

Changes in the Labor Market in the era of the COVID-19 Pandemic: Occupations Desired by Employers in the Polish Labor Market

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Abstract: The contemporary business environment is very dynamic. Only two years ago, the factor that determined changes in organizations the most was the technological progress – mass digitization of processes combined with progressive automation and robotization. Currently, the situation has changed a lot. Today's economy has to cope with another crisis caused by the COVID-19 pandemic and exacerbated by Russia's military aggression against Ukraine. The pandemic caused worldwide social and economic disruption, including the deepest global recession since the Great Depression. The pandemic also brought changes to the labor market and work environment. The most visible impact of the COVID-19 pandemic on the work environment was the spread of remote work. In this article, the main subject of consideration will be the issues of occupations in the context of the COVID-19 pandemic. The main objective is to assess the overall impact of the COVID-19 pandemic on the labor market. The analysis covered 2019-2023 and was based on secondary and primary research. The unemployment rate and the Occupational Barometer were analyzed. In-depth interviews with employment agents and career advisors were conducted. The conducted analyses and research showed that the changes in the labor market caused by the COVID-19 pandemic were temporary. The most significant changes occurred during the first year of the pandemic. Today, after the cessation of the epidemic threat and the revocation of the pandemic, the situation in the labor market has returned to normal - to the pre-pandemic state. The only change in the labor market that has not returned to the pre-pandemic state is the number of people working remotely.

Keywords: COVID-19 pandemic, Labor market, Remote work, Occupations, Poland

1. Introduction

On March 11, 2020, the World Health Organization (WHO) declared a COVID-19 pandemic caused by the SARS-CoV-2 virus – as a consequence of the rapid increase in the number of people infected with the virus, which first appeared in Wuhan, China. Due to the spread of the pandemic, most countries, including Poland, introduced various types of restrictions to prevent the spread of the coronavirus at the turn of the first and second quarter of 2020, i.e., ordering people to stay indoors, closing schools and workplaces, banning mass events and public gatherings, restricting movement and crossing borders, or using public transportation. In many countries, the state of epidemic emergency was introduced first, and then the state of epidemic. After three years, on May 5, 2023, the WHO declared the COVID-19 pandemic revoked.

The coronavirus pandemic has affected the economic climate worldwide. Global GDP in 2020 fell by 4.3% compared to 2019. The pandemic has also brought significant changes to the labor market - the demand for occupations and competencies changed, and forms of work organization evolved. Changes in the labor market were not identical for all entities, both at the macro and micro levels. The pandemic had a varying impact on different countries and regions of the world, both in terms of the object of change and the period of change. The same applies to industries and professions. For some, the impact was favorable, while for others, it was neutral or unfavorable.

The main purpose of the article is to assess the overall impact of the COVID-19 pandemic on the labor market. According to the definition, the labor market is a type of economic market that consists of, on the one hand, job seekers and their offers and, on the other hand, entrepreneurs who create new jobs and need a workforce. Within the main objective, the following research questions were posed to elucidate the research problem:

- Has the COVID-19 pandemic caused an increase in the level of unemployment?
- Has the COVID-19 pandemic affected the demand for occupations in the labor market?
- Has the COVID-19 pandemic caused significant changes in work organization?

With regard to the main objective and the posed research questions, the primary hypothesis was formulated: The changes in the labor market caused by the COVID-19 pandemic were temporary and were not perpetuated after the cessation of the epidemic threat and the revocation of the pandemic.

Against the background of global changes in the labor market, detailed analyses in terms of the most important indicators of the labor market, i.e., unemployment rate, number of job offers, employment conditions, and scarce occupations, were carried out for Poland, a country ranked 69th in the world in terms of administrative area, and 9th in Europe.

2. Work Changes Caused by the COVID-19 Pandemic

The most visible impact of the COVID-19 pandemic on labor was the spread of remote work (Marcus, 2023). The threat posed by the coronavirus and the introduction of the lockdown forced the market to shift some of the work activity of employees from workplaces to their homes (*Impact of Pandemic ...*). In Poland, according to the Central Statistical Office, in the fourth quarter of 2020, the number of people usually doing their work at home was 1,609,000 (which accounted for 9.7% of all working people). It constituted a significant increase – the number of people working remotely increased by 128% compared to the end of 2019, before the pandemic. The trend was intensifying, and during the so-called “Third Wave of the Pandemic” in March 2021, 14.2% of the employed were already working remotely (GUS, 2020, p. 10).

Another visible effect of the pandemic was a change in expectations regarding the competencies employees should possess. Employers began to pay more attention to competencies related to the use of new technologies, as well as time management, organizational skills, and resilience to stress, which is closely connected with the spread of remote work.

The pandemic has made employers and employees realize the importance of flexibility and responding quickly to change. It is also vital to have the ability to make decisions in uncertain conditions and adapt to new realities. As a result, companies are more likely to hire people characterized by so-called learning agility, i.e., the ability to learn quickly and adapt to change.

3. State action to Protect Jobs

The crisis caused by the COVID-19 pandemic detrimentally affected the labor market, which has contributed to a decline in people’s living standards and created socioeconomic problems (Hupkau et al., 2023). To counteract these adverse developments, governments in many countries have undertaken a series of countermeasures (Köhler et al., 2023). The Polish government introduced the first package of support for businesses and employees, known as the Anti-Crisis Shield, as early as April 1, 2020. Within the framework of the Anti-Crisis Shield, an assistance program was launched targeting businesses affected by the pandemic. Its purpose was to protect the labor market and provide companies with liquidity during a period of severe economic disruption. Support granted to employers aimed at maintaining jobs and consisted of (*Life and Work ...*, 2020, pp. 194-195):

- Subsidizing micro, small, and medium-sized entrepreneurs for part of the cost of employee salaries and social security contributions;
- Subsidizing entrepreneurs who are natural persons not employing workers to conduct business activities;
- Granting low-interest loans to micro-entrepreneurs;
- Subsidizing salaries with funds from the Guaranteed Employee Benefits Fund during the period of economic downtime or reduced working hours imposed by employers.

In addition, small businesses could receive support through an exemption from Social Security contributions for three months. Medium-sized companies were able to apply for more funds from the Export Insurance Policy Committee for insuring trade turnover at home and abroad. Large enterprises could obtain state support by, among other things, being subject to more flexible labor market regulations.

4. Working During the Pandemic

With the economy grinding to a halt, many employers have suspended hiring processes and cut back on hiring people in order to survive the challenging times. They dismissed a significant portion of their staff, leaving employees without jobs and income (Nunes et al., 2023). It affected the service sector in particular. Industries such as tourism, hospitality management, catering, hairdressing, culture, and entertainment suffered the most. Customer service departments in companies also showed a downward trend. Many employers reduced working hours for their employees.

The Covid-19 pandemic and the resulting lockdown have led to significant changes in the perception of performing work. Employers and employees alike had to adapt to the new conditions in a rapid manner. Initially, the lockdown caused panic and complete paralysis of most industries in the market. However, when the public realized that the shutdown of the economy would last over a dozen days, it became necessary to develop new solutions that would enable the continuity of the work of individual entities. As a result, a significant part of the professional activity was transferred from the company to the home. It was a milestone in working conditions,

as under regular conditions, the application of remote work on such a scale would certainly not have happened sooner than in a few or a dozen years (*Impact of Pandemic ...*).

The epidemiological crisis has fundamentally changed the organizational reality. In many industries, remote work has become a requirement and the only option. It posed a significant organizational challenge, especially for those companies that had never had experience with this form of work organization. The pandemic, therefore, caused remote work to become widespread in organizations (Marcus, 2023). This form of work was a safe choice for many companies and provided them with an opportunity to maintain work continuity. In this circumstance, the ability to work remotely, good work organization, and soft skills were becoming vital qualities of employees.

Remote work should rely on cooperation between supervisors and employees and a sense of responsibility for the work performed. The pandemic has forced employees and employers to adapt to a new way of working. To this end, new technologies and information techniques have been used, enabling the digitization of all forms of work. The manner of communicating at work, including the mode of meetings between employees or meetings with the employer, has changed. These have become possible through the use of video and teleconferencing (Stanciu et al., 2023).

The pandemic has intensified the demand for IT professionals and specialists in finance and economics-related occupations. Demand for blue-collar workers in positions such as warehouseman and courier has also increased. It is related to the shift of sales to the Internet and the development of e-commerce platforms and services for delivering products directly to the customer's home.

The ability to work in home office mode should occur in accordance with the following rules (*Working remotely ...*):

- Adequate management support – especially a results-focused approach that requires precise identification of tasks and main goals and proper monitoring of work performance without excessive reporting.
- Provision of work tools (including laptops and apps), platforms for communication with management and colleagues, and the necessary training.
- Explicit rules and transparent expectations regarding telework performance, its hours, the method of reporting, and the contact ability and availability of employees.
- Allowing employees time flexibility so that they can perform their work at the most convenient time for them, balancing their home responsibilities and at the same time remaining in contact during the company's working hours.
- Mutual trust, which determines the effectiveness of remote work.

After an initial period of complete stagnation, organizations gradually began to initiate recruitment processes. However, they offered much less favorable employment conditions in comparison with the pre-pandemic period. It was caused mainly by the desire to reduce labor costs. The number of provided non-wage benefits declined, such as subsidies for learning foreign languages, private medical care, or sports cards. Instead, companies offered in-house training, which generates lower costs.

The COVID-19 pandemic has undoubtedly brought changes in the way work is organized and in demand for particular job positions. However, it did not lead to the collapse of the labor market but only to its transformation. The pandemic showed that companies, regardless of size, have become efficient organizations, quickly adapting to the new reality.

5. Research Method

The main purpose of the article is to assess the overall impact of the COVID-19 pandemic on the labor market. With regard to the main objective, three research questions were posed:

- Has the COVID-19 pandemic caused an increase in the level of unemployment?
- Has the COVID-19 pandemic affected the demand for occupations in the labor market?
- Has the COVID-19 pandemic caused significant changes in work organization?

The primary hypothesis was formulated: The changes in the labor market caused by the COVID-19 pandemic were temporary and were not perpetuated after the cessation of the epidemic threat and the revocation of the pandemic. The trends of changes in the labor market were analyzed in two dimensions: macroeconomic and microeconomic. The phenomenon was considered on the scale of a single country – Poland, in 2019-2022.

In the macroeconomic dimension, the unemployment rate and the Occupational Barometer were analyzed. The unemployment rate is one of the primary macroeconomic indicators. It is a statistical quantity that describes the severity of unemployment in a given population. It is most often defined as the ratio of the number of unemployed people to the economically active population. The fundamental premise for selecting this indicator, which characterizes the state of the labor market, was its unified nature. This feature makes it possible to conduct comparative analyses between regions, countries, and industries. Furthermore, the level of unemployment determines the level of economic growth and translates into the living standards of the population.

The "Occupational Barometer," on the other hand, is a one-year forecast of the state of occupations. The barometer divides professions into three groups: deficit, balanced, and surplus, and the results apply to districts, voivodeships, and the country as a whole. It is a qualitative study based on so-called expert panels. Participants in the study, recruited from among employees of labor offices and other institutions statutory involved in the labor market, as well as companies that operate in the HR industry, provide answers to the following questions in the course of the discussion:

- How will the demand for employees in a given occupation change in the upcoming year? Will it increase, decrease, or remain the same?
- How will the relationship between the available workforce and the demand for employees in a given occupation shape? Will there be a deficit or a surplus of work seekers, or will demand and supply balance out?

Changes in the classification of occupations into a deficit, balanced, or surplus group illustrate well the changes occurring in the local, regional, and national labor market, including the expectations of employers.

In the microeconomic dimension, the research subjects were labor offices¹. Labor offices are institutions that study and analyze the labor market, provide information to the unemployed, and engage in job placement for work seekers. The research was conducted in the form of interviews. It was an in-depth study to clarify the changes that have occurred in employers' expectations of job candidates due to the COVID-19 pandemic. The interview questionnaire consisted of two sections: header and substantive section. The header section recorded such information as the date of the interview, the start and end time of the interview, the form of the interview, the name of the respondent, the held position, and the respondent's seniority. The substantive section consisted of ten questions, which are presented in the aggregated form in the last main point of this article. The validity of the posed questions was also verified during the interview.

The research was carried out between October and December 2022. Prior to conducting an interview, the secretariats of the labor offices were contacted by phone and asked to speak with the director or deputy director. Interviews were carried out in offices where the directors agreed to conduct such a survey. A total of 10 interviews were conducted. The average duration of an interview was 1 hour. The respondents were eight employment agents and two career counselors from various labor offices in the Silesian voivodeship.

6. Changes in the Labor Market in Poland in 2019-2022 in the Light of Macroeconomic Indicators

The announced and implemented state of the epidemic in Poland in March 2020 caused changes in the labor market. Companies reduced their employees' working hours, sent workers on furlough, or dismissed them. In the initial and following stages, the labor market in Poland was in a worse condition than in previous years. In December 2019, the unemployment rate in Poland stood at 5.2% (Table 1). In March 2020, at the outbreak of the pandemic, the unemployment rate was 5.4%. The unfolding pandemic caused a significant increase in the number of unemployed people. At the end of 2020, the unemployment rate was 6.8%. Such a level of unemployment persisted until April 2021. In the following months, the level of unemployment in Poland decreased slightly – at the end of 2021, it was 1 percentage point lower compared to the same period in 2020. After the pandemic slowed down, the level of unemployment in Poland decreased and stabilized – from May 2022 to April 2023, it remained within the range of 5.2-5.5%.

¹The research was conducted by a research team led by Waldemar Jędrzejczyk. The main research stream concerns the issue of competencies, both currently desired and prospective, regarding sectors and types of organizations, occupational groups, and key positions in organizations. In the area of labor market changes caused by the COVID-19 pandemic, the head researcher was Agnieszka Mańka-Goncerz.

Table 1: The Registered Unemployment Rate in Poland in 2019-2023 (data in percentage)

Month/Year	2019	2020	2021	2022	2023
January	6,1	5,5	7,0	5,9	5,5
December	5,2	6,8	5,8	5,2	-

Source: Compiled based on current GUS data (<https://stat.gov.pl/obszary-tematyczne/rynek-pracy/bezrobocie-rejestrowane/stopa-bezrobocia-rejestrowanego-w-latach-1990-2023,4,1.html>)

The highest increase in the unemployment rate was recorded in the first year of the pandemic in March 2020–March 2021. Over the course of 1 year, the unemployment rate increased by 1.5 percentage points. The increase in unemployment halted in April 2021, and a downward trend could be observed from May onward.

With regard to the increase in the unemployment rate caused by the outbreak of the COVID-19 pandemic, the question must be asked: has the decline in employment affected all industries and occupations to the same extent? The occupational barometer was used to find the answer to this question. Occupation barometers for the years 2020-2023 (developed respectively in 2019 and 2022) were analyzed. The main focus was on deficit and surplus occupations.

In these two categories, the number of deficit occupations, that is, professions in which the number of vacancies is greater than the number of people interested in taking a job or meeting the requirements of employers, predominated each year on a national scale. By contrast, there were virtually no surplus occupations – in which the number of vacancies is lower than the number of people interested in taking a job or meeting the requirements of employers. Surplus occupations were indicated only in the 2020 and 2021 barometers – in both cases, these were economists.

Deficit occupations pose a far more significant problem. There are occupations in which it has been difficult for employers to find job candidates for many years. These include such professions as (these appear on the lists of deficit occupations in the occupational barometers in all analyzed years): woodworkers and construction carpenters, roofers and sheet metal workers, electricians, electromechanics and electrical fitters, physiotherapists and massage therapists, bus drivers, truck and tractor drivers, cooks, doctors, warehouse workers, motor vehicle mechanics, construction fitters, bricklayers and plasterers, practical vocational training teachers, vocational subject teachers, earth-moving equipment operators and mechanics, machine tool operators, caregivers of the older people and people with disabilities, nurses and midwives, construction finishers, construction laborers, independent accountants, welders, and locksmiths.

The pandemic has caused a shift in demand for some occupations. In the 2021 occupational barometer, unlike in 2020, hairdressers and accounting and bookkeeping workers were absent from the group of deficit occupations (due to the lockdown and closure of hairdressing establishments and other service establishments in many industries, which reduced, among other things, the scale of outsourcing in financial and accounting services), while tailors, garment production workers (due to a change or expansion of the business profile - many entities began sewing protective masks, suits, and aprons for health care), and paramedics (as a result of a very high increase in severe illnesses caused by the SARS-CoV-2 virus) appeared. The second year of the pandemic also brought changes in the group of deficit occupations. In the 2022 occupational barometer, tailors and garment production workers disappeared from the group of deficit occupations, while psychologists and psychotherapists appeared (as a result of widespread isolation, especially among children and adolescents - education in most schools was provided remotely), and accounting and bookkeeping workers reappeared.

The slowdown of the pandemic has again brought some changes in the group of deficit occupations. In the 2023 occupational barometer, bakers, woodworkers, carpenters, and paramedics disappeared from the group of deficit occupations, while general education teachers and teachers of special schools and inclusive departments appeared – a trend unrelated to the pandemic phenomenon.

The COVID-19 pandemic exacerbated the deficit crisis for certain professions. In particular, there was a shortage of medical, construction, and IT workers – programmers and database administrators, as well as workers in the transportation industry – drivers and warehouse workers. The pandemic also caused a crisis of demand for some occupations. The crisis particularly affected professions in the industries subject to restrictions, namely catering, trade, tourism, and hospitality management, and the mining, manufacturing, and automotive sectors. There was a deficit of job listings in the Labor Offices for occupations in these industries. Only since May 2021 has there been an increase in job offers and occupational activation, while the number of unemployed people has fallen.

In 2021, despite the ongoing pandemic, employers were more open to new hiring processes than 12 months earlier. The caution from the beginning of the pandemic was replaced by a rational personnel strategy. There was an increase in the number of employers seeking employees in the sectors most affected at the beginning of the pandemic and in the second wave – catering, hospitality management, and the HR industry (*OLX labor ...*, 2022). Businesses have opened up to home offices due to the pandemic. As early as 2021, there was an increase in the number of job offers with remote work options compared to the beginning of the pandemic. It proves that the remote work form found many enthusiasts. It was also a safe choice that allowed work continuity, at least in some sectors. Remote work became widespread in industries such as marketing, PR and media, accounting, telephone customer service, and IT (*OLX labor ...*, 2022). Not every trade could afford to switch from onsite to remote work. Certain businesses do not allow remote work, i.e., the construction or manufacturing industries.

7. Changes in the Labor Market in Poland in 2019-2022 in the Light of Labor Offices

Interviews conducted with employees of labor offices aimed to find answers to the following problem questions:

- Which industries, occupations, and positions have been most affected by the COVID-19 pandemic?
- What impact has the COVID-19 pandemic had on employers' requirements for candidates for recruited positions?
- What changes have occurred in the processes implemented by labor offices as a result of the COVID-19 pandemic?
- What impact has the COVID-19 pandemic had on the situation of the unemployed?
- Has the COVID-19 pandemic caused an increase in interest in remote or hybrid work?

Respondents included hairdressers, catering assistants, cooks, waitpersons, bartenders, beauticians, nail stylists, bus drivers, truck and tractor-trailer drivers, travel agents, and tour guides among the occupations most severely affected by the pandemic in the labor market. The prolonged lockdown has primarily caused great caution in the employment of people in industries exposed to restrictions. Temporary and contingent workers and employees with short job seniority were the first to suffer the fallout of the lockdown. They were the first to receive notices of termination, were not offered another contract, or had no job offers in their occupations. Employers who received state assistance, such as the Anti-Crisis Shield, did not dismiss workers for whom they obtained support, but the majority did not increase employment.

The worst period in the number of job offers on the market was the early months of the pandemic – from March to June 2020. By the same period in 2021, most occupations had already returned to relative balance. Job offers were plentiful, and employers' interest in subsidized employment increased. The phenomenon of rebranding has also intensified. Many people dismissed from industries impacted by restrictions declared a desire to retrain – they were leaving their professions and looking for work in more stable industries.

Among the occupations positively affected by the pandemic (as a result of the pandemic, the supply of these occupations in the labor market increased), respondents included: couriers, food delivery drivers, IT specialists, warehouse workers, logistics specialists, salespeople, and cashiers. Due to the increased interest in online sales and the transition of some restaurants to selling food with home delivery, interest in food delivery drivers and couriers was particularly pronounced.

The pandemic has highlighted and exacerbated staff deficits in the healthcare sector the most. It has been difficult for medical facilities to find candidates for medical and nursing vacancies. Interest in medical registrars, caregivers for older people, and health carers has also increased.

Since the loosening of restrictions, demand has begun to increase for low-skilled occupations, such as cashier, salesperson, and warehouse worker. Employers require from such candidates only the willingness to work and availability, understood as the willingness to work shifts and the ability to start working "immediately." The high supply on the labor market for such employees stemmed from high rotation. Employers also forwent requiring work experience for such positions. Depending on the industry, employers require primary or secondary education.

In the case of more complex products or sales processes involving middle-skilled occupations, i.e., sales representative, customer services advisor at a bank or insurance institution, or salesperson of specialized equipment or high-tech products, employers' requirements increased and, apart from a willingness to work, professional education and experience were required.

For high-skilled occupations, such as positions requiring credentials, licenses, and a certain level of professional education, the COVID-19 pandemic did not affect employers' requirements for job applicants. They remained the same before, during, and after the pandemic.

During the pandemic, job seekers usually contacted labor offices by phone or email. Many treated such contact as confirmation of their willingness to work. Only a few inquired about job offers that were lacking in the market. The unemployed reported on suspended recruitment processes and the lack of vacancies.

The pandemic highlighted the phenomenon of digital exclusion. A high percentage of people were unable to adapt to the new pandemic reality due to their living situation (difficult financial conditions, homelessness, illness, addictions) or lack of digital competencies. The implemented lockdown and recommendations for the administration to work remotely caused many services to be available only in the remote form. The pandemic further aggravated the problem of exclusion of certain groups of the unemployed. The situation has particularly worsened for the long-term unemployed, who entered the pandemic already with severely limited social contacts. The pandemic has caused even further isolation. A phone call or email contact with the unemployed did not create convenient conditions for frank conversations about professional issues.

The trend, observed in Poland and abroad, of employers offering remote or hybrid work opportunities was not clearly confirmed in the intermediation provided by the surveyed labor offices. Employees did not notice significant interest from employers cooperating with labor offices in such forms of work.

8. Conclusions

The COVID-19 pandemic has had a profound impact on the labor market in Poland and caused many changes. As it was presumed, the demand for particular occupations and forms of work organization changed, with the strength of the impact varying from highly negative to highly positive. The adopted main objective was therefore achieved.

The answers to the posed research questions were also found. The COVID-19 pandemic has had a negative impact on the labor market. In its initial period, it caused an increase in the unemployment level and a decrease in the overall number of job offers reported to labor offices, which was influenced by the centrally introduced restrictions aimed at limiting the transmission of the virus (restrictions on the use of services, restrictions on leaving homes and on traveling, restrictions on the ability to gather in closed spaces, mandatory quarantines for people infected with the SARS-CoV-2 virus and their families) and changes in how work is performed (remote work was practiced more frequently; some sectors, such as education, outsourcing of financial and accounting services, and outsourcing of IT, switched entirely or to a large extent to remote work), and also by the uncertain scenario of the pandemic, which may have translated into personnel decisions in organizations.

The labor market crisis has particularly affected occupations in the industries subject to restrictions, namely catering, trade, hairdressing and beauty services, tourism, and hospitality management. Professions in these industries have become surplus. Some people left their occupations, retrained, and sought work in more stable industries.

The pandemic also contributed to the emergence of deficit occupations. Such occupations, both immediately after the outbreak and during the pandemic, were IT specialist, logistics specialist, salesperson, cashier, and courier. Personnel deficits worsened the most in the medical sector.

Above all, the pandemic contributed to the proliferation of remote work and recruitment. In these cases, the company's location was not an issue for candidates. The new pandemic reality has forced a change in the previous habits of companies and employees at all levels. The hybrid work model, which combines working from a company's headquarters and performing work duties remotely in a home office, became the most common work style during the pandemic.

After the initial stagnation, the labor market has returned to normal – the unemployment level has fallen to the pre-pandemic level, and employment dynamics have increased. In job offers, employers often reported their willingness to train employees for a specific position. The availability and willingness of candidates to take the job mattered the most. If the candidate agreed to be trained for a job, the level of professional education mattered less to employers, especially in deficit occupations. The exception was recruiting for specialized positions which required specific competencies, such as in the IT or medical sectors.

The conducted analyses and research showed that the changes in the labor market caused by the COVID-19 pandemic were temporary. The most significant changes occurred during the first year of the pandemic. Today,

after the cessation of the epidemic threat and the revocation of the pandemic, the situation in the labor market has returned to normal - to the pre-pandemic state. The only change in the labor market that has not returned to the pre-pandemic state is the number of people working remotely. Also, in many organizations, administrative and office work in particular, the hybrid work model remains in use. The adopted hypothesis is therefore confirmed.

The considerations presented in the article do not exhaust the issue and require further research. The limitation of the study is the narrowing of the analysis of macroeconomic indicators to one country and the size of the research population – the study was conducted on a small research sample. Verification of the adequacy of specific changes in the labor market should be carried out on the basis of a higher number of countries and a larger group of respondents.

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