

The image of the industry in the COVID-19 pandemic

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ABSTRACT : The coronavirus epidemic represents a threat both for the European and for the Romanian industry. During this pandemic, it is important to protect both workers and jobs in all sectors of the economy. At the industry level, the pandemic has left its mark on all branches, so the oil and gas industry around the world is facing the biggest crisis in 100 years, with a triple effect: the rapid decline in oil prices, the decline in the demand for petroleum products and the management of the situation generated by the pandemic; regarding the manufacturing industry, there is a restriction of production and demand for products and services as well as difficulties in providing liquidity to meet payment obligations, and in the electricity industry, the effects have led to reduced consumption and lower prices in the energy market. Although the coronavirus pandemic has severely affected the industry, it also opens up opportunities for relaunching the industry as there are comparative and competitive advantages capitalized very little so far. This article aims to analyse the opportunities, constraints and costs generated by Covid-19, as well as offering solutions that could support the industry during this period

KEYWORDS: pandemic; industry; COVID -19; workers; jobs.

I. INTRODUCTION

In December 2019 the normal course around the world was affected like lightning by Coronavirus, the crisis started in China was seen as a distant problem that could not affect the population around the world so quickly but in only three months the virus has spread worldwide. Mankind woke up in an atypical context. The population's concern came both from the severity of the disease and from its fast contagion, a simple sneezing or even normal breathing in contact with other people can transmit the disease. The lack of means to prevent and treat this new disease has aggravated the state of panic and confusion among the population. Thus, both Romania and the other states are facing two crises: a medical one, which aims at the evolution of the pandemic and whose duration is unpredictable, and an economic one which produces visible effects in the medium term. In Romania, although the existing medical resources and medical services were not prepared to face such a crisis, we witnessed a fast mobilization of specialists in the health system in the hope of minimizing the risks of illness. Due to the fact that Romania had the example of the countries severely affected by the pandemic, it was able to anticipate the problems that would arise, both medically and economically and socially, to which we add the experience of the past as a useful one. Thus, in the last century, Romania has gone through several economic crises, such as: The Great Crisis of 1929 - 1933; the 1940s and 1950s war years; the famine of 1945 - 1947; the 1980s marked by the payment of external debt; the two transitions and the privatization process between 1990-1992 and 1997-1999 and last but not least, the economic crisis 2008 - 2010¹. The social-economic impact is huge, the COVID-19 crisis has also generated an economic and social crisis with big effects: the paralyzed economy, rising unemployment rates, job losses, decreasing population incomes – these are just a few negative effects generated by this pandemic; therefore, the economic recovery could last for a long time according to specialists.

At the time of the contagion with the new coronavirus, Romania's situation was not good, so the emergence of this crisis found a fragile economy with a high degree of poverty and disorganization, unbalancing the economy, pushing it back and stopping projects. As a result, the economy contracted, businesses closed, many employees were sent in various forms of unemployment such as technical unemployment, unpaid leave or even worse, job loss. Moreover, a good part of the Romanians who worked abroad had to return to the country, therefore, according to the estimated data, the number of those who returned is around half a million. Before the crisis caused by COVID - 19, the Romanian economy had already a shortage of job opportunities, and with the pandemic this deficit only worsened, so that to meet the need for economic activity at the level of needs Romania

¹ Arpinte D, Cace S., Mihaiu S. et al , "Pandemia si standardul de viata. Politici de protectie sociala" Institute for Research on Quality of Life of the Romanian Academy, Bucharest, April 2020;

should create additional job opportunities², but the economic restart could take time which will affect the population even more. The restriction of economic and social activity caused by the rules of isolation and physical and social distancing had as effect the decrease of incomes for a large population, about a quarter of a million people were laid off, over one million people had their employment contract suspended thus entering in technical unemployment to which are added the persons who worked mainly in agriculture and whose number cannot be determined with precision, as well as the persons recently returned from abroad. The social risk being represented by the last two categories of people, because they do not have any support, for the first two categories mentioned, the social protection system has the role of compensating the loss of income through social insurance and social assistance. According to the views expressed by Robert Palacios and David Robalino, who, analyzing the means of reducing the labor market distortions have the opinion that, the integration of social security systems with social assistance becomes more important given the future characteristics of the labor market in which will persist the jobs that require a low level of qualification and even subsistence³.

According to the International Labour Organization, the most vulnerable groups are those working in the hardest hit sectors, as well as low-skilled workers. Thus, under the impact of the COVID-19 pandemic, the number of active employees in Romania decreased in the first three months of 2020 by 904.4 thousand, respectively from 6,474.3 thousand people in December 2019 to 5,569.9 thousand people in March 2020. The number of suspended contracts reached the maximum level on April 10, so 1,046.5 thousand employees lost their jobs⁴. Most suspended employment contracts are related to economic activities such as: manufacturing, wholesale and retail trade, repair of motor vehicles and motorcycles, hotels and restaurants. According to data provided by the International Labor Organization, globally there are over two billion people working in the informal economy, without social protection, health insurance, pension contributions, and in the context of the COVID -19 pandemic it has been estimated that 1.1 billion people in this category have lost their jobs, being trapped in homes due to restrictions, running out of income and being on the verge of starvation⁵. In Romania, there are about 1.5 million employees without employment contracts, this means that they cannot benefit from technical unemployment, their incomes being low, generally below, or up to the minimum wage.

II. EFFECTS ON INDUSTRY

By analyzing the industries we will notice that they have been subjected to great pressure as a result of the COVID - 19 pandemic, as follows:

In the extractive industry, the world oil and gas industry has faced the worst crisis in the last 100 years caused by the situation generated by the coronavirus pandemic and isolation measures, the fast decline in oil prices and also by the decline in demand for petroleum products⁶. The global demand for fuels has decreased by about 30 million barrels / day, as a result of the mobility restrictions and the restriction of the economic activities. Thus, April 20, 2020, was a day that will remain in the history of financial markets as the first time when the price of oil reached a negative value due to 'Futures' contracts that matured in May 2020 which depreciated in a few hours with over 300%⁷, the price reaching -37.63 dollars / barrel. Investors who held buying positions on these contracts had to pay to sell them because the volume of oil they were to receive would have been difficult to store. The difficulty was also increased by the fact that, globally, the storage capacity is about 6.8 billion barrels, being already 60% occupied, moreover, the refineries were not willing to process crude oil due to the low level of demand. Therefore, producers, traders and oil companies have resorted to various storage methods such as: storage of crude oil and petroleum products in railway wagons or unused pipelines, the usage of disused salt

² Zamfir C., Zamfir E., "Calitatea vietii in timpul pandemiei: probleme si politici de raspuns" Institute for Research on Quality of Life of the Romanian Academy, Bucharest, April 2020;

³ Palacios R. J., Robalino D. A., "Integrating Social Insurance and Social Assistance Programs for the Future World of Labor", IZA Discussion Paper No. 13258, May 2020;

⁴ Chivu L., Georgescu G. , "Vulnerabilitati ale pietei muncii si ocuparii in contextual pandemiei Covid-19, posibile solutii", Department of Economic, Legal and Sociological Sciences, National Institute of Economic Research 'Costin C. Kiritescu' of the Romanian Academy, Bucharest, May 2020;

⁵ International Labor Organization Monitor, "COVID-19 and the world of work. Updated estimates and analysis", International Labour Organization, April 2020;

⁶ Muscalu M.S., Badileanu M., Russu C. et al, "Impactul pandemiei COVID-19, asupra unor activitati economice din domeniul industriei", Department of Economic, Legal and Sociological Sciences, National Institute of Economic Research 'Costin C. Kiritescu', Center for Economics of Industry and Services of the Romanian Academy, Bucharest, May 2020, p 3;

⁷ Ibidem;

pans from Sweden or other Scandinavian countries. According to the data, a quantity of almost one million tons of refined products is stored in about 30 oil tanks near the coastal areas of Europe⁸.

In the coal mining industry, the impact of the pandemic on this sector is indirect, largely caused by the decrease in the energy demand (by 10% in Europe)⁹, by reducing the volume of production, however, during the pandemic, it was also noted an increase in the share of energy generated from renewable sources (increase of 8% in the period 10.03-10.04.2020 compared to the same period of 2019)¹⁰. In Romania, the production of coal-based electricity decreased by about 950 thousand MWh¹¹, the priority being taken by wind and photovoltaic energy. A first negative effect is the fast restriction of coal mining, so at the Oltenia Energy Complex operating at low capacity determined the interruption of work for 17 days, given the existence of necessary stocks to maintain domestic electricity production. However, the impact of the Covid - 19 crisis has accelerated the short-term energy transition providing an opportunity to verify the operation of energy systems with much higher levels of renewable sources. A second negative effect was the placement of employees in technical unemployment due to the reduction of coal demand and the imposition of traffic restrictions on the population in order to stop the spread of SARS-VOC -2 virus.

In the metal ore mining industry, the Covid - 19 pandemic caused a decrease in mining activity as a result of the reduction of activities in the metallurgical field and, especially, the cessation of the activity of manufacturing industries worldwide. The exception to this declining trend is gold and silver, given that since the beginning of the pandemic the demand for precious metals has grown steadily leading to an increase in sales of gold bars, coins and other gold and silver coins¹². An advantage for the mining industry was the decrease in electricity prices which represents about 20-25%¹³ of operating costs. In Romania, the restriction of mining activity at the Rosia Poieni Mining Exploitation determined the interruption of work due to low capacity operation, placing employees in technical unemployment so as to avoid the spread of the virus which led to the allocation of significant amounts from the state budget.

Regarding the electricity and heat industry, the impact of the COVID-19 crisis has led to reduced consumption and lower prices on the electricity market. According to statistics, there has been a sharp decline in consumption in countries such as Italy, Spain and the United Kingdom. In Italy there was a decrease of 10% in March 2020, compared to the same period of 2019, and in Spain the decrease was 17.4%¹⁴ for the same period mentioned above. The electricity consumption index shows important decreases in the tourism field and in the industrial activities. In Romania, there was a decrease of about 14.8%¹⁵ in April 2020 compared to the same period of the previous year. If the decrease in consumption has affected to a greater extent a relative number of European countries, the decrease in electricity prices on spot markets is manifested throughout Europe and this is felt to a large extent. In Italy, the average electricity prices in April 2020 were lower by 53.2% compared to the same period of 2019¹⁶, and in Spain the average price in March on the spot market was lower by 21.22 euro / MWh compared to the same month of the previous year¹⁷. In Romania, the significant decrease in electricity prices was felt immediately as the measures to close some economic activities, so in April 2020 Romania registered a decrease in the spot energy price by about 43% compared to the similar period of 2019¹⁸. Regarding the electricity production in Romania, it decreased by about 9.6% in March and April 2020, compared to the similar period of the previous year. The significant decrease was registered at the level of coal-based energy production (-44.2%)¹⁹ but was offset by the increase in wind energy. Due to the decrease in the amount of electricity

⁸ Idem p 4;

⁹ Idem, p 6;

¹⁰ Ibidem p 6;

¹¹ Complexul Energetic Oltenia. Energia pamântului românesc, accessed on 19.12.2020 retrieved from www.ceoltenia.ro;

¹² Ziady H., (2020), "Want to buy gold coins or bars? Good luck finding any", CNN Business, accessed on 10 Ianuarie 2021 retrieved from <https://edition.cnn.com/2020/03/26/investing/gold-demand-supply-coronavirus/index.html>;

¹³ Muscalu M.S., Badileanu M., Russu C. et al, May 2020, p 8;

¹⁴ Idem p 19;

¹⁵ Transelectrica, accessed on 19.12.2020 retrieved from <https://www.transelectrica.ro/ro/web/tel/productie>

¹⁶ Gestore Mercati Energetici (GME), accessed on 19.12.2020 retrieved from www.mercatoelettrico.org/En/Statistiche/ME/DatiSintesi.aspx.

¹⁷ Red Eléctrica de España (REE), accessed on 19.12.2020 retrieved from www.ree.es/en/datos/demand;

¹⁸ Muscalu M.S., Badileanu M., Russu C. et al May 2020, p 20;

¹⁹ Ibidem;

transported, the transmission and distribution operators also registered financial losses between March and April 2020.

Regarding the **manufacturing industry**, all countries have faced a drastic restriction of production as a result of the decrease in the demand for products and services and thus difficulties in providing liquidity to meet payment obligations. In the manufacturing industry, the activity cannot be carried out remotely and the presence of workers in the industrial spaces is necessary, but the social distance could be a problem because it cannot be respected. The countries' economy being largely supported by the manufacturing industry, with the appearance of coronavirus pandemic the recession is observed in each country as a result of the contracting of the manufacturing industry. Thus, Germany, considered the country whose economy has the highest level of performance in the European Union is facing a more severe economic recession than the one in 2009. As the period of isolation at home increases, the country's economy is increasingly declining, the industries most severely affected are machinery and equipment, automobiles, textiles and clothing as a result of decreasing demand in the Chinese market - the main importer of German products. In Italy the crisis is felt painfully, because the economy of this country is fragile (external debt represents 135% of GDP). According to statistics, Italian industry fell by 5.4%, following the closure of 60% of production capacity. In the Spanish economy, the shock of the pandemic amplifies the already existing vulnerabilities, as a result the restriction of the economy it is foreseeable for a long time. In Romania, since the COVID-19 pandemic, companies face various problems such as: the lack of management plans for crisis situations at the company level, insufficient stocks to cover cash flow disruptions, reduced digitization of remote control of the production processes, the lack of the necessary financial reserves and the accentuated dependence of many industries on the imports of raw materials and materials from other states²⁰. According to estimates, the activity of the industry was restricted by around 50%, the affected subsectors being especially the road transport vehicles, electrical equipment, metal constructions and metal products²¹. Between March and May 2020, the number of terminated contracts tripled, from 19.6 thousand to 60.4 thousand, and the number of suspended contracts reached a maximum of 332.7 thousand on April 23, subsequently registering a general decreasing trend²².

MEASURES SPECIFIC TO THE EPIDEMIC PERIOD: THE COVID - 19 PANDEMIC PRODUCED A MAJOR SHOCK NOT ONLY IN ROMANIA, BUT ALSO IN THE EUROPEAN AND WORLD'S ECONOMY. ALL STATES HAVE ADOPTED BUDGETARY, POLITICAL AND LIQUIDITY MEASURES TO INCREASE THE CAPACITY TO RESPOND TO THE NEGATIVE EFFECTS OF THE PANDEMIC AND, ALSO TO PROVIDE SUPPORT TO AFFECTED CITIZENS AND SECTORS DURING THE HEALTH CRISIS. THE MAIN MEASURE WAS TO MAINTAIN THE INCOME OF THE POPULATION AT A LEVEL THAT DOES NOT DRASTICALLY REDUCE THE STANDARD OF LIVING, ESPECIALLY BY PARTIALLY SUBSIDIZING SUSPENDED JOBS.

The European Commission has also provided additional support to Member States' financial efforts to mitigate the negative effects on living standards and savings. It has diverted significant amounts of money from the EU budget to support businesses and jobs. Through the support tool for mitigating unemployment risks in an emergency situation, it was provided financial assistance counting 100 billion euros in the form of loans granted on advantageous terms. The purpose of the loans was to cover the costs of Member States with technical unemployment, but also the costs of similar measures established in some countries for self-employed workers. The potential solutions for the industry must take into account the specific characteristics of the epidemic period and at the same time the post-epidemic recovery. Among the measures taken in the member countries, a good part of them were adopted in Romania.

A first package of measures relates to the help given to companies that have ceased their activity by granting technical unemployment, both for employees with employment contracts and for the liberal professions and authorized individuals. For these categories, it was established that the state will bear, regardless of their income, a gross fixed indemnity equal to 75% of the average gross salary, the indemnity being borne from the unemployment insurance budget. Initially, technical unemployment was used in industry when there were production gaps caused by a lack of orders or a lack of raw materials, but now it has been seen as a measure of job retention. A Eurofound study mentions that those who went into unemployment as a result of the crisis caused by COVID - 19 suffer from acute financial insecurity, highlighting the need for their social protection in

²⁰ Idem p 29;

²¹ Idem p 30;

²² Ministry of Labor and Social Protection, accessed on 19.12.2020 retrieved from <https://msmps.gov.md/>;

the context of physical distance and reduction of social contracts. Another package of measures concerns the guarantee of loans, the opening of new lines of government guarantees granted to banks to ensure the necessary liquidity for companies or the granting of loans guaranteed by the State up to a certain limit of turnover for newly established companies.

III. CONCLUSION

The COVID - 19 pandemic crisis has changed the priorities of all states, it is not yet known whether it is a temporary derivation from the individual actions of the Member States, but it remains certain that the progress in reforming the European Union and the Eurozone is small which will mean a long recovery period²³. The crisis has created new tensions between states through the isolation measures imposed, thus decreasing the desire for investment and household consumption. Consumer behaviour did not change but the lack of mobility affected it in decline which caused a shock on supply by decreasing production, technical and structural unemployment and closing companies, this burden was taken over by the involvement of governments and central banks in order to restoring the order. The most dangerous feature of the economic crisis anticipated by the current medical crisis is the speed of the shock generated by the direct and immediate consequences caused by COVID-19 as well as by the measures adopted by state governments to control the pandemic. The crisis has brought decline in certain economic branches which will need support and assistance to resume their activity when the virus is no longer a fatal danger to the population. The COVID-19 pandemic has shown that the intensification of the globalization process is having unexpected and growing effects on the world's states²⁴ as well as the lack of EU action in the short term. The COVID-19 crisis has further highlighted the potential of information technology and digital transformation, therefore the directions of action should be aimed at developing the offer of IT systems and applications as well as the development of telecommunications infrastructure.

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²⁴ Albu L.L et al, "Evaluari ale impactului macroeconomic al COVID – 19", *Department of Economic, Legal and Sociological Sciences, Institute of Economic Forecasting of the Romanian Academy, Bucharest May 2020*.

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