

Impact of the COVID-19 Crisis on the Demand for Digital Goods and Services in Serbia [†]

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Abstract: The main goal of the paper is to examine whether the COVID-19 crisis has changed the “usual” pattern of consumer behavior. The analysis was conducted on the basis of samples of 6354 and 6108 Serbian households for 2019 and 2021. The results of the analysis showed that there have been changes in the behavior pattern of Serbian households when it comes to demand for digital goods and services. The obtained results have a special significance for producers, traders of digital goods and services in Serbia. This work has achieved both theoretical and empirical contribution in the field of microeconomic theory and analysis.

Keywords: demand; digital goods and services; COVID-19 crisis; consumer behavior; econometric model

1. Objectives

The theory of consumer demand postulates that consumer behavior is influenced by numerous economic factors (such as consumer income, price of the observed good, prices of complementary products and substitutes), demographic factors (gender, age, education, marital status, etc.), geographical factors (a region in which one lives, climatic conditions, size of the city, degree of urbanization, etc.) and psychological factors (motives, attitudes, habits, feelings) that determine consumer preferences, i.e., the order in which consumers rank individual products through the combination of quantities of individual products, omitting the influence of natural, political and similar factors [1–3]. The main goal of this work is to examine the impact of the COVID-19 crisis, which is a type of manifestation of natural factors, on the demand for digital goods and services in Serbia. More precisely, the main goal of this paper is to examine whether the COVID-19 crisis has changed the “usual” pattern of consumer behavior [4–11].

2. Methodology

The analysis of the impact of the COVID-19 crisis on the demand for digital goods and services, i.e., on consumer behavior, was conducted based on 6354 and 6108 samples for 2019 and 2021, respectively. The relevant data were collected by the Statistical Office of the Republic of Serbia using the Household Consumption Survey, which is standardized and harmonized with appropriate survey instruments used by the European Union Statistics Agency (EUROSTAT). To investigate the impact of the COVID-19 crisis on the demand for digital goods and services, econometric techniques were used based on models formulated in the form of a regression equation and appropriate tests for examining the robustness of the results and testing the set research hypotheses [12–18].

3. Results

By applying relevant estimators to the selected econometric specification for which the value of the information criterion is the smallest, appropriate results were obtained,



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and the hypothesis tested that the parameters of the models evaluated for 2019 and 2021 were equal. At a risk level of 0.05%, the null hypothesis was rejected, and it was shown that the difference in the value of the population parameters was statistically significant, thus proving the initial research hypothesis about the change in the pattern of consumer behavior in the demand for digital goods and services in Serbia.

4. Implications

In addition to the significance of the results for the expansion of the concept of consumer demand theory, the obtained results have a special significance for producers and traders, i.e., providers of digital goods and services.

5. Originality Value

The originality of this work is reflected in the fact that, for the first time in the field of theory and analysis of consumer demand, the influence of natural factors on consumer behavior is introduced and analyzed.

6. Contribution

This work has provided both theoretical and empirical contributions in the field of microeconomic theory and analysis. The theoretical contribution comprises expanding the theoretical model of consumer demand, in which, in addition to the standard variables, a completely new variable is included in the classic model that determines the demand for consumer products, especially the demand for digital goods and services. The empirical contribution is reflected in the fact that they are based on original microdata that make up large samples, on the basis of which the studied parameters of demand for digital goods and services were precisely assessed.

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