having an increased desire to save for an uncertain future.

This paper analyses the changes of consumption spending and saving of households during the COVID pandemic and factors, leading to these variations.

EXPOSITION

1. Literature review

Number of papers have analysed changes in spending patterns during phases of the pandemic. Chronopoulos, Lukas and Wilson (2020) and Hacioglu, Känzig and Surico (2020) both provided early analyses of trends in spending patterns. Firth, Gathergood and Stewart (2020) analysed online versus offline spending.

³⁵ Докладът е представен на научна сесия на 29.10.2021 в секция „Икономика и мениджмънт 2“.

³⁶ Проучването е в рамките на проект 2021-БМ-02 „Изследване на социално-икономическите ефекти на COVID19 пандемията върху българската икономика”, финансиран от ФНИ на РУ „Ангел Кънчев“.

Jaravel and O’Connell (2020) used real-time data on supermarket purchases to measure the impact of the pandemic on inflation, while O’Connell, de Paula and Smith (2020) used the same data to explain the nature of the ‘panic buying’ seen in March.

A number of researchers have observed the bank account data to provide a real-time assessment of spending patterns in the wake of the crisis. These include Chetty et al. (2020) documenting spending patterns in the US using credit and debit card data and finding that higher-income areas reduced spending (as % from income) considerably more than lower-income areas. Similar analysis with various transaction data sources has been conducted in China, Denmark, France, Iran, Japan, Mexico, Spain and Switzerland.

2. Problem statement

The consumption depends on disposal income. The decline of consumption will depend on how long the reduction in income is expected to continue. By the COVID19 pandemic to this direct effect it possible to add three additional effects on households behaviour:

- Supply restrictions: Restrictions on access to goods and services, which may include restrictions imposed on businesses by lockdown and social distancing, as well as supply chain disruptions.

- Demand changes: Shifts in preferences that may be due to health concerns and make some services – such as eating out – less attractive. The reduced demand due to a desire or need to self-isolate.

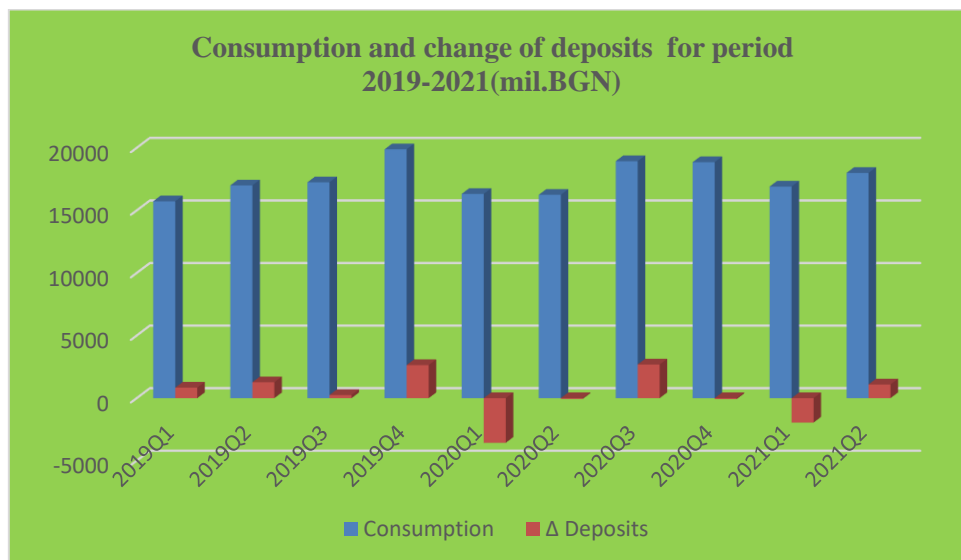
- Increased uncertainty: Concerns over the future may lead individuals to defer spending. These concerns may be over future employment prospects or future income.

The COVID-19 pandemic can increase environmental uncertainty and stimulate an individual's risk perception. When risk perception is stimulated, people usually adopt a conservative economic strategy; and they may prefer saving money rather than spending it. Any fall in spending will have implications for saving rates: for those without a change in income, reduced consumption leads to extra saving.

3. Data presentation

The graph below is shown the changes of consumption and of deposits for period of COVID19 pandemic.

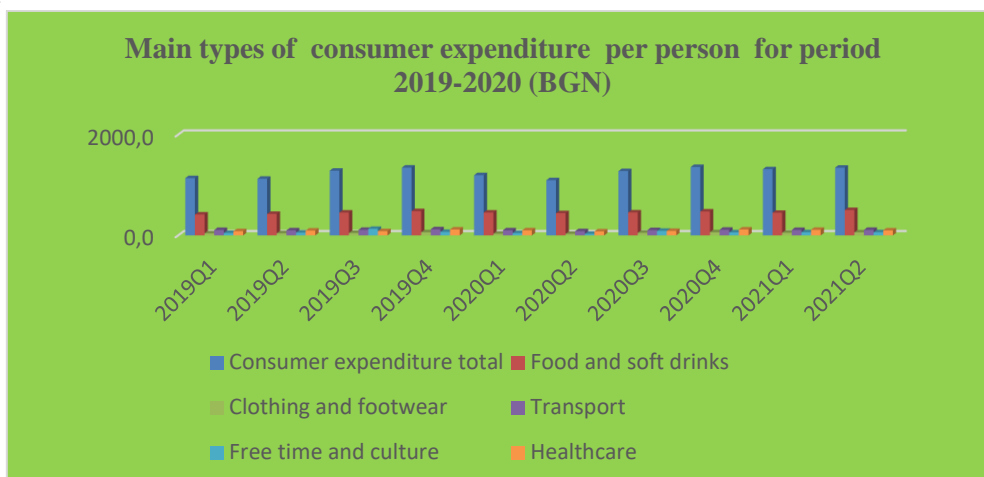
Graph 1



Source: BNB and NSI

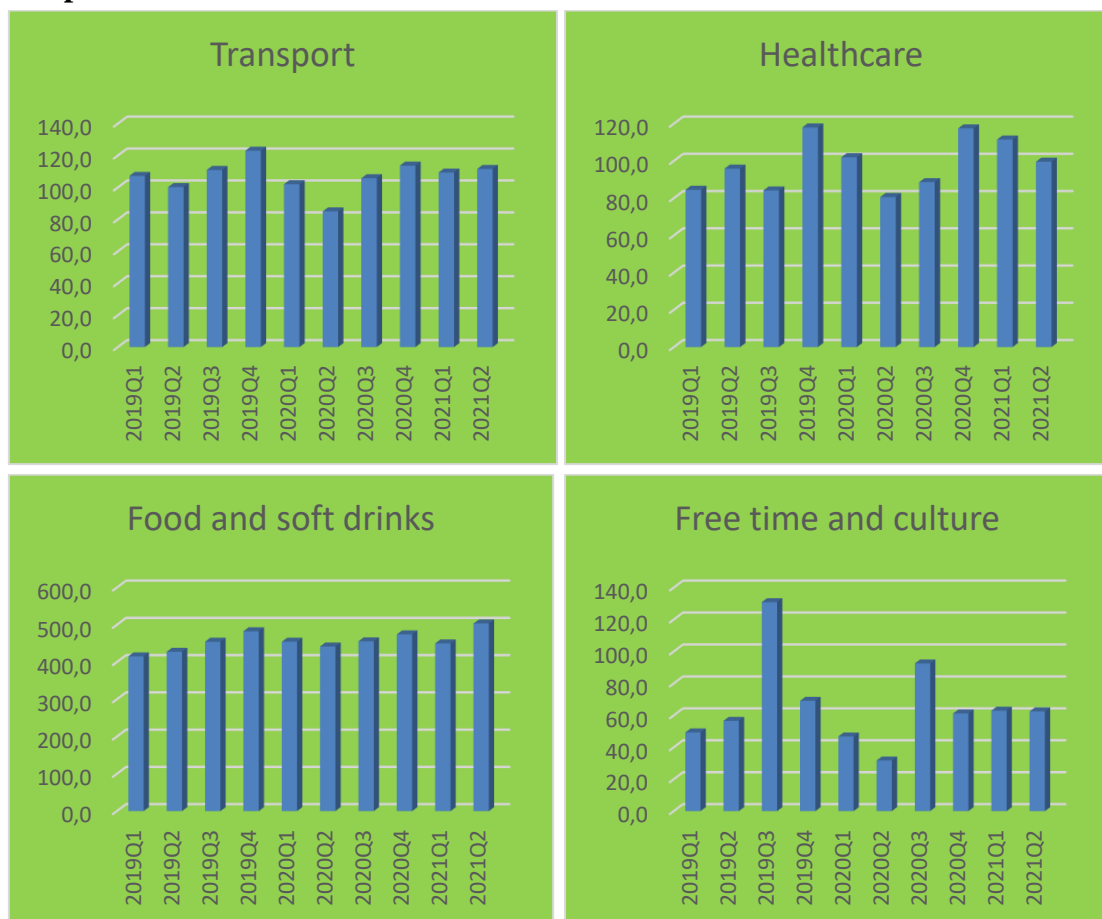
The graph below is shown the changes in main types of consumption spending.

Graph 2



Source: BNB and NSI

Graph 3



Source: BNB and NSI

4. Results

4.1 Consumption spending during the crises

The spending initially fell by after first lockdown but easy recovered through third quarter of 2020 and not reduce after it. Spending for food rose during lockdown and remains on the same level during 2020 as in 2019. It due to:

- Low level of income in Bulgaria and high part of spending for food from whole spending

- Uncertainly in the economy and restrain of all expenses.

The opposite for spending for free time (restaurants, clubs, and holidays) and culture strongly fell to 2.89 % from all expenses after first lockdown.

The spending for transport reduce only for short period of time after lockdown and after it quickly return to pre-crises level. This situation is different compared with other countries in Europe.

About personal healthcare expenses the situation is not similar as in Europe. This spending fell after first lockdown for second and third quarter of 2020 and after it back to previous level.

Table 1

% from total consumer expenditure	2019Q1	2019Q2	2019Q3	2019Q4
Transport	9.43	8.91	8.63	9.13
Food and soft drinks	36.52	38.00	35.34	35.81
Clothing and footwear	3.72	3.82	3.77	4.68
Free time and culture	4.33	5.03	10.18	5.13
Healthcare	7.43	8.52	6.54	8.76
% from total consumer expenditure	2020Q1	2020Q2	2020Q3	2020Q4
Transport	8.53	7.75	8.28	8.37
Food and soft drinks	37.98	40.27	35.66	34.92
Clothing and footwear	2.92	2.84	4.1	4.72
Free time and culture	3.91	2.89	7.24	4.5
Healthcare	8.52	7.35	6.93	8.65

There has been a persistent shift in shopping and payment habits during the crisis, away from cash and towards online-only merchants. The cash use remained below half of normal levels, having plummeted after lockdown, whereas spending on online alternatives for goods bought in physical stores remained over a quarter higher.

4.2 Saving during the crises

‘Forced saving’ – the spending on goods and services declines and was substantially affected by lockdown – has been significant across the income distribution.

The saving initially fell by after first lockdown in Bulgaria. The loss of deposits of households during first quarter of 2020 was recovery in next three quarter of same year and deposits returned to pre – crises level. It due to:

- Uncertainly in the economy ;
- It is not clear perspective to the end of health crises.

Table 2

Quarter/ year	Δ Deposits	Quarter/ year	Δ Deposits
2019Q1	839	2020Q1	-3569
2019Q2	1266	2020Q2	-68
2019Q3	249	2020Q3	2687
2019Q4	2640	2020Q4	-78

The experience in other countries shows any fall in spending will increase the saving rate by the same level of income. It is tested this correlation for Bulgaria. The research of consumption spending and saving relationships made by usage linear regression model

$$Y = a + b \cdot X + e \quad (1)$$

Where

Y – change of deposits

X - consumption

The regression coefficients are statistically significant. The statistical analysis shows the coefficient of determination for the change of deposits is insignificant. It show that is not direct relations and when consumption decline, the sum is not become deposits in every case. The economic analyse confirms in the case in Bulgaria during COVID19 crises the level of income fall. The main factor for positive or negative variation of consumption or deposits is disposal income.

CONCLUSION

The declines of spending by the pandemic have been well documented. The spending fall for quarter and return to normal levels. There has been much debate about the form of recovery that has been and will be seen going forwards.

These declines have not been felt equally across sectors. For example, food and soft drinks saw increases in spending during lockdown, while holidays, and restaurants and other free time entertainment saw substantial declines and these changes continue after reopening too.

Our analysis also sheds light on the distributional impacts of the crisis. A shutdowns in many sectors of the economy ‘forced’ for many households withdraw money from the banks and return there after reopening.

REFERENCES

BNB, Statistics, Monetary statistics, www.bnb.bg

NSI, Statistical data, Key indicators. Macroeconomic statistics, www.nsi.bg

Bourquin, P., Delestre, I., Joyce, R., Rasul, I. and Waters, T. (2020), ‘The effects of coronavirus on household finances and financial distress’, IFS Briefing, Note 298, <https://www.ifs.org.uk/publications/14908>.

Brewer, M. and Gardiner, L. (2020), ‘The initial impact of COVID-19 and policy responses on household incomes’, Oxford Review of Economic Policy, 36, pp. 187–199, <https://doi.org/10.1093/oxrep/graa024>.

Chetty, Raj, John N. Friedman, Nathaniel Hendren, Michael Stepner & The Opportunity Insights Team(2020). The Economic Impacts of COVID-19: Evidence from a New Public Database Built Using Private Sector Data. NBER. Working paper 27431 DOI 10.3386/w27431.p109

Chronopoulos, Dimitris K. and Lukas, Marcel and Wilson, John O. S., Consumer Spending Responses to the COVID-19 Pandemic: An Assessment of Great Britain (July 1, 2020). Available at SSRN: <https://ssrn.com/abstract=3586723> or <http://dx.doi.org/10.2139/ssrn.3586723>

Crawford, R., Davenport, A., Joyce, R. and Levell, P. (2020), 'Household spending and coronavirus', IFS Briefing Note 279, <https://www.ifs.org.uk/publications/14795>.

Gathergood John , Fabian Gunzinger, Benedict Guttman-Kenney, Edika Quispe-Torreblanca, Neil Stewart(2020). Levelling Down and the COVID-19 Lockdowns: Uneven Regional Recovery in UK Consumer Spending. AVAILABLE: <https://arxiv.org/abs/2012.09336>

Hacioglu, S., Känzig, D. R. and Surico, P. (2020), 'Consumption in the time of Covid-19: evidence from UK transaction data', CEPR Discussion Paper DP14733, <https://ssrn.com/abstract=3603964>.

Jaravel, X. and O'Connell, M. (2020), 'Real-time price indices: inflation spike and falling product variety during the Great Lockdown', Journal of Public Economics, 191, <https://doi.org/10.1016/j.jpubeco.2020.104270>

O'Connell, M., de Paula, Á. and Smith, K. (2020), 'Preparing for a pandemic: spending dynamics and panic buying during the COVID-19 first wave', IFS Working Paper W20/34, <https://www.ifs.org.uk/publications/15100>.