

The role of online platforms in weathering the COVID-19 shock

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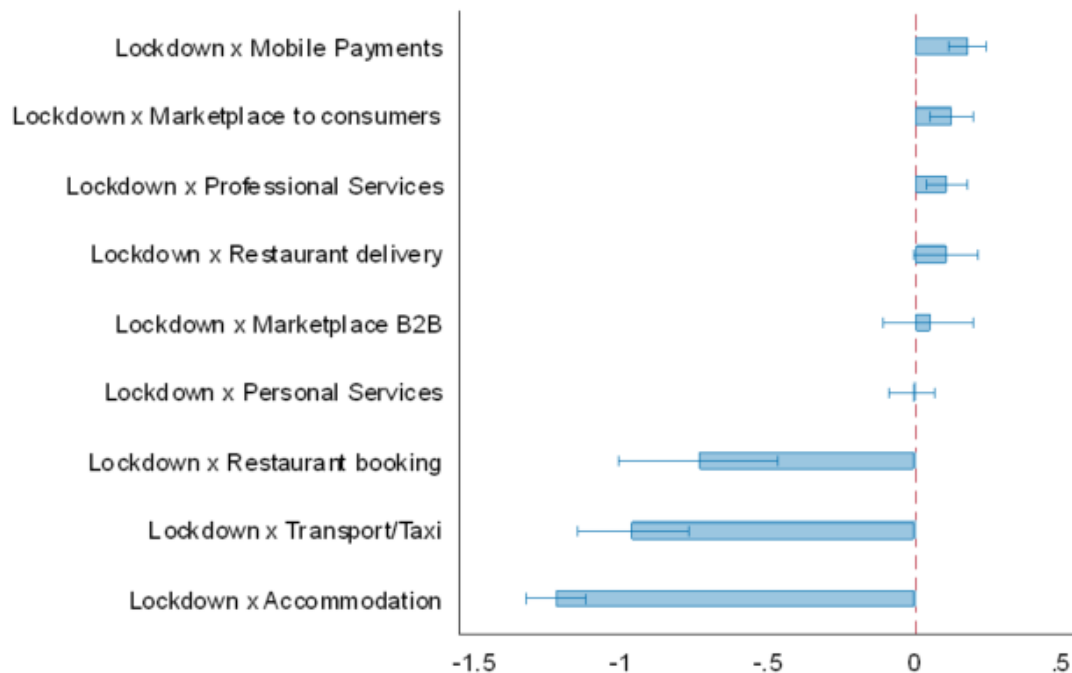
While the COVID-19 pandemic has forced many businesses, big and small, around the world to shut down and fire or furlough workers, others thrived. Online platforms that allow people and firms to buy and sell product and services through the internet and without physical contact boomed. A prime example is Amazon, whose revenues in the second quarter of 2020 increased by around 40% on a yearly basis while GDP plummeted worldwide. Likewise, transaction volumes and revenues of digital payment processing companies, such as Paypal and Square, jumped to new highs and their market capitalisation surpassed that of most retail and investment banks.

Understanding the shift of economic activities to online marketplace during the COVID-19 is important as there is no close parallel in recent history to draw insights from. On the one hand, online platforms might have helped to mitigate the negative economic impacts of COVID-19 by allowing firms and people to keep producing and working during lockdowns, thus strengthening resilience to shocks disrupting traditional economic activities. On the other hand, the shift towards

online platforms may have helped to strengthen and consolidate their market share, heightening concerns about unfair competition, data privacy and non-standard forms of work. The shift could also outlast the COVID-19 shock as people and businesses build new habits.

A new OECD Policy Brief sheds light on the use of online platforms during the first half of 2020 using a new comprehensive dataset of about 1 400 online platforms active in OECD and G20 countries in nine activity areas. The analysis shows that, during lockdowns, businesses and people increasingly turned to online platforms to pursue economic activities. This was especially the case in activity areas requiring little or no physical proximity for product and service delivery (such as mobile payments, marketplace to consumers, professional services and restaurant delivery) (Figure 1). In these areas, online platform use, as proxied by Google Trends data, increased by about 20% in the first half of 2020. However, in activity areas requiring physical proximity (such as accommodation, restaurant booking and transport), platform activity declined markedly (by around 90% in the first half of 2020), reflecting the generalised economic disruption caused by the COVID-19 pandemic.

Figure 1. Lockdown measures has impacted on platform traffic differently across activity areas



Note: The bars represent the estimated coefficient of the lockdown indicator interacted with area dummies in an estimation where the dependent variable is the year-on-year logarithmic change of the Google Trends searches for online platforms: $\Delta PlatformUse_{p,s,c,t} = \beta_1 Lockdown_{c,t} * Area + \theta_t + \delta_{s,c} + \varepsilon_{p,s,c,t}$. The lines in the graph are the 95% confidence interval. The x-axis is in logarithmic scale (-1 is equivalent to a fall of online platform activity, as proxied by Google Trends searches, of 63%). Lockdown indicates the OECD containment index. The estimation includes country-area and month fixed effects, and standard errors are clustered at the platform-sector-country level.

Source: OECD estimations based on Google Trends and Crunchbase data.

The analysis also reveals that the increase in online-platform use varied across countries depending on pre-existing structural conditions and policies. The increase tended to be larger in more developed and technologically-advanced countries, those with easier access to infrastructure and connectivity, higher skill levels, and more widespread use of the Internet (Figure 2). These results highlight the varying degree of countries' digital preparedness. When COVID-19 hit, some countries were better prepared than others and in these countries people and businesses may have found it easier to shift activities towards online platforms.

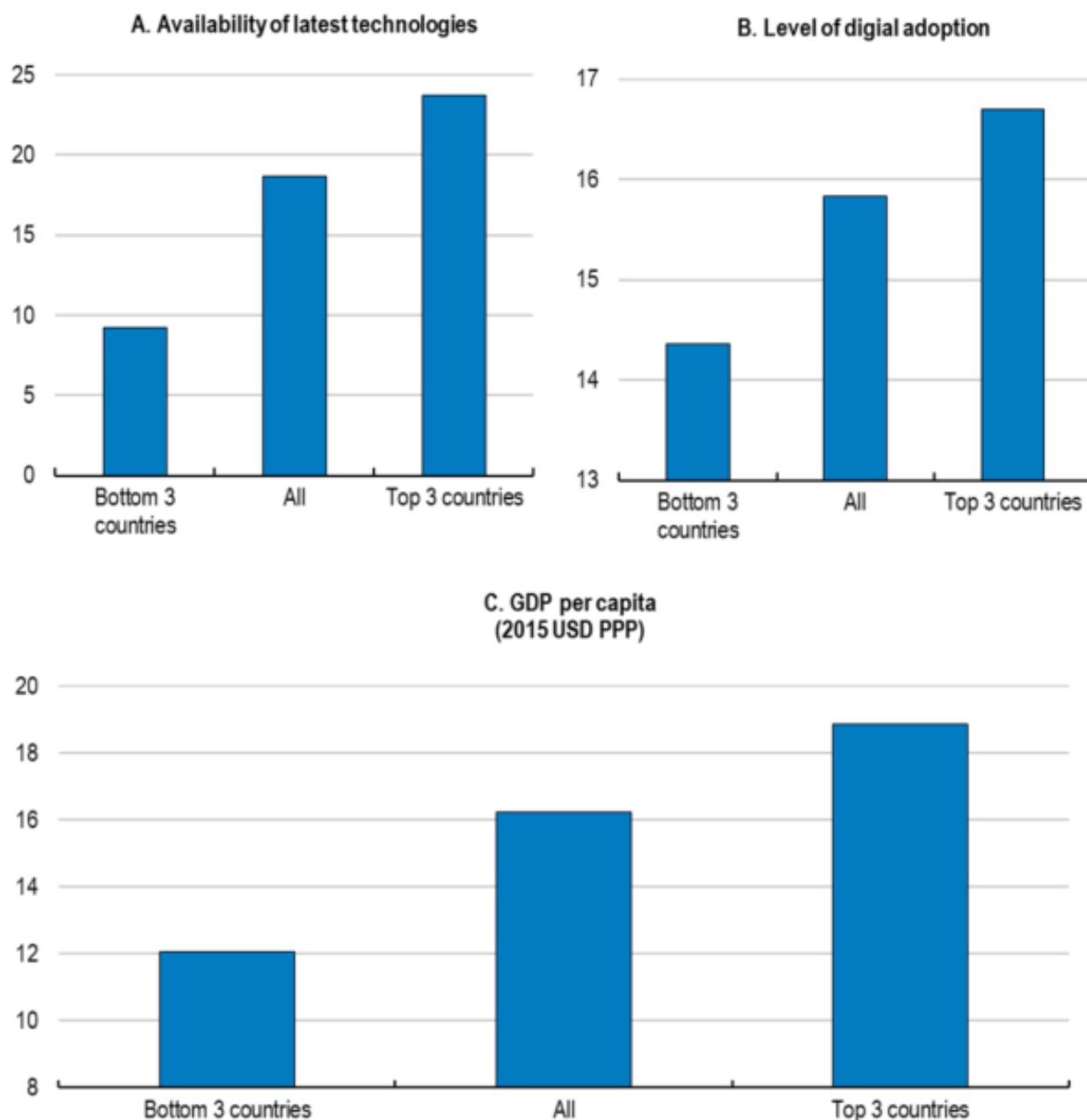
The COVID-19 shock has added urgency to policies aiming at accelerating the digitalisation of public and private sector activities. During the crisis many OECD and G20 countries implemented a range of such policies including, for instance, improving broadband connectivity, helping firms adopt online business models, promoting online payments, and enhancing

digital skills (G20, 2020; OECD, 2020a; OECD, 2020b).

This new urgency is welcome but a coordinated approach is needed to exploit synergies across policy areas. For instance, to make the investment in digital infrastructure effective, complementary investment in skills is necessary. Moreover, policies to protect the privacy of personal data and strengthen cybersecurity can enhance trust in digital technologies and online platforms, accelerating their adoption. Designing or updating Industry 4.0 plans in view of the new challenges the COVID-19 has created would be a good way to build such a coordinated approach.

Figure 2. The use of online platforms during the COVID-19 crisis rises with the level of technological and economic development

Effect of containment measures on online-platform use (% increase in Google keyword searches)



Note: The panels show the marginal effect of the containment index estimated through $\Delta PlatformUse_{v,s,c,t} = \beta_1 Lockdown_{ct} + \beta_2 Lockdown_{ct} * Characteristic_c + \theta_t + \delta_{s,c} + \varepsilon_{v,s,c,t}$, on three country-level policy/structural characteristics. The policy/structural characteristics considered are: the availability of latest technologies measured by an index 1-7 by the World Economic Forum (Panel A); the digital adoption index, which is a World Bank 0-1 index of digital adoption measured across people, government, and business (Panel B); GDP per capita levels in 2015 USD PPP (Panel C). Each panel shows the effect of the containment index estimated at different values of the country policy/characteristics considered: average value of bottom 3 countries; average value computed considering all countries, average value of top 3 countries. In Panel A, bottom 3 countries refer to Argentina, India, and Russia, and top 3 countries refer to Norway, United States, and Finland. In Panel B, bottom 3 countries refer to Indonesia, India, and Mexico, and top 3 countries refer to Korea, Austria, and Lithuania. In Panel C, bottom 3 countries refer to India, Indonesia, South Africa, and top 3 countries refer to Switzerland, Ireland, and Luxembourg.

Source: OECD estimations based on data from Google Trends, Crunchbase, World Economic Forum, and the World Bank.

For more details see:

OECD (2020), "The role of online platforms in weathering the

COVID-19 shock", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, <https://doi.org/10.1787/2a3b8434-en>.

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