THE IMPACT OF THE COVID-19 PANDEMIC ON LABOUR MARKET DIVERSITY

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Abstract

Diversity of labour market is currently one of its most striking features. The processes of globalisation and interdependence are creating pressure for ever more international cooperation, which naturally causes more frequent clashes between the diverse elements of the environment, and increases the interdependence of economies. In this context, the COVID-19 pandemic has generally weakened existing global relationships and chains. Economies have been distorted by various types of restrictive and later stimulus measures in a relatively short period of time - a situation that leads naturally to the idea of the interconnectedness of existing processes and the labour market. The main objective of the present study was to make a comparison of the authors' views on the development of these indicators on the basis of the results of analyses of selected macroeconomic indicators, and to establish the dependence between the development of the COVID-19 pandemic, macroeconomic developments and state interventions in the functioning of economies. We begin the empirical part by analysing the evolution of quarterly GDP values in selected economies of the world, and then turn to the employment rate. We conclude the study with the evolution of unemployment in comparison with the evolution of the pandemic situation in the Slovak Republic. The comparison of selected indicators and its results confirm the existence of links between pandemic, macroeconomic and legislative developments in the Slovak Republic. Although the COVID-19 pandemic is the ultimate cause of changes in the labour market, the immediate cause of the dynamics of GDP, employment and unemployment is the state intervention in the economy.

Key words

COVID-19, employment rate, GDP, labour market, unemployment rate

INTRODUCTION

Aside from the fact that different sectors of the economy are affected by pandemic impacts at different intensities, there is a large body of empirical evidence demonstrating the link between pandemics and major economic challenges, including implications for both developing
and developed countries (McKibbin, Fernando, 2020; Umar et al., 2020). Even the countries that were considered highly resilient and having strong health care systems prior to the current crisis were much more vulnerable to pandemics and their associated economic impacts (Su et al., 2021).

However, the current crisis is not only a typical downturn, a general slowdown in economic activity, but also a radical shift in the mix of economic activity (Dias et al., 2020). On the one hand, it has significantly constrained some sectors (tourism, services, etc.), but on the other hand, it has allowed others to expand and increase their socio-economic potential (health, science, internet commerce, etc.). It is precisely the plurality of its impacts that results in, “it is challenging if not impossible to predict the full magnitude of the economic and financial stability outcomes of the 2020 pandemic, as this is a unique systemic event that does not have a cyclical character and it has very few and rather remote episodes of historical resemblance.”... “The crisis has triggered deep structural adjustments in the labor market, strengthening job creation in health care, information technology, and various types of on-line services, while reducing jobs in travel, manufacturing, retail sales, recreation, and many other business areas.” (Orlowski, 2020). The author goes on to introduce the idea that the current pandemic crisis is an abrupt halt in economic life, manifesting itself as a widespread disruption of economic activity. One cannot disagree with this statement - even before the outbreak of the crisis, there were signs of an impending economic recession, but it could not have been foreseen that this development would be accelerated by a global pandemic.

**LITERATURE REVIEW**

As with the demand side of the labour market, we can identify a number of direct impacts of the COVID-19 pandemic on the supply side, such as the health complications caused by the respiratory disease COVID-19, which have forced many workers around the world to change their jobs or to stop working altogether, particularly because of the long-term health consequences. There is also a rigorous research demonstrating and confirming a significant causal link between the number of people infected or dying and unemployment. One of these studies claims an increase in unemployment rates in the pandemic after COVID-19 cases; deaths from COVID-19 caused unemployment especially in Italy or the UK (Su et al., 2021). On the other hand, Pinilla et al. (2021) did not find a significant correlation between the economic fall in GDP in 2020 attributable to the Covid-19 pandemic and the cumulative incidence of infection. Today, we cannot say with certainty how many people have survived and will survive with damage to their lungs and other vital organs, and how these consequences will affect their working life options. Nor do we know how COVID-19 will affect today's adolescents and children of working age who have survived it. Thus, the future of the workforce can be associated with a greater degree of uncertainty in this regard.

However, the current crisis has not only affected labour supply on the basis of the potential deterioration of workers' health. It has changed and is changing a range of other areas closely linked to labour supply - labour mobility, workers' interest in different flexible forms of employment, employees' work habits, the skills, abilities and knowledge of the workforce, the quality and balance of work and non-work life, as well as discrimination in the workplace. Last but not least, the pandemic, especially at micro level, has changed the economic situation of many households; some people have lost their jobs, others have had to stay at home with their children, and many have had to spend enormous amounts of time at work (health professionals, doctors, civil servants, scientists, etc.). The economic fluctuations, the fall in GDP and the rise in unemployment are all consequences of the pandemic crisis, which have clearly affected not only organisations, but also households and individuals. This assumption is confirmed by others: “Past recessions have disrupted employment almost entirely from the demand side. The
COVID-19 pandemic is unusual because it also disrupts labour supply. Health concerns, family demands, and government policies all play roles in who can work and when.” (Handwerker et al., 2020). As an example, the authors of the paper cite the closure of schools and childcare facilities - this has the biggest impact on parents' labour supply. Dias et al. (2020) and Lemieux et al. (2020) argue that the labour market and human capital felt the negative effects of the pandemic, resulting from rising unemployment, job insecurity and shrinking career opportunities.

Although the COVID-19 pandemic affects almost all occupational groups, the most negative impact is undoubtedly on low-wage and low-skilled workers. This is confirmed by an ongoing study entitled Heterogeneous Labour Market Impacts of the COVID-19 Pandemic, which reports that job loss was significantly greater in lower-wage occupations and industries (Cortes and Forsythe, 2020). These workers have very limited opportunities to work outside of their physical place of work, are often hourly workers, and are concentrated in occupations that suffer from high turnover and poor working conditions (Kramer, Kramer, 2020). Therefore, Kramer expects that, in the near future, organizations will increase investment in high-skilled workers (as this allows them to maintain relatively stable productivity even in working conditions such as the current pandemic), and reduce investment in low-skilled workers whose productivity is heavily dependent on the location of their work (and this may be continually threatened). In addition, the first group of workers will be structurally more mobile - so employees will have no problem adapting more quickly to changing conditions.

**METHODOLOGY**

The main objective of the present study was to compare the results of the analyses of selected macroeconomic indicators with the authors' views on the development of these indicators and to establish the dependence between the development of the COVID-19 pandemic, macroeconomic development and state interventions in the functioning of economies. In order to achieve the stated objective, several methods were used, in particular a comparative analysis of data obtained from the OECD and the Centre for Labour, Social Affairs and Family in the Slovak Republic databases. These data sources also foreshadow the direction of the research itself. For GDP and employment, we focus on nine selected economies of the world (Slovakia, Czech Republic, Germany, EU, USA, China, Russia, India and Japan), this selection is an attempt to map different areas of the world and the source of data was OECD. We used statistical-mathematical methods to process the data. A marginal part of the study is the analysis of unemployment trends in Slovakia. All time series examined strictly correspond to the duration of the current crisis, i.e. they started with the last quarter of 2019 or 2020 and always end with the most recent data available. Based on the findings and pre-existing knowledge and opinions, we summarise the results at the end of the study.

**RESEARCH RESULTS**

One of the most striking pieces of evidence of the link between the COVID-19 pandemic, economic developments and government interventions to mitigate the impact or stimulate the economy are the significant fluctuations in the GDP indicator, quantified as year-on-year changes in quarterly values over the nearly two-year period under review (Q4 2019, the period just before the outbreak of the global COVID-19 pandemic, to Q4 2021, the latest available data). Figure 1 shows that the evolution of GDP reflects the evolution of the COVID-19 pandemic and the associated introduction of various restrictive measures. We can see how the measures taken at the national (and also international) level manifest themselves markedly in the quarters under review. While the trend is identical in each of the economies under review,
apart from small differences, the differences in the growth or decline values are often very pronounced (Figure 1).

OECD defines gross domestic product as the standard measure of the value added created through the production of goods and services in a country during a certain period. With the exception of Japan, all the monitored countries achieved positive GDP growth before the outbreak of the COVID-19 pandemic. The arrival of the pandemic, which in most of the monitored countries did not fully erupt until March 2020 (except for China, which was a hotspot and the pandemic was already manifesting itself in the beginning of 2020), thus negatively affected GDP development in the second quarter of the year in question. India’s economy experienced the biggest year-on-year drop of almost a quarter (24.2 %) - this is also evidenced by the development of unemployment there, where more than 122 million people were expected to lose their jobs in April 2020 alone (Unni, 2020). However, India has also achieved the highest year-on-year GDP growth - in the second quarter of 2021 it reached almost 20 %, but this is undeniably due to the very low baseline, as this is a year-on-year comparison of the values of this indicator. For comparison, in the US, more than 13 million jobs were lost in almost the same period (second half of March 2020) (Cajner et al., 2020). The economic developments during the pandemic crisis in China are also interesting. Indeed, it was the only country among the countries compared that did not experience an economic recession; GDP there fell only once in the entire period under review, in the first quarter of 2020. Since then, the world’s second-largest economy has not fallen; on the contrary, it has been one of the few to achieve steady GDP growth, even during the pandemic, with GDP growth of more than 18 % in the first quarter of last year. We can conclude that GDP development in the last two quarters of 2021 in the economies under review has stabilised in the range of 0-5 % (only the US economy has exceeded this threshold). In general, it is thus evident that the COVID-19 pandemic is spilling over into economic life. As a result of the enforcement of bans on many activities but also the

Fig. 1 Quarterly (Q) year-on-year GDP growth in selected world countries and country groupings in the period 4Q/2019 - 4Q/2021 (in percent)

Source: OECD, own processing
voluntary social isolation of people, the service sector, tourism, catering and leisure have been critically affected (Ceylan, Ozkan, Mulazimogullari, 2020).

The above statistical data is evidence that the impact of the current crisis on individual countries is not the same, but rather differentiated - it depends on a number of input factors. These are, for example, the economic development in the countries before the outbreak of the pandemic, the speed of the political response to the sudden onset of the crisis, the adequacy of the measures taken at national level, but it is worth mentioning in particular the preparedness of the labour market. This means how the unemployment situation is developing in a given country, how many people are working in particular professions, to what extent work is substituted and replaceable by technology, what mobility opportunities are available to the workforce, what flexibility is allowed by the legislation regulating labour relations, to what extent the state intervenes in the wage issue, and the readiness of employers (companies) for worse economic times is also an important aspect, and so on.

Figure 2 traces the evolution of employment rates in a sample of economies around the world. Compared to the quarterly GDP evolution, we do not show the employment rate values of India and China in this chart, which is due to their unavailability (for a basic idea, we at least show the estimated values of these indicators for 2020 - 36.4 % for India, 63.5 % for China). Looking at the chart in aggregate, we find that the largest drop in the employment rate over the period under review occurred in the US, when it fell by 9.24 p.p. between the first and second quarters of 2020. This was followed by a period of relative stagnation, which only ended in the first quarter of 2021, when employment rates started to rise again in all economies. By the end of 2021, only two of the economies surveyed (the US and Japan) had not reached their pre-pandemic employment levels, while the other economies had increased their employment rates (most notably the EU, by 1.33 percentage points). The smallest fluctuations in the employment rate can be attributed to Japan, where the difference between the lowest and the highest value was only 0.85 p.p. It is not yet possible to draw a universal conclusion from the above data concerning the discrepancy between the experts' views; in order to label or not label the
pandemic as a turning point for labour market issues, we will need to know much more about the broader and deeper context, determined above all by the passage of a longer period of time.

However, the outlined GDP and employment trends undeniably declare a link between economic developments and the outbreak of the pandemic. Understandably, the slowdown in the economy is only the end result of the impact of a whole complex of sub-processes. One of these is the functioning of the labour market - because people are involved in a transformation process, at the end of which is a final product or service that accounts for a significant part of the value of GDP. It is evident that the reduction in social contact of people also affects their concentration in the workplace and thus must have had an impact on many productive and non-productive segments of the economy, as ultimately shown in Figure 2. However, the economic downturn was not only a manifestation of the reduction in social contact, but also of the disruption of the network of supply-supply chains around the globe. “...some panic among consumers and firms has distorted usual consumption patterns and created market anomalies.” (McKibbin, Fernando, 2020). For this reason, especially in 2020, there has been a decline in employment and, conversely, an increase in unemployment - this is confirmed by the results of a large-scale study entitled Pandemic COVID-19 and Unemployment Dynamics in European Economies, according to which the pandemic significantly increases unemployment rates in most European economies (Su et al., 2021). The development - analogous to GDP development - varied across countries. In Figure 3, we can see how the registered unemployment rate in Slovakia has evolved between January 2020 and the latest available data (March 2022).

![Figure 3: Development of the unemployment rate calculated from the total number of UoS (jobseekers) and the registered unemployment rate in the Slovak Republic in the period from January 2020 to August 2021 (in percent)](image)

*Source: UPSVaR, own processing*
Figure 3 illustrates the development of unemployment according to the Central Office of Labour, Social Affairs and Family (ÚPSVaR). In the period before the outbreak of the COVID-19 pandemic, unemployment in the Slovak Republic was at an all-time low - in January 2020, the registered unemployment rate reached 4.98%. Subsequent developments were marked by a sharp month-on-month increase in the registered unemployment rate. From the level of 5.19% (March 2020), it rose to 6.57% (April 2020) - an increase of 1.38 p.p. The more than one-quarter increase in the share of the unemployed in the total number of available jobseekers is due to the so-called first wave of the pandemic. This was characterised by the fact that it was the initial phase, characterised in the Slovak Republic by a relatively small number of active cases of COVID-19, but by relatively sudden and substantial restrictive measures by the state. It was the intensity of the state restrictions, combined with the slow onset of economic stimulus and further economic support from the private sector, which appears to have been the main cause of the observed changes in the labour market. From November 2020, however, unemployment rose again continuously until March 2021, broadly corresponding to the onset and duration of the so-called second wave of the pandemic. However, the rise in unemployment indicators was not as marked - one possible explanation is that the second wave of the pandemic, unlike the first, was anticipated - a situation for which both the state and the private sector had prepared in advance with varying degrees of intensity. In addition, during the first year of the pandemic, the system of state assistance was gradually improved to be more effective, timely and sufficiently high compared to the previous period. The third rise in the unemployment curve occurred at the end of 2021, namely in December (6.76%). However, this marginal increase in the registered unemployment rate lasted only two months, with the curve peaking in January (6.96%) and seeing a continuous decline from February 2022 onwards. Also, the outlined rise in unemployment rates can be identified (as in the previous cases) with the interval of the so-called third wave of the pandemic. The evolution of unemployment in Slovakia thus proves the assumption of a link between the pandemic, the restrictions adopted and macroeconomic developments (in our case represented by the labour market). At this point, it is also worth mentioning the employment rate in 2020; according to the OECD, it will reach 69.47%, which represents a year-on-year decrease of 0.95 percentage points (by more than 50 thousand people), i.e. 2.531 million workers. The year 2021 was almost identical in this respect, with the employment rate in Slovakia reaching 69.45%.

**DISCUSSION**

It is evident from the unemployment trends outlined above that the current crisis is indeed determining the labour market environment. The International Labour Organisation (ILO) itself states in its document that COVID-19 has had a bad impact on the labour market in terms of reduced working hours and job losses. In the past year, according to it, almost 9% of global working time has been lost (this equates to 255 million full-time jobs) - resulting in a large loss of global labour income of roughly 4.4% of global domestic product (ILO, 2021). The ILO report in question also points to another problem, but one that exists and has been around for a long time, and the effects of the pandemic are only exacerbating it. Women and young workers are more affected by the pandemic than men over 25. This view is partly confirmed by the President of the World Bank: “The wide spillover from the pandemic and the shutdown in advanced economies hits the poor and vulnerable – women, children, elderly, and healthcare workers – hardest, deepening the inequality from lack of development and making the health crisis even worse.” (Malpass, 2020). Travel restrictions are also a negative impact on the workforce, and pose a serious complication for migrant workers (Letzing, 2020). However, migration restrictions also cause problems for employers - some sectors have been marked by a shortage of workers performing mainly low-skilled work (Abel, Gietel-Basten, 2020). The
The disruptive impact of the pandemic on the labour market is thus manifested in different ways - but the common denominator of all effects is the high level of uncertainty associated with it. Uncertainty is also mentioned by Dalton, who argues that consumers’ hesitancy to return to their previous spending patterns may also be a problem - this represents a high uncertainty about which jobs will quickly recover after a pandemic (Dalton, 2020). This uncertainty is the reason why, for example, during the second wave of the pandemic, firms in the UK posted almost no new job vacancies. Despite the fact that one of the results of another study was more frequent job losses in lower-skilled occupations, the large-scale outbreak in this country also resulted in a reduction in the size of the high-skilled labour market (i.e. the primary labour market) (Dias et al., 2020). The issue of the impact of the current crisis on workers has also been documented by the OECD - briefly noting that the impact of the COVID-19 pandemic on the labour markets of OECD countries was much more severe than the 2008 financial crisis (OECD, 2020). Furthermore, households and firms that are economically weaker are most vulnerable to the pandemic, causing great economic hardship, fuelling resistance to the measures being taken (Gräbner, Heimberger, Kapeller, 2020). It is precisely the resistance of a section of the public that can exacerbate and prolong these problems. In line with the first part of the previous idea is the research conducted in the UK. Indicators of financial well-being and living standards suggest that the crisis there primarily affects households with lower working incomes (Brewer, Gardiner, 2020).

CONCLUSION

The insights and opinions of the experts, together with the research carried out, evoke a number of ideas. In our opinion, the disruption to labour supply discussed by Handwerker et al. can be seen at two levels: the first is that the COVID-19 pandemic affects the health of the working population, and the restrictive measures also limit the number of people working in different sectors. The second level is more psychological - people who have lost their jobs as a result of the pandemic and the measures that are subsequently implemented tend to have a higher level of distrust towards their former jobs. This means that the aforementioned labour supply is disrupted not only directly (by illness or restrictions) but also indirectly (psychological motives, employment in another sector after losing a job in the original sector). We can see confirmation of this idea not only within Slovakia - the Association of Hotels and Restaurants of Slovakia states in one of its reports that the specific problem in the tourism sector is mainly the shortage of workers and the lack of confidence of employees to work again in this sector. For example, during the second wave (February 2021), employment in the accommodation sector decreased by more than 20 % year-on-year, in the catering sector by almost 17 %, in the construction sector by 10 %. The industrial sectors saw a decline of 5.7 % compared to the previous ones. Thus, following the economic recovery, a number of the available workforce were faced with a dilemma - comparing the opportunities and risks of returning to their original occupation with the job opportunities offered by other industries. According to the latest information, Slovakia now has the opposite problem to a year ago - whereas then the tourism industry produced a large volume of new unemployed, today it faces an acute shortage of the required workforce. Indeed, the people who swelled the ranks of the unemployed during the first and second waves have largely been employed in other sectors over time. The Ministry of Labour mainly sees the reason as people's fear of losing their income again during the pandemic in the tourism sector. They will prefer to take a lower but more secure salary in industry, for example.

Unemployment is one of the key indicators of the state and development of the labour market. In the context of the current pandemic crisis, the indicators associated with it are also perhaps the most explicit evidence of its negative impact on the labour market situation. "The
administrative measures taken by the Government of the Slovak Republic to prevent further spread of the pandemic directly restrict the population, or restrict human resources (employees) in the form of measures to ensure the elimination of their vulnerability - possible disease, which has resulted in a slowdown or even a halt in the economic activity of business entities in most sectors." (Bečka, 2020). In other words, the restrictions adopted in order to protect the population also have a negative aspect - they distort ongoing economic processes in various ways and cause a general economic downturn. When speaking of economic processes, we refer primarily to production, but it is undeniable that the regulation or elimination of human social intercourse is also manifested in the sphere of exchange, consumption and distribution. Our statement is supported by the following sentence of the National Bank of Slovakia: "As a result of the current constraints in the global and domestic economy (reduction of consumption in services, trade, stopping purchases of goods other than essential products, restrictions on production in industrial sectors), it is likely that in the short term there will be a reduction in employment, especially of auxiliary and temporary labour - contract work, agency workers, temporary workers or workers from abroad, who often work in the Slovak Republic only for a short period of time." (NBS, 2020). Thus, already at the beginning of the first wave of the COVID-19 pandemic, there was a realistic expectation that the ensuing crisis would go beyond its health dimension and spill over into most of the spheres of economic and social life.

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