Digital Skills and Labour Market Resilience

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Abstract: Coronavirus pandemic has affected millions of workers and companies around the world. Movement of people has been restricted nationwide or in limited areas. Social distancing measures have impacted labour markets in a great extent as numerous sectors and economic activities have been temporarily closed or restricted. Developed and emergent economies have been disrupted by the COVID-19 pandemic and important contractions are expected by analysts and authorities. Lives of workers have been impacted in a number of ways, varying from job loss to shifting to remote work. This paper aims to explore potential transformations of the labour markets in and post-pandemic times and the role of digital skills. It is argued that the telework and ICT-based mobile work will support labour market resilience during and after the coronavirus outbreak. In this sense, digital skills will become more important and existing gaps can affect recovery.

Keywords: economic shocks; coronavirus; labour market; digital skills; unemployment; telework.

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1. Introduction

Public health measures taken in the context of COVID-19 pandemic have impacted labour markets as numerous sectors and economic activities have been temporarily closed or restricted. Most affected sectors include commercial aviation, tourism and auto industry, but the impact is going to be felt across all sectors. Coronavirus pandemic has influenced the lives of millions of workers around the world as many companies had put into practice temporary or permanent lay-offs and short-term working arrangements. Massive job losses and reduced working hours have been the first decisions taken by employers. In the context of coronavirus crisis, governments have urged companies to facilitate working from home for their employees. As a result, there is an important increase in the take-up of telework and it is expected that future labour markets will be more open to flexible and remote work as ever before. Thus, coronavirus pandemic will bring far-reaching implications for the way people work around the world.

In this context, labour market resilience will depend on labour market policies, regulation of telework and skills supporting the recovery. Active labour market policies can facilitate the re-entering of unemployed on the labour market and collective bargaining mechanisms can support resilience by allowing wage and working-time adjustments (Hijzen et al., 2017). Taking up flexible working arrangements in the digital age will determine increasing numbers of ICT-based mobile workers. Digital skills will become more important and existing gaps can affect recovery.

In this sense, the analysis of new and flexible models of work emerged in the context of COVID-19 pandemic is relevant for postmodern studies as they replace forms of employment traditionally associated with mass production. They are characteristic to the "late capitalism" or to a phase in which the time and space are contracted with the help of new technologies (Wood, 1997).

2. The economic impacts of COVID-19 pandemic

The COVID-19 virus is bringing considerable human suffering, but also it is most definitely spreading economic suffering worldwide. There is a high probability that the pandemic will slow down the entire world economy, so one can say that this coronavirus may be as contagious economically as it is medically (Baldwin & Weder di Mauro, 2020a; Boone, 2020). The public health measures such as quarantine, restrictions to travel, factory closures are taken for flattening the epidemic curve, but these efforts and others such as making people work from home and avoiding their usual
habits, including consumption, are leading to significant economic disruptions which are the direct channels through which the virus affects the economic activity (Boone, 2020; Baldwin & Weder di Mauro, 2020b).

The effects of the pandemic on the economy are not certain entirely at this moment, but most economists from Europe and the USA believe that it will follow a large-scale recession (Surico & Galeotti, 2020), so one can say that the pandemic could lead to a worldwide economic shock. In his work, Recker (2009) defines economic shocks as events that appear suddenly having a major impact on the economy. The last large global economic shock was the financial crisis of 2007-2008 which was an economic catastrophe for the entire world because a lot of people lost their jobs all over the world, as well as their savings, their homes and businesses, while the collapse of the banks also took place (Odendahl & Springford, 2020). Considering this experience as well as the current situation, some fear that this pandemic will be just as bad, but the scenarios made so far are more optimistic. The base-case scenario presents the case where the economic growth worldwide would suffer a sudden and significant decrease in the first six months of 2020 and after that it would recover step by step, while the downside scenario is based on more containment measures which can lead to a more marked and prolonged slowdown. However, regardless of the scenario that will become reality and the fact that the economic problems caused by this pandemic seem to be quite large, if governments act quickly to prevent the economic fallout the long-term effects will be less severe than the effects of the financial crisis (Odendahl & Springford, 2020; Boone, 2020).

This pandemic leads to a decline in demand, determining many companies to close and contribute to an increase of lay-offs which is also causing a contraction in income, leading to a significant decrease in consumption. Considering these relations, economy falls into a depressing loop (Wei, 2020; Surico & Galeotti, 2020). Many firms have limited cash reserves, perhaps at most for three or six months to cover important and urgent expenses. If things are getting worse, the bankruptcy of some companies can bring a lot of inconveniences to the others. Moreover, the decrease of business activity and also increasing uncertainty can lead to reduced expenses for both households and companies, even after the containment measures are ended (Wei, 2020; Baldwin & Weder di Mauro, 2020b). Another negative effect is due to the slowing down of the Chinese economy, because of which the supply chains worldwide have suffered disruptions which affected their normal functioning.
To limit the spread of negative effects in time and space and to avoid the permanent effects of temporary disruptions, governments should take quick and efficient measures. They should encourage short-time working schemes or other options for millions of people working in sectors such as: manufacturing, construction, tourism, retail, transport and utilities, who can’t work from home, and homeworking for workers from other sectors of activity (Odendahl & Springford, 2020; Surico & Galeotti, 2020).

An important question refers to how the labour market will look like after the end of the pandemic. Considering the effects felt and the measures already taken, the future economy and labour market will experience both negative and positive effects. The measure of school closure can amplify labour shortages because many workers have needed to take time off in order to look after their children (Wren-Lewis, 2020). Another issue is that a surge of bankruptcies could leave deep marks on the economy over time if successful companies reach a critical point and the level of output in the future could be dampened because of the current labour market effects (Odendahl & Springford, 2020). This pandemic will affect numerous people in many ways, such as: job loss, businesses loss, savings loss and other losses hard to offset in the near future (Furman, 2020). Among the worst hit in and after pandemic period will be the employees with temporary contracts, the ones with no contracts and the self-employed (Odendahl & Springford, 2020). Another big issue that is expected to emerge is the significant increase in unemployment, some sectors being very affected (e.g. manufacturing, services).

Besides the negative effects, digitalization has grown a lot during this period due to work from home and online teaching but also due to some businesses that have moved online to meet the basic needs of consumers and to avoid bankruptcy. As a result, in the near future companies might think to increase the use of homeworking which will bring a lot of flexibility for most workers and less traffic in cities. The pandemic outbreak has been considered as a good opportunity for digital learning and for homeworking, companies hoping this to become a permanent change (Surico & Galeotti, 2020). Even if after the pandemic is gone, traffic of physical stores will recover to normal, younger generations will adapt for more online shopping and online sales are expected to further increase, so it is expected that a significant part of shopping from offline retail will be made online in countries that have internet access almost everywhere, a developed culture of digital payments and an efficient and inexpensive delivery system (Wei, 2020).
3. Flexible working in the digital age as labour market resilience strategy

Telework and ICT-based mobile work (TICTM) is a new form of employment, different from traditional work organization, in which the work is performed remotely by using digital technologies such as laptops, mobile phones and the internet. In 2015, around 19% of workers in the EU have TICTM arrangements at work (Eurofound, 2020). The important cross-country variations are related with differences in the spread of ICT, internet connectivity, digital skills, economic structure, GDP and work culture. Another relevant factor is how the legislation and collective bargaining regulate flexible and remote work (Eurofound & ILO, 2017). As its implementation is less formal, this form of work is vulnerable to job insecurity, lower access to training and poor career prospects. Moreover, previous research showed that teleworkers and ICT-based mobile workers are more exposed to higher levels of work intensity, poor work-life balance and longer working hours (Eurofound, 2020). Such findings call for a more formal regulation of remote work that will provide quality working conditions for the workers.

Meanwhile, the share of home-based teleworkers has increased sharply in the context of COVID-19 crisis and working from home has become a must for many workers, representing one of the most important labour market resilience strategies.

As a result, digital skills become increasingly important. However, only 58% of people from EU 28 have had basic or above basic digital skills in 2019. As expected, level of digital skills is influenced by the education of individuals: only one quarter of low educated and almost 90% of highly educated individuals have basic or above basic digital skills. Another factor influencing the digital skills proficiency is the level of income. Individuals in low income categories are less represented among those with basic or above basic digital skills. As a result, low-educated and low-income individuals are less able to work remotely in and post pandemic times. Also, important cross-country variations exist. The share of individuals who have basic or above basic overall digital skills varies from 29% in Bulgaria to more than 70% in Nordic countries and Germany.
Table 1. Individuals who have basic or above basic overall digital skills in EU 28, 2019

| Category                                                   | %   |
|------------------------------------------------------------|-----|
| All Individuals                                            | 58  |
| Individuals aged 25 to 64 with low formal education        | 25  |
| Individuals aged 25 to 64 with medium formal education      | 56  |
| Individuals aged 25 to 64 with high formal education        | 87  |
| Individual living in a household with income in first quartile | 41  |
| Individual living in a household with income in second quartile | 49  |
| Individual living in a household with income in third quartile | 61  |
| Individual living in a household with income in fourth quartile | 74  |

Source: Eurostat, [isoc_sk_dskl_i]

4. Conclusions

Early data show that labour market impact of the coronavirus pandemic is not distributed evenly across countries, sectors and categories of workers. Variations in the impact effect across economies reflect differences in their economic structure and some sectors are more affected than the others. Also, it seems that the impact will hit harder the low-educated and low-income people due to the fact that they are concentrated in the sectors that are most affected and that they do not possess the needed digital skills for taking-up telework. This paper has discussed potential transformations of the working patterns in and post-pandemic times and argued for the increasing importance of digital skills for labour market resilience.

Concluding, in order for the remote work to be able to mitigate part of the impacts of COVID-19 crisis on labour markets, digital skills development need to be better supported by employers and authorities, especially among low-educated and low-income people.

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