

**CZECH SOCIAL POLICY AS A TOOL
FOR REDUCING UNEEMPLOYMENT: EXPERIENCE
AND LESSONS FOR OTHER COUNTRIES**

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INTRODUCTION

Unemployment remains one of the most persistent and multidimensional socio-economic challenges facing both developed and developing nations. It affects not only macroeconomic indicators such as GDP growth and tax revenues but also exacerbates poverty, social exclusion, and political instability. The negative consequences of joblessness – ranging from decreased household income and psychological distress to reduced human capital – underscore the importance of designing and implementing effective employment policies.

In recent decades, the role of social policy in managing labour market outcomes has gained increasing attention among policymakers and researchers. Social policy is now seen not only as a means of redistributing income, but also as a strategic instrument for activating human potential, increasing productivity, and fostering inclusive economic growth. In this context, the experience of the Czech Republic offers an important case study.

Among the member states of the European Union, the Czech Republic has consistently maintained one of the lowest unemployment rates. This performance is especially remarkable in light of various external shocks including the global financial crisis, the COVID-19 pandemic, and the economic fallout from geopolitical instability in Eastern Europe. The Czech government's ability to navigate these challenges stems from a multidimensional and flexible approach to social policy.

Key components of this approach include active labour market programmes (ALMPs), the development of vocational training and retraining systems, tailored support for disadvantaged groups, and employment incentives for businesses. These measures are not implemented in isolation but are coordinated in a way that reflects the real-time needs of the labour market and demographic realities such as an ageing workforce and regional disparities. Importantly, the Czech model emphasises inclusivity, targeting long-term unemployed individuals, youth, and caregivers, particularly women, who face systemic barriers to employment.

The Czech Republic's success suggests that social policy can be more than a reactive safety net – it can be a proactive mechanism for structural

transformation. However, to fully understand the factors contributing to this success, a deeper theoretical and empirical analysis is required. The present article aims to explore the structure, principles, and evolution of Czech social policy in the area of employment, assessing its relevance and applicability to other national contexts.

Using econometric modelling, regression analysis, and comparative approaches, the study examines the direct and indirect impacts of social policy interventions on unemployment rates. Moreover, a forecast of unemployment trends in the Czech Republic up to 2028 is provided using time-series models, identifying emerging risks and strategic opportunities for labour market resilience.

By closely examining the Czech case, this research seeks to provide theoretical and practical insights into the formulation of effective employment policies. It highlights the importance of combining theoretical rigor with empirical evidence to design socially responsive and economically sustainable policy frameworks. Ultimately, the findings aim to support international knowledge exchange and inform adaptive approaches to labour market governance in other countries.

1. Theoretical Foundations of Research into Social Policy and Unemployment

Understanding how social policy influences employment requires a strong theoretical framework. While empirical research provides measurable outcomes, theoretical analysis uncovers the mechanisms and causal relationships underlying those results. In an era of technological transformation and global uncertainty, a robust conceptual basis is essential for developing adaptive and sustainable labour market strategies.

The Czech experience illustrates how integrated social policies can address structural unemployment and support inclusion. Exploring this within a theoretical context allows for critical comparison across different national models and contributes to the transfer of successful practices.

Aim of the Theoretical Section to define the conceptual underpinnings of social policy as a mechanism for reducing unemployment. Objectives: to analyse theoretical approaches to social policy in the context of employment; to synthesise recent research on ALMPs and their impact on unemployment, with a focus on the Czech Republic; to evaluate methodological tools such as econometric modelling, regression analysis, SWOT and ARIMA for studying the outcomes of social policy interventions.

The basis of modern research in social policy and the labour market was laid by the works of John M. Keynes¹, Arthur Owken², Beveridge William³, and Milton Friedman⁴, Gary Becker⁵. These scholars explored the fundamental causes of unemployment, the impact of social policy on employment, and the necessity of government intervention to reduce unemployment.

The issue of unemployment and the impact of social policy to reduce it is still the subject of numerous studies both in the Czech Republic and globally. Researchers analyse the impact of social programmes on the labour market, the effectiveness of government interventions and the consequences for socio-economic development.

Recent studies on unemployment and social policy in the Czech Republic provide a thorough analysis of the effectiveness of national programmes aimed at reducing unemployment. One of these studies is the OECD Economic Outlook 2022, which highlights the consistently low unemployment rate in the Czech Republic, despite the economic challenges posed by the war in Ukraine and high energy prices. The report also notes that the country's unemployment rate remains at 3% thanks to policy adaptations to support key sectors of the economy, such as information technology, finance and manufacturing.

The articles published on the Prague Forum platform in 2023 also examine the impact of government initiatives on the labour market, especially in times of economic instability. The authors note that training programmes and the development of new technological areas, particularly in the green and digital sectors, help to maintain low unemployment, particularly among young people and vulnerable groups.

Global research focuses on comparing different models of social security, the effectiveness of active employment programmes and the importance of integrating vulnerable groups. For example, Thomas Le Barbanschon, Johannes Schmieder, and Andrea Weber⁶ examine the impact of unemployment insurance (UI) and active labour market policies on jobseeker

¹ Keynes, John M. (1936). *The General Theory of Employment, Interest, and Money*. UK, Macmillan.

² Owken, A. (1975). *Equality and Efficiency: The Big Tradeoff*. USA, Brookings Institution Press

³ Beveridge, W. (1944). *Full Employment in a Free Society*. UK, Allen & Unwin

⁴ Friedman, M. (1968). *Unemployment Versus Inflation*. *American Economic Review*, 58(1), 1–17.

⁵ Becker, G. (1964). *Human Capital: A Theoretical and Empirical Analysis*. USA, Columbia University Press.

⁶ Barbanschon, Thomas, Schmieder J., & Weber A. (2024). *Job Search, Unemployment Insurance, and Active Labor Market Policies* (online). Available at: https://www.nber.org/system/files/working_papers/w32720/w32720.pdf

behaviour. They analyse the effectiveness of ALMPs in reducing unemployment and improving labour market outcomes, emphasising both theoretical and empirical aspects of these policies. Elif S. Filiz⁷ analyses various aspects of active labour market policies and social transfers and shows how the duration and level of benefits can affect the duration and structure of unemployment in different economies.

Despite the large number of scientific papers on the impact of social policy on unemployment, further research is needed to study the long-term effectiveness of social policy in reducing unemployment, especially in times of economic instability. It is important to analyse the impact of regional differences on policy effectiveness, as well as the integration of new technologies and digital tools into the social protection system. The issue of ensuring social inclusion of vulnerable groups, such as young people, people with disabilities or long-term unemployment, deserves special attention. In addition, there is insufficient research on how to adapt successful practices to the context of other countries, taking into account their economic and social conditions.

Social policy plays a key role in reducing unemployment through the implementation of active labour market programmes (ALMPs), which include vocational training, job subsidies and employment support for socially vulnerable groups. In the Czech Republic, for example, the effectiveness of such programmes has been confirmed by a reduction in long-term unemployment and an increase in youth employment. Also important are passive policy mechanisms, such as unemployment benefits, which help to maintain the purchasing power of citizens and the stability of the economy.

In addition, public investment in educational programmes and incentives for employers help to close the gap between the skills of the workforce and the needs of the labour market. The success of Czech social policy can serve as an example for other countries, especially in times of economic instability.

Several methodological approaches were used to analyse the Czech social policy and its impact on the unemployment rate: econometric modelling, correlation and regression analysis, SWOT analysis, and the ARIMA method. Let us consider each of them in more detail.

Econometric modelling was used to study the impact of variables (e.g., social benefits) on unemployment (employment). This method is based on the use of statistical data to build mathematical models that describe the

⁷ Filiz, Elif S. (2017). The Effect of Unemployment Insurance Generosity on Unemployment Duration and Labor Market Transitions. *Labour*, 31 (4), 369-393.

relationship between social indicators and unemployment^{8 9 10 11}. This is done using a regression model (formula (1))¹²:

$$U_t = \beta_0 + \beta_1 X_{t1} + \beta_2 X_{t2} + \varepsilon_t \quad (1)$$

where:

U_t – is the dependent variable (e.g., unemployment rate);

X_t – independent variable (social indicators);

$\beta_0, \beta_1, \beta_2$ – regression parameters

Correlation and regression analysis was used to identify the relationship between social policy spending and employment. The strength and direction of the relationship between the variables is determined by calculating the correlation coefficient (formula (2))¹³:

$$r = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2} \sqrt{\sum_{i=1}^n (y_i - \bar{y})^2}} \quad (2)$$

where:

r – is an indicator of dependence between two variables x and y ($-1 \leq r \leq 1$).

To assess the strengths, weaknesses, opportunities and threats of the Czech social policy, the SWOT analysis developed as a strategic planning tool in the 1960s by Albert Humphrey was applied¹⁴. With its help, the authors analysed the effectiveness of social policy measures in the Czech Republic and the prospects for its adaptation to other countries.

To forecast the unemployment rate on the basis of time series, the authors used the ARIMA model, which allows to take into account seasonal fluctuations, past values and their impact on future periods and ensures the accuracy of indicators in the medium and long term.

In order to forecast unemployment rates, the authors used the ARIMA method (Autocorrelation Integrated Moving Average Model). The main components of the model are:

1. An autoregressive component that describes the dependence of the current value of the series on previous values using lags.

⁸ Frisch, R. (1933). *Econometrics: The Development of Econometric Methodology*. Norway, Statistisk Sentralbyrå

⁹ Keynes, John M. (1936). *The General Theory of Employment, Interest, and Money*. UK, Macmillan.

¹⁰ Klein, L. (1955). *An Introduction to Econometric Models*. USA, Prentice-Hall

¹¹ Filiz, P., et al. (2018). *The Impact of Active Labor Market Policies on Unemployment: Belgium, Evidence from European Countries*.

¹² Green, W. (2020). *Econometric Analysis*. UK, Pearson

¹³ Box, George E. P. & Jenkins, Gwilym M. (2016). *Time Series Analysis: Forecasting and Control*. USA, Wiley.

¹⁴ Humphrey, Albert S. (1960). *The SWOT Analysis: A Guide to Business Success*. USA, Stanford Research Institute

2. An integrated component to transform a non-stationary time series into a stationary one by taking differences (differentiation). $\theta\theta$ errors (white noise) on the current value.

The ARIMA model combines all three components and is denoted as *ARIMA* (p, d, q), where:

p – is the order of autoregression;

d – is the number of differentiations;

q – is the order of the moving average.

The authors forecast unemployment in the Czech Republic using the ARIMA model using the following formula (formula (3))^{15 16}:

$$Y_t = \phi_1 Y_{t-1} + \dots + \phi_p Y_{t-p} + \varepsilon_t + \theta_1 \varepsilon_{t-1} + \dots + \theta_q \varepsilon_{t-q} \quad (3)$$

where:

Y_t – is the current value of the time series;

ϕ – autoregressive coefficients;

ε_t – is a random error (white noise);

θ – moving average coefficients.

The use of all the above methods allows us to get a complete picture of the unemployment problem, identify its causes and prioritise areas for improving the situation, and provides a comprehensive approach to analysing and forecasting the effectiveness of Czech social policy.

2. Labour market analysis

Demographic indicators are the basis for assessing the economic activity of the population and the state of the labour market. An important stage of the analysis is to determine the relationship between the total population, economically active population, employed persons and unemployment rate (Fig. 1). As of 01.01.2024, the population of the Czech Republic amounted to 10900555 people, which is 3.7% more than in 2013. At the same time, there is a trend towards population ageing, which is typical for many European countries. This affects the size of the economically active population, which amounted to 47.7 % of the total population in 2023 compared to 50.5 % in 2013¹⁷ The economically active population consists of people who have a job (employed) and are actively looking for work (unemployed). As of 1 January

¹⁵ Gondim, A.M. & Ospina, R., Leiva, V., Castro, C. (2023). An Overview of Forecast Analysis with ARIMA Models during the COVID-19 Pandemic: Methodology and Case Study in Brazil (online). Available at: <https://www.mdpi.com/2227-7390/11/14/3069>

¹⁶ Hamiane, S. & Ghanou, Y., Khalifi, H., Telmem, M. (2024). Comparative Analysis of LSTM, ARIMA, and Hybrid Models for Forecasting Future GDP (online). Available at: <https://iieta.org/journals/isi/paper/10.18280/isi.290306>

¹⁷ Czech Statistical Office (online). Available at: https://vdb.czso.cz/vdbvo2/faces/en/index.jsf?_af=statistiky&katalog=30832#katalog=30848

2024, the number of employed people in the Czech Republic (CR) was 5060.8 thousand (or 97.4 % of the economically active population), which indicates a stable level of employment in key industries. The unemployment rate in the country, determined according to the ILO methodology, as of 01.01.2024 was 2.6 % compared to 7 % in 2013¹⁸.

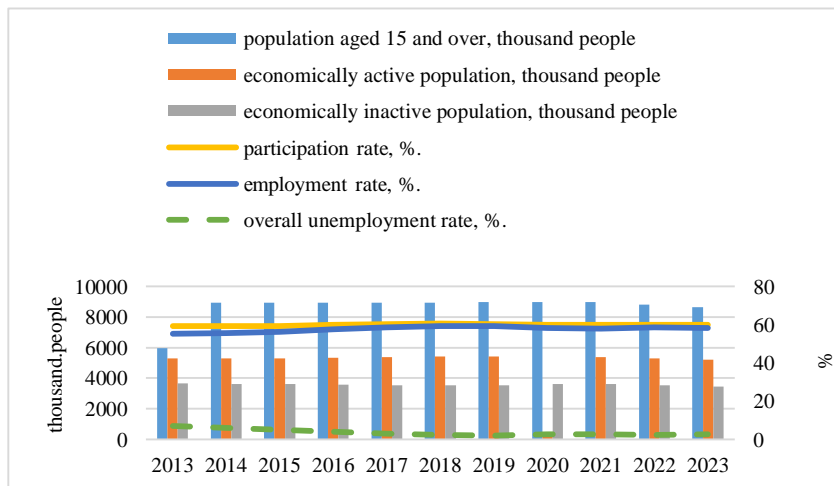


Figure. 1. Changes in the economic situation of the Czech population in 2013-2023¹⁹

In the Czech Republic, despite the relatively low overall unemployment rate compared to other EU countries, long-term unemployment (a situation where a person is unable to find a job for 12 months or more) remains a challenge, especially for certain groups of the population. The share of the long-term unemployed among all unemployed in the Czech Republic varies between 30-40% (depending on the period). In some regions (in particular, in the north of the Czech Republic, e.g. in the Ustecký and Moravian-Silesian regions), the long-term unemployment rate is higher due to structural problems in the economy and fewer employment opportunities. The highest proportion of long-term unemployed is observed among people over 50 years old and young people who have recently completed their studies.

¹⁸ Czech Statistical Office (online). Available at: <https://vdb.czso.cz/vdbvo2/faces/en/index.jsf?page=statistiky&katalog=30832#katalog=30848>

¹⁹ Completed by the authors: Czech Statistical Office (online). Available at: <https://vdb.czso.cz/vdbvo2/faces/en/index.jsf?page=statistiky&katalog=30832#katalog=30848>

The main causes of long-term unemployment in the Czech Republic are as follows:

1) economic and structural:

a) demographic changes: the ageing of the population leads to the fact that workers of pre-retirement age face difficulties in finding a job due to discrimination and low digital literacy;

b) Sectoral changes in the economy: falling demand for unskilled labour due to automation and technological developments and the closure of enterprises in traditional industries, such as mining, in certain regions of the country.

2) Social factors:

a) insufficient level of education: people without higher or vocational education have fewer chances of finding a job; mismatch between knowledge and employers' needs;

b) Vulnerable groups: people with disabilities, representatives of the Roma community and women who have been out of the labour market for a long time (for example, due to childcare) face discrimination and certain barriers to employment.

3) regional imbalances: regions with high unemployment often lack investment in job creation; access to jobs in cities is limited by the lack of quality transport infrastructure.

4) Individual factors:

a) psychological aspect: prolonged unemployment often leads to a decrease in motivation and self-esteem, which makes it difficult to return to work;

b) low mobility: many people are not ready to move in search of work due to family obligations or lack of housing in other regions.

The economic consequences of long-term unemployment include the loss of skills and experience by employees, and increased social security expenditures from the state budget. Social consequences include an increased risk of poverty and related criminalisation, and social exclusion of the long-term unemployed. The personal consequences of this type of unemployment include a deterioration in psychological state, increased depression, reduced motivation to work and return to the labour market.

The unemployment rate in the Czech Republic shows significant regional differences, which is due to economic, demographic and social factors (Fig. 2).

Prague traditionally has the lowest unemployment rate due to the high concentration of businesses, investments, and a large number of vacancies in the service, IT and finance sectors. Unemployment in the capital is usually below 3%. The Central Bohemian, South Bohemian, Plzeň, Pardubice and Vysočina regions have low unemployment rates, which is the result of

a combination of favourable economic, geographical and social factors that make these regions among the most stable in the Czech Republic.

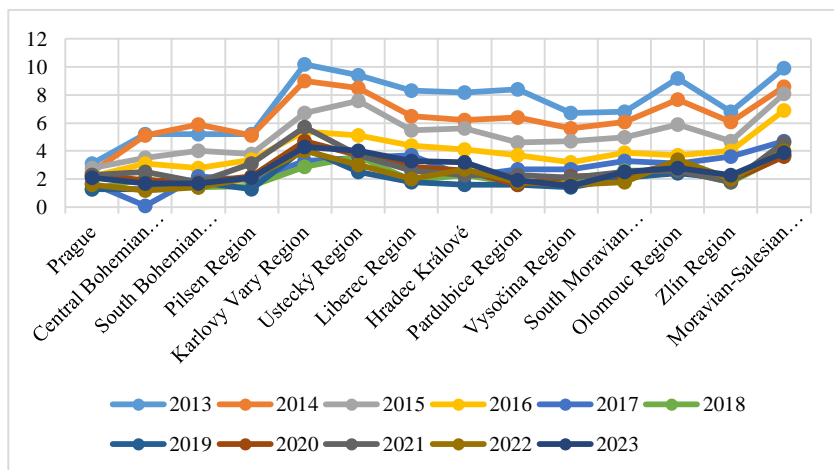


Fig. 2. Regional unemployment rates²⁰

High unemployment rates are observed in the Karlovy Vary, Ustecký, Liberec, Moravian-Silesian and Hradec Králové regions of the Czech Republic, which is due to a number of socio-economic, geographical and historical factors.

For example, the Karlovy Vary, Ustecký, Moravian-Silesian regions were traditionally based on industry, especially coal mining, glass production and heavy industry. Due to the global deindustrialisation, many enterprises were closed down, and the regions were unable to adapt quickly to the new economic conditions.

Unemployment in these regions is high among people with low levels of education and qualifications (the share of such people is higher than in central and developed regions such as Prague), and there is a problem of depopulation and ageing of the population. Young and educated people often emigrate to developed regions, which reduces the economic potential of the regions.

Due to poor infrastructure, transport accessibility, and historical problems, these regions are less attractive to new businesses and have lower investment attractiveness (for example, due to historical dependence on mono-profile enterprises, the Ustecký and Karlovy Vary regions have lower investment

²⁰ Completed by the authors: Czech Statistical Office (online). Available at: https://vdb.czso.cz/vdbvo2/faces/en/index.jsf?_af=statistiky&katalog=30832#katalog=30848

attractiveness). In these regions, the level of population mobility is lower due to the underdevelopment of the rental housing market or cultural characteristics that encourage people to stay in their home areas.

An analysis of regional unemployment allows us to identify general trends and peculiarities of its distribution in different parts of the country. At the same time, for a deeper understanding of the labour market situation, it is important to pay attention to other factors that affect unemployment. In particular, it is important to consider unemployment rates by age group, occupation, and gender, which will allow us to assess the specific challenges faced by certain categories of the Czech population (Table 1). This approach helps to develop more targeted measures to overcome labour market problems.

Table 1

Unemployment structure in the Czech Republic by age and gender²¹

Indicators	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Unemployed, thousand people, total	368,9	323,6	268,0	211,4	155,5	121,6	109,1	137,0	150,5	117,6	134,0
Gender											
Men, %	47,5	46,8	46,8	47,5	44,9	44,2	47,5	48,8	45,8	44,6	47,8
Women, %	52,5	53,2	53,2	52,5	55,1	55,8	52,5	51,2	54,2	55,4	52,2
Age group											
Young people (15–24), %.	18,6	17,4	16,3	16,4	16,1	16,4	14,8	15,3	14,3	15,7	18,2
Population of working age (25–54), %.	68,4	69,9	70,1	68,2	70,0	68,4	68,7	71,5	70,7	67,5	66,0
Population 55+, %	12,9	12,7	13,6	15,4	13,8	15,1	16,6	13,3	15,0	16,8	15,8

The decline in the share of unemployed youth (15–24) in the total number of unemployed in the Czech Republic from 18.6% in 2013 to 18.2% in 2023 may be due to several factors:

1. Improvement of the economic situation. Over the past decade, the Czech economy has generally shown growth, which has led to an increase in the number of jobs. This has had a particularly positive impact on youth employment, as the expansion of the service and technology sectors has created opportunities for entry-level positions.

2. Educational reforms and career guidance. Improvements in the education system, including the introduction of dual education (a combination of theoretical training and practical training), helped young people acquire

²¹ Completed by the authors

skills in demand on the labour market. Active career guidance has also helped to reduce the gap between education and the needs of employers.

3. Stimulating youth employment. State programmes to support young people, such as subsidising first jobs or funding internships, have helped to reduce unemployment among this group. The EU has also funded initiatives such as the Youth Guarantee, which have helped to promote employment.

4. Changes in the demographic structure. As a result of demographic changes, the number of young people in the 15-24 age group has been gradually decreasing. This has led to a decrease in competition for jobs and, consequently, the share of unemployed youth in the total number of unemployed.

5. Increased youth mobility. Czech youth have become more mobile, actively seeking employment not only within the country but also in neighbouring EU countries. This has reduced pressure on the domestic labour market.

6. Technological progress. The growing demand for workers with basic digital skills has enabled many young people to adapt more quickly to market needs. Young people are generally better prepared to work in a digitalised environment than older workers.

This decline is a positive signal, but it also points to the need for further support for young people in the transition from education to stable employment.

The data in Table. 1 also shows a decrease in the share of unemployed people of working age (25-54 years) in the total number of unemployed in the Czech Republic from 68.4% in 2013 to 66% in 2023, which is explained by several key factors Improved economic situation; demographic changes (decrease in the population in the 25-54 age group due to population ageing, which led to an increase in the share of older age groups (55+ years) in the country's labour market); expanding support for young people and older workers through employment promotion programmes, which may have changed the structure of the unemployed, reducing the share of the 25-54 age group; labour migration trends (some of the working-age population may have gone abroad in search of better working conditions, which also affected the change in the share of this age group among the unemployed).

Taken together, these factors indicate structural changes in the Czech labour market that reflect both economic and demographic processes.

Along with the decline in the share of young people and the working-age population in the total number of unemployed in the country, the share of unemployed aged 55+ increased from 12.9% to 15.8% in 2013-2023. This is explained by:

1. Population ageing. Demographic changes, including population ageing, are one of the key reasons. In the Czech Republic, as in many European countries, the proportion of elderly people in the total population is growing. This is leading to an increase in the number of older people in the labour market, among whom the proportion of unemployed is also growing.

2. Age discrimination in the labour market. People aged 55+ often face age discrimination. Employers may perceive them as less flexible, less capable of adopting new technologies, or less productive than younger workers.

3. Difficulties with retraining. Older workers may find it more difficult to adapt to rapid changes in the labour market, such as automation and digitalisation. Lack of relevant skills and knowledge makes it more difficult for them to find employment after losing their jobs.

4. Changes in pension legislation. Raising the retirement age in the Czech Republic forces people to stay economically active longer. This increases competition on the labour market, and older workers often become more vulnerable to unemployment.

5. Economic factors. Economic crises or changes in the structure of the economy, such as job losses in traditional industries that employ a large number of older workers, can also contribute to an increase in unemployment among this age group.

6. Health and motivation. Health problems in older age or lack of motivation to be actively employed may affect the ability or willingness of older people to find new work.

These factors point to the need to implement special support programmes for older people, including retraining opportunities, combating age discrimination, and creating conditions for continuing active work.

Unemployment among women and men in the Czech Republic has its own specific features, which are determined by social, economic and cultural factors. According to CSU data for the period 2013–2023, the unemployment rate among women ranged from 51.2–55.8% and was slightly higher than among men (44.2–48.8%). In 2023, the overall unemployment rate in the country was 2.6%, but gender differences were noticeable (52.2% for women and 47.8% for men). Women are more likely to face ‘hidden’ unemployment, when they do not register officially due to family responsibilities, while men may be more prone to long-term unemployment due to difficulties in adapting to labour market changes.

The main causes of unemployment among women are as follows:

1. Family responsibilities. Many women face difficulties in combining professional activities with caring for children or elderly relatives. This limits their mobility and flexibility in the labour market. The situation is exacerbated by a lack of available places in kindergartens and limited flexible working programmes.

2. Discrimination in the labour market. Women are more likely to face prejudice when being hired or fired, especially in times of economic instability. The gender wage gap can lead to less motivation for women to actively re-enter the labour market after breaks.

3. Segregation by occupation. Women are more likely to work in industries that are more susceptible to seasonality or economic fluctuations (trade, tourism, healthcare).

The reasons for unemployment among men include: a) the reduction of industrial jobs due to the introduction of technological advances in production, which leads to increased automation and reduced use of live labour; b) difficulties in finding employment due to a lack of alternative vacancies in certain regions dominated by industrial sectors, due to low male mobility; c) older men are often less ready for retraining, especially in areas dominated by soft skills or digital competencies.

An analysis of occupational unemployment in the Czech Republic shows that the labour market situation largely depends on the demand for specific professions and structural changes in the economy. For example, the growth of occupational unemployment in the Czech Republic is driven by the introduction of automation and digitalisation of production, which are replacing workers in traditional industries such as textiles and coal. This is leading to the dismissal of machine operators, assemblers and other middle-skilled technicians. The situation is exacerbated by the mismatch between modern labour market requirements and outdated curricula, as graduates do not have the necessary competencies.

At the same time, the Czech labour market is facing an acute shortage of skilled workers in key industries. Large enterprises face more difficulties in hiring workers than small and medium-sized companies (57% of large companies have problems filling vacancies, compared to 42% of micro-enterprises). The main reasons for these difficulties are the high requirements for staff qualifications and the shortage of certain specialists in the country. For example, in the engineering and manufacturing sector, there is a growing demand for engineers in mechanical engineering, electrical engineering, chemical engineering, and technical specialists for manufacturing companies. At the same time, there is a shortage of programmers, data analysts, and cybersecurity specialists in information technology (IT) due to a limited number of graduates in the relevant specialities.

Similar problems are observed in the field of medicine and healthcare, where there is a shortage of doctors, nurses and care staff, and the healthcare system is heavily dependent on immigrants. In construction, there is a shortage of skilled workers (bricklayers, plumbers, electricians) and civil engineers needed for large infrastructure projects. There is also a shortage of truck

drivers and warehouse operators in transport and logistics, and the education sector faces a shortage of teachers, especially in natural sciences such as mathematics, physics, and computer science. In agriculture, the shortage of seasonal workers is exacerbated by the low level of automation.

The significant shortage of staff in these sectors is partially compensated by workers from neighbouring countries, including Ukraine. The Czech Republic has hosted over 600,000 Ukrainian refugees, of whom over 360,000 have been granted temporary protection. Among them, about 118,000 are officially employed, with the majority working in industry, logistics, construction and services, and high-tech industries, compensating for the shortage of staff in these sectors. However, to solve the problem in the long term, it is necessary to modernise the educational system to focus on technical and natural sciences, introduce professional reorientation programmes to adapt the workforce to labour market changes, encourage production automation, and improve mechanisms for attracting and integrating foreign specialists.

The level of education has a significant impact on the likelihood of being unemployed. People with secondary education without specialisation have a higher unemployment rate, as they tend to hold low-paid or unskilled positions that are most susceptible to redundancy. People with vocational education face slightly lower unemployment rates due to their specialised skills that meet labour market needs, especially in technical fields. The lowest unemployment rate is observed among people with higher education who hold specialised or managerial positions that are less vulnerable to economic changes. The exception is specialities with limited career prospects.

The unemployment rate in the Czech Republic has a pronounced seasonal pattern that affects the economy and the labour market. In winter, between December and February, unemployment increases due to a reduction in seasonal work in construction, agriculture and tourism. The increase in the number of registered unemployed is particularly noticeable in January, when temporary contracts in industries related to the Christmas holidays expire.

In the spring, from March to May, unemployment begins to decline as construction work intensifies and tourism and agriculture prepare for the summer season. During this period, demand for workers in industries dependent on favourable weather conditions increases.

Summer, from June to August, is characterised by the lowest unemployment rate. Seasonal jobs in tourism, hospitality, agriculture and transport are becoming more active. In addition, temporary jobs are often filled by students, which increases overall employment.

In autumn, between September and November, the unemployment rate gradually increases as seasonal work in agriculture and tourism ends. In late autumn, the number of temporary positions decreases before the winter period.

Studies show that a significant share of the unemployed find temporary or part-time employment in the informal sector, particularly in low-skill industries. It is estimated that up to 20-25% of the officially registered unemployed may be working illegally, which poses serious challenges for state control and the social security system.

The shadow economy has a significant impact on the Czech labour market. It includes a wide range of activities in the construction, hospitality, retail, domestic and care sectors. Employees in these sectors often work without formal contracts, in small firms with violations of labour laws, or as self-employed persons who only partially register their income. Foreigners, in particular migrants, make up a special part of the shadow sector, facing language barriers, legal restrictions or difficulties with documents. The impact of the shadow economy on the formal labour market is multifaceted. Participation in the shadow economy allows for tax avoidance, which reduces public resources and limits funding for social programmes. Workers in the shadow sector are deprived of social guarantees such as pensions, health insurance or accident compensation, which increases their economic vulnerability. Shadow activities create an unfair playing field for formal businesses, forcing them to compete with illegal structures that reduce labour costs. This can put downward pressure on wages in the formal sector. Despite the negative aspects, the shadow economy acts as a buffer in times of economic instability, providing income for those who cannot find formal employment.

Geopolitical events, including the war in Ukraine, are having a significant impact on the labour market, creating both challenges and opportunities. Geopolitical conflicts are changing the structure of employment, increasing the demand for specialists in IT, logistics, engineering, defence and infrastructure restoration. Sanctions against Russia and restrictions on international trade are also affecting the labour market, causing job losses in import-dependent industries.

The Czech labour market is also affected by the country's participation in European programmes aimed at integrating refugees through language courses and vocational training, as well as at developing small and medium-sized businesses, creating new jobs. International labour mobility within the EU allows Czechs to gain experience abroad and attract foreign specialists.

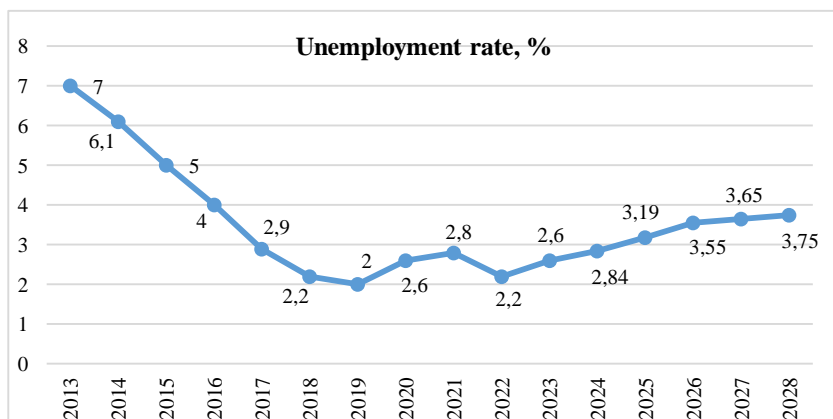
Thus, geopolitical developments and international cooperation, especially within the EU, have a profound impact on the Czech labour market. They can bring about both positive and negative changes, but in general, support for the integration of migrants and active social assistance programmes contribute to the adaptation and development of the labour market.

3. Features of the social policy of the Czech Republic

Unemployment in the Czech Republic remains one of the lowest in the European Union, which is a testament to the stability of the labour market. The main factors behind the low unemployment rate are a developed economy, active integration of migrants, cooperation with the EU and effective social policy aimed at supporting employment.

At the same time, the labour market faces certain challenges, such as shortage of skilled workers in certain industries, in particular in IT, medicine and technical professions; regional imbalances in the level of employment; growing pressure on the social security system due to demographic changes and the integration of refugees.

Forecast data on unemployment in the Czech Republic for the period 2024–2028, obtained using the ARIMA method, are shown in Fig. 3.



**Fig. 3. Unemployment rate
in the Czech Republic for the period up to 2028²²**

The unemployment rate is forecast to gradually increase if inflation stabilises and GDP growth remains moderate. The lowest unemployment rate is expected in 2024 (2.84%), followed by a slight increase to 3.75% in 2028.

In order to prevent a significant increase in the unemployment rate in the Czech Republic, it is necessary to ensure the implementation of reforms aimed at improving the skills of the workforce, stimulating the mobility of workers and creating new jobs in depressed regions. An important role in this process is played by the country's social policy, which is focused on a combination of

²² Completed by the authors

effective integration of workers into the labour market, support for families and cooperation with the EU. Compared to other EU countries, the Czech Republic pays more attention to flexible solutions that take into account both the needs of the domestic market and external challenges, including migration processes. This makes its social policy one of the most adaptive in the Central European region.

The authors conducted a SWOT analysis of Czech social policy, which showed that the country has strong support from the EU and has a developed infrastructure. However, the Czech Republic faces challenges such as demographic changes and economic risks. To strengthen the system, it is important to introduce innovations, streamline bureaucratic processes, and continue to adapt to new geopolitical and economic realities (Table 2).

Czech social policy has a number of features that distinguish it from other EU countries:

1. Unlike many Southern European countries, the Czech Republic traditionally has one of the lowest unemployment rates in the EU (2-3% in the Czech Republic, 6-7% on average in the EU) and is more efficient in adapting to changes in the labour market. This is achieved through active cooperation between the government and employers, the development of retraining programmes and the integration of migrants.

2. The Czech Republic actively attracts foreign labour, in particular from Ukraine, Slovakia and Poland, which is not always the case in countries with high unemployment, such as Italy or Greece. The emphasis is on rapidly integrating migrants into the labour market through language courses, vocational training and simplified administrative procedures. In many other countries, integration is slower due to more complex bureaucracy.

3. The Czech Republic stands out for its large-scale support programmes for families with children, including long paid maternity leave, state subsidies for childcare and the development of a kindergarten system. This significantly distinguishes it from Western European countries, where more attention is paid to gender equality in the distribution of family responsibilities rather than the length of leave.

4. Czech social policy actively supports the development of vocational education and training, working with employers to ensure that workers' qualifications meet market needs. This is especially important in the context of a shortage of specialists in certain industries.

5. The Czech Republic has a well-developed, but less 'generous' social welfare system compared to Nordic countries such as Sweden or Denmark. Social assistance in the Czech Republic is targeted at specific needs rather than universal provision, as in many Western European countries.

Table 2

SWOT analysis of the Czech social policy²³

<p>Strengths:</p> <ul style="list-style-type: none"> – Developed social protection system: The Czech Republic has an effective system of unemployment support, pension provision and health insurance programmes that cover the majority of the population. – Support from the EU: Participation in European funds, such as the European Social Fund, provides additional funding to address social issues. – Integration of migrants: Successful integration programmes, including language courses, vocational training and employment, help refugees adapt and reduce social tensions. – High level of social mobility: Investments in education and vocational training contribute to the upskilling of the labour force 	<p>Weaknesses:</p> <ul style="list-style-type: none"> – Overburdened social system: The large flow of migrants and refugees puts additional pressure on the social security system. – Shortage of workers in key sectors: Despite support for migrants, some sectors, such as healthcare and education, face a shortage of skilled workers. – Bureaucracy: Complex administrative procedures slow down the implementation of social programmes and access to assistance. – Dependence on external financing: A large part of social programmes is financed by European funds, which creates risks in case of a reduction in EU support.
<p>Opportunities:</p> <ul style="list-style-type: none"> – European cooperation: Further use of EU programmes such as Europe 2020 to develop social infrastructure and create jobs. – Integration of innovations: The introduction of digital solutions in the social sector can simplify access to services and increase the effectiveness of programmes. – Demographic diversification: Migration can be a resource for addressing the demographic crisis and replenishing the labour market. – Education reforms: Training in high-demand fields such as IT and medicine can reduce the shortage of specialists. 	<p>Threats:</p> <ul style="list-style-type: none"> – Economic fluctuations: Global economic crises may reduce funding for social programmes. – Social tensions: Popular discontent due to migration or inequality in access to social benefits can lead to conflict. – Population ageing: Increasing pressure on pension and healthcare systems due to an ageing population. – Political instability: Changes in political direction may lead to reduced investment in social services.

6. The Czech Republic actively attracts funds from European funds to develop the labour market and implement social projects. In some other EU countries, especially more economically developed ones, the dependence on such funds is less pronounced.

²³ Completed by the authors

7. The Czech minimum wage policy ensures a gradual increase in the minimum wage, but the level of the minimum wage is still lower than in wealthier Western European countries. This promotes competitiveness on the labour market, but has certain social risks.

8. In the Czech Republic, the unemployment problem is largely concentrated in certain regions (e.g. Ustecký and Moravian-Silesian regions), while in other countries, such as Spain or Greece, the unemployment problem is more nationwide.

The advantages of Czech social policy are:

- Czech retraining programmes are highly effective. Low unemployment indicates successful workforce adaptation to market needs;
- the Youth Guarantee programme supports quick employment for graduates;
- subsidies and tax benefits encourage employers to hire the long-term unemployed and people with disabilities;
- migration policies help address shortages in key sectors like construction, manufacturing, and healthcare (Table 3).

Table 3

Advantages of Czech social policy in the context of the EU²⁴

Indicator	Czech Republic	Other EU countries
Unemployment rate	2–3 %	EU average – 6–7 %, Spain, Greece – 12–14 %
Active employment policy	Retraining, subsidies	Similar programmes, but less effective (e.g. in Greece)
Youth support	Strong programmes	In many countries, not enough attention is paid (Italy, Spain)
Regional issues	Problematic regions in the north	Much larger disparities in Italy or Greece

The shortcomings of Czech social policy include the following:

- remote regions face a job shortage due to insufficient investment;
- older individuals, women after maternity leave, and Roma communities have fewer employment opportunities because of inadequate support programmes;
- dependency on migrants may lead to labour market tension if geopolitical situations or regulations change;
- the Czech Republic lags behind Scandinavian countries in preparing workers for automation and digitalisation.

²⁴ Completed by the authors

At the same time, the Czech social policy has similarities with social programmes in the EU. Like other EU countries, the Czech Republic fulfils its obligations under the European Employment Strategy, which aims to reduce unemployment. Most EU countries, including the Czech Republic, use passive measures (unemployment benefits) and active programmes (training, retraining, subsidies). Like other countries, the Czech Republic has programmes for young people, the long-term unemployed, people with disabilities and migrants. Like most EU countries, the Czech Republic receives funding from the European Social Fund (ESF) for retraining and job creation projects.

Czech social policy in the field of unemployment is an example for many EU countries due to its effectiveness and comprehensive approach. The main areas of its application in the fight against unemployment in the future include the following measures:

1. Implementation of an active employment policy:
 - vocational training and retraining: organisation of courses to improve skills or learn new professions, especially in sectors where there is a shortage of workers (IT, medicine, engineering);
 - stimulating youth employment: internship programmes, support for first jobs for graduates, and motivational measures for employers;
 - support for the long-term unemployed: development of special programmes for people who have been out of work for a long time, including individual employment plans.
2. Promotion of entrepreneurship:
 - financial support for small and medium-sized businesses: providing grants, soft loans and consultations for the creation or expansion of businesses that create new jobs;
 - stimulation of self-employment: training in business basics and tax benefits for the self-employed.
3. Integration of migrants:
 - development of integration programmes that include language courses, vocational training and ensure adaptation of foreigners to the local labour market;
 - simplification of procedures for obtaining a work permit and access to vacancies in high-demand sectors.
4. Support for vulnerable groups:
 - creation of inclusive workplaces, adaptation of working conditions for people with disabilities, financial support for employers hiring people with disabilities;

- to support women with children by creating conditions for combining work and family responsibilities, for example, developing a system of kindergartens and flexible work schedules.

5. Cooperation with employers:

- provide subsidies for job creation and guarantee preferential taxation for companies that hire the unemployed;
- development of dual education, organisation of joint work of enterprises and educational institutions to train specialists that meet market requirements.

6. Investments in regional development:

- to create jobs in regions with high unemployment through infrastructure development, support for local businesses and investment;
- to develop programmes to create jobs in agriculture, tourism and other sectors and areas

7. Use of European programmes:

- financing of projects to increase employment, vocational training and social integration of the unemployed by attracting funds from the European Social Fund (ESF);
- involvement of the Czech Republic in the implementation of programmes to promote sustainable growth and job creation in line with the EU's strategic objectives.

Implementation of the proposed measures will provide a multifaceted approach to reducing unemployment by stimulating economic activity, entrepreneurship and improving the skills of the workforce.

CONCLUSIONS

The Czech Republic has demonstrated success in the field of social policy, which has helped to reduce unemployment and ensure labour market stability. Through the integration of active employment support measures, human capital development and strategic partnerships between different sectors, the Czech Republic has created an effective model of socio-economic development.

One of the key achievements of Czech policy is the expansion of vocational training and retraining opportunities. This allows workers to adapt to rapid changes in the labour market, including the challenges of automation and structural economic transformation. Programmes that include subsidies for employers and support for career counselling ensure the smooth integration of citizens into new employment sectors.

Czech social policy also successfully promotes entrepreneurship and self-employment. Thanks to government grants, access to business counselling and specialised support programmes, many citizens have started their own

businesses, which has not only reduced unemployment but also boosted economic activity in the regions.

The Czech Republic's social policy pays special attention to the integration of vulnerable groups, such as young people, the elderly, women on maternity leave and people with disabilities. Through the development of flexible employment programmes, specialised trainings and government support, these groups have access to stable employment, which helps to reduce social inequality.

The Czech experience offers valuable lessons that can be integrated into the social strategies of other countries:

- 1) social policies need to be flexible, able to respond to economic and social changes such as technological innovation, globalisation or crises;

- 2) support for education, vocational training and retraining is critical to improving the skills of the workforce and its competitiveness in the global labour market;

- 3) effective implementation of social policy requires active cooperation between government, business and civil society organisations to ensure inclusive development;

- 4) to achieve long-term results, funding must be stable, which is possible through the rational use of domestic resources and international support.

The Czech model shows that a strategic approach to social policy can significantly reduce unemployment, boost the economy and ensure social stability. Other countries, taking into account these lessons, can adapt this experience to their national circumstances, which will contribute to a fairer and more sustainable labour market.

SUMMARY

The research studies the impact of social policy in the Czech Republic on unemployment and analyses its key aspects. Using econometric methods, correlation analysis, comparative approach and time series analysis, the authors assess the effectiveness of measures aimed at supporting employment. Particular attention is paid to vocational retraining programmes, entrepreneurship promotion and integration of vulnerable groups into the labour market.

The results of the study demonstrate the systematic and successful impact of Czech social policy on reducing unemployment, which remains one of the lowest in Europe. The article also presents a time-series forecast of the unemployment rate until 2028, which takes into account economic, demographic and social factors.

The authors discuss potential challenges to maintaining the achieved employment levels, such as regional disparities and the risks of global economic changes, and offer recommendations for improving social policy.

The study is useful for analysing employment policies in other countries and for adapting the Czech experience to different economic and social conditions.

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