Global Journal of Human Resource Management
Vol.8, No.3, pp.1-10, September 2020
Published by *ECRTD-UK*
Print ISSN: 2053-5686(Print), Online ISSN: 2053-5694(Online)

THE IMPACT OF COVID-19 ON ECONOMY AND EMPLOYMENT - MAIN HIGHLIGHTS ON WORLDWIDE TRENDS

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ABSTRACT: *The present paper discusses the economic features of the current Covid-19 outbreak and its relation to labor markets and new skills in demand. It mainly focuses in analysing the recent global trends in affected sectors, examines the current unemployment issues while deepens in the kind of new skills and soft skills in demand that are necessary for an easier transition to the new Covid-19 way of life.*
KEYWORDS: coronavirus, covid-19, pandemic, economy, employment, labor markets, skills

INTRODUCTION

The starting date appears to be November 17, 2019 where gradually at least 266 pneumonia - like cases came into medical surveillance [1], in Hubei province in China. On December 31, China alerted the World Health Organization (WHO) to several cases of unusual pneumonia, caused by unknown virus, in Wuhan, a city of 11 million people. The new disease was first named '2019 novel coronavirus' and later 'Covid-19' [2], while the virus responsible for this disease is SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus 2), due to its similarity to the coronavirus related to SARS outbreak in 2003[1]. The actual origin of the virus is not yet known. Initially it was estimated to have originated from Wuhan market, but further investigations revealed many infected cases with no record of association with the market [3]. As the human-to-human transmission was verified by Chinese experts, soon the virus started appearing outside China while cases were reported in Thailand, US, Nepal, France, Australia, Malaysia, Singapore, South Korea, Vietnam and Taiwan. On January, 23 the cities of Wuhan, Xiantao and Chibi in Hubei province were placed under quarantine while air and rail departures were suspended [4]. That week was the first lockdown attempt that affected a total of 56 million people. On January, 30, the WHO declared the coronavirus as a global emergency. Within a few days, new cases were confirmed in even more countries. During February 2020, Covid-19 seriously started spreading worldwide, while the WHO declared the Covid-19 outbreak as a pandemic on March, 12 [5]. As Wuhan went under complete lockdown on January, 23, by March, 2020 most countries similarly adopted serious quarantine measures that basically left open only pharmacies and food stores. These measures hoped to ease all the national healthcare systems which have been more or less implemented, as later proved, with the exception of major virus hot-spots such Wuhan, Italy and New York. By August, 11, 2020 the confirmed cases were more than 20 million, while deaths due to Covid-19 exceeded 740.000 worldwide [6]. Due to the existence of asymptomatic cases, the actual number of infected cases is considered much higher. At the same time, the basic protective strategies mainly include frequent hand washing, facemasks, gloves and social distancing.

The Coronavirus SARS-CoV-2

Coronaviruses or COVs are members of the family of Coronaviridae, the enveloped viruses that possess extraordinarily large single-stranded RNA genomes. They can be identified in avian hosts and various mammals. Currently there are at least seven coronavirus species known to cause diseases in humans, including types of flu. Severe illnesses can be caused by the

[1] Sars-CoV (2003) infected 8.098 individuals across 26 countries worldwide, with mortality rate of 9%.

SARS-CoV which resulted in the outbreak of SARS in 2002-2003, by the MERS-CoV which emerged in 2012 and SARS-CoV-2 that emerged in Wuhan, China in 2019 and the huge effort to contain the global spreading is lasting up to present time. The typical characteristic of the SARS-CoV-2 infected patients is pneumonia that has been termed as Coronavirus Disease 2019 or Covid-19. It is demonstrated by computer tomographic (CT) scan or X-ray. Initially patients show acute respiratory infection symptoms, while some may quickly develop acute respiratory failure or other complications. Other common symptoms of the disease include fever and cough, fatigue, sore throat, shortness of breath, body pain, confusion, etc. SARS-CoV-2 can be transmitted by human to human through direct or indirect contact with mucous membranes in the mouth, nose, eyes for instance any droplets by coughing, sneezing, respiratory droplets or aerosols, contacts and surfaces. One of the biggest challenges is the fact that the virus can be transmitted by asymptomatic contacts. That means one can be infected by contact with persons without signs or symptoms of the infection but become ill with Covid-19 later [7]. Moreover, the development of the disease appears to follow an exponential growth and the decline that becomes visible during the most recent days, is likely to be due to under-ascertainment of cases with recent onset of the illness and delayed identification or reporting, rather than a true turning point in cases [8].

Economic consequences of Covid-19

The restrictions imposed to control the Covid-19 pandemic and lessen the burden of the national healthcare systems have appeared to work, as there is a decline of new cases in most countries due to the latest quarantine measures. Yet these restrictions appear to have an impact on a wide range of economic activities worldwide. For example, the pandemic has been disrupting global supply chains and international trade. In Europe and North America, many industries that involve physical interactions such as retail, trade, leisure, hospitality and transportation services, are now facing multiple difficulties. These sectors account for more than a quarter of all jobs in these economies. Global tourism is highly affected as well, due to domestic and international borders closures. Service industries such as tourism, hospitality, and transportation have suffered significant losses due to restrictions in travel. The International Air Transport Association projects a loss in airline revenues solely from passenger transport of up to $314 billion in 2020 compared to 2019 [9]. For instance, China's air passenger traffic fell by almost 85% on a year-on-year basis and the same is happening in other nearby countries such as Vietnam and Sri Lanka. It is estimated that prolonged restrictions on international travel may severely hurt economies that rely on tourism as a basic source of foreign exchange revenue. For example, in the Bahamas, Cabo Verde, Maldives, etc. tourism accounts for almost 20% of GDP and nearly 60% of their foreign exchange earnings. Moreover, small and medium sized enterprises (SMEs) account for 80% of the global tourism sector which employs 123 million people. In fact, many tourism dependant countries such as the Caribbean rely heavily on tourist arrivals mainly from the USA, and the same is common elsewhere. Such economies would rather see increases in unemployment to the extent that the livelihood of low-skilled workers will be highly affected provided that their income is connected to only tourism-related sources. Developing countries with highly concentrated trade exposures to the European Union and the United States are vulnerable to growth turndowns. For instance, 90% of exports from Cabo Verde and Sao Tome and Principe are destined for Europe. For Morocco and Tunisia, it is over 60%. So, if demand from Europe falls, these economies will suffer significant downturns. The same accounts for the Dominican Republic, Haiti and Mexico, with more than 50% of their exports to the USA. Furthermore, the sharp decline in consumer spending in Europe and USA might reduce imports of goods from developing countries. Moreover, several

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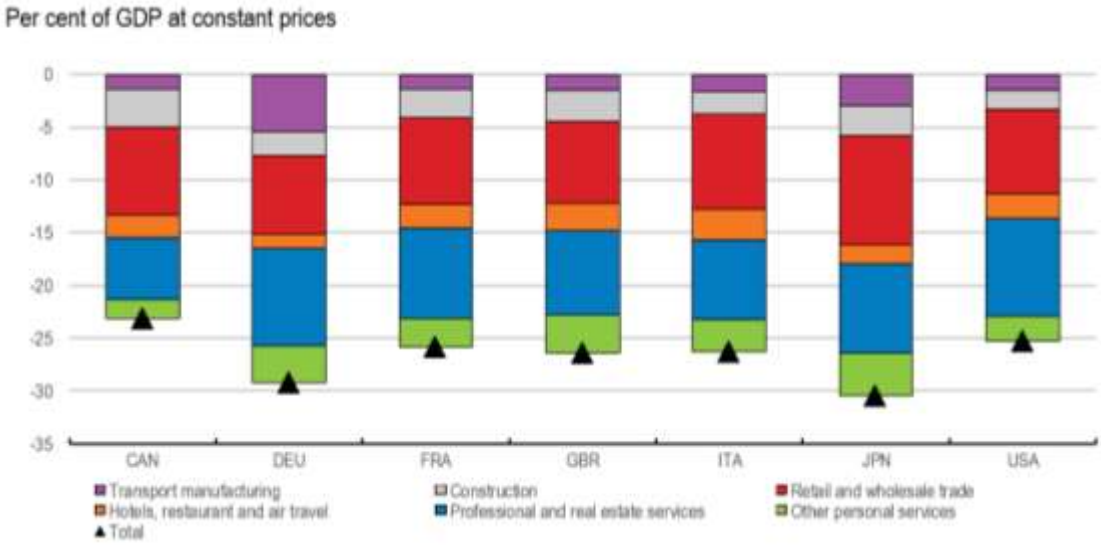
automobile companies have announced large scale production suspensions in Europe and USA. Many firms worldwide, particularly in the automobile, electronics and telecommunication industries are facing shortages of components as exports from China contracted at an annual pace of 17.2% during January and February 2020. In addition, the tightening of credit conditions could force firms to deleverage rapidly. Banks may be forced to reduce lending, adding to downward pressures in the credit market. As corporate and consumer loan defaults rise, this could result in a deterioration in bank balance sheets, further constraining banks' ability to extend credit, thus increasing the fragility of domestics banking systems [10].

It is expected that if the public health response (social distancing, lockdown measures) is initially successful but fails to prevent a resurgence in the virus, then the world will experience a 'muted' economic recovery [11]. This means that recovery to pre-crisis level is not expected before year 2023. If the public response is stronger and more successful, controlling the spread of the virus in each country within 2-3 months, then the outlook could be more positive, with economic recovery at 2021 or earlier. Yet industries that include commercial aerospace, travel and insurance may see a slower recovery. Within the travel sector, the shock to immediate demand is estimated to be 5-6 times greater than following the terror attacks of 11 September 2001 - though recovery may be quicker for domestic travel [12].

Global GDP rates could go lower depending on how long governments maintain the lockdown measures, many of which are already expected to last till May or June 2020. The baseline forecast predicts a 5.2% decrease in the global GDP for year 2020—the deepest global recession rate in eight decades, despite the vast emergency support measures adopted. [13]. Most governments are rolling out large stimulus packages to avert a sharp downtown of their economies that could potentially plunge the global economy into a deep recession. The overall affected sectors from Covid-19 pandemic, account for 30-40% of the total output in most economies. The overall direct initial hit to the level of GDP is typically between 20-25% in many major advanced economies, as shown in figure 1 below, while the actual impact on annual GDP growth depends on the duration of the lockdown measures [14].

Figure 1. The potential initial impact of partial or complete shutdowns on activity in the G7 economies (Image source: OECD 2020. Evaluating the initial impact of Covid-19 containment measures on economic activity)



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consumers' expenditure accounts for only around three fifths of GDP in the typical G7

economy. As shown in figure 2, the declines in consumers' expenditure also imply a reduction of around one-fifth in the level of domestic output [14].

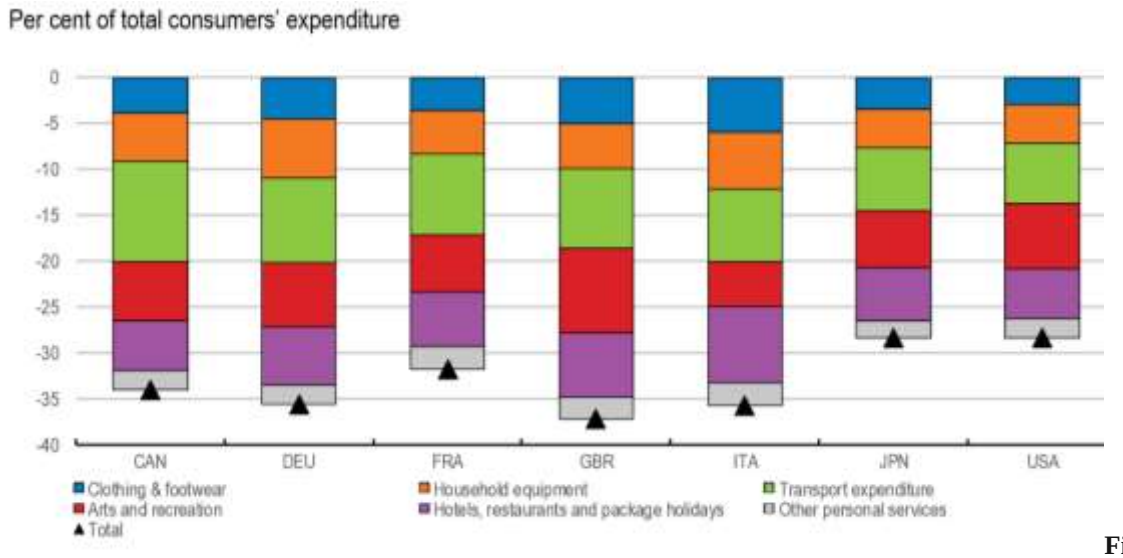

Figure 2. The potential initial impact of partial or complete shutdowns on private consumptions in the G7 economies (Image source: OECD 2020. Evaluating the initial impact of Covid-19 containment measures on economic activity)

The approaches used to note the above potential immediate impact of widespread shutdowns were based at detailed categories of output and identification of the sectors most directly affected by containment measures. For each of these activities, illustrative assumptions can be made about the extent to which the activity is likely to be reduced, with output declines ranging from 50-100%. Within service sectors, activities involving travel, tourism and direct contact between consumers and service providers, such as hairdressers and house purchases, are clearly adversely affected by restrictions on movement and social distancing. Most retailers, restaurants and cinemas have also closed, although takeaway sales and online sales are preventing the full cessation of activity in many businesses. Non-essential construction work is also being adversely affected, either because of containment policies affecting labor availability or because of temporary reductions in investment. The direct impact of lockdown measures is smaller in manufacturing sectors, some of which are less employment intensive. Complete shutdowns are occurring in producers of transport equipment, often because of difficulties in obtaining necessary inputs from suppliers in other countries. Allowing for only partial shutdowns in some sectors and assuming a similar extent of shutdowns in all countries, the overall direct initial hit to the level of GDP is typically between 20-25% in many major advanced economies. The impact on annual GDP growth would depend on how long these measures remain in place. All the above calculations have been based on an assumption of an economy-wide shutdown, rather than a shutdown confined to particular regions only. In all countries, full shutdowns are assumed in transport manufacturing and other personal services; declines of one-half are assumed for output in construction and professional service activities and declines of three-quarters are assumed in all the other output categories directly affected by shutdowns. These are assumptions and the actual situation may vary from one country to another, depending on the containment measures adopted [14].

The impact of Covid-19 on employment

As businesses lose revenues, unemployment is likely to increase rapidly and significantly, transforming a supply-side shock to a wider demand-shock for the economy. Consequently, millions of people are facing the possibility of losing their jobs.

According to the ILO [15], the vast majority, (mores specifically the 93%), of the world's employees continue to reside in countries with some sort of closure measures in workplace premises.

As a consequence, during the first quarter of the year, an estimated 5.4% of the global working hours (equivalent to 155 million full-time jobs) were lost relatively to the fourth quarter of 2019. Working hour losses for the second quarter of 2020 relatively to the last quarter of 2019 are estimated at 14.0% worldwide (equivalent to 400 million full-time jobs). Working-hour losses may be categorized into four components:

1. Shorter hours: a drop in average weekly hours worked compared to the pre-crisis situation
2. Being employed but not working: employees remain attached to their existing jobs but do not engage in any work at all. They are employed but not at work or are temporarily absent from work (e.g. furloughed employees and employees on sick leaves)
3. Unemployment: being available for and seeking employment
4. Inactivity: withdrawal from the labor force

According to researches [16], the global unemployment rate has already increased from 3.9% to 6% and is expected to go higher. The economic fallout from the pandemic raises the risks of a global economic recession with unemployment levels not seen since the Great Depression of the 1930s. On May 8, 2020, the Bureau of Labor Statistics (BLS) reported that 20 million Americans lost their jobs in April 2020, totaling to 23 million unemployed Americans which is the 14.6% of a 158 million total civilian labor force. The increase pushed the US national unemployment rate to approximately 14.7%, the highest since the Great Depression of the 1930s. In Europe, the European Commission predicted that the unemployment rate would rise to 9.0% in 2020 and to 7.9% in 2021 [17].

However, these impacts could lead to further short-term and medium-term effects that could be as critical as the long-term effects. For instance, job losses affect future earnings due to interruptions, productivity reductions, de-skilling associated with prolonged unemployment spells, and missed opportunities to build on the job human capital. So far, low-income employees have been disproportionally affected by COVID-19. The crisis is already leading to increased income inequality according to real time surveys from the UK, US, Germany, Japan and Canada. Employees in Germany, which has a well-established short-time work scheme, are substantially less likely to be affected by the crisis [18].

Also, the coronavirus crisis has risked widening social inequalities, with young people, women, minorities, older employees and those with lower levels of qualifications or job-skills are all at great risk. It is estimated that workers under 30 years old are over twice as likely to work in shut down sectors than those aged 30 or more and the same applies to workers with no qualifications. The OECD estimates that the impact from job losses is likely to affect especially younger employees and lower-skilled employees, with the imminent risk of becoming trapped in joblessness for an extended period of time [19]. Poverty rates for those groups are also likely

to rise as the labor market performance data in the US and the UK shows a collapse twenty times faster and much deeper than the Great Recession [18].

Overall, it is expected that Covid-19 will bring about marked structural adjustment and protracted disruption in industries and occupations, even more so than a typical economic recession. According to a Cedefop working paper [20], countries that have sought to tackle high unemployment rates in the past by promoting low-skilled work and activities are bound to find that their labor markets will be particularly susceptible to a sustained negative aftermath of the new social and labor market reality that is caused by the Covid-19 pandemic.

The digital transformations of Covid-19

Covid-19 has forced companies, institutions, schools and organizations of public and private sectors, to adopt faster and flexible forms of digital transformations in various areas such as telecommunication, on-demand food and services, virtual events and the use of the cloud. As plenty of physical jobs moved to 'work from home', in order to avoid complete isolation, telecommunication apps have been a profound solution. Grocery delivery has now been a new normality for many people who would not have bothered to make on line orders just a few months ago. Insurance companies promote now remote services and telehealth. It has becoming pretty obvious that any business that cannot alter the way of delivering products and services might go through severe lockdown. The events industry is shifting budgets to digital events and digital contents. In the near past, people were used to post photos and events in the social media while now are posting photos of their online meetings and fun stories from teams that are now learning to enjoy this new way of working. The cloud has been offering the ability to share and co-edit documents securely, access analytics and many more, all in real time. During the past quarantine months, technology simply has to work, so every person or groups keep the tech elements that work for them. For instance, according to a research from Harvard Business review [21], $1.3 trillion was spent on digital transformations in 2018, while $900 billion was wasted because initiatives did not meet their goals. Moreover, even though most companies do understand the importance of digitalization, many are overwhelmed by the idea of having to revamp the entire digital approach and flounder without knowing how to implement a transformation. At the same time, they obviously realize that by doing nothing, they run the risk of being disrupted and replaced. Such matters, that have been really common in the near past, are now handled in the best possible way simply because there is no other choice. Moreover, as recently the choices are telecommunication or no communication at all, companies realize that digital transformation can provide unprecedented value to themselves and their customers. As a result, now, digital transformation is becoming a state of mind as both companies and even citizens tend to deeply realize that we all need to evolve and adopt new digital solutions. In fact, companies need to do so both in internal and external ways [22]. When a company works well internally, it greatly affects the external customer experience. Covid-19 outbreak has managed to teach technological and managerial lessons that have being discussed over and over again, during the past decade. Now when a company approaches a transformation, bears in mind that this must become part of the culture and experience and the way to achieve this is to select manageable transformations. At the same time, it is quite possible that the digital transformations that are emerging right now have the potential to become long standing shifts even when the current Covid-19 outbreak has passed.

It is estimated [23] that there four areas of tech that will thrive post epidemic. These include an increase in data-enabled healthcare initiatives such as *FluPhone* (measures and models the

spread of flu), *Definitive Heathcare* (tracks hospital bed capacity in the USA). Also the way of work might be changed permanently. For instance supermarkets as Walmart already sell point of sales data to brands (P&G, Unilever) who use it to ensure adequate stock of products in their warehouses and to promote real time availability of their products in grocery stores. Additionally, some level of digital-enabled sharing economy is expected to rise, as current examples include *Combiworks* (matches supply and demand of manufacturing capacity) and *Cargomatic* (connects shippers with local truckers) to accelerate into B2B much more rapidly as businesses face urgent pressure to find smart and quick ways to slash costs and monetise existing assets. Obviously, E-commerce is already experiencing a renaissance, due to self-isolation consumers who normally visit physical stores are now increasingly shopping online (mainly foods, health, sanitary and electronic products). The uplift in E-commerce may well be permanent if people remain wary of mingling in real life and increasingly replace shop visits with online purchases. For instance, *Bringoz* (logistics platform) are already revamping their concepts to match the new market circumstances by enabling retailers to scale home delivery fast. Similar innovations are expected to go forward. Furthermore, digital collaborations and entertainment tools are expected to see an upsurge in valuation, as remote working is growing and personal entertainment (concerts, museums, events, etc.) can be offered through VR experiences, in the safety of home. At the same time, social media, gaming, news, video streaming and e-books are valuable as people seek to fill the time previously taken with travelling and face-to-face socialising.

Another interesting fact is the joint effort between Google and Apple to enable the use of a Bluetooth-based contact tracing platform, to help governments and health agencies reduce the spread of the virus, with user privacy and security central to the design. This could be an answer to the big challenge worldwide, to protect people and get societies back and running. Through close cooperation and collaboration with developers, governments and public health providers both companies hope to use the power of technology to help countries around the world slow the spread of Covid-19 and accelerate the return of everyday life [24].

Covid-19 and new skills in demand

Facing the Covid-19 pandemic during the first four months of 2020 has shown a great amount of skills that weren't thoroughly used earlier. For instance, the ability to adopt self-isolation, to practice successful remote working and to cut expenses to basics is proving the human flexibility of survival. Empathy is another skill that we are now familiar with, as the whole humanity appreciated the work of the frontline medics in many hospitals and ICUs worldwide, in addition to all essential workers that have been daily on duty the same period that 3.5 billion people were self-isolating at home, in 210 countries and territories globally. So despite the fact that skills are the learned abilities (personal, functional and knowledge-based) acquired by practice, the recent pandemic has proved that skills can be performed without practice provided there is urgent need and reasoning. At the moment a focus on skills and human capital could offer a strong foundation for building sustainable economies. The past few months have also been a suitable period to progress and advance digital skills for those in need, thus reducing digital illiteracy. Before the pandemic, common job skills include leadership and management skills (coaching, motivation, problem solving, strategic thinking, decision making, etc.), professionalism skills (dedication, ethics, integrity, self-confidence, etc.), organizational skills (multi-tasking, time management, goal setting, strategic planning, etc.), team building skills (flexibility, communication, collaboration, etc.) and analytical skills (critical thinking, data analysis, research, etc.). Other taxonomies include skills that are divided in self-management

skills, social intelligence skills and innovation skills. Yet the bottom-line of every taxonomy mainly lies in fundamental attitudes of the personal self. In fact most of these skills are not even new, they have existed in past years during the history of humanity, but nowadays evidence suggests that their importance is constantly increasing together with the majority of every day roles that actually require them [25] which appears to be quite plausible during the current pandemic. Moreover, creativity is considered a top skill nowadays. In fact it has been proved quite accurate as we have all seen plenty of innovative homemade facemasks and face protection shields during the recent weeks of shortages in supplies. It appears that skills in demand are actually implemented when there is demand, as the current coronavirus crisis has shown. Despite of the dark side of the crisis, the infected cases, the deaths of innocents, the vital difficulties for the homeless and those in needs, there could be a positive side and that is the ability to be human, to have empathy, to collaborate, to care and to self-participate in the communities. Another positive element is the number of people using their lockdown weekends to improve their personal skills, according to an analysis by Circus Street Company (online learning provider). The company has found that 381% more workers are reskilling during the weekends since Covid-19 lockdowns were imposed across the globe. For instance, Saturdays in March 2020 saw an average increase in course activities of 500%, compared to a 64% average increase mid-week. Most popular courses during weekends include 'digital marketing strategy', 'performance marketing' and 'user experience'. Courses in 'customer experience' increased by 936% over weekends between February and March 2020. On weekdays, there have still been significant increases across course areas such as 'programmatic marketing' that went up by almost 3,000%, and 'digital marketing' that went up by 2,422%. Overall, since lockdown, learners' sessions have more than doubled, while new learners increased by 135% [26]. It is rather obvious that the current pandemic has rather been the reason that many people deeply realized the importance of advancing their skills and learn new ones. Remote working has contributed to this rapid change so there is no surprise that even professionals tend to want to improve agile working practices.

An interesting approach appears in many UNESCO webinar on skills development during and beyond the COVID-19 pandemic builds on country experiences already shared in previous UNESCO webinars, which have tackled several dimensions of education policy responses. The target is to share innovative country experiences with evidences on effectiveness of strategies aimed at tackling the immediate and longer-term effects of the COVID-19 crisis on TVET and skills development systems. It also explores how recovery is managed and how to build further equitable, resilient and labor market-responsive TVET systems.

CONCLUSIONS

Pandemics have been common throughout the history of humanity but most of us wouldn't even think that we could ever encounter one. The coronavirus (Covid-19) pandemic has resulted in an unprecedented labor market shock and unemployment crisis and is expected to bring about marked structural changes and protracted disruption for jobs and skills in the short to medium term. The pandemic is also expected to have an asymmetric impact, not only on different economic activities and occupations in the labor market, but also on diverse workforce groups. Also, the pandemic has had an unequal impact on different economic sectors and occupations, given their marked variation in digital maturity preceding the Covid-19 shutdown, which may have affected their ability to sustain continued operation via remote meetings, ICT-based work and online customer interaction (e.g. ecommerce). Remote working might raise

new mindsets, habits and styles that we would all have to adopt and get used to. Transparency of work, empathy, trust in people, collaboration, caring might as well be new skills in remote working. Lifelong learning is now a must as education in its true form is the best way to make adjustments. Education can officially take its online form, as there are plenty of tools that enable remote teaching in virtual classes, with face-to-face communication, collaboration and interactivity (screen and document sharing, keeping track of students, offering feedback, etc.). Online Vocational and Educational Training (VET) Programs could be implemented for health workers to keep them updated with the recent news and protocols on Covid-19, as well as for citizens of any age or educational background, teaching various useful courses that advance knowledge and skills.

At the same time policy responses should focus both on health protection measures and economic support on both the demand and supply side. For instance, protective measures at the workplace and across communities should be introduced and strengthened, requiring large-scale public support and investment. In addition, timely pro-active, integrated and coordinated policy efforts should be taken to provide employment and income support, stimulating the economy and labor demand while preventing a chain of supply shocks (losses in workers' productivity capacities) and demand shocks (suppressing consumption among workers and their families) that could lead to a prolonged economic recession. As things are evolving rapidly, careful monitoring of the direct and indirect effects of all interventions is crucial to ensure that policy responses stay relevant to the existing and developing needs. Building confidence through mutual support, trust and dialogue is crucial in making policy measures effective [27].

Provided things are done right, the current crisis could give rise to new, resilient and more human ways of doing business, truly caring for customers, employees and the community just the same way each and every one of us would wish to be cared for, in case of an infection, in case of being hospitalized, in case of being in a ICU.

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