Novi Ekonomist
Vol 15(2), Year XV, Issue 30, july - december 2021.
ISSN 1840-2313 (Print) 2566-333X (Online)
DOI: 10.7251/NOEEN2130015D

Submitted: 12.04.2021.
Accepted: 25.05.2021.
Scientific article
UDK: 616.98:578.834]:316.334.2/.3

THE IMPACT OF THE COVID-19 PANDEMIC ON THE GLOBAL COMMUNITY'S MOBILITY

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Paper presented at the 9th International Scientific Symposium „EkonBiz: Economy and COVID 19“, Bijeljina, 17 – 18th June 2021.

Abstract: *At the end of 2019, a new coronavirus appeared in China in the province of Wuhan, precipitating the emergence of cases of diseases called COVID-19. This disease quickly spread to other countries of the world. Most countries have estimated that the best strategy to combat COVID-19 is to prevent the transmission of the virus by social distancing. To make it easier to track the mobility of people in 135 countries around the world, in 2020 Google began publishing data on global mobility on a daily basis through a report called "Community Mobility Reports". This report provides a percentage change in activity at the six grouped locations compared to that in the reference days prior to the advent of pandemic COVID-19. In this paper, we study the dynamics of human mobility during the COVID-19 pandemic in 18 countries around the world starting from February 15, 2020 until March 9, 2021. We graphically presented the obtained data, then statistically processed them and presented them in several tables. We believe that the data we have obtained in this paper can be used for many other researches in various spheres of human life and work.*

Key words: *data, countries, movement, pandemic, Covid-19, Google, comparison*

1. INTRODUCTION

At the end of 2019, a new coronavirus appeared in China in the province of Wuhan, precipitating the emergence of cases of the disease called COVID-19. To fight COVID-19, China adopted lockdowns of this province on January 23, 2020. This disease quickly spread to other countries of the world. The first cases in Europe were recorded in the second half of January 2020.

The rapid spread of the COVID-19 pandemic has produced a series of reactions from governments around the world, which are designed to limit the spread of the virus and alleviate the burdens placed on health systems worldwide. These measures have ranged from very drastic lockdown policies applied in parts of Asia and Southern Europe, to less stringent approaches (e.g. Sweden and Belarus). At the beginning of this pandemic, there were no vaccines for the disease, so the best strategy to fight COVID-19, was to prevent the transmission of the virus by social distancing.

However, this is not an easy task, because many social activities are based on close human contact. The ideal scenario would be to monitor individuals' contacts 24 hours a day in order to trace any positive cases. Initiatives in this direction have been developed, but they face certain concerns in regards to the threat to privacy that they present.

This is why effectively monitoring a population's mobility is a difficult task for any government to implement practically speaking, during a pandemic. In 2020, Google began publishing data on global mobility on a daily interval through a report called "Community Mobility Reports" (CMR).

This report presents data from 135 countries in the world, collected from February 15, 2020 onwards. This report includes some statistics, aimed at promoting studies, that can further advance the fight against COVID-19 disease.

Google's CMR aggregates the data of those individuals who access the Google app with their smartphones or handheld devices, which gives the option of recording the "location history" of the user. The physical presence of an individual user and the time spent in certain establishment categories are compared, in order to determine activity characteristics of such individuals.

The data are categorized into six discrete categories, which can be summarized as follows:

- retail and recreation (restaurants, cafes, shopping malls, museums, libraries, cinemas);
- pharmacies and grocery stores (pharmacies, grocery stores, markets for agricultural products);
- parks (city parks, national parks, public beaches, marinas, camps, dog parks);
- transit stations (public transport hubs such as metros, bus and train stations, seaports, taxi stands, motorway rest areas);
- workplaces;
- and residential buildings (housing).

The CMR provides a percentage change in activity for each listed site category compared to recorded activities in the reference period prior to the onset of COVID-19 (a five-week period running from January 3, 2020 to February 6, 2020). Daily activity fluctuations are compared to the corresponding reference day.

For example, the data for an observed Monday are compared with the corresponding data from the Mondays in the reference period. The values thus shown represent a relative percentage change compared to the reference days, rather than an absolute number in terms of visitors.

With the help of these data, it is possible to assess whether the population adhered to the strict measures of social isolation, which were implemented by the governments of these respective countries.

In some countries, values for some of the 6 observed parameters were missing for certain days in the observed period, if the recorded activity of people at that location was too low on a certain day and therefore the anonymity threshold set by Google was not able to be achieved.

2. GRAPHIC REPRESENTATION OF HUMAN MOBILITY

The CMR report for each country is provided in tabular format in a file with a CSV extension. This file contains data written in plain text, which contains a comma-separated list of data. CSV files can be used with most spreadsheet programs. We loaded this data into a Microsoft Excel worksheet via the Data menu of the Get External Data submenu and the From Text command.

For the United States, we used a file that has as many as 989,261 rows of data, because it contains data for 289 days for the entire country, but also for each state and most regions and cities separately. For purposes of this paper, in most countries we took only data related to the whole country, but in some countries we also used data for individual regions and cities within regions.

This paper studies the dynamics of human mobility during the COVID-19 pandemic in countries around the world starting from February 15, 2020 until March 9, 2021. For 18 countries, we created changes in traffic graphs for six different location categories.

Looking at these graphs, we noticed that large peaks in attendance variation appear on weekends and on public and religious holidays. To normalize these peaks, we excluded data for all Saturdays and Sundays, as well as non-working days of Christmas, New Year's Day and May 1st. Figure 1 shows graphs of changes in attendance at six locations in Bosnia and Herzegovina.

The first graph seen is, when all 389 days are observed, and below it is the graph for 271 days (excluding all Saturdays, Sundays, non-working days of Christmas, New Year's Day and May 1st). It is very easy to notice a big drop in the movement of people in March 2020, and the biggest drop is noticed at the locations of businesses.

Even with the fact that the data for non-working days corresponding to certain holidays are excluded, large peaks in the decline in work attendance can still be observed, in the days before and after the holidays. This is due to the fact that in our country, people often combine non-working holidays with weekends.

Figure 1 Bosnia and Herzegovina changes in attendance at 6 locations

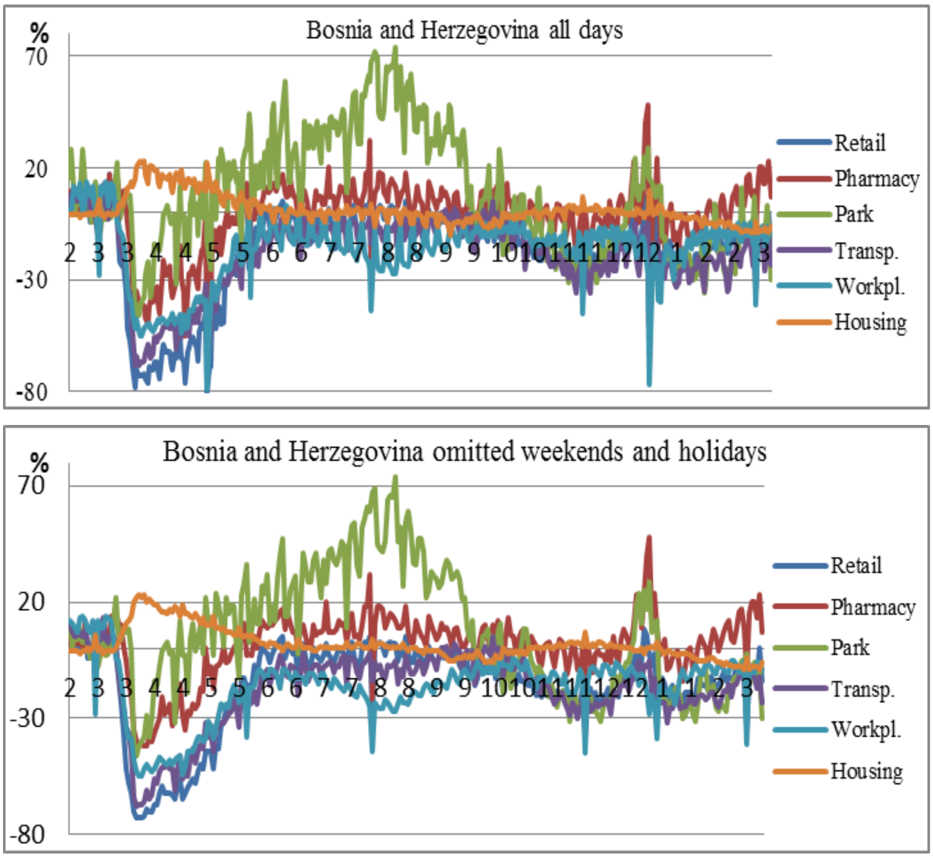
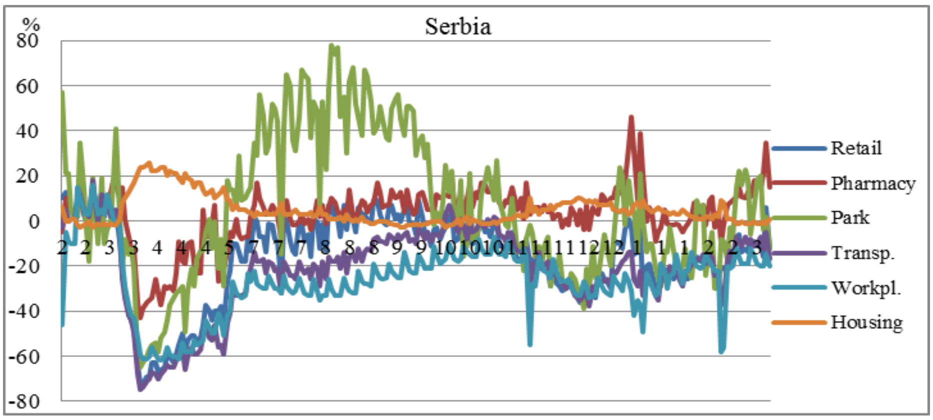


Figure 2 shows first the change in attendance at six locations throughout Serbia, and then only for the city of Belgrade (excluding all Saturdays, Sundays, non-working days for Christmas, New Year and May 1st).

These two graphs are very similar for the whole year, except for the parks category. From the first diagram, it can be seen that in the period of July, August and September, people in the entire territory of Serbia visited significantly more parks, but also diferent tourist locations (Zlatibor, Kopaonik, spas, etc.), than was the case in the city of Belgrade.

Figure 2 Serbia and Belgrade changes in attendance at 6 locations



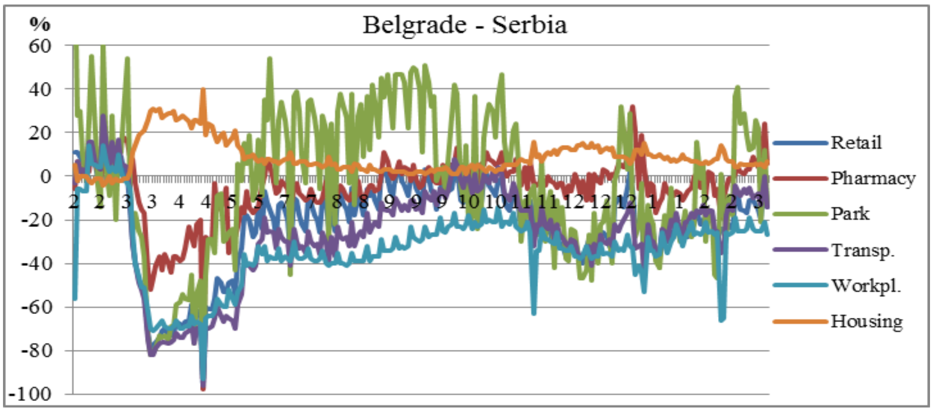


Figure 3 shows the change in attendance at six locations throughout Croatia (excluding all Saturdays, Sundays, non-working days for Christmas, New Year and May 1st). The graph shows a large increase in the attendance of the parks category in the period of June, July, August and September and up to a 500% increase compared to the reference period before the start of the pandemic. This is explained by the fact that in this period the Croatian coast was visited by tourists from a large number of European countries. Google registered all these people and added their number to the citizens of Croatia.

Figure 3 Croatia changes in attendance at 6 locations

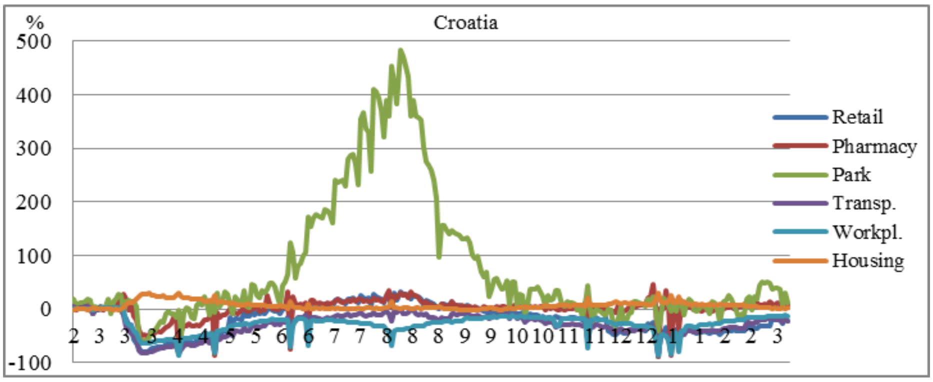


Figure 4 shows the change in attendance at six locations in the Bergamo region of Italy (excluding all Saturdays, Sundays, non-working days for Christmas and New Year). This Italian region was known for a large number of patients, high mortality, as well as the longest and strictest movement ban measures imposed on citizens. The graph shows a pronounced decrease in workplaace attendance and the use of public transport. Conversely, there is an increase in the time spent at home throughout the year.

Figure 4 Italy - province of Bergamo changes in attendance at 6 locations

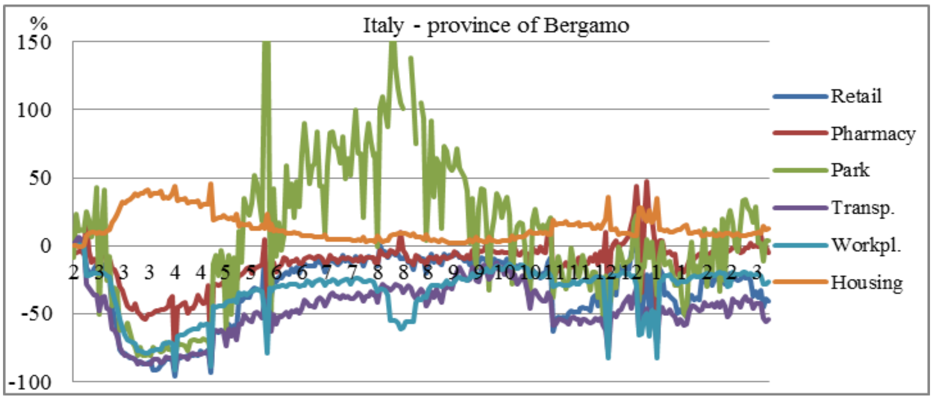


Figure 5 shows the change in attendance at six locations in the city of London, England (excluding all Saturdays, Sundays, non-working days for Christmas and New Year). At first glance, it can be noticed that the change in attendance at six locations in London differs significantly from that of other countries and cities in this paper. It is characteristically observed that for London that the decline in going to work, the decline in the use of public transport and the increase in time spent in apartments have been fairly constant throughout the year since the start of the pandemic. It can also be noted that this graph is very similar to the graph shown in Figure 6, which shows the change in attendance at six locations in the United States. This points to the overall similarity between the two countries.

Figure 5 London England attendance changes at 6 locations

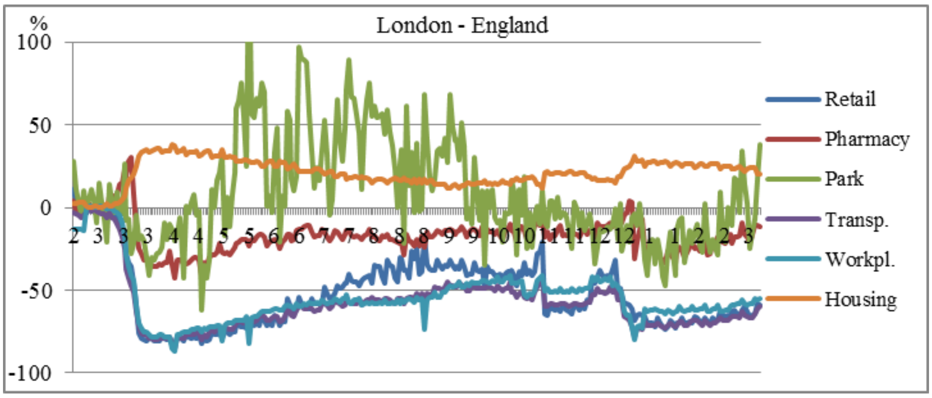


Figure 6 United States attendance changes at 6 locations

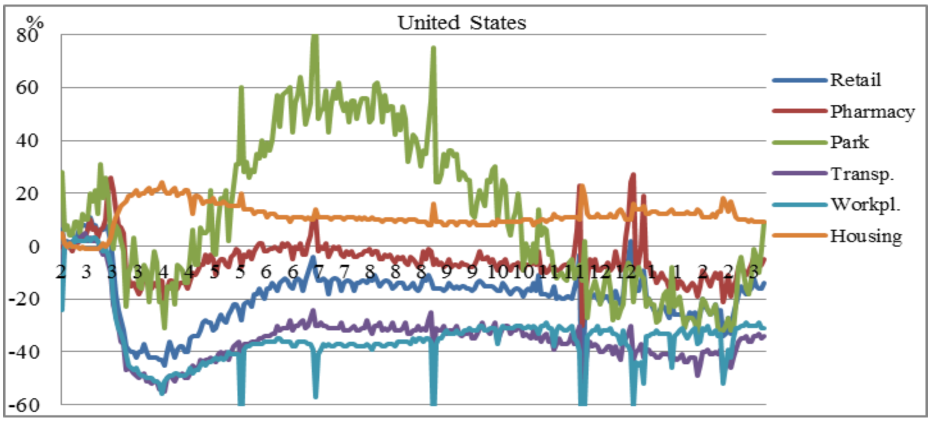


Figure 7 Byelorussia changes in attendance at 6 locations

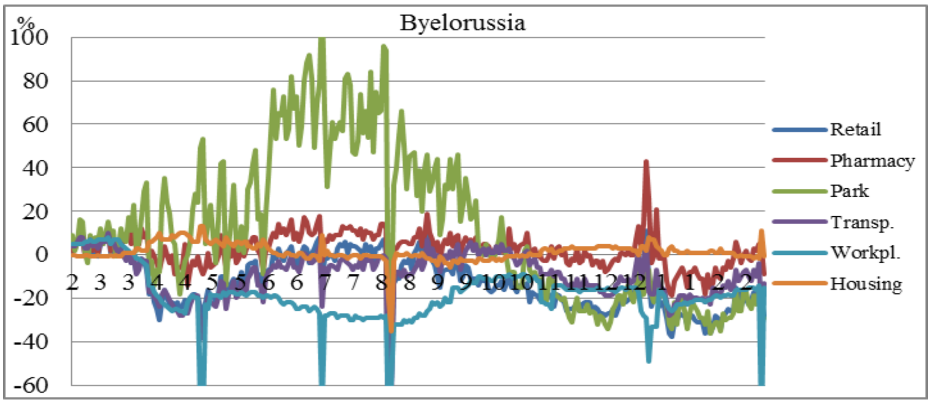


Figure 7 shows the change in attendance at six locations in Belarus (excluding all Saturdays, Sundays, non-working days for Christmas and New Year). Despite the fact that in Belarus there was no classic ban on gatherings and attending sports events, the graph shows that during the pandemic there was a reduction in time spent at work, albeit only at the end of March, which is a little later than in other countries of the world. The large narrow peaks that represent the decline in work attendance probably originate from some public holidays in Belarus, and similar peaks exist in all other countries whose graphs are not shown in this paper. The observed increase in attendance at the study locations of all countries was recorded only in the apartments category. In the days before the lockdowns, there are peaks in visits to stores and pharmacies. This can be explained by the fear and general haste of citizens to procure supplies before the announced lockdowns. Not surprisingly, the analysis indicates partial and complete lockdowns have the strongest causal impact on increasing attendance at residences and reducing visits to workplaces, public transportation hubs, restaurants, cafes, shopping malls, museums, libraries, and cinemas.

3. COMPARISON OF HUMAN MOBILITY IN 18 COUNTRIES

This part of the paper statistically processes data on human mobility at six grouped locations in 18 countries and in five other cities or regions, excluding all Saturdays, Sundays, non-working days for Christmas and New Year's Day.

Table 1, Table 2 and Table 3 for the 18 countries and 5 more regions or cities for each of the six different locations show six statistical parameters:

- MVa-Mean value of the percentage change in attendance for the whole year;
- MV45-Mean value of percentage changes in attendance for the last 45 days (from January 26, 2021 to March 9, 2021);
- SD-Standard deviation of the percentage change in attendance for the whole year;
- Co-Correlation of the percentage change in attendance to the change in workplace attendancefor the whole year;
- Max-Maximum percentage change in attendance for the whole year;
- Min-Minimum percentage change in attendance for the entire year.

Only data for Bosnia and Herzegovina are presented in two rows. The **BiH all** statistics show statistics for Bosnia and Herzegovina for all 389 days. The **BiH nw** line presents statistical data for Bosnia and Herzegovina when weekends, New Year's Day, Christmas, Easter and May 1st are omitted.

Table 1 Changes in the attendance of retail stores, recreational facilities, pharmacies and grocery stores expressed as a percentage

	Retail stores, recreational facilities						Pharmacies and grocery stores					
Country	MVa	MV45	SD	Co	Max	Min	MVa	MV45	SD	Co	Max	Min
BiH all	-18	-14	20	0,82	17	-81	-1,3	4	15	0,71	48	-67
BiH nw	-16	-14	19	0,78	8	-73	1	6	14	0,63	48	-42
Serbia	-16	-16	19	0,77	16	-72	3	8	13	0,63	46	-43
Belgrade	-22	-19	21	0,83	20	-97	-5	-1	14	0,75	32	-98
Croatia	-19	-34	28	0,60	32	-90	0	6	19	0,65	45	-90
Slovenia	-30	-45	28	0,73	20	-89	-14	-13	17	0,77	29	-94
Austria	-17	-14	11	0,60	16	-76	-1	-2	9	0,38	51	-55
Byeloruss	-13	-26	13	0,29	13	-87	2	-5	10	0,25	43	-86
England	-41	-56	23	0,80	10	-78	-12	-15	10	0,74	24	-41
London	-52	-66	21	0,88	11	-83	-17	-20	11	0,78	30	-43
Italy	-29	-31	25	0,76	5	-96	-10	-3	17	0,76	46	-93
Bergamo	-33	-29	26	0,73	5	-96	-13	-4	17	0,70	47	-88
Germany	-25	-50	22	0,63	6	-82	-4	-6	15	0,64	34	-93
Russia	-14	-20	15	0,52	14	-57	-1	-9	10	0,40	34	-32
Moscow	-27	-27	19	0,75	13	-69	-13	-15	12	0,73	29	-44
Sweden	-12	-24	14	0,14	20	-72	-2	-8	8	0,07	39	-46
Australia	-17	-14	11	0,60	16	-76	-1	-2	9	0,38	51	-55
S. Africa	-25	-17	20	0,81	16	-82	-8	0	17	0,62	59	-62
Brazil	-30	-27	16	0,87	7	-76	6	10	14	0,62	67	-38
Japan	-13	-18	10	-0,05	21	-38	0	-4	5	-0,12	17	-15
S. Korea	-12	-8	10	0,22	15	-47	7	15	11	-0,19	73	-18
USA	-19	-23	11	0,75	11	-70	-5	-12	8	0,40	27	-30
California	-30	-30	12	0,83	9	-63	-10	-15	8	0,54	31	-25
New York	-15	-23	14	0,66	13	-76	-1	-9	11	0,42	39	-56
Max	-12	-8	28	0,88	32	-38	7	15	19	0,78	73	-15
Min	-52	-66	10	-0,05	5	-97	-17	-20	5	-0,19	17	-98

Table 2 Changes in attendance of parks and places of rest and public transport hubs expressed as a percentage

	Parks and places of rest						Public transport					
Country	MVa	MV45	SD	Co	Max	Min	MVa	MV45	SD	Co	Max	Min
BiH all	8	-15	26	0,16	74	-48	-19	-21	17	0,83	13	-68
BiH nw	6	-17	26	-0,01	74	-46	-18	-19	16	0,80	13	-68
Serbia	6	-4	31	0,31	78	-65	-22	-17	19	0,91	18	-75
Belgrade	-3	-5	34	0,53	98	-92	-26	-16	23	0,93	28	-96
Croatia	72	18	121	0,00	484	-60	-29	-29	21	0,81	5	-83
Slovenia	25	8	56	0,20	199	-64	-30	-37	22	0,82	8	-72
Austria	-16	-19	12	0,09	28	-43	-40	-37	16	0,87	14	-77
Byeloruss	11	-27	34	-0,22	118	-74	-9	-15	11	0,60	10	-87
England	24	1	40	0,01	152	-42	-48	-60	17	0,91	1	-78
London	8	-8	32	0,00	160	-62	-58	-67	17	0,97	0	-85
Italy	9	-8	61	0,33	198	-86	-39	-37	19	0,85	5	-91
Bergamo	7	4	53	0,36	229	-84	-47	-45	19	0,77	6	-92
Germany	46	11	54	-0,10	264	-32	-30	-42	15	0,78	3	-73
Russia	13	-20	35	-0,03	90	-37	-14	-15	16	0,75	10	-60
Moscow	-10	-35	35	0,29	116	-71	-25	-19	20	0,87	9	-73
Sweden	77	9	94	-0,47	369	-27	-32	-43	12	0,55	-1	-66
Australia	-16	-19	12	0,09	28	-43	-40	-37	16	0,87	14	-77
S. Africa	-25	-38	13	0,35	14	-48	-41	-39	20	0,89	17	-85
Brazil	-29	-30	16	0,37	69	-62	-26	-20	17	0,92	13	-69
Japan	-5	-20	16	-0,33	76	-45	-26	-30	11	0,76	-1	-69
S. Korea	25	8	29	-0,31	158	-41	-9	-13	9	0,48	16	-38
USA	12	-20	29	0,00	86	-33	-34	-40	12	0,87	5	-60
California	-11	-23	17	0,36	44	-54	-43	-49	12	0,91	3	-63
New York	80	-5	75	-0,09	277	-57	-36	-41	14	0,77	10	-75
Max	80	18	121	0,53	484	-27	-9	-13	23	0,97	28	-38
Min	-29	-38	12	-0,47	14	-92	-58	-67	9	0,48	-1	-96

Table 3 Changes in attendance of jobs and housing facilities expressed as a percentage

	Jobs						Housing facilities					
Country	MVa	MV45	SD	Co	Max	Min	MVa	MV45	SD	Co	Max	Min
BiH all	-17	-11	15	1,00	14	-79	1	-6	6	-0,80	23	-10
BiH nw	-17	-10	14	1,00	14	-55	2	-6	7	-0,80	23	-9
Serbia	-26	-21	16	1,00	16	-62	5	1	7	-0,85	26	-3
Belgrade	-34	-28	18	1,00	14	-93	9	7	8	-0,86	40	-4
Croatia	-28	-19	17	1,00	3	-86	7	5	7	-0,85	30	-3
Slovenia	-30	-29	16	1,00	3	-88	10	11	9	-0,81	33	-4
Austria	-19	-14	15	1,00	17	-82	9	6	5	-0,86	33	-3
Byeloruss	-19	-21	13	1,00	8	-87	1	1	4	-0,05	13	-35
England	-45	-48	16	1,00	1	-83	16	19	7	-0,92	32	0
London	-54	-60	17	1,00	1	-87	21	24	8	-0,92	38	0
Italy	-34	-25	16	1,00	1	-90	12	9	9	-0,84	41	-1
Bergamo	-34	-22	18	1,00	0	-92	13	9	10	-0,87	46	-1
Germany	-27	-29	14	1,00	0	-88	9	13	5	-0,81	29	0
Russia	-25	-22	15	1,00	7	-73	4	4	5	-0,73	23	-3
Moscow	-38	-31	18	1,00	4	-78	9	7	8	-0,78	30	-2
Sweden	-31	-31	16	1,00	0	-85	8	11	4	-0,67	25	1
Australia	-19	-14	15	1,00	17	-82	9	6	5	-0,86	33	-3
S. Africa	-33	-25	19	1,00	9	-85	17	14	9	-0,96	44	-4
Brazil	-15	-9	16	1,00	21	-72	10	7	5	-0,89	27	-2
Japan	-16	-16	15	1,00	1	-75	8	8	5	-0,93	30	0
S. Korea	-7	-13	13	1,00	3	-82	5	6	4	-0,73	22	-2
USA	-35	-33	12	1,00	3	-81	11	12	5	-0,89	24	-1
California	-40	-41	13	1,00	4	-79	14	14	5	-0,90	26	-1
New York	-32	-30	14	1,00	4	-85	11	13	6	-0,87	33	-1
Max	-7	-9	19	1	21	-55	21	24	10	-0,05	46	1
Min	-54	-60	12	1	0	-93	1	-6	4	-0,96	13	-35

Table 4 shows the countries (city or region) with the largest and smallest magnitude deviations in the percentage values of the change for the six observed locations and the six statistical parameters shown in the previous tables. Analyzing the obtained values, we can say that the largest standard deviation is in the change in the number of visits to pharmacy stores and parks in Croatia. This is explained by the increased number of tourists on the coast, and not by the change in the attendance of the local population. The city of Belgrade has the largest standard deviation in the variation of the use of public transport. The reason for this lies in the fact that several days of total movement bans were implemented in Serbia several times. The region of Bergamo, Italy has the largest standard deviation in the change of occupents in residential buildings, which is explained by the fact that this region was one of the first parts of Europe to be impacted with a high number of infected people and elevated mortality during several waves of the pandemic. Japan, South Korea, Belarus and Sweden are the countries with the lowest standard deviation in the change in attendance of all six observed locations. This information can be explained by completely different lockdown policies, which were implemented by the governments of these countries, but also by the personal attitudes of each individual towards respecting the instituted measures of social distancing. In most of the analyzed countries, there is a fairly high degree of correlation between the change in the workplace attendance and of the change in the attendance of shops, pharmacies, grocery stores, as well as places of residence. Only Japan, South Korea, Belarus and Sweden have a very small degree of correlation between the change in attendance at jobsites with the change in attendance at stores, pharmacies and grocery stores. In all observed countries, there was a very small degree of correlation between the change in workplace attendance and the change in park attendance.

Table 4 Countries or cities in which the attendance of the observed locations had the value of the largest or smallest change for the six statistical parameters

Location		MVall	MV45	SD	Ko	Max	Min
Retail	Max	Sweden/S.K.	S. Korea	Croatia/Slo.	London	Croatia	Japan
	Min	London	London	Japan/S.K.	Japan	Italy	Belgrade
Phar.	Max	S. Korea	S. Korea	Croatia	London	S. Korea	Japan
	Min	London	London	Japan	Sweden	Japan	Belgrade
Park	Max	New York	Croatia	Croatia	Belgrade	Croatia	Sweden
	Min	Brazil	S. Africa	Austrija	London/USA	S. Africa	Belgrade
Tran.	Max	Byeloruss /SK	S. Korea	Belgrade	London	Beograd	S. Korea
	Min	London	London	S. Korea	J. Koreja	Sweden/Jap	Belgrade
Jobs	Max	S. Korea	Brazil	J. Afrika		Brazil	BiH
	Min	London	London	USA		Bergamo	Belgrade
Apart.	Max	London	London	Bergamo	S. Africa	Bergamo	Sweden
	Min	Byeloruss	BiH	ByR/Sw/SK	Byeloruss	Byeloruss	Byeloruss

Legend: *Retail - Retail stores and recreational facilities; Phar.- Pharmacies and grocery stores; Park-Parks and places for outdoor recreation; Tran.- Public transport; Jobs- Workplace; Apart.-Residential buildings; MVall-Mean value of changes in attendance for the whole year; MV45-Mean value of attendance changes for the last 45 days; SD-Standard deviation of changes in attendance for the whole year; Co-Correlation of changes in attendance to change in attendance of jobs for the whole year; Max-Maximum attendance change for the whole year; Min-Minimum attendance change for the whole year.*

Table 5 shows the countries (city or region) in which the largest (ΔMax) or smallest (ΔMin) difference between the largest and smallest percentage values of change (=Max - Min) of attendance at 6 locations for the whole year were recorded. Analyzing the obtained values, we can say that the cause of the biggest difference in the change in the number of visits to shops and parks in Croatia is the increased number of tourists on the coast, and *not* the change in the number of visitors due to the local population. The biggest change in the number of pharmacy visits was in Italy and this is explained by the fact that there were more waves in Italy with a corresponding large number of patients. What was surprising for us was the fact that the city of Belgrade was the place with the biggest change in business attendance and the use of public transport. The reason for this is that in Serbia, a total ban on movement for several days was applied several times. The countries with the smallest oscillations in the attendance change of the observed locations are: Japan, South Korea and Sweden. This can be explained by completely different lockdown policies, which were implemented by the governments of these countries, but also by the personal attitudes of each individual towards respecting the measures of social distancing. This parameter may very well be a decisive factor, which will ultimately determine which countries will have the smallest decline in gross domestic product during the current pandemic. Generally, stricter lockdowns produce more severe economic contractions.

Table 5 Countries or cities in which the attendance of the observed locations had the largest or smallest difference in change for six statistical parameters

	Retail	Pharmacies	Parks	Transport	Workplaces	Housing
ΔMax	Croatia	Italiy	Croatia	Belgrade	Belgrade	South Africa
ΔMin	Japan	Japan	South Africa	South Korea	BiH	Sweden / S.Korea

CONCLUSION

Understanding whether the policies taken by the different states have had the desired impact on reducing the mobility of people and concomitantly increased their habitation in homes, is crucial given that the reduced number of people outside their homes leads to lower rates of COVID-19 disease transmission and mortality. However, these policy measures have a high social and economic cost, so it is clear that they cannot last indefinitely. That is why there is a need for continuous monitoring and assessment of which interventions are necessary to maintain control of social distancing. The set of observed data in this paper has a number of limitations. First, people without smartphones and/or people who do not carry their devices when visiting the above-mentioned places are not included in Google's database. Second, the database only includes people who have Google Accounts and with the "Location History" setting enabled. We can conclude that most of the data for the observed locations in this paper refer to changes in people's visits due to social distancing. Social distancing has led to a decline in gross domestic product in most countries of the world and we intend to address this issue in future work.

REFERENCES

[1] Sulyok M., Walker M., Community movement and COVID-19: a global study using Google’s Community Mobility Reports, Cambridge University Press, Engleska, 2020.

[2] Mendolia S., Stavrunova O., Yerokhin O., Determinants of the Community Mobility during the COVID-19 Epidemic: The Role of Government Regulations and Information, IZA – Institute of Labor Economics, Njemačka, 2020.

[3] Athanasios Lapatinas, The effect of COVID-19 confinement policies on community mobility trends in the EU, Technical report by the Joint Research Centre, Publications Office of the European Union, Luksemburg, 2020.

[4] Damjanović S., Katanić P., Krsmanović B., „*Excel za ekonomiste*“, FPE Bijeljina 2020.

[5] Google. COVID-19 Community Mobility Report. Available at https://www.google.com/covid19/mobility (pristupljeno 15.3.2021. godine).

SUMMARY

At the end of 2019, a new coronavirus appeared in China in the province of Wuhan, causing the appearance of cases of diseases called COVID-19. This disease quickly spread to other countries of the world. Most countries have estimated that the best strategy to combat COVID-19 is to prevent the transmission of the virus by social distancing. To make it easier to track the mobility of people in 135 countries around the world, in 2020 Google began publishing data on global mobility on a daily basis through a report called "Community Mobility Reports". This report provides a percentage change in activity at the six grouped locations compared to that in the reference days prior to the advent of COVID-19. In this paper, we study the dynamics of human mobility during the COVID-19 pandemic in 18 countries around the world starting from february 15, 2020 until march 9, 2021. We graphically presented the obtained data, then statistically processed them and presented them in several tables. Understanding whether the policies taken by states have the desired impact on reducing human mobility and increasing their presence in homes is crucial given that a reduced number of people outside the home causes lower rates of COVID-19 disease transmission and mortality. However, these political measures have a high social and economic cost, so it is clear that they cannot last indefinitely. Therefore, there is a need for continuous monitoring and assessment, which interventions are necessary to maintain control of social distancing. We believe that the data we have obtained in this paper can be used for many other researches in various spheres of human life and work.