

The background features a large, abstract geometric composition. In the top-left corner, a cluster of triangles in various shades of blue and teal is arranged in a triangular pattern, with one bright yellow triangle standing out. Below this, a series of grey, three-dimensional cubes and rectangular blocks are scattered across the left side, some appearing to be stacked or falling. A large, light blue triangle is positioned on the right side of the page. The overall design is modern and digital.

# The Digital Leap. How COVID19 Transformed the Digital Future for the Western Balkans

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Florian Bieber

## Executive Summary

The government responses in the Western Balkans to the COVID-19 pandemic, as in the rest of the world, imposed temporary limitations on services and other aspects of everyday life that shifted many of them online. From education to socializing, from work, to news, online services gained in speed and volume to an unprecedented extent during the period.

This digital leap occurred against the backdrop of a region that has been lagging behind the EU average in most digital indicators, from household access to digital infrastructure and the use of the most common online services. At the same time, there have been regional efforts, including several digital summits in the region since 2018 and a joint Digital Agenda for the Western Balkans drafted by the European Union and the six Western Balkan economies. As such, the region has been preparing for enhancing digital infrastructure and its use. This study examines the impact of the COVID-19 pandemic on the use of digital services across all six Western Balkan economies, based on a regional opinion poll conducted by IPSOS in October 2020. On the basis of the survey data, the study explores where areas of increase have been strongest, what the key obstacles have been in the eyes of citizens, whether these changes might become sustainable and what lessons they hold for the wider digital transformation of the region.

Across the region, there has been a marked increase in using the internet to access key services, particularly for education, entertainment, social contact and information, whereas increases in teleworking, online shopping and e-government have been modest. The scale of obstacles faced by citizens across the region vary, but a majority faced at least one obstacle in using online services. Overall, citizens have been satisfied with online services and, with the exception of education, a majority of those who used them would like to continue doing so at the same or higher levels in the future.

This provides a strong foundation for locking in the digital gains made during the pandemic and translating them into a sustainable digital transformation of the Western Balkans.



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## 1. Introduction

COVID-19 has imposed an unprecedented shift to digital technologies worldwide. Lockdowns and closures have forced billions to work and study from home for periods of varying duration in 2020. Besides work and education, entertainment, social contact, shopping and government services were severely restricted. These global measures forced citizens to use digital alternatives, where available, to replace temporary limitations—sometimes in several waves and lasting for months—on going to work, school or university, to watch movies or concerts, to see parents or grandchildren, to buy clothes or visit the bank. Across Europe, 61% of consumers have tried out new shopping behavior, linked to digital services, and a majority of those plan to continue using it once the pandemic is over. The biggest increase in digital services in Europe has been in online streaming and social media, followed by video calls for professional and private use and remote learning for adults and children.<sup>1</sup> In the EU, online retail increased by 30% during the first phase of the pandemic in April 2020 over the same period in 2019,<sup>2</sup> and global surveys indicate a strong rise in internet traffic and an increase in the use of online services across different sectors.<sup>3</sup> In Germany, digital adoption jumped by 28% within a few months. Before the pandemic, 61% used digital access for goods and services, including social media. By May 2020, that rate had increased to 89%. The biggest impact has been among young users, suggesting that the COVID increase has been mostly driven by the tech savvy. That means the digital gap, particularly that based on age, increased.<sup>4</sup> In Central and Eastern Europe, the pandemic led to a 15% increase in the use of digital services, including many first-time users.<sup>5</sup>

This study assesses the state of digital transformation of the Western Balkans due to the consequences of the COVID-19 pandemic, which resulted in closures and restrictions imposed across the region that encouraged or forced online activities in a broad range of spheres. Based on primary data gathered in a specially commissioned representative public opinion survey conducted in the six Western Balkan economies by IPSOS Strategic Marketing in October 2020, it explores how the citizens of the Western Balkans have responded to the new digital reality.<sup>6</sup> It uses the findings of the 2018 study on “The Impact

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<sup>1</sup> The survey is based on data from Germany, Italy, Spain, France and the UK. McKinsey & Company, Survey: European consumer sentiment during the coronavirus crisis, 2.11.2020, <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/survey-european-consumer-sentiment-during-the-coronavirus-crisis>.

<sup>2</sup> OECD, E-commerce in the times of COVID-19, 7.10.2020, <http://www.oecd.org/coronavirus/policy-responses/e-commerce-in-the-time-of-covid-19-3a2b78e8/>

<sup>3</sup> Simon Kemp, Digital 2020: July Global Snapshot, *Data Reportal*, 21.7.2020, <https://datareportal.com/reports/digital-2020-july-global-statshot>

<sup>4</sup> McKinsey & Company, COVID-19 *Digital Insights. Survey results for the German market*, 14.5.2020, [https://www.mckinsey.de/~media/McKinsey/Locations/Europe%20and%20Middle%20East/Deutschland/News/Presse/2020/2020-05-26%20Digital%20Sentiment%20Survey/Ergebnisse\\_McKinsey\\_Konsumentenbefragung\\_Digital\\_Sentiment\\_2020.aspx](https://www.mckinsey.de/~media/McKinsey/Locations/Europe%20and%20Middle%20East/Deutschland/News/Presse/2020/2020-05-26%20Digital%20Sentiment%20Survey/Ergebnisse_McKinsey_Konsumentenbefragung_Digital_Sentiment_2020.aspx)

<sup>5</sup> Jurica Novak, Alexandru Filip, Ivana Valachovicova, Borys Pastusiak, Kamila Kawecka, and Margarita Młodziejewska, *Twelve million new online service users in CEE*, McKinsey & Company, 17.9.2020, <https://www.mckinsey.com/pl/en/our-insights/digital-challengers-artykul>

<sup>6</sup> The survey was conducted on a nationally representative sample consisting of a minimum of 1000 respondents aged 18+, through telephone and online interviews, according to the following ratios: Albania (phone + online, 90:10), Bosnia and Herzegovina (phone + online, 80:20), Kosovo (phone, 100), Montenegro (phone + online, 90:10), North Macedonia (phone + online, 90:10) and Serbia (phone + online, 80:20). Results are presented in percentages



of Digital Transformation on the Western Balkans” as a starting point to explore how the region has coped with the digital transformation. The main question this study seeks to address is whether the pandemic led to a significant leap in the use of digital tools in all fields, including work, education, entertainment, shopping, social contact and public administration. Thus, the region has followed larger global trends, as briefly outlined above. Second, how has the lower level of preparedness in comparison to the EU (as will be discussed in the background section) impacted this digital leap? Have particular economies or groups of citizens been particularly disadvantaged? Third, the study examines the question of whether the digital leap might help to overcome the challenges the region has faced in previous years. Finally, and closely connected, it strives to answer the question of whether the digital leap due to the pandemic will be just temporary, or whether it has the potential of a lasting digital transformation. The findings are inherently tentative, as the pandemic and the necessities of switching to digital are still ongoing. The study is thus written in the midst of an ongoing and transformative event, based on citizens’ assessments that are subject to change. Furthermore, the study is primarily based on survey data, which is representative for six economies, as well as other publicly available data.

The study will first outline the status of the digital transformation prior to the pandemic and highlight the key challenges faced by the region. Next, it will identify key trends in the digital leap that occurred with the onset of the COVID-19 pandemic. Subsequently, it will examine the trends in two key fields—education and news—in greater detail. The following section will look at key obstacles, namely what barriers citizens faced in using online services and what key causes can be identified. Finally, the study outlines whether the digital leap during the COVID-19 pandemic will have a sustainable effect or whether the region will revert to the pre-pandemic use of digital services. The study will conclude with key findings and takeaways that define the agenda for policymaking by the governments in the Western Balkans, regional organizations and the European Union. These policy-relevant findings are further explored in the accompanying policy brief.

## 2. Background

The Western Balkans were less well-prepared for the digital shock induced by the pandemic than many EU member states, although there is significant variety within the region. The 2018 study on the state of digitalization in the Western Balkans shows a substantial gap with the EU average in all indicators. With few exceptions, all economies of the region have weaker digital infrastructure. In terms of access to fixed broadband and internet access, Albania had been the biggest laggard, followed by Kosovo\* and Bosnia and Herzegovina. In terms of social networks and mobile phone subscriptions, Bosnia and Herzegovina lagged furthest behind.<sup>7</sup>

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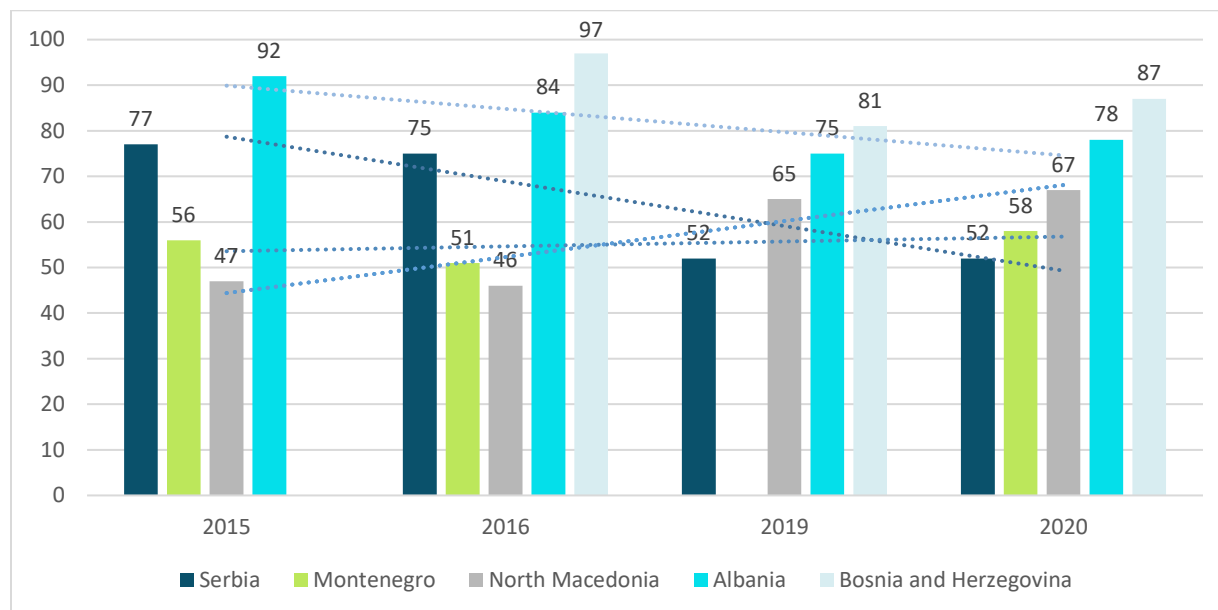
and are subject to the following margins of error: Albania  $\pm 3.39\%$ , Bosnia and Herzegovina  $\pm 3.39\%$ , Kosovo  $\pm 3.32\%$ , Montenegro  $\pm 3.36\%$ , North Macedonia  $\pm 3.34\%$  and Serbia  $\pm 3.38\%$ . The survey was conducted through telephone and online interviews using CATI (Computer Assisted Telephone Interviewing) and CAWI (Computer Assisted Web Interviewing).

\* This designation is without prejudice to positions on status, and is in line with UNSCR 1244(1999) and the ICJ Opinion on the Kosovo declaration of independence.

<sup>7</sup> Institute of Economics, Zagreb, Centre for Southeast European Studies, University of Graz, *The Impact of Digital Transformation on the Western Balkans—Tackling the Challenges towards Political Stability and Economic Prosperity*, 2018, 11, <https://wb6digital.files.wordpress.com/2018/01/wb6-study.pdf>



According to the Network Readiness Index, the economies of the Western Balkans have stagnated in recent years- and rank behind all EU countries, including the weakest performers and neighbors to the Western Balkans, such as Croatia (43), Greece (45), Bulgaria (46), and Romania (49). The two lowest-ranking economies, Albania and Bosnia and Herzegovina, are particularly underperforming on preparedness for future technology, high-tech orientation of industry and social digital inclusion in the case of Albania and governance, trust and future technology in Bosnia and Herzegovina (See Graph 1).



Graph 1: Ranking of 5 Western Balkan Economies in the Network Readiness Index, 2015-2016, 2019-2020<sup>8</sup>

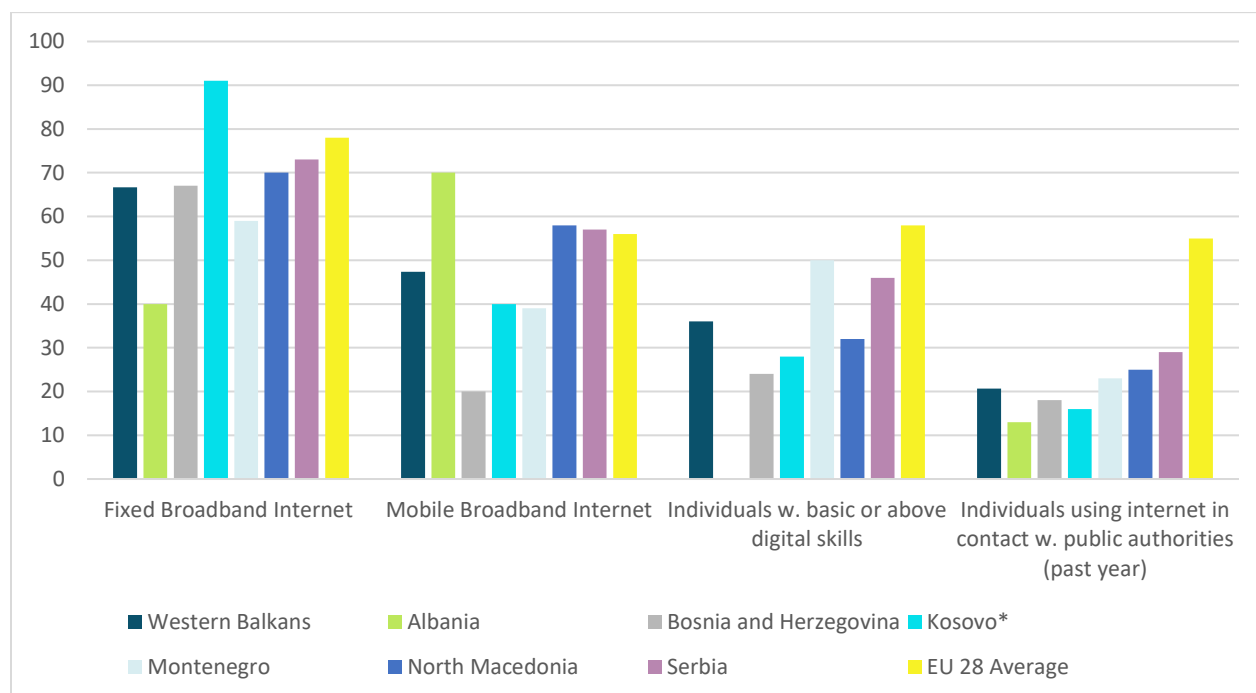
These trends are confirmed by the regional Digital Economy and Society Index (DESI) study, conducted in 2018 and 2019.<sup>9</sup> While coverage of fixed broadband is comparable with the EU average, the take-up is considerably lower in the region overall. Access to computers and the internet and digital skills were also well below the EU average, with the number of internet users below the EU average of 81% in all economies except for Bosnia and Herzegovina and Kosovo. Finally, the use of the internet to communicate with public authorities was a fraction of EU levels (see Graph 2).<sup>10</sup>

<sup>8</sup> The index does not include Kosovo, Bosnia and Herzegovina (2015) and Montenegro (2019), Source: <https://networkreadinessindex.org/#reports>

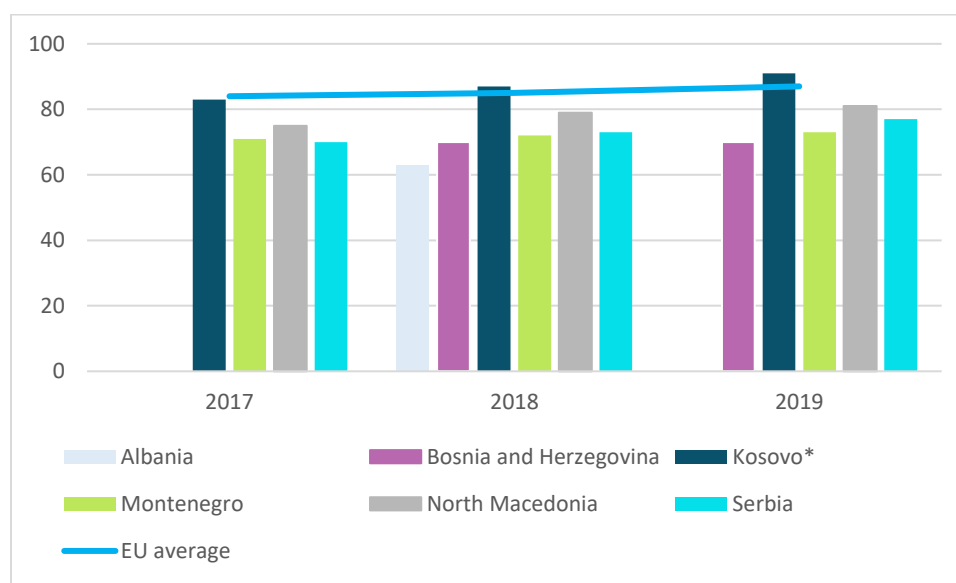
<sup>9</sup> Data from the report for Albania in regard to connectivity are not included. Tech4i2, Time.lex and Domagoj Jurjevic for the European Commission, *Monitoring the Digital Economy and Electronic Communications Services in the Western Balkans and Turkey, Market Report 2019 Follow-up Study Report*, 2019.

<sup>10</sup> OECD, *The Covid-19 Crisis in the Western Balkans. Economic impact, policy responses, and short-term sustainable solutions*, 2020, 13. Data for Albania (Public Authority) and Montenegro (Digital Skills) from 2018. Data for Internet Users (data for Albania from 2017) from European Commission, *Monitoring the Digital Economy and Electronic Communications Services in the Western Balkans and Turkey*, 2019, 16.





Graph 2: Indicators of digital preparedness 2019<sup>11</sup>



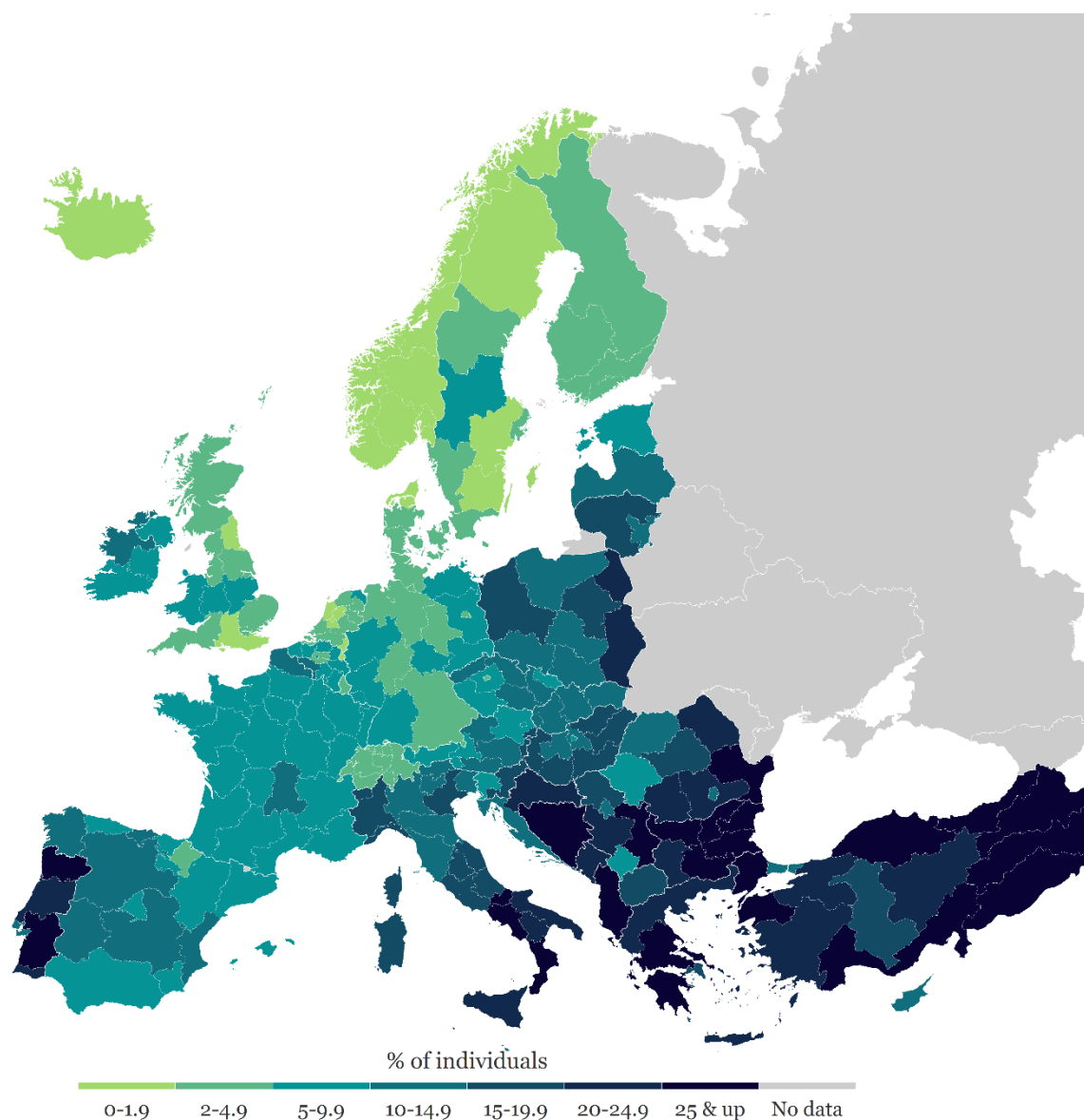
Graph 3: Percentage of individuals among total population using internet<sup>12</sup>

<sup>11</sup> OECD, The Covid-19 Crisis in the Western Balkans, 13. Data for Albania (Public Authority) and Montenegro (Digital Skills) from 2018.

<sup>12</sup> Eurostat, <https://ec.europa.eu/eurostat/databrowser/view/tin00028/default/table?lang=en>



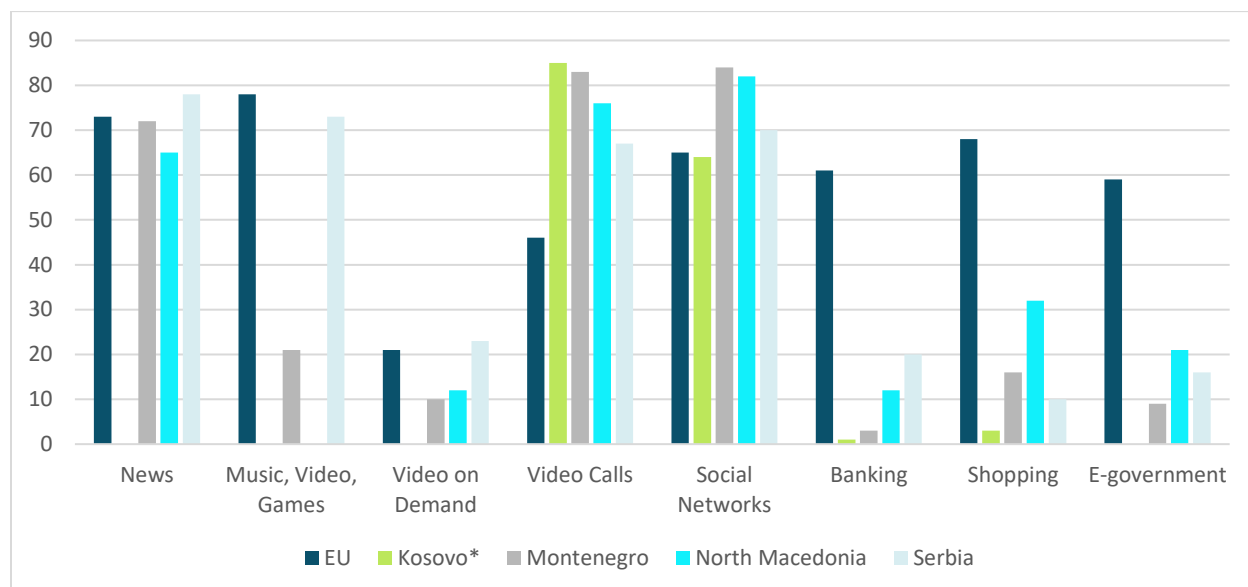
The number of individuals who are using the internet in the Western Balkans (see Graph 3) has remained below the EU average, with the exception of Kosovo. This trend is highlighted in Map 1 (below). While the share of Western Balkan citizens who have never used the internet is high in European perspective, it is comparable to adjacent regions in the EU, including in Romania, Greece and Bulgaria, but also to regions in other EU countries, particularly in Poland and Portugal.



Map 1: People who have never accessed the internet (2019)<sup>13</sup>

<sup>13</sup> Maps designed and copyright by Miloš Popović (<http://milosp.info>), Data: Eurostat, <https://ec.europa.eu/eurostat/data/database>





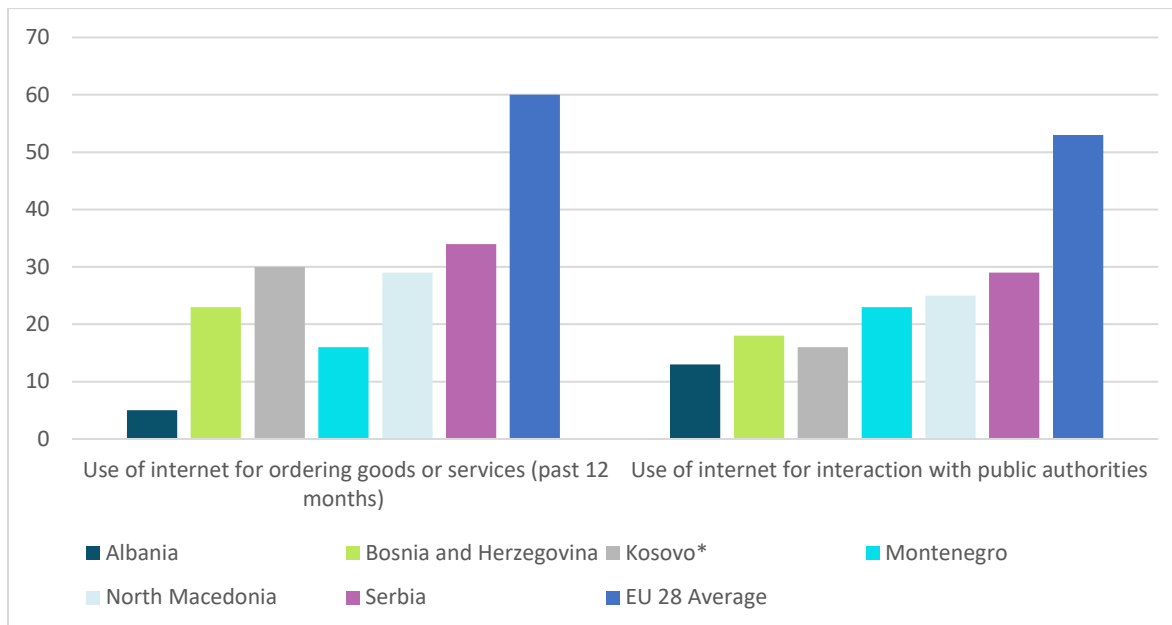
Graph 4: Citizens' use of internet before COVID-19 (Data 2019, in %)<sup>14</sup>

When it comes to use by citizens, the areas of convergence between the Western Balkans and the EU remain uneven. As indicated by the regional DESI study 2019 (see graph 4), citizens use the internet for news, video calls and social networks at levels comparable with the EU average.<sup>15</sup> This might in part be explained by large diasporas, which require them to keep in contact with their families and friends through social networks and video calls. For e-government (i.e. the use of public administration services online), online banking and shopping, as well as other payable services (e.g. video on demand), usage is considerably less widespread than the EU average. The biggest gap to the EU average is in the field of shopping and banking, where 61% (banking) and 68% (shopping) of EU citizens use digital services, whereas in the Western Balkans the rate stands between 1% (Banking, Kosovo\*) and 32% (shopping, North Macedonia). This gap will thus also be a focus of the analysis of the survey results, to determine whether this discrepancy has persisted during the pandemic digital leap.

<sup>14</sup> No data provided for Albania and Bosnia and Herzegovina. European Commission, Monitoring the Digital Economy and Electronic Communications Services in the Western Balkans and Turkey, 17, 19.

<sup>15</sup> Ibid.





Graph 5: Use of internet for shopping and services, and e-government, comparison WB6 and EU (in%)<sup>16</sup>

Altogether, the digital transformation of the region in the years prior to the pandemic has been only slowly gathering pace and the gap with the EU average, and even with underperformers within the EU, has remained significant. The cause of the digital gap between the Western Balkans and the EU can be attributed to the EU benefiting from a faster pace of digitalization in the EU, more investment in digitalization, the deployment of more efficient and integrated solutions and larger structural advantages such as better rule of law and larger economies on average (see Graph 5). There has also been variety among the economies of the Western Balkans, with Serbia, Montenegro, and partly North Macedonia generally performing better than Kosovo\*, Albania and Bosnia and Herzegovina.

The digital gap between the Western Balkans and the EU constitutes a risk and an opportunity, as outlined in the 2018 study. With a significant share of the population not using the internet in the region (with the exception of Kosovo\*) and an overall stagnating rank in the Network Readiness Index for most regional economies between 2019 and 2020, there is a considerable risk that the regional economies might be left behind. The gap is larger in fields of digital infrastructure, such as internet access for households or broadband subscriptions, and considerably lower in terms of social network use or mobile phone subscriptions.

At the same time, an overall increasing digital convergence between the Western Balkans and the EU average since 2005 can be observed, indicating a shrinking digital gap which leave room for some optimism.<sup>17</sup> Thus, the digital transformation constitutes an important opportunity to catch up with the EU in terms of the economy, as well as e-government and other sectors. As outlined in the 2018 study, an improvement in the digitalization of the Western Balkans could have a marked impact on the economic

<sup>16</sup> Data from 2019, except Albania (2018), Eurostat, <https://ec.europa.eu/eurostat/databrowser/view/tin00096/default/table?lang=en>

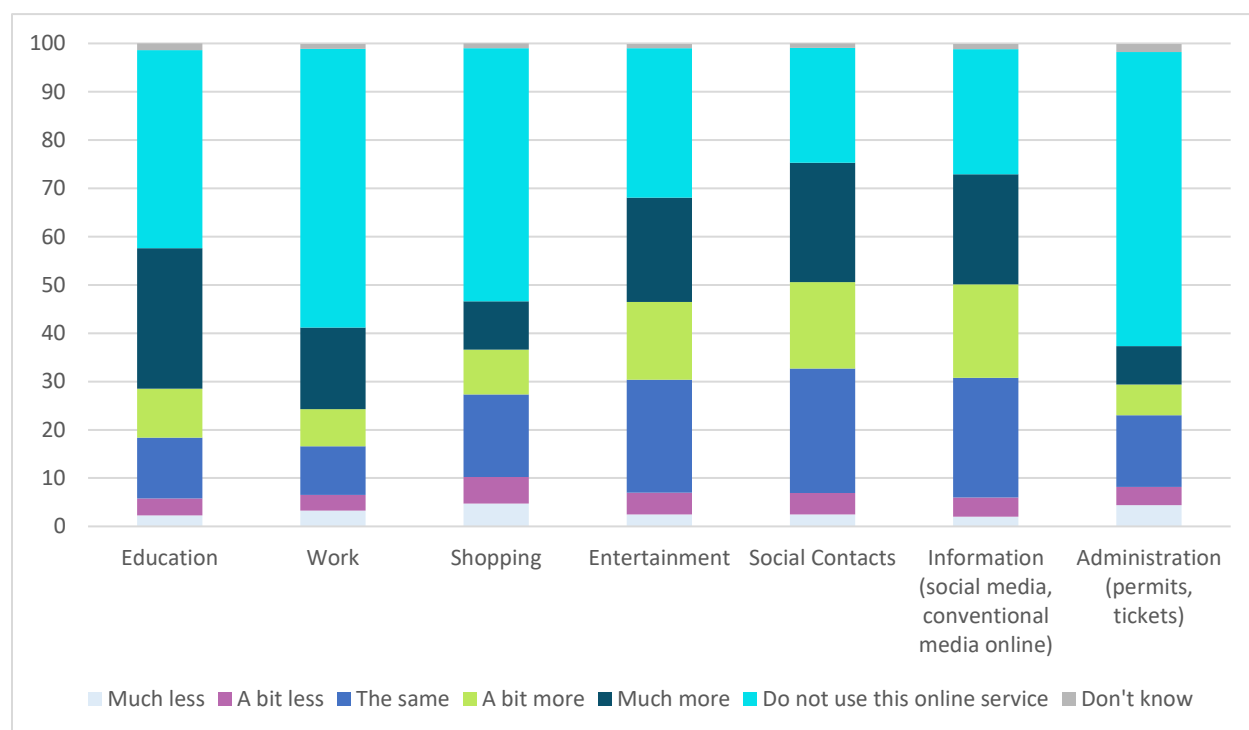
<sup>17</sup> European Commission, *Monitoring the Digital Economy and Electronic Communications Services in the Western Balkans and Turkey*, 12, 45.



growth of the region and thus reduce the gap with the EU average. Embracing new digital technology will provide fixed and mobile access capabilities and ensure technology potential for future throughput increases like fiber access and Fixed Wireless access FWA (4G/5G) as a path to future 6G deployment (EU's Hexa-X), allowing economies to leapfrog and overcome structural disadvantages.<sup>18</sup>

### 3. The Digital Leap

Despite adverse circumstances, there has been a digital leap across the region since the beginning of the pandemic. In all fields, from work and education to entertainment and shopping, citizens have embraced digital content. Digital use has increased most (between 37.8% and 42.6%) in the spheres of entertainment, education, social networks and information. The only two spheres which have seen a much more modest increase of 14.3% and 19.4% percent respectively are contacts with the administration and shopping. Strikingly, these are also the spheres that were weaker in terms of digital use before the pandemic (see Graph 6).



Graph 6: Increased of decreased use of online services due to the COVID-19 pandemic per household (in %)

The share of citizens not using online services ranges from 23.8% (social contact) to 60.9% (administrative services). The lower number reflects the approximately one quarter of the population in most Western Balkan economies who do not use the internet at all, based on pre-pandemic data. The 37.1% gap of non-users between the most and the least used online service can be best explained by the lack of availability

<sup>18</sup> Institute of Economics, Zagreb, Centre for Southeast European Studies, University of Graz, *The Impact of Digital Transformation on the Western Balkans—Tackling the Challenges towards Political Stability and Economic Prosperity*, 2018, <https://wb6digital.files.wordpress.com/2018/01/wb6-study.pdf>

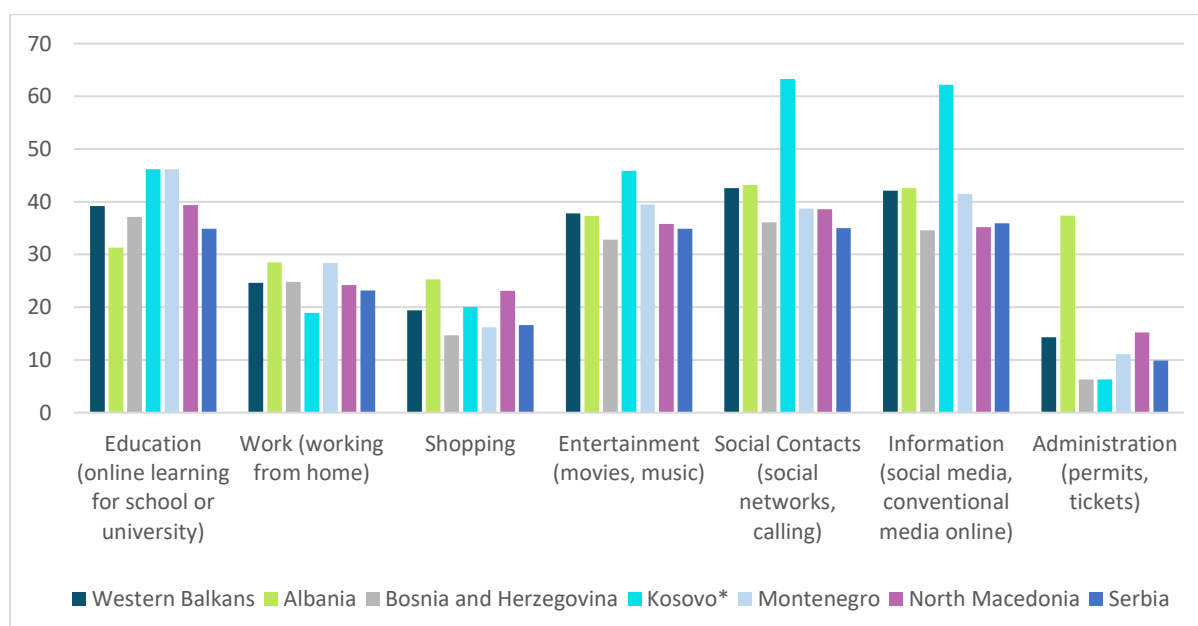


(in particular in the fields of administration and work) and other obstacles, such as the lack of trusted or reliable payment methods (particularly for shopping and entertainment).

Working from home stands in between, with a quarter of citizens using it more than before the pandemic. The low number of those using digital technology to work from home is less surprising, as among those surveyed, a representative sample, only 38.7% were active in the workforce. With a significant number of people in the region employed in conventional industrial and non-digital service jobs, the switch reveals more about the nature of the region's employment structure than it does about digital shifts. This in itself is indicative of the regions low level of digital transformation.

Across the Western Balkans, the shift to working from home has been highest among university educated citizens and those working in the public sector. Among both, the share of those using the internet to work from home amounted to around 44%, compared to 30.5% in the private sector and 22.5% of those with a secondary education.

Still, 57.7% do not work from home, including 46.1% of private and 35.6% of public employees. In Albania, the shift to online was particularly sharply divided between public and private sector employees. In Albania, this might be linked to a particularly strong increase in e-government use. Whereas 63% of public service employees indicated an increase, only 26% of private employees did, with a similar pattern in Kosovo\*. The trend was similar in Serbia, Montenegro, and Bosnia and Herzegovina, but less pronounced. Only North Macedonia bucked the trend, with no significant difference between public and private sector. With the exception of Kosovo\*, there is a strong link to education, with citizens with university degrees being significantly more likely to work from home.



Graph 7: Increase (categories "a bit more" and "much more") in internet use by category and economy (in %)



There are some regional variations in terms of the larger patterns (see Graph 7): for example, Albania experienced a rise in all spheres, including administration, with a rise of 37.4% in using these services since the pandemic. This is linked to a considerably higher level of user-friendly public services in Albania prior to the pandemic. While the region scored 65% in terms of user centricity, Albania scored 74%, linked to user-friendly online services and mobile friendliness, which is important considering the low level of computer ownership.<sup>19</sup>

In Kosovo\*, as well as Bosnia and Herzegovina, the increase is significant in all fields except administration, where only 6.3% used it more, suggesting a limited availability and provision of online services. The greatest increases in digital use occurred in Kosovo\*, where information and social contacts increased among more than 60% of households, particularly among 18 to 29-year olds, 75% of whom stated that they use social networks more than before the pandemic. This increase took place against an already high backdrop of social network use, with only 11% stating that they did not use social media prior to the pandemic.

Similarly, to social contact, information, including conventional media online presence and social media, is used by nearly 75% of citizens and over 40% of citizens used it more during the pandemic. As with social contact, Kosovo\* is using this considerably more and has the greatest increase compared to before the pandemic (more than 60%). This can be attributed in part to the switch of printed media to online-only formats and the significance of social media at the main contact among families and friends separated by transnational ties, given the high proportion of Kosovo\* citizens living in West European countries who were unable to return home.

Entertainment is not accessed online by around a third of citizens in the regions. The increase is significant, with more than 37.7% using it more, with little regional variation. As in other spheres, it is the young, employed and well-educated who have driven most of this increase. This once again highlights the risk of an increasing digital gap between this segment of the population, familiar with using digital technology, and those left behind.

One of the domains that has experienced only a relatively modest increase in digital use during the pandemic is shopping. More than half of all those surveyed (except Albania) do not use shopping at all, and the increase during the pandemic has been modest across the region. This confirms the low uptake of online shopping from before the pandemic.

Online shopping is also limited by legal restrictions that discourage local shops from selling online due to high operational costs and greater obstacles in regard to payment. Finally, trust in financial transactions might be lower in the Western Balkans, often due to weak state capacity. This appears to have kept the numbers down during the pandemic, combined with high levels of economic anxiety and the availability of everyday products offline.

Online administration is the greatest laggard. Generally speaking, administrative services are used little across the region. A clear majority of 60.9% across the Western Balkans do not use administrative services

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<sup>19</sup> OECD, *Government at a Glance: Western Balkans*, 2020. [https://www.oecd-ilibrary.org/governance/government-at-a-glance-western-balkans\\_a8c72f1b-en](https://www.oecd-ilibrary.org/governance/government-at-a-glance-western-balkans_a8c72f1b-en)



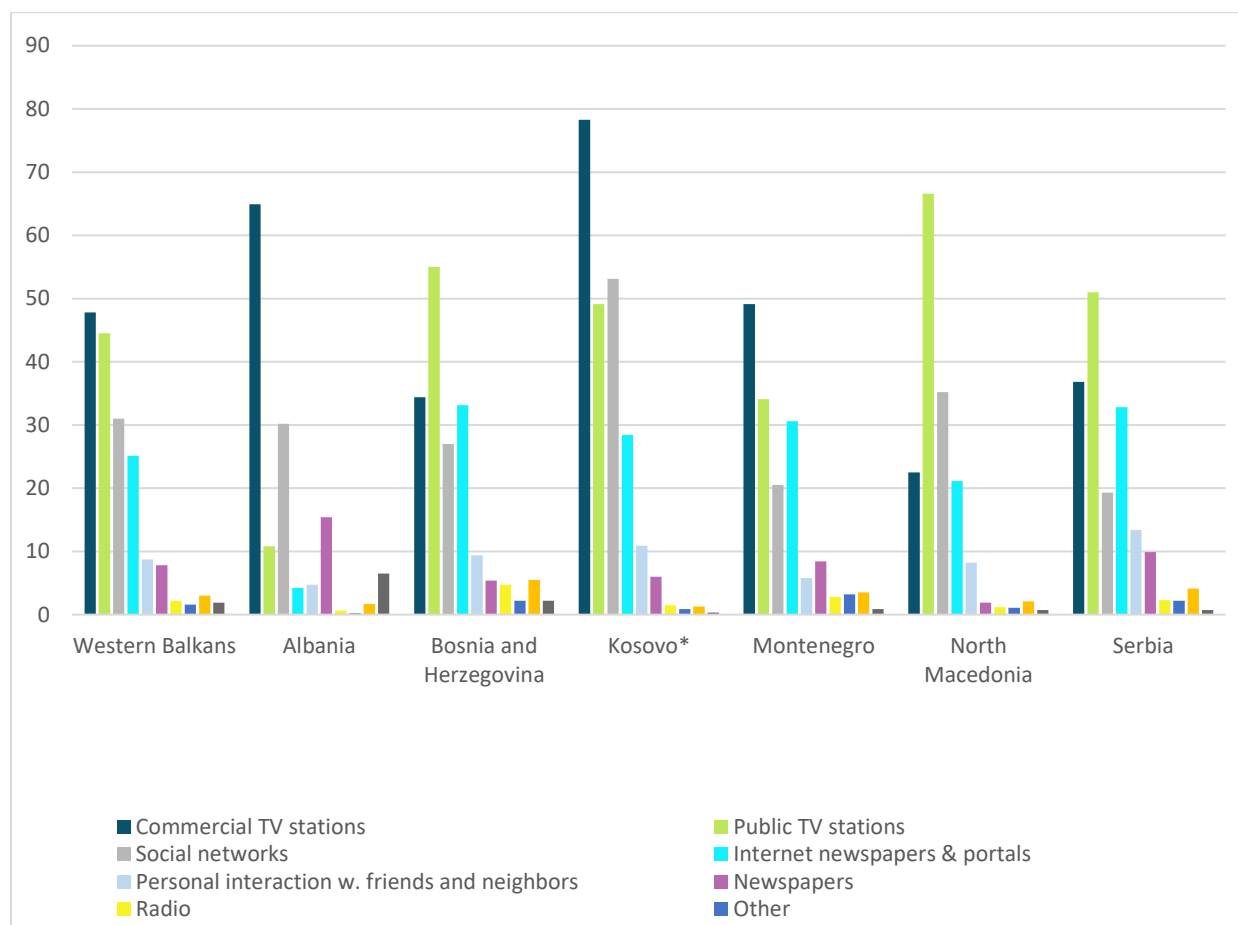
online, especially the elderly, pensioners and those with lower levels of education. With the outlier of Albania, it is not used at all by between 58.0% (Serbia) and 79% (Kosovo\*) of the population, and the increase has been modest, ranging from 6.2% (Kosovo\*) to 15.2% (North Macedonia). Overall, the lower level of digital administrative service use has not been disrupted by the pandemic. The only exception has been in Albania, where 64% of the population used digital means to communicate with the public administration. The increase was also highest in Albania, with 37.4% of the population using the online services more during the pandemic. The link between the levels of usage and the increase suggests that when there is already an established use of digital administrative services, such as through easy access and availability, citizens will increasingly use these methods.

#### 4. News, Online Media and Conspiracy Theories

In Kosovo\* during the first wave of the lockdown, the main newspaper *Koha Ditore* only appeared online, as the restrictions meant that there was little sense in publishing in print. Irrespective of the COVID-19 pandemic, print media across the Western Balkans has been weak for years and TV has dominated. Thus, the pandemic at most accelerated an existing trend. Unlike in other domains, media consumption habits have not been directly impacted by the pandemic. The survey did ask where citizens inform themselves about political developments and the pandemic, which confirms this trend. Overall, TV remains the main source of information, be it the public broadcaster or private channels. Internet portals and social media closely follow as sources of information on politics, with internet portals usually being more significant than social media.

The use of media for staying informed about the pandemic and general political developments are largely similar, so that on average there has not been a 'return' to traditional media in light of the pandemic. There are a few exceptions. In Montenegro, for example, internet portals are the second most important source for political information, but are less important in relation to information on the pandemic itself. More significant is the regional variation (Graph 8). While internet portals and newspapers are the main sources of information on political developments for 30% of the Western Balkan population, and on the pandemic for 25%, the share is only 5.4% and 4.2% respectively in Albania. This matches the wider pattern of Albania having an overall lower level of digital use across the spectrum. The significance of social networks also varies greatly as a source of news, with a high rate in Kosovo\* (51.6% for political developments) and half that number in Serbia (26.3%).



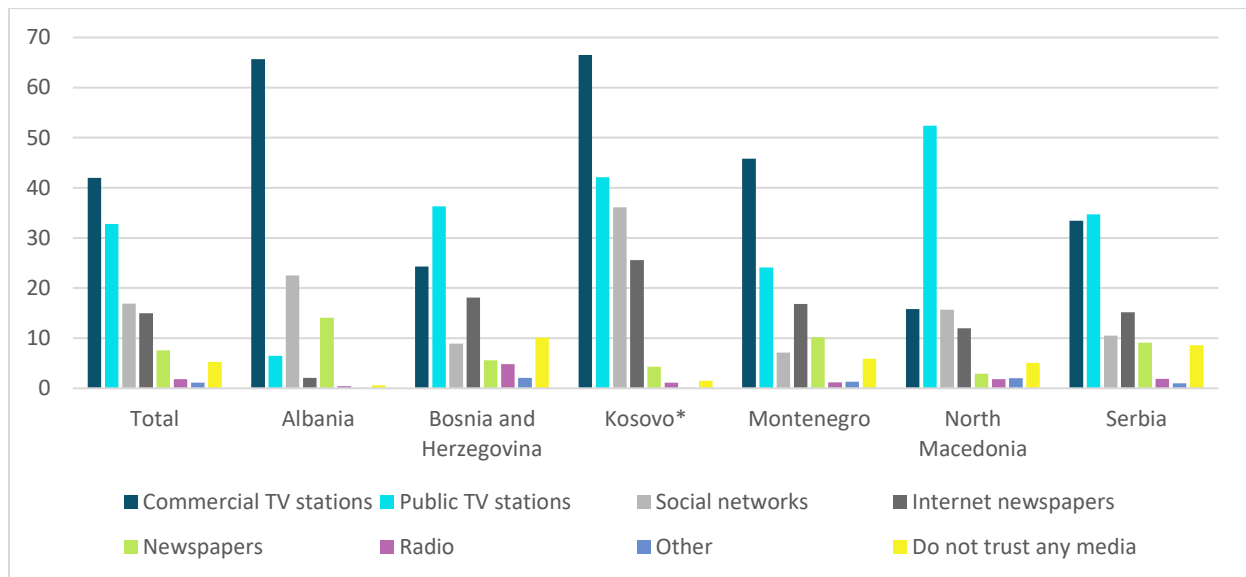


Graph 8: Main sources of information on the pandemic (in %)

The consumption of media is closely linked with trust, with TV stations most trusted, albeit with a great variation regarding public broadcasters. Trust in internet-based news providers is overall below 20%, with only Kosovo\* having relatively high levels of overall trust in media, including online news (see Graph 9). These findings are corroborated by a survey in the framework of the Regional Cooperation Council's COVID-19 Balkan Barometer, conducted in April and May 2020, which finds that official sources, such as medical professionals and governments are most trusted, followed by conventional media. Online sources are considerably less trusted, again with the exception of Kosovo\*, where media enjoys more trust than officials.<sup>20</sup>

<sup>20</sup> Regional Cooperation Council, *Balkan Barometer 2020, COVID-19 Impact Assessment*, 2020, 20.





Graph 9: Which media do you trust about political developments? (in%)

As pointed out in the Western Balkans study from 2018, the rise of digital news also constitutes a risk. Lower costs and the ease of setting up portals in comparison to conventional media can help level the playing field. At the same time, online media can easily be used to spread ‘fake news’, disinformation and conspiracy theories.<sup>21</sup>

Disinformation and fake news are widespread in the Western Balkans and promoted by a number of actors, including politicians, both from ruling parties and the opposition, prominent individuals through social networks, and conventional media, such as TV and newspapers.<sup>22</sup> Such disinformation has impacted a number of elections and referendums in recent years and is important due to the sharp levels of domestic polarization and strong geopolitical competition in the region. The uncertainty surrounding the pandemic has furthered the spread of misinformation and conspiracy theories. Their spread cannot be exclusively linked to digital media, whether portals and news sites or social media, as many have also been promoted by conventional media. However, more extreme conspiracy theories have spread through video platforms, social media and messaging apps.<sup>23</sup>

Conspiracy theories, even if they have local specifics, are part of a global trend and focus either on downplaying the pandemic or attributing responsibility for spreading it to a particular actor with a supposed motive. These include claims of Chinese or US responsibility for deliberately spreading the virus,

<sup>21</sup> Institute of Economics, Zagreb, Centre for Southeast European Studies, University of Graz, *The Impact of Digital Transformation on the Western Balkans—Tackling the Challenges towards Political Stability and Economic Prosperity*, 2018, 61, <https://wb6digital.files.wordpress.com/2018/01/wb6-study.pdf>

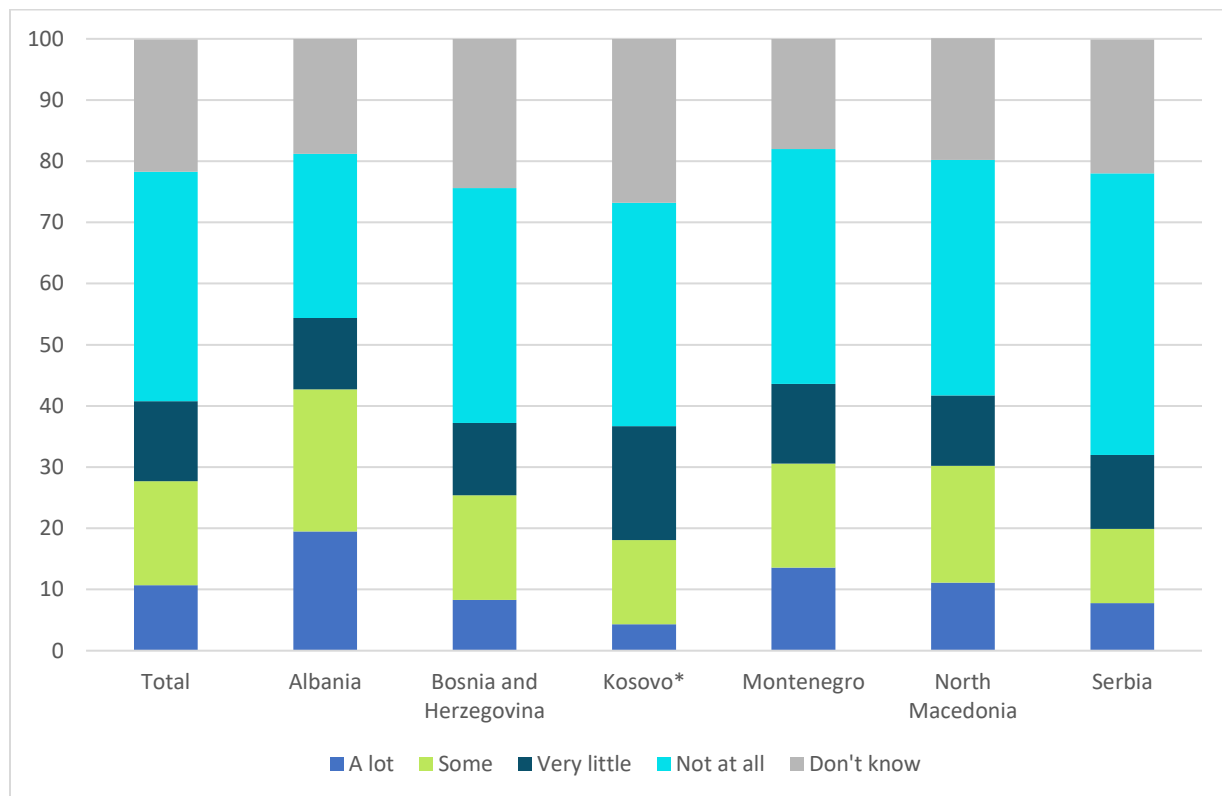
<sup>22</sup> Samuel Greene, Gregory Asmolov, Adam Fagan, Ofer Fridman, Borjan Gjuzelov, *Mapping Fake News and Disinformation in the Western Balkans and Identifying Ways to Effectively Counter Them*, European Parliament, 2020, [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/653621/EXPO\\_STU\(2020\)653621\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/653621/EXPO_STU(2020)653621_EN.pdf)

<sup>23</sup> Ibid.



or that Bill Gates is using it to implant microchips. Overall, such conspiracy theories are considerably more widespread in the Western Balkans than in most other European countries.<sup>24</sup>

One of the more outlandish conspiracy theories, suggesting the spread of the pandemic is linked to 5G technology, bears particular risks of jeopardizing the digital transformation of the Western Balkans. The good news is that, of the five most common conspiracy theories, that claiming a link to 5G has the least support, with only 27.7% of citizens giving the theory some or a lot of credence (Graph 10). The range of support varies in the region, between 42.7% in Albania, and 18.1% in Kosovo\*. Still, these levels are significant and matter. Beyond the overall negative implication for public health and trust in public institutions, the anti-technological and anti-digital claims of the conspiracy theory can have repercussions. Supporters of such a conspiracy theory might reject the spread of the technology, and radical supporters elsewhere have even set fire or otherwise damaged 5G transmission towers, although this has not yet happened in the Western Balkans.



Graph 10: Citizens in Western Balkans on whether there is a link between 5G technology and the Coronavirus (in %)

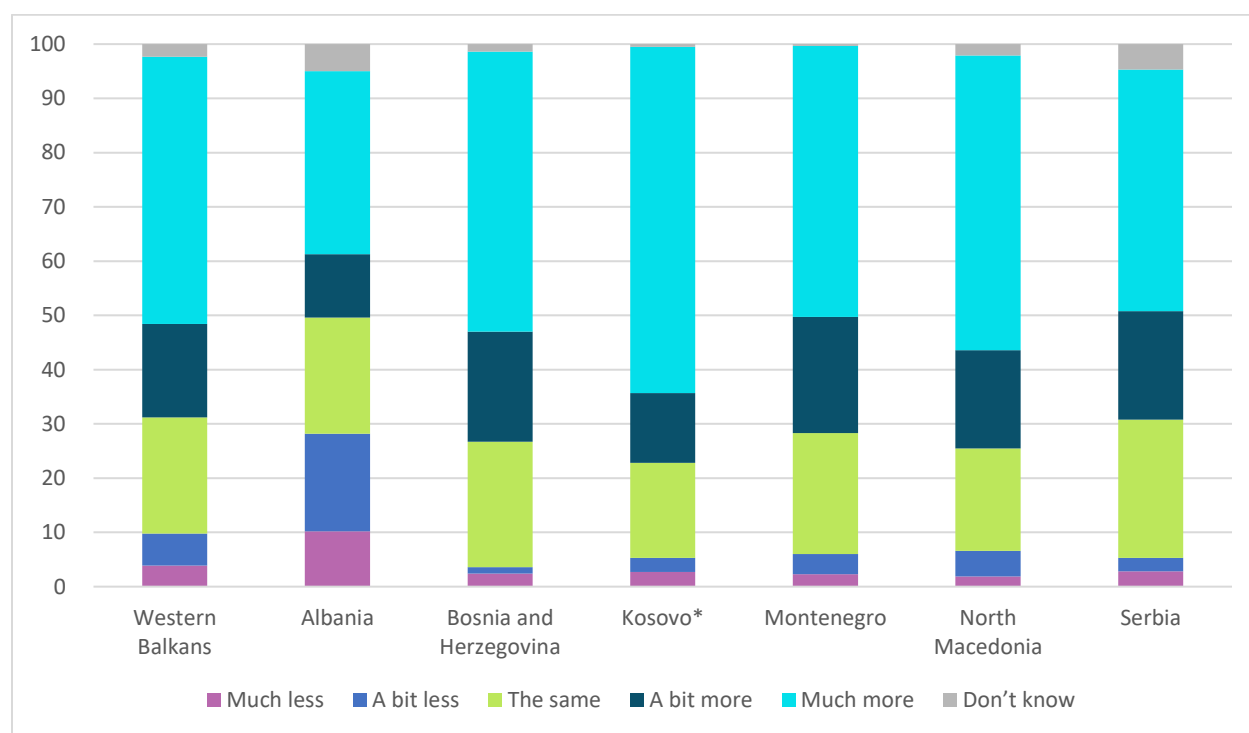
Overall, the rejection of evidence and anti-science discourses are reflected in these conspiracy theories and feed into the rejection of technology—even if the same technology is used to spread these narratives.

<sup>24</sup> A detailed analysis of the survey results regarding conspiracies is available in Florian Bieber, Tena Prelec, Dejan Jović, Zoran Nechev, *The Suspicious Virus. Conspiracies and COVID19 in the Balkans*, Balkans in Europe Policy Advisory Group, 2020. <https://biepag.eu/wp-content/uploads/2020/12/Conspiracies-and-COVID19-in-the-Balkan-English-2.pdf>.



## 5. The Digital Education Revolution

The use of digital tools for education has increased dramatically, with nearly a third of citizens across the region using it much more during the pandemic than previously, especially in Kosovo\* and Montenegro. This shift occurred against a backdrop of low levels of preparedness. The availability of digital devices in schools and digital teaching platforms were well below OECD levels in the region. Only Montenegro had a significantly higher level of availability of online learning platforms; otherwise, the level was low. However – and this may have made a decisive difference during the pandemic – pupils surveyed indicated that teachers have the skills to integrate digital learning at a level higher than the OECD average in the region. In fact, every country in the region fared better than the OECD average in this category in 2019. It would appear that the digital leap in education was possible despite these obstacles.<sup>25</sup>



Graph 11: Household use of internet for education during the pandemic in comparison to before, among households with children in school or university (in %)<sup>26</sup>

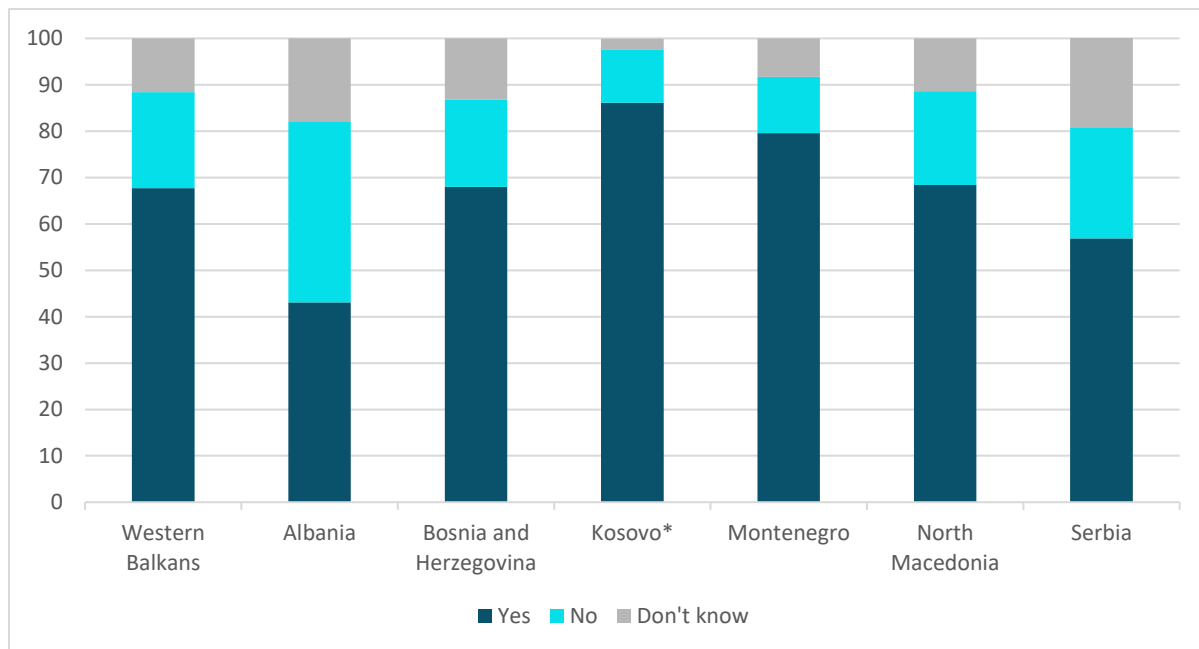
Of all the digital leaps that occurred, the most significant has been in the field of education. During the closure of schools, digital education was not the only option. Education was also offered through specially produced school programs on public TV or through written instructions by teachers, rather than digital platforms. Although these were available, digital content delivery prevailed in all of the Western Balkan economies.

<sup>25</sup> OECD, The Covid-19 Crisis in the Western Balkans, 10-11.

<sup>26</sup> Answers "Don't know" not displayed

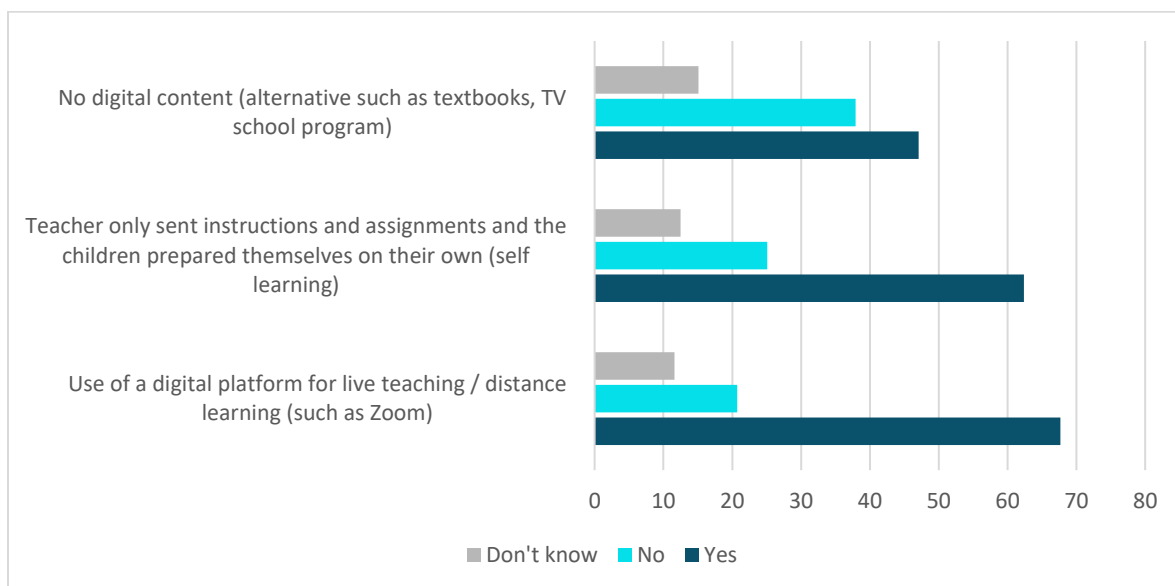


Overall, more than two thirds of households with children attending school or university used digital platforms, with the most in Kosovo\* at 86.1% (see Graph 11). Live online teaching was least commonly used in Albania, where a near-equal number of households used non-digital content. Otherwise, live teaching by far eclipsed other forms of teaching during the lockdown (Graph 12)



Graph 12: Use of digital platform for live teaching (among households w. children in school or university, in %)

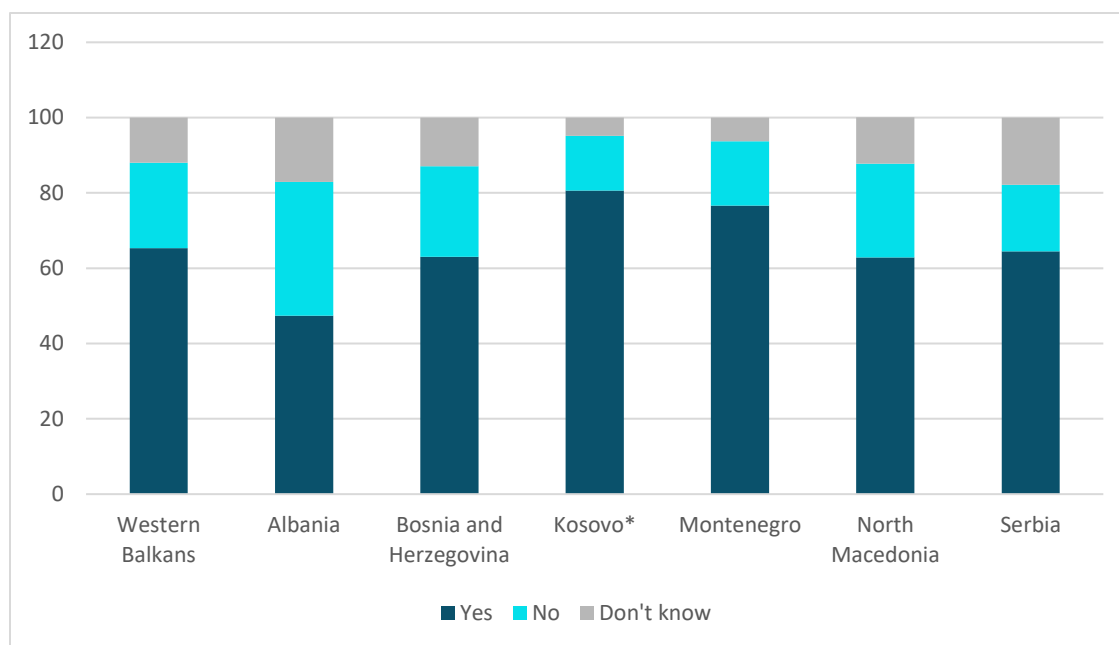
When asked specifically about the type of teaching, digital delivery prevailed, but self-learning through written instructions or the use of textbooks and TV programs were also widely used. Thus, digital teaching is widely supplemented by other educational tools (Graph 13).



Graph 13: Digital and non-digital methods of teaching during the COVID-19 pandemic (in %)



Nearly two thirds of the citizens in the Western Balkans who used online education were satisfied with the services (Graph 14). There is some regional variation, ranging from very high levels of satisfaction in Kosovo\* (80.6%) to lower levels in Albania (47.4%), but there is a clear majority in all economies who are satisfied.

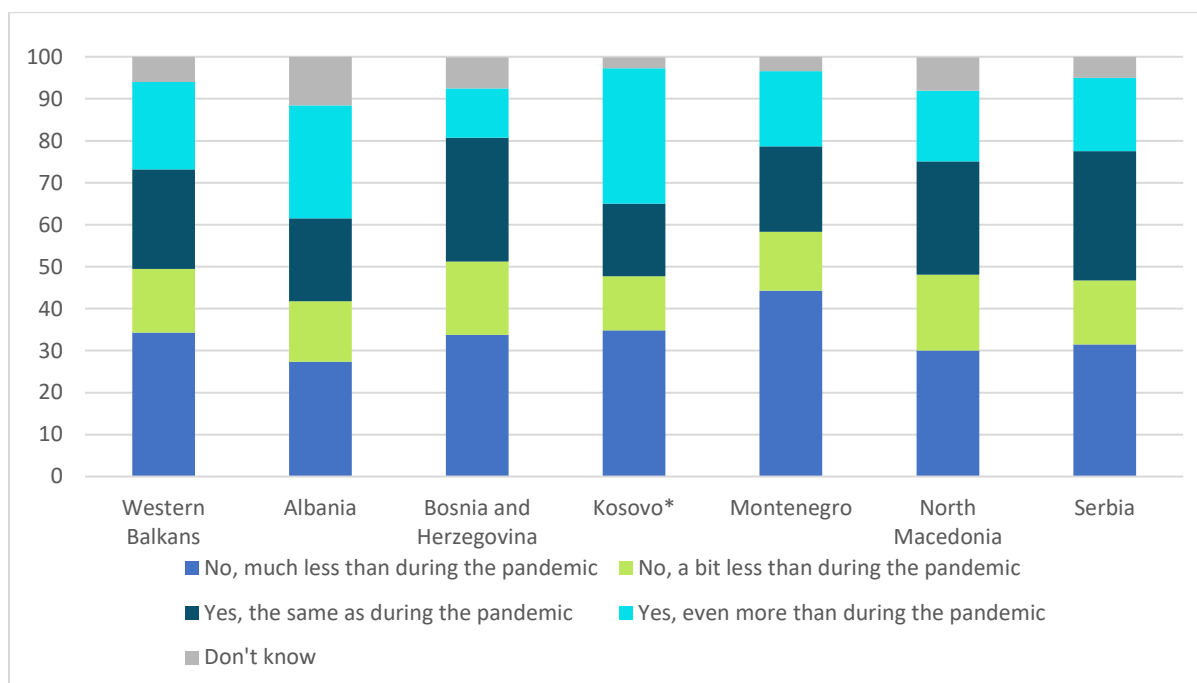


Graph 14: Satisfaction with Online Education during the COVID-19 pandemic (in %)

Consistently, the overall expectation is that such high level of digital education will be temporary and will return to normal after the pandemic. This is no surprise, as schools and universities have shifted to online education across the region and few would expect or desire that education would permanently shift in this direction.

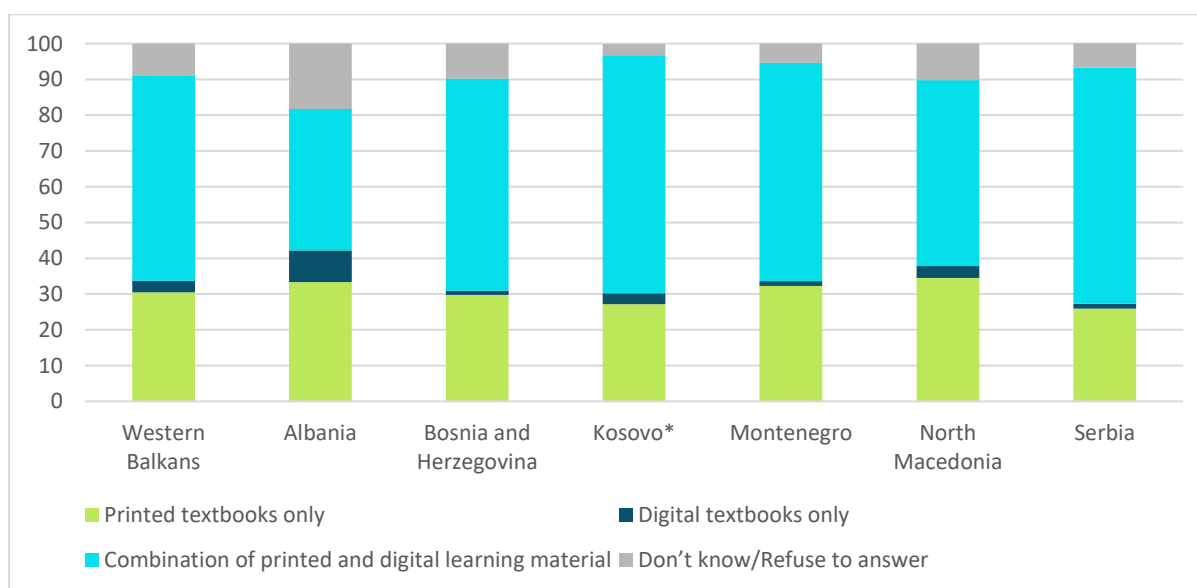
Nevertheless, a significant share of households which have been using more online services for education during the pandemic can envisage continuing to do so, even when it is no longer necessary (Graph 15). Especially in Kosovo\* and Albania, there is considerable demand for online education. There is a big gender gap in Albania, with women being considerably more skeptical about online education, and younger citizens are having reservations.





Graph 15: Citizens who can imagine using online services after the pandemic for education, even if not necessary (only those who used it more during pandemic, in %)

Based on the experience of the digital delivery of education, a majority of citizens across the Western Balkans prefer not a complete switch to digital content, but a combination of digital and printed materials (Graph 16). With the exception of Albania, there is a large majority for such a combination. This suggests that there is great potential for translating the digital leap into a sustainable combination of print and online content, in line with the overall readiness to retain some elements of the digital delivery of education.



Graph 16: Types of teaching materials for quality learning and acquisition of knowledge (in %)

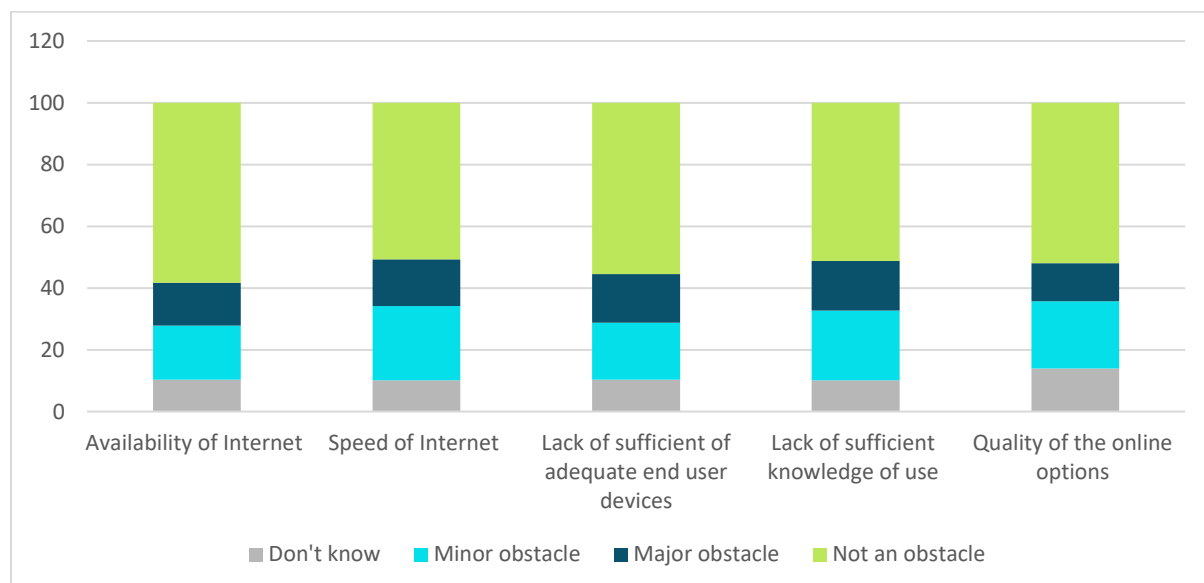


Despite the considerable challenges the educational sector faced during the crisis, such as the limited extent of digital preparedness, uneven broadband internet access and end-user devices and limited experience of teachers, pupils, students and parents with online teaching tools, the educational system has been able to respond to the imposed shift to online teaching. Overall, the levels of satisfaction and uptake are encouraging.

## 6. The Digital Obstacle Course

Considering the scale and intensity of the digital shift, and the obstacles documented in previous years in terms of the Western Balkans' digital preparedness,<sup>27</sup> a key question is the type and scale of obstacles encountered by citizens during the digital shift. The survey asked them about five potential obstacles, including digital infrastructure (speed and availability), the offer of programs (online options) and obstacles within the household itself (digital skills and devices).

Surprisingly, most citizens noted only few obstacles, considering the demands and challenges of the shift. A majority noted no obstacles in all five categories, and less than 20% experienced different types of serious obstacles (Graph 17).



Graph 17: Obstacles to Using Online Services (in %)

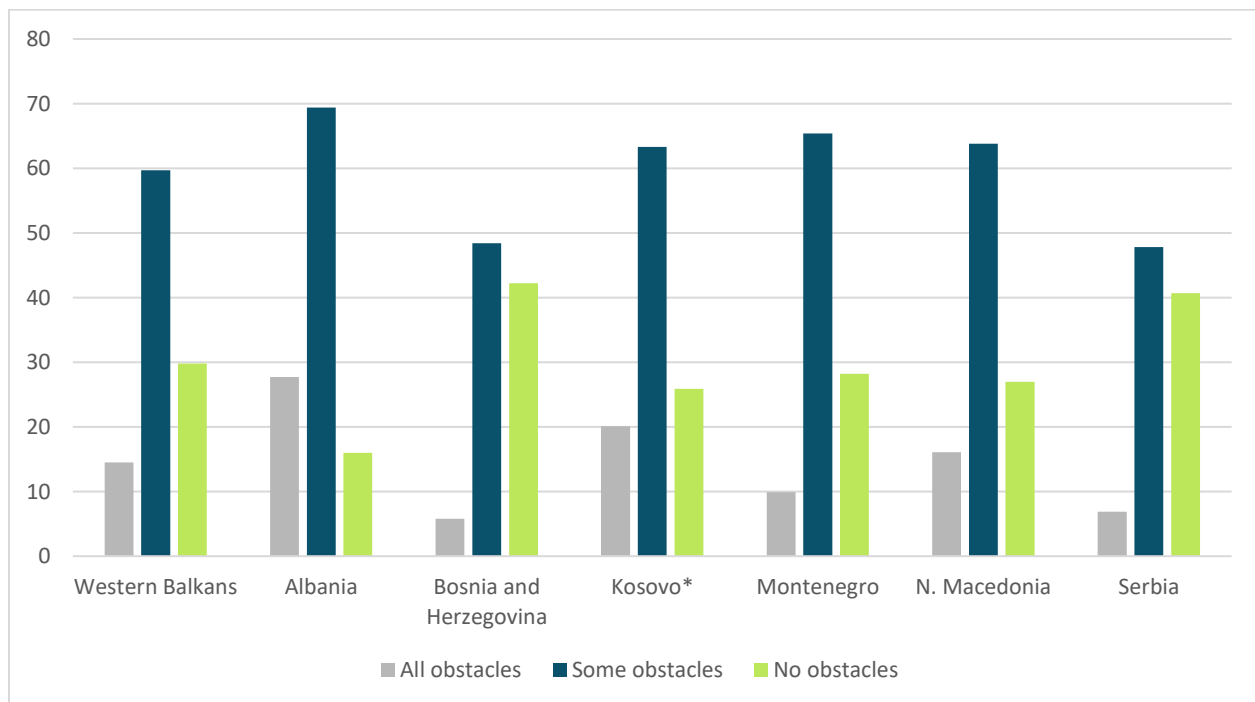
Overall, the largest proportion of citizens encountering no problems are those in the 30-44 old age category with higher levels of education (secondary and university). On the other hand, those facing most obstacles are the young (18-29), those with primary education, those living in rural environments and the unemployed.

<sup>27</sup> European Commission, *Monitoring the Digital Economy and Electronic Communications Services in the Western Balkans and Turkey*.



Thus, among those who face obstacles in making the digital leap one can identify two distinct groups: one group has a high need for online services and thus find themselves constrained based on demand and need, such as the young, who need online services for work, education and services. The other, more significant group are citizens who are marginalized in terms of access to services. These are primarily those with a lower level of education, those living in rural areas and often the elderly. While their needs in terms of education and work are, in part, lower than other groups, they most frequently note a lack of access or face other obstacles.

There is considerable regional variation. In Albania, there are considerable obstacles. Only 16% encountered no obstacles, whereas as many as 28% encountered all five obstacles listed. 69% encountered at least one obstacle. This did not diverge significantly based on education, age or other demographic indicators. The two economies which faced the least obstacles are Bosnia and Herzegovina and Serbia, where 42.25 and 40.7% respectively indicated no problems. These numbers are constitutively higher along all indicators and thus cannot be attribute to one factor, such as higher internet availability and speed. In some economies there is also an ethnic dimension. In North Macedonia, 33.3% of Macedonians faced no problems, but only 14.1% of Albanians (Graph 18). For Albanians in Macedonia, the greatest difference among the obstacles in comparison to the overall population is the availability of internet (overall 33.7%; 50.2% among Albanians, 27.8% among Macedonians).

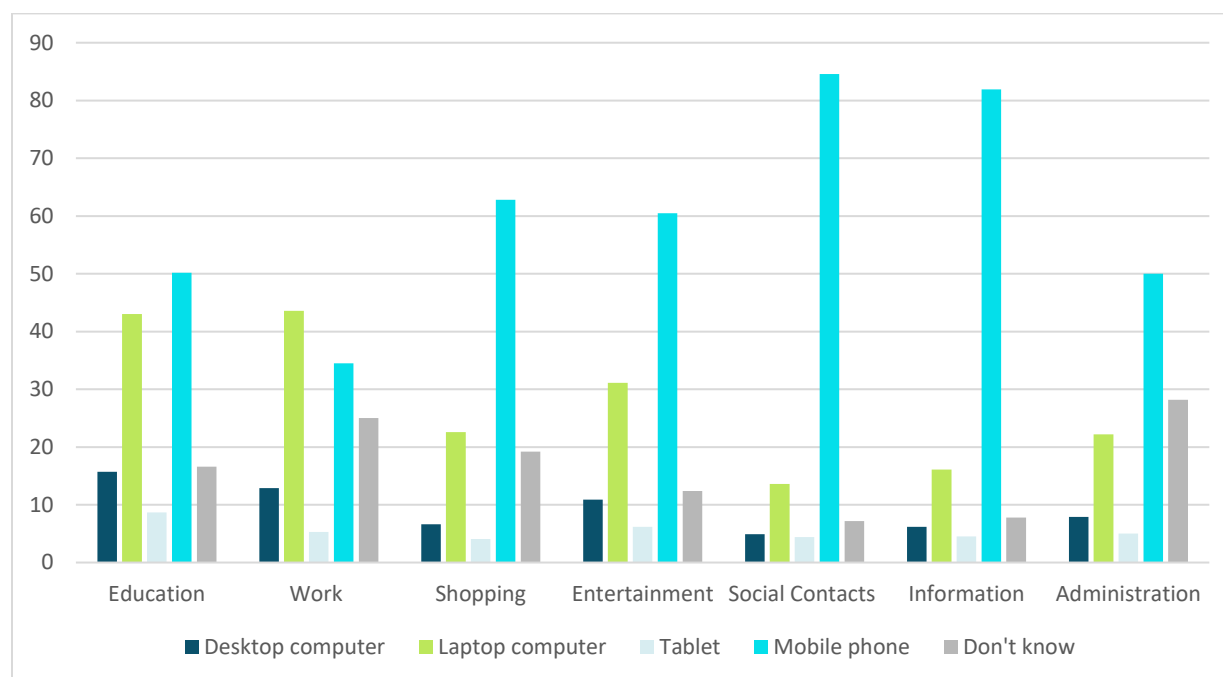


Graph 18: Cumulative Obstacles in Accessing Online Services by Country (in %)

In terms of devices used, there has been a clear trend indicating that mobile phones and laptops are the dominant tools used to access digital content. Except for work, mobile phones are the most used devices for all services. Desktops and tablets are the exception, used for around 10 to 25% of all activities (Graph 19). There is a gap in terms of usage on the basis of education. Especially in terms of work and education,



citizens with college education are more likely to use a laptop (63.6% for work, 56.7% for education), whereas those with a primary degree are more likely to use a mobile phone rather than a laptop, which is most likely caused by the lack of availability of laptops.

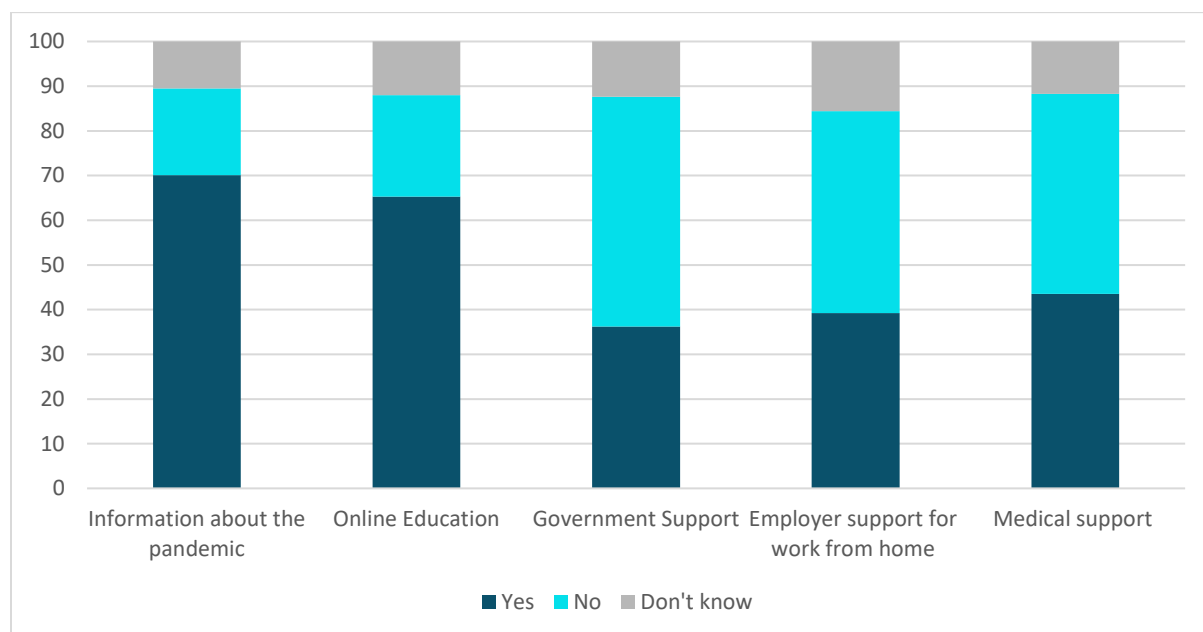


Graph 19: Main Devices Used for Different Online Services (in %)

The survey further asked which services specific to the pandemic have been used and citizens' levels of satisfaction with them (Graph 20). These include five services, such as online education and information about the pandemic, special contact tracing apps, government and job assistance and medical assistance.

Around half of all citizens did not use any of the digital services that might have been available related to work, education and government services. The two most used digital services have been education (44.8%) and information (53.5%). Strikingly, these are also the only two areas where the level of satisfaction is positive, whereas citizens are more dissatisfied than satisfied with government and employer support. In terms of information about the pandemic and education, there is a clear digital divide, with higher levels of satisfaction among the younger and the well-educated, while older and less educated citizens were mostly dissatisfied.





Graph 20: Satisfaction with Online Services among Users (in %)

This pattern is replicated also in categories where most were dissatisfied, such as government services, medical and employer support. While all demographic groups were dissatisfied, the more digital savvy demographic groups were less so.

Despite the impressive digital leap by the Western Balkans in 2020, key obstacles remain. There is considerable regional variation that reflects the pre-existing regional trends in terms of digital preparedness. The greatest level of use has been in the field of education, whereas overall the use and satisfaction with government and employer services has been limited. There is **no single obstacle** across the region for the digital leap. Where obstacles are encountered, they are often multiple and mutually reinforcing. The greatest risk for the digital transformation is **a widening digital divide** with Western Balkan societies between those who are digitally competent and able to use the services and those who are left behind, in particular citizens above 60 and those with only primary education.

## 7. What is the New Digital Normal?

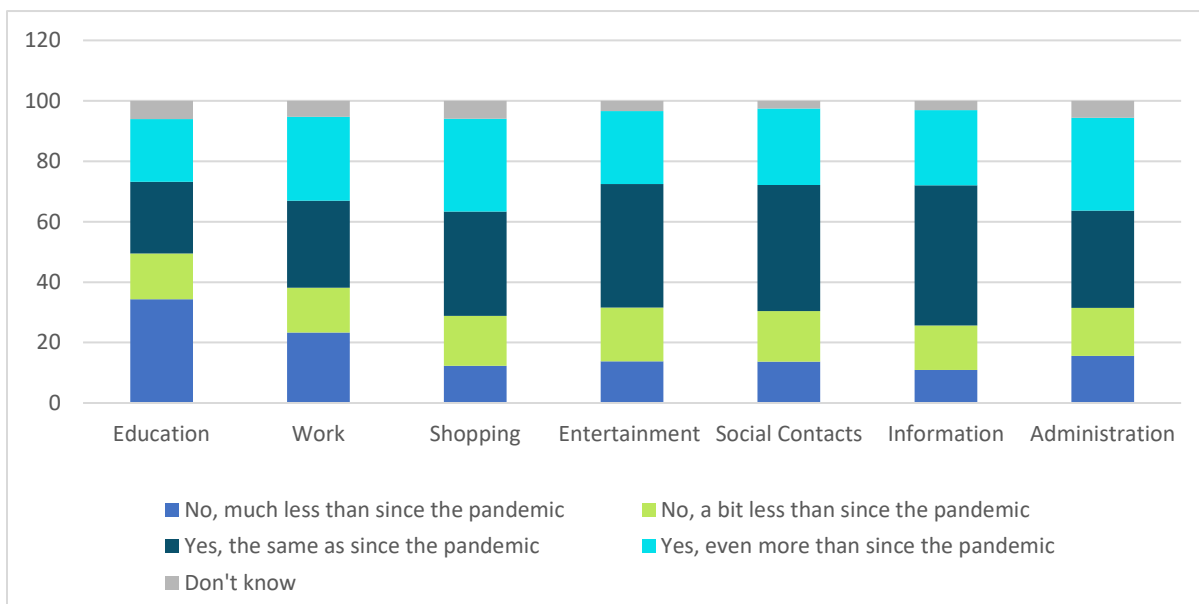
Will the digital shift persist? The transformation that has occurred across the world, including the Western Balkans, has been involuntary. Thus, the crucial question is whether the shift and change is sustainable and whether citizens want to return to the pre-pandemic reality. As citizens in the EU also shifted to online services during the pandemic, the question also remains unanswered whether the digital gap to the EU increased, despite the leap across the region.

Overall, the new digital normality seems here to stay. With the exception of education, a clear majority expects to remain at current levels of digital use or even increase it further. The pandemic imposed digitalization on populations around the world. Online teaching was not a matter of choice for parents,



but imposed by schools and governments to maintain education despite school closures. Similarly, other services and work switched partly to digital out of necessity. A central question for the future of the digital economy is whether this shift was temporary, borne out of necessity, or whether it will usher in a more digital era globally and in the Balkans. Will the use of digital tools revert to its pre-pandemic levels after COVID-19 is under control, or will some of the shifts that occurred in 2020 become permanent? Assessing whether the changes are in part permanent or temporary will not only depend on the supply side, i.e. whether schools and universities give greater weight to online teaching, employers encourage their staff to work from home and governments provide services online, it will also depend on the demand and the question whether citizens will want to take on these services digitally once the COVID-19 pandemic is overcome.

Despite talk of 'Zoom fatigue', the challenges of families using digital devices for different purposes at the same time and the association of the digital switch with the pandemic, the digital leap appears to be sustainable on the demand side (Graph 21). Across the Western Balkans, a clear majority of citizens would like to continue using online services after the pandemic, with the exception of education. Even in education, 44.5 percent would like to use online service as much or even more than during the pandemic. In other spheres, the majority ranges from 56.5% regarding work to 71.2% regarding information.



Graph 21: Citizens who can imagine using online services after the pandemic, even if not necessary (only those who used it more during pandemic, in %)

These numbers suggest that the digital shift that occurred involuntarily due to the Pandemic will not subside with the end of restrictions. The citizens of the Western Balkans have embraced the new digital 'normal' for the most part.



## 8. Key Findings and Conclusions

The economies of the Western Balkans appear to have weathered the externally imposed digital pressure during the pandemic well. In most fields and all across the region, there has been a substantial increase in the use of digital tools. This has been especially strong in fields that had previously seen substantial use, such as social contacts and news. It has also been strong where there was limited previous experience, such as education. Some fields, such as online shopping and e-government, have overall experienced a much smaller increase. This has been less due to the lack of demand than to obstacles in providing these digital services. While many households lack computers, mobile phones served to fill the gap, including in fields such as education and work. Less than a third of all citizens of the Western Balkan economies faced no obstacles in digital access, and many face multiple challenges in taking advantage of online services, confirming data from before COVID-19.

Across the region, one can observe a positive feedback loop wherein population groups and economies better prepared for the digital leap both used the digital offers to a greater extent and also express greater willingness to continue to do so after the end of the pandemic. It would appear that digital exposure increases the willingness to consider further use of digital technology. Thus, Albania, which has less digital uptake, also has the lowest rate of citizens who would keep or increase the levels of digital use after the pandemic. The biggest growth potential for an increase is in areas that have seen little digital use before and during the pandemic, such as shopping or interaction with the public administration, as well as continued and increased use in information, social media and entertainment.

Based on these findings, one can identify three distinct digital communities. The first are the **digitally excluded**: between a quarter and a third of the population who are not using any of the digital services or do so only marginally. These are typically pensioners and those with a low level of education. While rural-versus-urban divides are significant, it is age and education that are the most relevant markers. This group has been largely excluded from the digital leap during the pandemic. The second group could be called the **digital pragmatics**, who have participated in using digital services more during the pandemic but also see themselves using digital resources less after it comes to an end. This group constitutes a similar share of the population. The third group are the **digital enthusiasts**, who have used digital resources considerably more during the pandemic and plan to continue doing so afterwards, in many areas increasing their digital use. Most striking is that this group is found in all demographic categories. It is not just the young or the well-educated. In all economies, many of those who used digital resources more during the pandemic also seek to continue or increase the use of online offering.

The demand for continued or increased online services provides a positive environment for closing the digital gap vis-à-vis the EU. As the 2018 study on the impact of the digital transformation of the Western Balkans argued, a 10 percent improvement in the digital index could translate into a 0.63 percent increase in GDP.<sup>28</sup> Considering the economic impact of COVID-19, including a sharp and deep recession<sup>29</sup> and the

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<sup>28</sup> Institute of Economics, Zagreb, Centre for Southeast European Studies, University of Graz, *The Impact of Digital Transformation on the Western Balkans—Tackling the Challenges towards Political Stability and Economic Prosperity*, 2018, 8, <https://wb6digital.files.wordpress.com/2018/01/wb6-study.pdf>

<sup>29</sup> World Bank, *An Uncertain Recovery, Western Balkans Regular Economic Report*, No. 18, Fall 2020, <https://openknowledge.worldbank.org/handle/10986/34644>



concern among business that a recovery might take several years,<sup>30</sup> this underlines the increased importance of using these digital opportunities.

This study, based on survey results, suggests seven key takeaways for making the digital leap sustainable and inclusive in the Western Balkans:

First, use digital experience with **education beyond COVID-19** related measures. The positive experience with online education and many citizens' support to continue using some level of digital content, as well as the experience in digital teaching, provides the opportunity to supplement education with online components in schools and universities. This can serve several goals. It can increase digital skills among younger citizens entering the workplace and thus reduce the digital gap to the EU average.<sup>31</sup> Furthermore, it can help deal with some other shortcomings in the region's educational systems, as evidenced by low PISA scores.<sup>32</sup>

Second, increase the **use of e-government** services based on citizen demand. E-government lagged behind prior to COVID-19 and this gap with EU levels was not closed during the pandemic. The benefits of enhanced e-government are clear, from reducing opportunities for corruption to simplifying administrative processes, and it also has economic advantages and potential benefits for the rule of law.<sup>33</sup> Using the experience from other fields of the digital leap in 2020, as well as reducing administrative and legal obstacles, could facilitate a boost to e-government. The experience with many public sector employees working from home could serve as a boost for a broader switch to a more digital public administration. Experience from Albania could be instructive, where better usability and availability of online administrative services translated into a significant increase during the COVID-19 pandemic.

Third, online services linked to **banking and shopping** have also not benefited from the digital leap of 2020. Levels were low across the region prior to the COVID-19 pandemic and did not change significantly.<sup>34</sup> This stands in contrast with global trends that indicate a strong growth of online shopping in emerging economies such as Turkey during the pandemic.<sup>35</sup> Demand for using such services is substantial, so growth could be driven by reducing obstacles to using these services, such as restrictions regarding payment

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<sup>30</sup> In April/May 2020, 37% of surveyed business leaders expect the recovery to take 2 years. Regional Cooperation Council, Balkan Barometer 2020, COVID-19 Impact Assessment, 34.

<sup>31</sup> European Commission, *Monitoring the Digital Economy and Electronic Communications Services in the Western Balkans and Turkey*, 44-45.

<sup>32</sup> OECD, *Government at a Glance: Western Balkans*.

<sup>33</sup> Institute of Economics, Zagreb, Centre for Southeast European Studies, University of Graz, *The Impact of Digital Transformation on the Western Balkans—Tackling the Challenges towards Political Stability and Economic Prosperity*, 2018, 58-61, <https://wb6digital.files.wordpress.com/2018/01/wb6-study.pdf>.

<sup>34</sup> Data 2019, EUROSTAT, E-commerce statistics for individuals, <https://ec.europa.eu/eurostat/statistics-explained/pdfscache/46776.pdf>

<sup>35</sup> United Nations Conference on Trade and Development, Netcomm Suisse, *COVID-19 and E-commerce. Findings from a survey of online consumers in 9 countries*, 2020, <https://unctad.org/news/covid-19-has-changed-online-shopping-forever-survey-shows>



services and increasing trust in online shopping. Furthermore, considering the small markets, improving the conditions for cross-border shopping would facilitate greater regional use.<sup>36</sup>

Fourth, many citizens shifted to **working from home** during the pandemic, yet the use of teleworking was uneven, often being more significant among public sector employees. While in part the nature of work in the private sector might not be able to shift to teleworking, such as manufacturing and some service jobs, there is a need to support private companies, particularly SMEs, in adapting for staff to work from home.<sup>37</sup> The benefits of increased teleworking extend beyond the COVID-19 measures, as they allow for lower startup costs for companies while enabling staff to work from different locations, including rural communities.

Fifth, **tackling structural obstacles** for accessing online services remains important, as some citizens still lack access to the internet. The importance of mobile phones in using services also highlights that only slightly more than half of households in the Western Balkans (EU-28 average 84%) have access to a computer at home.<sup>38</sup> Programs to provide laptops to pupils and other citizens can help to decrease the gap, but might be costly and not sustainable considering the limited life-cycle of computers. Instead, the compatibility of online services with mobile phones should be ensured, as they are widely available in all Western Balkan economies, with between 91.29 subscribers per 100 inhabitants in Albania and 183.28 in Montenegro (2019).<sup>39</sup> Mobile phone use also reduces the importance of broadband internet at home and can otherwise reduce inequality, if online services are compatible with mobile phones.<sup>40</sup>

Sixth, **addressing misinformation** and conspiracy theories has become an important challenge, rendered more visible due to the COVID-19 pandemic. As these impact public health and trust in institutions and democratic processes, tackling misinformation has become a global concern, particularly in the Western Balkans due to high levels of support for conspiracy theories in the region. This is closely linked to online news and the spread of misinformation through social media. Here, regional cooperation and clear standards regarding transparent media ownership and confronting misinformation can help increase trust in online media and reduce the potentially negative impact of misinformation.

Seventh, the digital leap has increased the scope and reach of digital services in the Western Balkans. However, through positive feedback patterns it increased the digital divide between different services used, and more importantly between different groups of citizens. As the elderly and the less well-educated have often been left out of the digital leap, there is a risk that these groups might be left behind permanently. Deliberate efforts to **avoid the exclusion** of large segments of the population from digital services are thus required.

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<sup>36</sup> There are obstacles to intra-EU cross-border shopping. See Julie Hunter and Mark Wilson, *Cross-border Online Shopping within the EU. Learning from Consumer Experiences*, ANEC, the European consumer voice in standardisation, 2015, <http://www.anec.eu/attachments/ANEC-RT-2015-SERV-005.pdf>.

<sup>37</sup> OECD, *The Covid-19 Crisis in the Western Balkans*, 4.

<sup>38</sup> Data for 2017 (WB average without Albania and Bosnia and Herzegovina, 51.5%) OECD, *The Covid-19 Crisis in the Western Balkans*. 13.

<sup>39</sup> Data for 2018, ITU, <https://www.itu.int/net4/ITU-D/icteye#/compare>

<sup>40</sup> Mjellma Carabregu Vokshi, But Dedaj, Adel Ben Youssef, Valentin Toçi, "Mobile phone penetration and its impact on inequality in the Western Balkan countries," *Zagreb International Review of Economics & Business*, Vol. 22, No. 2, 2019, 111-131.