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The role of the state during the Covid-19 pandemic in Poland and the Czech Republic. A comparative analysis

INTRODUCTION

The role of the state in the economy is changing, as the history of economics shows. The state has a coercive apparatus (taxes) and is the provider of public goods and legal norms, as the market economy of democratic European countries is regulated. The state is at once a producer, a consumer, a regulator, and a redistributor of public resources, a tax collector, and an innovator. It must be flexible and adapt to changes in the environment. Looking through the prism of history, the state as an entity with decision-making powers changes significantly following civilizational changes, technological development, and expectations of societies. In terms of state functions and tasks, this is not only quantitative but above all qualitative. Hyperglobalisation, whose shift to a stage called deglobalisation was observed with the great financial crisis of 2007–2008, primarily brought about the development of regional integration. In this dimension, states have had to adapt to linkages with economic organisations and adjust their functions to their requirements. In the case of EU member states, one should first take into account the different types of competence of the organisation and member states developed in primary law. This includes exclusive EU competences (monetary policy, competition rules, common trade policy), shared competences (internal market), supportive competences, coordinating competences, and complementary competences (culture).

The Treaty of Lisbon leaves no doubt that the EU is not the state. It only has the powers that have been entrusted to it by the founding of the state. The limits of the EU competences are determined by the principle of conferral of competences. The exercise of competences is subject to the principles of subsidiarity and pro-

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portionality, Article 5 of the TEU. All competences not conferred on the EU in the treaties, therefore, belong to the member states (Barcz, Górka, Wyrozumska, 2020, pp. 104–116).

This changes the position of the state in a major way. Thus, countries had to learn to defend the economic interests of their citizens and the interests of an integrating group such as the EU externally (protectionism under the EU's common trade policy). Although it is important to remember that their decisions and actions are not the sum of members' expectations, but rather the result of them. Although the regulatory role of the state is changing, in connection with sanctions (law enforcement), it is still strongest at the level of the nation-state. While the activity of the state in crisis situations seems to be justified, there is a dispute about the methods, instruments, and scope of this interference.

Since the twentieth century, economic orthodoxy has included the Keynesian and the monetarist view (more broadly antistatist, e.g., supply-side economics or the concepts of F. A. von Hayek). These two perspectives have always perceived the sources of crises, ways to counter them, and model economic settlements differently. Today, economics has developed a theory of market, state, and third-sector errors. However, it is important to remember that all economic concepts are implemented into the system through policy.

The 2007–2008 crisis was seen as an effect of the influence of neoliberalism (Godłów Legiędź, 2014, pp. 11–29). During this period, it was the state that in many cases was the 'last resort' to save private business institutions (Dobrzanski, 2015, pp. 34–35). The dispute between market fundamentalists and antistatists has a long history and seems to be unresolvable (Flejterski, Solarz, 2015, p. 89). The contemporary crisis differs in the nature of the impulses that triggered it having a non-economic dimension. In terms of the role of the state in the economy, the Covid-19 pandemic has brought significant concerns, primarily about the rise of populism and excessive state interventionism and the construction of a system of so-called zombie companies. However, during the Covid-19 pandemic, states generally did not ask the question: Should we help? But what kind of help should be given and to which sector(s) should it be directed?

The activity of the state during the crisis, as a rule, shows vulnerable areas, ones that are weaker or for a long time unreformed, representing the 'weaknesses' of a given economy. The aim of this paper is to compare areas requiring particular state aid in Poland and the Czech Republic in the context of the impact of the Covid-19 pandemic, taking into account their historical development. This article refers to two Central and Eastern European countries: Poland and the Czech Republic. A research method called comparatism was used, which today plays an important role in economic research. The development of comparatism represents a kind of initial response to the new challenges of economic theory

and practice. The Covid-19 pandemic represents a new challenge, as will be demonstrated below. The historical method has been used (a brief historical evolution of the two economic systems). Data and reports from organisations such as the International Monetary Fund, the Organisation for European Economic Cooperation, the European Commission, and the United Nations World Tourism Organization were used.

A LOOK AT THE CZECH REPUBLIC AND POLAND – PRELIMINARY ISSUES

Both the Czech Republic and Poland represent post-socialist bloc countries, represented planned economies after World War II, and underwent socio-economic transformation. Additionally, the division of the country into the Czech Republic and Slovakia (1993) was a major challenge for the Czech economy. The symbol of the changes in Poland was the ‘Round Table’, in the Czech Republic, the ‘velvet revolution’. Economic transformation is understood as the transition from a centrally administered economy to a market economy. It was associated with the crisis and subsequent collapse of the centrally planned economy in the USSR and its dependent countries. The starting position at the beginning of the transition period was better in Czechoslovakia than in Poland. It is worth noting that when in the 1950s the United States took the first place in the world in terms of GDP per capita, then Czechoslovakia was ranked 21st as the first country of the socialist bloc. This is because in addition to industrialisation, Czechoslovakia had invested in such fields as electronics, the automobile industry, and chemistry. In Poland, on the other hand, huge outlays went to support the mining and metallurgical industries, as the goal was to expand the fuel and energy base, which is now a significant burden on the economy (Matera, Skodlarski, 2021 pp. 235, 260, 299).

In the face of the macroeconomic destabilisation of the Polish economy, the neoliberal transformation strategy and the formation of economic institutions conducive to it was chosen. It was pointed out that T. Mazowiecki recognised L. Balcerowicz’s role in Poland is symbolically similar to the position of the father of the success of the German economy, L. Ehard. A social market economy model was adopted. To this day, Article 20 of the Polish Constitution is still debated in the context of differences with respect to the German economy and its ordoliberal roots. Despite the prominence of the term ‘social’, the theoretical basis of the economic policy pursued in Poland in 1990–1991 was neoliberalism and monetarist economics (Przybyciński, 2021, p. 12). This was done under the Washington Consensus doctrine. For many years, the study of J. Williamson was a kind of model, a set of necessary conditions for liberal market reforms (Kowalski, 2009, p. 256). In the Czech Republic, however, the direction was

the opposite, as S. Swadźba points out, namely, a transition from Klaus's liberal vision (the Czech version of democratic capitalism with the predominance of free market characteristics) to the socio-economic model prevailing in continental Europe with elements of the welfare state and a tendency towards regulation (Swadźba, 2021, p. 72). This is because in the Czech Republic, policymakers after 1989 made social policy an important part of their transformation project. Both countries have adopted different strategies for radical economic reform: shock therapy in Poland and a social-liberal or social-market approach in the Czech Republic. The priority in the Czech Republic was to create a welfare state based on liberal principles in accordance with the market economy and political democracy (Orenstein, 1995, pp. 179, 180, 193). The Czech Republic has its own traditions in this regard. It is worth mentioning that in the interwar period, Czechoslovakia enacted advanced social legislation that became a model for many countries, including Greece. Moreover, it is characterised by a system with so-called insurance inspired by the Bismarckian system. According to the principle "Czechs like to be liberals with a state wind blowing at their backs" (Potůček, 2009, pp. 34–35). The Czech Republic, therefore, exhibits the typical characteristics of a strong adherence to the Bismarckian, corporatist idea of the welfare state. Therefore, the social aspects of the state (unemployment, social inequality) are not a key problem in the contemporary Czech economy. Interestingly, according to A. A. Davidescu, the Czech Republic is currently in the group of countries at the middle level of the social market economy along with, for example, the economies of Cyprus and Austria. Poland represents the high level of social market economy along with Germany and the Netherlands (Davidescu, 2017, p. 52). Poland, due to its complex history, including the influence of the solutions of the partitioning states, etc., according to S. Golinowska's thesis pursued a non-model and difficult to define social policy, the symbol of which was the so-called 'kuronówka' (Golinowska, 2009, p. 241). Historically, the Czech Republic has always been an industrial state. It is one of the European countries with the highest share of industrial production in GDP at 47.3% in 2015. The Czech industry focuses mainly on the automotive, electrical machinery, electrical engineering, metallurgy, and chemical sectors. In contrast, the light industry and the agricultural sector have the lowest contribution to GDP and less importance in the economy (PAIH, 2018, p. 8). The agricultural sector of this economy accounts for more than 2%, while in Poland agriculture accounts for about 3% of the GDP. Unlike the Czech Republic, it is an important sector in the national economy and the primary source of livelihood for a large part of the population. The Polish economy is in a state in which manufacturing and service activities coexist side by side, condition their development, and intermingle (Szczukocka, 2018, p. 276). The Czech Republic is a relatively self-sufficient country in terms of food, which was extremely important at the time

of the Covid-19 pandemic. Poland is a surplus country in food production. It has good natural conditions for agricultural production and is capable of producing more food than it requires (Mikuła, 2012, p. 295).

Poland and the Czech Republic joined the EU in 2004, which involved a symbolic entry into the so-called European social model and the adoption by both countries of the entire *acquis communautaire*. Both countries had to meet the Copenhagen criteria (1993). In terms of the labour market, Poland and the Czech Republic stood out within the EU due to their cheap labour force. Poland has acquired the status of a country with a derogation (euro area), i.e., it has committed itself to adopt the euro at a later stage. Similarly, the Czech Republic does not belong to the Eurozone today, unlike Slovakia (Przybyciński, 2021, p.17). Analysing the development of both countries in the EU through the lens of GDP per capita in 2004–2011, it should be noted that its level in both countries clearly increased (except for 2009, which can be explained by the impact of the crisis in Europe) – a positive impact of integration. There are large disproportions between Poland and the Czech Republic in favour of the latter.

Table 1. GDP per capita of the Czech Republic and Poland in the years 2004–2011 (euro/citizen)

Country/year	2004	2005	2006	2007	2008	2009	2010	2011
Czech Republic	9,000	10,200	11,500	12,800	14,800	13,600	14,300	14,800
Poland	5,300	6,400	7,100	8,200	9,500	8,100	9,200	9,600

Source: (Kowalewska, 2015, p. 224).

An important test for both economies was the recent financial crisis that affected most countries of the market economy. Poland emerged from the crisis unharmed, as it did not belong to the Eurozone. The largest decline in industrial production in 2007–2009 was recorded in Ukraine, falling by 30%, while in the Czech Republic it was as much as 24%, which is associated with its close ties with the economies of western European countries, a problem of trade (Matera, Skodlarski, 2021, pp. 356, 416). The Czech Republic is a small, open economy, heavily dependent on foreign cooperation and trade relations and foreign investment (PAIH, 2018, p. 8). Indeed, it is landlocked and highly integrated into European value chains. The pandemic has shown the harm of dependence on supply chains in sensitive sectors, e.g., access to equipment and drugs. The Czech Republic, unlike Poland, still has a more centralised administrative system (speed of decision-making). It is hierarchical, despite the spontaneous decentralisation processes of 2001–2002 (Graziano, Winkler, 2012, pp. 340–352). Both countries belong to the same international and regional organisations, for example, the Visegrád Group (V4) Table 2.

Table 2. Multidimensional comparison of the Czech Republic and Poland

Similarities	Criteria	Differences	
		Czech Republic	Poland
Organisations – membership in the Visegrád Group (creation of CEFTA in 1992) – membership in NATO – membership in the Three Seas Initiative, In the EU since 2004 (Schengen zone, no participation in the Euro zone), Other participations: – Organisation for Economic Co-operation and Development (OECD) – World Trade Organization (WTO) – International Monetary Fund	Area – determinants of trade	78,866 km ² – landlocked (impact on supply chains)	312,679 km ² – access to the Baltic Sea
	– administration system	Unitary state ‘The so-called joined model of public administration was chosen in the Czech Republic, where municipalities and regions carry out, in addition to self-governmental powers, also state administration through delegated competence’.	Unitary state with local self-government limited to development planning, municipal and partly social matters.
	Health care system	Unified centralised system	Unified system for social security, decentralised due to the so-called ownership responsibility of health care facilities
	Legal Approach to Covid-19	State of emergency	Statutory approach

Source: (Metelska-Szaniawska, 2008, p. 44; Golinowska, 2009, pp. 5, 9; PAIH, 2018, p. 20; European Union, European Social Found, Ministry of Interior of the Czech Republic, 2018, p. 7).

COVID-19 PANDEMIC

The World Health Organization (WHO) defined the new disease on 11 February 2020 as Covid-19 and declared it a pandemic. Around the beginning of April, more than 90 countries worldwide introduced numerous restrictions in the form of lockdowns, quarantines, curfews (as in France), etc. During the pandemic, the question was not whether it was justified for the state to help the economy, but what instruments should be used taking into account the condition of the public finances of the individual states.

We can interpret the pandemic as:

- a butterfly effect, a black swan, when precise prediction and prevention of problems becomes impossible due to increasing instability and chaos (Kielczewski, 2021, p. 6),
- a global crisis with local implications, sudden and deep compared to previous crises,
- a state interference in the economy, which is present in most states around the world; a huge increase in public spending (health, testing, vaccines, personnel protection), in addition to the interference of the state into the private sphere, such as hygiene habits,
- concerning not only economic risk but also uncertainty (dominance of economic forecasts by OECD, IMF, etc.),
- variation in sectors, states, regions (industrial versus agricultural), time periods (easing restrictions typically in May–September). It is now clear (September 2021) that the pandemic is creating its own cycle (increase in infections – lockdown, loosening of restrictions, slow recovery, increase in infections again) (Barrett et al., 2021). It represents an unanticipated exogenous factor. Unlike all known economic crises so far, this macroeconomic shock contains as many as four disruptions: demand shock, supply shock, falling expectations, and rising uncertainty; and shock caused by the restrictions (Čavrak, 2021, p. 85). Analysing the first two channels of demand and supply, it should be noted that in the case of the first, the Covid-19 pandemic negatively affected the economy in the form of a decrease in consumption due to restrictions and a decrease in trust (social capital),
- an increase in transaction costs, a decline in private investment due to the deterioration of the financial situation of companies, a strong slump in selected sectors (such as transport and tourism). In the case of the supply channel, shortages of workers due to disease, quarantine, or other state-imposed restrictions, lack of resources for production (e.g., components) due to broken supply chains (PIE, 2021b).

Thus, the time of social isolation and quarantine, and freezing of the economy, motivated by the desire to flatten the contagion curve, reduced the level

of consumer spending and household income (in Poland by as much as 50%). Through its multiplier, the pandemic hit the flows between individual sectors (Solarz, Waliszewski, 2020, p. 44). The role of the state during this period should be viewed in two ways:

- a) introduction of measures to protect health (primarily life),
- b) introduction of relief measures for market actors and society as a whole in response to the lockdown.

The Czech Republic was among the EU countries that were the quickest to introduce restrictions and the quickest to lift them. Strict adherence to wearing face masks became their symbol. Both countries responded as early as March 2020. In Poland, against the background of discussions on the nature of the necessary legal instrument, so-called statutory solutions were introduced, while in the Czech Republic, a state of emergency was introduced on March 12, 2020 (repeatedly extended). The precautionary measures taken by the Czech Republic affected nearly 80% of Czech companies, greatly affecting the state of the country's economy. The Czech economy, which was previously on a growth path, has suffered significant financial losses (Czarnecki, 2020b).

In Poland, on 4 March, the Minister of Health announced the detection of the first case of Covid-19. On the same day, a meeting of the Government Crisis Management Team (GCMT) was held. The Polish Prime Minister also met with the heads of government of the Visegrád Group countries in Prague, where the coronavirus situation in Europe was primarily discussed (PARP, 2020, p. 10).

Table 3. Economic situation of the Czech Republic and Poland before the Covid-19 pandemic (2010–2019) based on OECD data

Criterion	Czech Republic	Poland
GDP PPP per capita	27% lower than the best OECD economies	40% lower than the best OECD economies
Production	35% lower than the best OECD economies	30% lower than the best OECD economies
Inequalities Gini coefficient	lower than the most advanced OECD economies and equal to 24.9 (range 23.6–62)	lower than the most advanced OECD economies and equal to 28.1 (range 23.6–62)
Salaries	The poorest 20% of the population earns 9.9% of total income	The poorest 20% of the population earns 8.5% of total income

Source: (OECD, 2021, pp. 108–109, 203–204).

The nature of the economic policies pursued by both countries is presented in Table 4.

Table 4. Selected aspects of the economic policies of Poland and the Czech Republic during the Covid-19 pandemic

Country	Fiscal policies (various forms of benefits, extra expenses, allowances)	Reduction in interest rates	Macrofinancial tools	Monetary tools	Trade exchange (exchange rate interventions).
Poland	yes	yes	no	yes	no
Czech Republic	yes	yes	no	yes	no

Source: (PIE, 2021a).

The health care system became a key issue during the pandemic. The ancient Roman saying “health is the greatest wealth” has never been more relevant (Tarricone, Rognoni, 2020, p. 275). In the course of the epidemic, it became clear, to paraphrase the words of the father of economics, A. Smith, that public health is a condition for ‘the wealth of nations’. Those states that invested more in health care found it easier to recover from the crisis. In addition, the crisis has taught the public that increased spending and digitisation in this sector is necessary. In 2020, the Council of Ministers in Poland passed a bill raising health care spending to 7% of GDP (Druk numer 145, 2021). The EU countries are estimated to have spent an average of 8.3% of their GDP on healthcare in 2019. Poland had the lowest share of GDP allocated to health care (6.2%). The Czech Republic was well ahead of it with 7.8% of GDP (including higher levels of public spending on health per capita) (OECD, 2021; Morgan, Astolfi, 2014, p. 125). After World War II, the dominant model on the basis of which the Polish and Czech health care systems functioned was the Siemaszko model. In terms of health system structure, the Czech health care system is based on mandatory public health insurance, which provides universal access to a broad package of benefits (Nemec, Maly, Hubarova, 2021, p. 284). The 1993 reform in the Czech Republic resulted in the establishment of 27 health insurance funds to support the public sector without the possibility of making a profit. Since 2008, so-called regulatory fees have been in force in the Czech Republic, which are paid by each patient from their own funds (Wielicka, 2014, p. 498). In July 2013, the Constitutional Court decided that the system was unfair to vulnerable groups and all fees were abolished. The government abolished all fees in January 2015, except the fees for emergency services (evening/weekend) – a fee of CZK 90 (Fall, Gloker, 2018, p. 4; Alexa et al., 2015, p.108; Health insurance system in cz, 2021).

In 1999, a major health reform was introduced in Poland, introducing a new system called the insurance-budget system. The state was tasked with supporting the health care system, but to a much lesser extent. Local governments also played a role in reforming health care. The primary source of funding for the health care

system in Poland is the health insurance premium (a tax on the insured's income) (Rogalski, 2016, pp. 449–451).

A September 2020 INTERREG study found that trust in the health care system in Poland on a scale of 1 (low) to 10 (high) is low, hovering around 4.6 points. Moreover, it is lower than the EU average of 6.4 and the Czech trust level above 7 points (Römisch, 2020, pp. 2–3). The Covid-19 crisis in Poland revealed long-standing problems in the health care sector, including the population's susceptibility to respiratory diseases associated with high air pollution (the smog problem in Poland).

The crisis primarily affects the labour market. The phenomenon of the Czech Republic is that it consistently ranks among the countries with the lowest unemployment. The average annual unemployment rate in the Czech Republic in 2001 was 8.1%, while in Poland it was as high as 18.1%. The Czech Republic in 2001–2012 was characterised by the most stable situation on the labour market (on average throughout the period studied, the unemployment rate was 7%). This is due to the social policy model, cheap labour (the hourly labour cost in the Czech Republic in 2019 was €13.5, while the EU average was €27.7) but also the relatively high distribution of labour in the manufacturing industry (Grabia, 2014, p. 39). From March to June 2020, the unemployment rate in the Czech Republic increased by approximately 0.7% to 3.7%. This number is 1.1% higher compared to the same period in 2019 (Czarnecki, 2020a, p. 41). According to INTERREG research, when comparing the unemployment rate in Poland in June 2020 with the previous year, it is observed, first of all, that the unemployment rate was lower in the year 2020, which is key to these considerations, compared to 2019. The Czech Republic, in turn, also maintained one of the lowest inequality and poverty rates in the OECD. This is because the labour market in both countries was developing positively until Covid-19 broke out. The relatively mild labour market response to the health crisis was largely due to state measures supporting the so-called *kurzarbeit*. Restrictions on working hours affected women primarily. This is because Covid-19 affected sectors with a higher percentage of female employment, such as retail, more than male-dominated industries (Römisch, 2020, pp. 2–3).

According to EU guidelines, the demand for digital skills upgrading, the impact of the pandemic on youth, argues for increased public spending on active labour market policies, especially training. The Czech Republic is among the least developed member states in terms of using digital public services (EC, 2020). The shortage of skilled labour is an obstacle to the sustainable development of the Czech economy. It has a negative effect on the digitisation and greening of the economy where new skills will be needed. A serious problem in the Czech Republic that was exacerbated by the Covid-19 pandemic is the wage disparity affecting women (OECD, 2021).

Analysing the pandemic through the prism of the banking sector, it is worth pointing out that the balance sheet structure of the Czech Central Bank's increased 4.4 times from 2007 to 2021, but its structure did not change significantly. At the beginning of the Covid-19 crisis, the Czech Republic announced a large anticrisis program in the range of 12.3% of GDP (described later in this article). Public guarantees accounted for 70% of this. However, the program was not supported by the CNB because the bank decided that it could only be used as a last resort in terms of loosening monetary policy. Unlike the Czech Republic, Poland has involved its National Bank of Poland (NBP) in the Covid-19 antirecession program. Bold redistributive measures (expansionary fiscal policy) probably could not have been implemented without the support of the central bank. This support was up to 10% of GDP. In addition, the central bank lowered interest rates and made direct purchases of government securities. (Lovrinović, 2021, p. 141). However, interest rates were lowered for both countries. The Czech National Bank lowered rates from 2.25% to 0.25% from March to May 2020 (OECD, 2020). The NBP lowered interest rates at the Monetary Policy Council (MPC) meetings held on March 5, 2020, April 17, 2020 and May 28, 2020 (Solarz, Waliszewski, 2020, p. 43).

Looking through the lens of regional vulnerability, it is worth noting that industrial regions are more likely to be impacted by the Covid-19 pandemic. In March 2020, the United States stopped production of its entire auto industry for the first time in more than 100 years, something not even experienced as part of the crisis in the 1930s- Great Depression (Adamczyk, Surdykowska, 2020, p. 9). In the Czech Republic, Škoda, in agreement with the Volkswagen Group and the KOVO trade union, closed its factories in March 2020. Škoda is the largest Czech company by sales, the largest Czech exporter and one of the largest Czech employers. The Czech Republic is one of the most industry-dependent countries in the European Union (second place in the EU, 30.5% of value added in the whole economy), including dependence on the automotive industry. Automobile manufacturers and suppliers make up 23% of the industry, responsible for 9% of GDP. The Czech Republic is the world's second largest automobile producer by population and is also heavily dependent on the Chinese economy. In light of the importance of the automotive industry for the Czech economy, the strong procyclical nature, export orientation, and dependence on supply chains of the sector pose a significant threat (NRPoCR, 2020, p. 46; Prust et al., 1990, p. 1).

Moreover Czech carmaker Škoda Auto, part of Volkswagen Group, halted production at two domestic plants for a week due to chip shortages. Škoda had thousands of cars unfinished as it waited for chips.

Car makers around the world were struggling with a shortage of semiconductor chips amid a post-pandemic increase in demand, and the disruption was hampering the Czech economy and others in central Europe reliant on the auto industry (Reuters, 2021; The Irish Times, 2021).

The Czech automotive sector was under pressure before the pandemic due to regulatory changes (CO₂ emission targets for new cars) and digital transformation that required structural changes and investments in new technologies and external competitiveness, for example, electric cars (OECD, 2020). Based on research conducted by the Czech Republic Association of Industry and Transport and presented by the Institute of East-Central Europe, more than a third of the 347 industrial companies in the Czech Republic have problems with procurement, transport, and logistics as a result of the pandemic (NRPoCR, 2020, p. 46; Czarnecki, 2020b). In 2020, the Ministry of Industry and Trade in the Czech Republic prepared the document SME Support Strategy in the Czech Republic for 2021–2027. It will be a key document supporting small and medium enterprises through business development measures and initiatives, which should help SMEs face the numerous challenges of the digital age, the growing importance of services, climate and energy change, and major demographic changes that can reduce the competitiveness of Czech SMEs. Important strategic documents in this area include: Economic Strategy of the Czech Republic 2020–2030, and Innovation Strategy of the Czech Republic 2019–2030 (GoCR).

Poland and the Czech Republic face similar decarbonisation challenges in the coal sector as part of their energy policy (Turów mine conflict). The process of transition from a fossil fuel-based economy to a low-carbon, sustainable and green economy concerns both the Czech Republic and Poland. This transformation is also forcing policymakers in both countries to change tax laws. Green growth is a detailed treatment of the concept of sustainability by considering environmental and economic aspects.

Key to the Czech economy is the inclusion of nuclear energy among sustainable sources. The National Development Plan for Nuclear Energy from June 2015 anticipates the construction of new nuclear generation capacity to maintain the current level of self-sufficiency in energy and to advance energy transitions towards a low-carbon energy sector. A revised State Environment Policy was adopted in January 2021 and includes a long-term vision for reaching carbon neutrality by 2050. Nuclear energy will replace coal and other solid non-renewable fuels as the largest fuel in total primary energy supply. The share of renewables and secondary energy sources and that of gas will also increase, while the share of oil will decrease (International Energy Agency, Czech Republic 2021, pp. 23–24).

Among the stimulants that have a positive impact on Poland's green growth is employment in the sector of environmental goods and services (full-time equivalent). In turn, destimulants in the case of Poland are mainly the dependence of the country on energy. The Czech Republic has a higher share of renewable electricity in total electricity consumption (14.9%) and lower values than Poland for the following factors: green house gas emissions index, sulfur oxide emission. Therefore, an

important challenge for both countries is the EU climate and energy policy (aiming for climate neutrality by 2050) in accordance with the Paris Agreement (MKIŚ, 2021; Sulich, Grudzinski, Kulhánek, 2020, pp. 1998–199). Coal continues to dominate the energy sector and remains an important driver of economic activity in three Czech regions and the Silesia region in Poland. This sector in the Czech Republic does not receive financial incentives and lacks an adequate legal and institutional framework to support its further development. Transportation taxes are low and do not depend on CO₂ emissions. The Czech Republic is among the countries that are particularly affected by technological change (e-government) and that need significant investment in this area (EC, 2020).

Tourism is the third largest global export, behind fuels and chemicals (PIE, 2020). The imposed administrative restrictions limiting the possibility of travelling, and in particular travelling abroad, mean direct losses for the tourism industry and indirect losses for other sectors of the economy, in particular those providing products, components, and services for enterprises operating in the tourism industry (trade, transport, agriculture). As K. Obłąkowska points out, the introduction of limiting the scope of travel and the freezing of the tourism sector were important in this area. A comparison of the direct contribution of tourism to the GDP of European OECD member states and Poland shows that in Poland this impact is one of the lowest, amounting to 1.3% in relation to such economies as Cyprus and Croatia. In the Czech Republic, it accounts for nearly 3% (Obłąkowska, 2021, p. 196). For example, in 2018 in terms of accommodation places, of 32.2 million available in the EU, the figure was 800,000 in Poland, 740,000 in the Czech Republic, while in Italy it was 5.1 million. However, it is worth pointing out that international tourist traffic is extremely important from the perspective of Prague (there are separate programs for Prague). In Poland, Tarcza 5.0 (Shield 5.0) was addressed directly to tourism. Additionally, the Act of 15 July 2020 on the Polish Tourism Voucher was adopted. The anti-crisis shields allowed state interference in tourism, hotel, and transportation operations. In Poland, the withdrawal of a traveller from an agreement or the termination of an agreement for participation in a tourist event by a tour operator grants the right to return payments made to the Tourist Guarantee Fund. Entities managing airports and railroad stations will not be liable for damage caused in connection with proceedings (actions) of the public authorities aimed at counteracting the Covid-19 pandemic, and primarily for the lack of transport (Kudęłko et al., 2020, pp. 78–79).

In the Czech Republic, the law ‘Lex voucher’ (Act No. 185/2020) was adopted to assist tour operators and stipulated that, with a few exceptions (so-called protected persons), they do not have to return financial amounts to customers for cancelled trips or trips that will not take place. This law allows tour operators to convert a monetary debt to the customer into a travel voucher. And after this time,

if the customer does not use up the voucher, they are entitled to a refund. Thus, tour operators have customers' funds at their disposal for a certain period. These vouchers, like package tours, are covered by compulsory insolvency insurance. The Lex voucher system allowed tour operators to not refund customers' payments for travel services in the protection period (from 20 February 2020 to 31 August 2020) if the original obligation under the tour contract ceased due to the Covid-19 pandemic. In lieu of a payment refund, the tour operator was allowed to provide the customer with a voucher for a tour of at least the value of the original tour. The 10% vouchers offered by the private travel agencies expired after a year (Eurofound, 2020; Veverková, 2020; Kvítková, Petru, 2021, p. 67; Government of the Czech Republic, 2020).

The Czech Republic and Poland were among the UNWTO countries that introduced the following measures for tourism:

- exemption, deferral (up to six months) and reduction (up to 50%) of tourism-related taxes for companies in the tourism industry, hotel industry, and other tourism-related operations such as the environmental protection fee, tourism licenses, tourism marketing, taxes, visa fees, capital gains taxes;
- economic assistance to SMEs in tourism;
- cash flow assistance to travel agencies (UNWTO, 2020, p. 18).

One of the industries most affected by the Covid-19 pandemic was air transportation.

At the beginning of 2020, LOT Polish Airlines (PLL LOT) and the Polish Aviation Group (PGL) were in good economic shape and arranged the acquisition of Condor Airlines. The restrictions introduced in Poland contributed to the listing of Warsaw Chopin Airport in the 10th position on the list of 40 airports most affected by the SARS-Cov-2 pandemic, as published by Eurocontrol (Wąsowska, Wincewicz-Bosy, Dymyt, 2021, pp. 524–528). As a result of the declared state of emergency and the emergency measures implemented in connection with the spread of the pandemic, Czech Airlines (CSA) suffered a loss of CZK 1.57 billion and an unprecedented decrease in company revenue to approximately 20%. CSA and Smartwings pointed out that despite recommendations from the European Commission and the International Air Transport Association (IATA), CSA did not receive any financial support from the government, unlike in other European countries (Czech Airlines, 2021).

In response to the far-reaching restrictions on the economic freedom of market entities and as a secondary effect of weakening household incomes, states have prepared a package of crisis solutions.

In March 2020, the Polish Parliament adopted a package of laws called the Anti-Crisis Shield. Due to the fact that the shield is an evolving package of laws, the numbering of shields from 1 to 6 was adopted. In the article, the term 'Anti-Crisis Shield' is used, while in the Appendix bibliography its legal basis is listed

in chronological order. It included broad support for worker safety, financing of businesses, the health care system, the financial system, and public investment (KPR, 2020, p.13)

The Law of March 2, 2020 on special solutions related to the prevention, counteraction and combating of Covid-19, other infectious diseases and crisis situations caused by them introduced a number of significant changes in the form of the following instruments: the possibility of issuing orders to entrepreneurs by public authorities, necessary for the time, exemptions from public procurement law and construction law, in order to protect public health, obligations of entrepreneurs in the field of state defence. In the changes concerning employees and employers, the employer obtained the legal possibility of ordering remote work, and the insured employee, exempted from performing work in connection with the care of a child under 8 years of age, obtained the right to additional care allowance (Kudęłko et al., 2020, pp. 78–79; PARP, 2020, p. 2.). Shield 1.0 highlighted flexibilities in state budget management and public finance systems at different levels (from local to central), which was necessary due to increased public spending. An interesting solution in Poland was the downtime benefit paid to certain individuals from the state budget. This benefit, subject to a number of exclusions and conditions, applies to those entrepreneurs who, as a result of the occurrence of Covid-19, will record a decline in turnover, and entitled them to introduce economic downtime in the workplace or reduce working hours for employees. This, in turn, makes it possible to apply for a subsidy from the Guaranteed Employment Benefits Fund for the salaries of these people and for funds intended for paying social insurance contributions due from the employer on these salaries. Thus, if, following the occurrence of Covid-19, there has been a shutdown in the conduct of business, either by a non-employed person or by a principal or contracting entity with whom a civil law contract has been entered into, lasting for a continuous period of at least 30 calendar days, one becomes entitled to a downtime benefit, which is revenue for income tax purposes. After all, according to special provisions introduced by the special act to the personal income tax act, this benefit is exempt from income tax (Bartosiewicz, 2020, p. 42, 55). The flexibilisation of working time, which has been implied in the Polish labour market, has become an important element. The employer affected by Covid-19 may shorten the uninterrupted day and weekly rest time for the employee; in consultation with the trade unions or employee representatives, the employer will also be able to lengthen the daily working time and the settlement period. Since the Great Recession, *kurzarbeit* (short-time work) programs have been used across Europe to help employers retain workers during the sharp transitional drop in demand. In April 2020, a *kurzarbeit* was launched as part of the Antivirus program, which is best known as an employment promotion program, in the Czech Republic, as discussed in more detail below. The essence of this program is the partial compensation of the wage cost during the Covid-19 pandemic. The economic rationale for the

kurzarbeit policy is that an effective policy to respond to temporary drops in demand (e.g., financial crises) or temporary suspensions of economic activity (pandemics) should minimise economic operations (Kudelko et al., 2020, p. 82; Jurajda, Doleželová, 2021, pp. 2–4).

In Shield 2.0, changes were made to exempt entities that report between 10 and 49 insured persons from social security contributions. In addition, it is further stipulated that the number of insured persons shall be calculated excluding insured persons who are young workers (Kudelko et al., 2020, p. 84). This was significant in the context of two groups that were particularly affected by the pandemic: women and young people. Among the key solutions of the act, commonly referred to as Shield 4.0, were: temporary anti-takeover regulations to protect Polish companies from being bought out by investors from outside Europe and the OECD; subsidies from the budget to cover bank loan interest rates for companies; credit vacations for those who lost their jobs or main source of income after March 13, 2020 (PARP, 2020, p. 23). Shield 6.0 (also referred to as the Industry Shield) is considered to be a form of support for entrepreneurs in approximately 40 industries. Due to the predominance of so-called microenterprises in Poland, in the issue of loans for them, a favourable decision had already been made in Shield 3.0 to change the conditions for granting a microloan by extending the catalog of microentrepreneurs eligible for a low-interest loan (Kudelko et al., 2020, p. 87).

Antivirus (A, B, C) has become the key anti-Covid-19 program in the Czech Republic. It provided support for entrepreneurs and the self-employed. This is because the Czech tax system is not conducive to economic growth. It has been emphasised for many years that it has an impact on the lowest income groups. The high tax burden on labour is not optimal. On the other hand, the use of environmental and property taxes, which are less distortive to growth, is low. Taxes and contributions of the self-employed remain lower than for employees, leading to the dominance of self-employment (OECD, 2020). The scheme applies to those companies where employees have an employment relationship and must be covered by sickness and pension insurance. The employee, in turn, cannot be on notice and cannot receive notice of termination (Ministry of Labour and Social Affairs, 2020).

The program is designed to protect jobs at employers directly affected by government restrictions related to Covid-19. The wage allowance was to be granted by the Czech Republic Labour Office on the basis of an application submitted by the employer. In mode A, in the case of quarantine, the employee is compensated at 80% calculated on the average reduced income. If a company closes due to a government order, the employee receives 100% of their average salary (the cause of the problem lies with the employer). Mode A supported companies primarily in the hotel and cultural industries that had to shut down their operations due to the pandemic lockdown. Under mode B, aid was provided in the

form of a compensation allowance to the self-employed (due to their large market share) and small limited liability companies. Reduced availability of the workforce on the part of the employer due to quarantine orders or employees' involuntary childcare leave became the basis for the right to compensation equal to 100% of one's average salary. Mode B was a kind of *kurzarbeit* policy for companies facing declining demand (Czech Republic, 2020; Jurajda, Doleželová, 2021, pp. 2–4). Non-wage labour costs were covered by program C. This involves the compensation of social security contributions paid by the employer. The program called 'Pětadvacítka' gained importance, under which self-employed persons forced to suspend or significantly reduce their economic activity due to public health risks or crisis measures implemented by public authorities are entitled to a tax bonus of CZK 500 per person (EC, 2020). In addition, 3 Blockade programs were launched, mainly in the form of loans with government guarantees. The Czech Republic also as a state did not impose penalties for late filing of personal and corporate income tax returns, for late payment of a tax claim, and for late filing of control tax returns (Government of The Czech Republic 2020). In Poland and the Czech Republic, public procurement procedures have been simplified, systemic changes have been introduced in the form of various tax solutions, a longer period for settlements, e.g. in Poland in the case of PIT returns, and in relation to market entities in the case of loss of liquidity. In the case of the Czech Republic, many public programs highlight the role of Prague as the largest Czech agglomeration, e.g. COVID PRAGUE.

As of 1 January 2021, the Czech Republic was abandoning the concept of the super-gross salary as a unique way of determining the tax base. At the same time, this change is associated with the abolition of the flat tax rate, the abolition of the solidarity surcharge and the reintroduction of progressive taxation with a marginal rate of 23% for income over CZK 1.7m annually. Furthermore, a special tax base with a rate of 15% is introduced for selected types of non-Czech investment income (e.g. dividends and interest from abroad). This results in an impact on public finances (reduction of revenues to the state budget) and an increase in inflation in 2022. The Czech state budget deficit swelled to a new record in 2021. The 2021 budget deficit was approximately twice the deficit posted during the 2008–2009 global financial crisis and higher than in the initial year of the 2020 pandemic. The economic fallout from Covid-19 resulted in the Czech Republic having a state budget deficit of 367 billion crowns (\$16.7 billion) in 2020, but the budget gap in 2021 has reached a record 420 billion crowns (Insights from Global Mobility Services, 2021; Muller, Hovet, 2021; 2021 Investment Climate Statements: Czech Republic, 2021).

Both the Czech Republic and Poland are members of the EU, which significantly changes the methods of state interference (horizontal and vertical connections). As a result, some aid programs require the involvement of the

European Commission. Due to the common market and competition rules, there are strict rules for state aid in the EU. In March 2020, the EC adopted a State Aid Temporary Framework (EC, 2021b; EC 2020) allowing Member States to use the full flexibility provided by state aid rules. In order to support economies with anticrisis measures, the EU has made the application of EU state aid rules for business and workers, as well as fiscal policy and public finance rules, as flexible as possible. This legislation allowed member states to support those companies most affected by the pandemic (Kudełko et al., 2020), allowing them to stay in business or be able to temporarily suspend operations without adversely affecting their long-term growth prospects. From 2020 to 2021, on the basis of Article 107 of the TFEU, the EC approved aid schemes for the damage caused by the Covid-19 pandemic for Poland and the Czech Republic. In the case of Poland, this mainly involved €32 million in compensation for damages to airports, and in the case of the Czech Republic – €37.6 million in compensation to non-profit sports organisations. In turn, under Article 107(3)b of the TFEU, this concerned support for Czech ski resort operators affected by the pandemic. Regarding Section 107(3) c of the TFEU, for both states, this involved the financing of a wide variety of assistance programs. Regarding the Czech Republic, there was €1.9 billion in aid to support companies in the country; €11.6 million to support travel agencies; €1.9 billion to support uncovered fixed costs for companies affected by the epidemic, €268 million to support accommodation operators, €3 million to support Czech tour operators, and €110 million to support agricultural firms.

In addition, the European Commission approved a €1.2 billion program to support the self-employed and two Czech employment programs to support companies affected by the coronavirus outbreak. In the same period, the EC approved Polish programs concerning: €1 billion to further support companies affected by the coronavirus; also support for micro, small, and medium-sized enterprises that are key to Poland's economic development in the amount of €2.9 billion. A special role should be given to strategic support in the amount of €650 million for Polish Airlines; also €40 million to support the producers of chrysanthemums; moreover €193 million to support companies operating in the tourism and cultural sector; also €95 million to support companies operating in the agricultural sector (EC, 2021a). In addition, the Czech Republic has requested financial assistance from the Union under the SURE Regulation (pursuant to Article 6(2) of the SURE Regulation). Both countries have prepared national reform programs necessary for the cohesion policy (accepted by the European Commission only in the case of the Czech Republic). In addition, the so-called EU escape clause is important for the conduct of fiscal policy in both countries.

As indicated above, the relationship between the state and the EU currently forms a complex system of links. The future prospects for the Czech Republic and Poland are similar. The OECD predicts that in 2022, GDP is expected to grow by

4.9% in the Czech Republic and by 4.7% in Poland. The European Commission indicates a growth of 4.5% for the Czech Republic and 5.2% for Poland in 2022 (EC, 2021b).

CONCLUSIONS

The paper analyses the endogenous factors and takes into account the economic peculiarities of the two countries and the impact of external factors affecting these economies, especially those brought about by the Covid-19 pandemic. The Czech Republic and Poland are considered to have similar economic and social levels. It is worth noting that, as a rule, the Czech Republic occupies a higher position in the rankings than Poland, which should be of interest to policymakers in Poland. The Covid-19 pandemic became a barometer of the weaknesses of both economies as it brought out the pre-existing problems and the backwardness of a socio-economic nature and areas of so-called development challenges. In addition, it highlighted the resilience and strengths of both economies. Comparing them with the OECD recommendations for both countries (OECD, 2021), it should be stated that in the case of the Czech Republic, in the area of the labour market, it is not about quantitative changes, but about the quality of this market, i.e., strengthening the professional position of women and active labour market policies to facilitate employment transitions (new professions and skills). The problem in the Czech Republic is the apparent relatively inadequate activation of the unemployed to meet the needs of the labor market. During the 2009 crisis, youth unemployment doubled and remained high for several years. This is a particularly vulnerable group during the Covid-19 pandemic. In the case of Poland, it is the rate of participation in the labour force of older workers and women.

In both cases, the challenge to growth is investment in research and development. Moreover, due to the domination of micro and medium enterprises in Poland and the self-employed sector in the Czech Republic, it is necessary to simplify business regulations and streamline bankruptcy proceedings (shortening the time and number of procedures, legal costs) and the tax system in the Czech Republic. Although CO₂ emissions declined during the pandemic, sustainability concerns remain in both countries. Environmental policy is about state support for energy efficiency and renewable energy, as well as investments in upgrading electricity grids and district heating networks that help reduce emissions. The problem for both countries is the so-called coal regions. Another problem in Poland is the high air pollution associated with the use of poor quality coal and biomass in the residential sector. In the case of the Czech Republic, improving the efficiency of the public sector through consolidation of local government

services and e-government. In the case of Poland, a long-term view of health care and social inequality. Both countries need to invest in the development of their key market sectors. In addition, they should increase the digital development that enables microentrepreneurs to transition to remote work. Both the Czech Republic and Poland are food-secure countries. In both countries, the decline in trust characteristic of this type of crisis is evident, implying a recourse to legal regulations and a decline in transaction costs. Thus, it can be seen that it is necessary to target a long-term economic policy because someday the Covid-19 pandemic will be over. The paper does not cover all the issues in the indicated area. It paves the way for further research on the indicated policies in the context of the endemisation of economies. This requires a detailed and in-depth analysis of each of the public policies.

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Summary

The activity of the state during the crisis, as a rule, shows vulnerable areas, ones that are weaker or for a long time unreformed, representing the ‘weaknesses’ of a given economy. The aim of this paper is to compare areas requiring particular state aid in Poland and the Czech Republic in the context of the impact of the Covid-19 pandemic, taking into account their historical development. The choice of the countries is the deliberate methodological procedure due to the fact that both represent one of the key regions in Europe. The indicated countries are EU members, which determines the approach of the Czech Republic and Poland in the field of economic policy, including trade, social policy, food security, energy, and health protection (taking into account the competences of the member states in relation to the EU in this area). It was pointed out that both countries did not join the euro area. Tax concepts in the public finance of both countries were taken into account. Moreover, these countries are faced with similar ecological challenges such as the Green Deal which influences the necessary economic changes. Comparative analysis was used as a research method, taking into account not

only the differences and similarities between the countries analysed. Both countries face civilization and development challenges, for example, digital changes, which determine the effectiveness of other public policies.

Keywords: state, Covid-19 pandemic, comparative analysis.

Rola państwa podczas pandemii Covid-19 w Polsce i Czechach – analiza porównawcza

Streszczenie

Aktywność państwa w okresie kryzysu z reguły ukazuje obszary wrażliwe, słabsze lub od dawna niezreformowane, reprezentujące „słabości” danej gospodarki. Celem artykułu jest porównanie obszarów wymagających szczególnej pomocy publicznej w Polsce i Czechach w kontekście wpływu pandemii Covid-19, z uwzględnieniem ich historycznego rozwoju. Wybór państw jest celowym zabiegiem metodologicznym ze względu na to, że oba reprezentują jeden z kluczowych regionów Europy. Wskazane państwa są członkami UE, co warunkuje podejście Czech i Polski w zakresie polityki gospodarczej w tym handlowej, społecznej, bezpieczeństwa żywnościowego, energetycznej, ochrony zdrowia (z uwzględnieniem kompetencji państw członkowskich w relacji do UE w tym zakresie). Zwrócono uwagę na fakt, że obydwa państwa nie przystąpiły do strefy euro. Uwzględniono koncepcje podatkowe w ramach finansów publicznych obydwu państw. Ponadto państwa te współcześnie stanęły przed podobnymi wyzwaniami ekologicznymi np. Green Deal, co wpływa na konieczne przemiany gospodarcze. Jako metodę badawczą wykorzystano analizę komparatystyczną uwzględniając nie tylko różnice, ale i podobieństwa pomiędzy analizowanymi państwami. Przed obydwo państwami stoją wyzwania cywilizacyjne i rozwojowe, np. zmiany cyfrowe, które będą determinowały efektywność pozostałych polityk publicznych.

Słowa kluczowe: państwo, pandemia Covid-19, komparatystyka.

JEL: E02, H00.