

CZECH LABOUR MARKET AND ITS POSITION IN INTERNATIONAL COMPETITIVENESS RANKINGS

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Abstract

In the years of economic recovery, the professional activity of the population in the Czech Republic has increased, but the labor demand side is struggling with a shortage of skilled labor. As a result, the imbalance in the labor market is deteriorating, which is an obstacle to the growth of labor market efficiency in the Czech Republic. The aim of the paper is to verify how the Global Competitiveness Index and the Competitiveness Index of the EU countries reflect current labor market problems in the Czech Republic. The subject of the analysis is sub-indices concerning the labor market situation: the index of education and training and the index evaluate the labor market and its effectiveness. The sub-index evaluating the level of education was included because well-trained workers who can adapt quickly to changing economic environments are prerequisites for effective use of new technologies and the timely and an effective transfer of a new knowledge into practice.

Key words: labour market, higher education and training, labor market efficiency, employment, competitiveness index

JEL Code: J11, J21, I25

Introduction

Economic problems typically occurring in the financial market lead to changes in the commodity market and the labor market (in the form of changes in the employment level and structure). The decline in labor demand caused by the economic crisis is documented by numerous expert sources (eg. Neumeyer & Perri, 2005, Andolfatto, 1996). This situation causes changes on the labor side: on the one hand, labor supply is declining as some people do not register at the employment office and do not have the status of the unemployed. It will only return to the labor market when it improves the prospects for a job. (Blundell et al., 2008, Pissarides, 2000). On the other hand, labor supply is increasing as a result of other workers who were professionally inactive on the labor market and come from families whose income

has fallen due to job losses (Cahuc & Le Barbanchon, 2010). The economic downturn generally reduces professional activity, while economic recovery is characterized by an increase in demand for labor and a falling unemployment rate. (Pissarides, 2000; Coile & Levine, 2007).

The theoretical basis shows that the economic crisis is causing unemployment, economic recovery means the opposite phenomenon, including changing the level and structure of the labor market and the required work activities. The labor market in the Czech Republic faces a labor shortage in the current phase of the recovery, whether it is a highly skilled worker or a craft profession (linking to elementary school). The aim of this work is to verify how the labor market in the Czech Republic responds to current changes in economic conditions and how the index of global competitiveness and the index of competitiveness of the EU countries reflect current problems in the labor market in the Czech Republic. We will focus especially on sub-indexes related to the situation on the labor market, ie on the index evaluating education and training, and the index evaluates the labor market and its effectiveness, respectively the labor market and employment. The market response to the development of the economy depends on many factors, the most important are the level of economic development and the structure of the economy. All comparisons will therefore only apply to so call Vysehrad group of countries: these countries have a similar level of economic development and are characterized by a similar employment structure.

The research problem determines the methodology that has been used. An analysis of labor market developments is based on data published by the World Economic Forum (Global Competitiveness Report and Europe 2020 Competitiveness Report). 2011 was chosen as the start of the period under review as positive economic trends have been unambiguous since this year. The method of statistical analysis was used to capture specific changes in the various indicators characteristic of the current situation and for the development on the labor market, especially the index method.

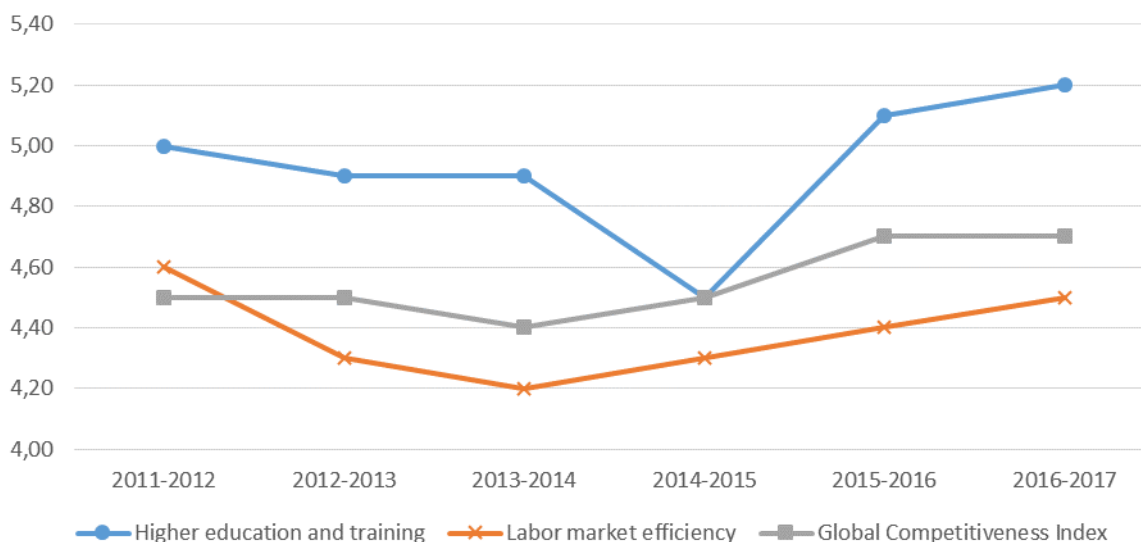
In the following, the situation of the Czech Republic will be analyzed through the Global Competitiveness Index (GCI) and the EU Competitiveness Index (ECI). Given that the analysis of the Czech labor market is the subject of our analysis, we will focus only on indicators evaluating the quality of education and training and the efficiency of the labor market and employment. Europe's competitiveness is assessed on the basis of available quantitative data, such as information on the rate of unemployment from respected institutions and data from the Executive Opinion Survey (EOS). The overall GCI and ECI score is given

by the average of individual points of seven pillars: the score ranges from one to seven (higher values mean better results). The Global Competitiveness Index has been published by the World Economic Forum for several years: it has allowed to capture the development of education and training quality and labor market efficiency in years 2011 to 2017. The 2020 index has been published only in 2012 and 2014 (The Europe 2020 Competitiveness Report 2012 and 2014).

1 Global Competitiveness Index (GCI)

Fig. 1 illustrates the development of the Global Competitiveness Index and the Education and Training and Labor Market Efficiency indexes over the last six years.

Fig. 1: GCI, Higher education and training and labor market efficiency



Source: World Economic Forum, 2011-2017, The Global Competitiveness Report

The view of the last six years seen captured by tab. 1 shows that the education and training has improved to a final value of 5.2. However, figures illustrating labor market and employment efficiency have not improved favorably over the last six years: a decline from 4.6 in 2011 to 4.2 in 2013. The final estimate of 4.5 in 2016 remained below the target of the starting year. (This trend was typical for all Visegrad countries.)

Tab. 1: GCI, Higher education and training and labor market efficiency

		2011- -2012	2012- -2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017
Higher education and training	Score	5.0	4.9	4.9	4.5	5.1	5.2
Labor market efficiency	Score	4.6	4.3	4.2	4.3	4.4	4.5
Global Competitiveness Index	Score	4.5	4.5	4.4	4.5	4.7	4.7

Source: World Economic Forum, 2011-2017, The Global Competitiveness Report

A more detailed view of the development of monitored indexes will allow data given in the following two tables. Tab. 2 shows the development of individual indicators of the Education and Training Index in the last six years. Higher quality of education and training is necessary for increasing the efficiency of the labor market. Well-educated workers who are easy to adapt to a changing economic environment are prerequisites for efficient use of new technologies and a precondition for timely and effective transfer of new knowledge into practice.

The data from table 2 show that the secondary and tertiary education enrollment rate has been increasing in the last six years. In the case of quality indicators of education and schools, the average score was stabilized at 4: a slightly lower score on average was the indicator of Quality of the education system at 3.8, a better quality of math and science education at 4.1 and Quality of management schools at 4.1.

Tab. 2: Higher education and training

	2011- -2012	2012- -2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017
Secondary education enrollment rate gross %	94.9	90.4	90.8	96.6	96.6	105.1
Tertiary education enrollment rate gross %	58.3	60.7	64.9	64.2	64.2	66.0
Quality of the education system	4.1	3.9	3.7	3.6	3.8	3.9
Quality of math and science education	4.1	3.8	4.0	4.1	4.3	4.4
Quality of management schools	4.0	3.8	4.0	4.3	4.3	4.2
Internet access in schools	5.8	5.8	5.8	5.8	5.4	5.3
Local availability of specialized training services	5.2	5.1	5.0	4.9	5.1	5.3
Extent of staff training	4.3	4.2	4.0	4.1	4.3	4.5

Source: World Economic Forum, 2011-2017, The Global Competitiveness Report

Tab. 3 shows the development of the individual sub-indices of the Labor Market and Employment Index in the last six years. Efficiency in the labor market is a condition for the economy's ability to mobilize human resources to secure economic growth. Labor market

flexibility is very important for the allocation of workers so that they can be used in the economy as efficiently as possible. Effective labor markets must allow a rapid transfer of workers between economic activities, ensure a clear relationship between earnings and effort.

Tab. 3: Labor market efficiency

	2010- -2011	2011- -2012	2012- -2013	2013- -2014	2014- -2015	2015- -2016	2016- -2017
Cooperation in labor-employer relations		4.5	4.3	4.2	4.5	4.7	4.5
Flexibility of wage determination		5.2	5.2	5.2	5.4	5.8	4.7
Hiring and firing practices		3.2	3.4	3.3	3.2	3.5	3.5
Redundancy costs weeks of salary		22	22	20.2	20.2	20.3	20.3
Effect of taxation on incentives to work		-	-	2.7	3.1	3.3	3.3
Pay and productivity		4.4	4.5	4.6	4.6	4.7	4.7
Reliance on professional management		4.7	4.5	4.4	4.5	5.1	5.3
Country capacity to retain talent		-	-	2.8	3.3	3.6	
Country capacity to attract talent		3.2	3.3	3.2	3.1	3.2	3.3
Female participation in the labor force ratio to men		0.78	0.78	0.78	0.80	0.81	0.81

Source: World Economic Forum, 2011-2017, The Global Competitiveness Report

The evolution of individual indicators of Labor market efficiency has been different over the last six years: the evaluation of the indicators in Labor-Employee Relations and Country Capacity to attract talent was - on average - stable (4.5 in the first and 3.2 in the second case). The Flexibility of wage determination dropped from a default of 5.2 to 4.7, and the Redundancy costs weeks of salary dropped from 22.0 to 20.3. A slight increase can be registered for the Pay and Productivity indicator (from 4.4 to 4.7), Reliance on professional management (from 4.7 to 5.3) and Female participation in the labor force ratio to men (from 0.78 to 0.81).

In terms of selected GCI indexes, it is possible to evaluate the Czech Republic's position in comparison with other V4 countries favourably: values of sub-indices Education and Training and Labor and Employment are ranked 1st or 2nd among Visegrad Group countries. Within the monitored sub-indices, the Czech Republic has a comparatively high level of higher education and training as well as the EU-28 average.

2 Europe 2020 Index (ECI)

Assessing Europe's competitiveness through Europe 2020 Competitiveness Index is based on publicly available quantitative data such as Internet penetration rates and unemployment rates from respected institutions, and the EOS, a survey of executives conducted annually in more than 140 countries. It provides data on different Qualitative aspects of competitiveness for which statistics are unavailable (eg. Quality of the education system). The latest statistics come from 2013.

The seven key dimensions of the Europe 2020 strategy (Enterprise environment, Digital agenda, Innovative Europe, Education and training, Labour market and employment, Social inclusion and Environmental sustainability) are represented in a seven-pillar framework. Combined, these seven pillars create the Europe 2020 Competitiveness Index. All results are listed on a scale from one to seven where higher values point to higher performance. Within the framework of the ECI, especially the 4th and 5th pillar - Education and training pillar and Labor market and employment - characterizes the conditions and prerequisites for labor market development.

The 4th pillar - Education and training - measures the proportion of the population participating in secondary and tertiary education and the quality of the education provided. The scope of employee training is also taken into account, as only continuous training at the workplace can ensure continuous improvement in skills of workers.

The 5th pillar - Labour market and employment - measures the ability to mobilize all human resources to ensure economic growth. Efficiency and flexibility of the labor market enable the most efficient use of labor, enabling workers to move quickly from one economic activity to another. At the same time, they need to be motivated to make the most of their work. Effective labor markets must ensure a clear link between workers' incentives and labor productivity and equality between women and men. Together, these factors have a positive impact on the performance of workers and the attractiveness of the country for workers with specific talents: two aspects important in the context of the lack of work of specific skills and talents at present.

Tab. 4 illustrates the Europe 2020 Competitiveness Index and the sub-indices - Education and Training and the Labor Market and Employment in available years, ie 2012 and 2014 and the 2010 aggregate index (rank out of 28). The Czech Republic was in 18th place in 2014, with four places down from the 2010 rating.

Tab. 4: Rankings and Scores of the EU Member States in 2010, 2012 and 2014

	Europe 2020 Index 2010		Europe 2020 Index 2012		Europe 2020 Index 2014	
	Rank	Score	Rank	Score	Rank	Score
Europe 2020 Index	14	4,5	16	4,5	18	4,33
Education and Training			16	4,82	21	4,76
Labour market and employment			14	4,35	14	4,18

Source: The Europe 2020 Competitiveness Report 2012, 2014

The data from the above table shows that the evaluation of the Czech labor market through ECI, namely the education and training sub-index, deteriorated from 4.82 in 2012 to 4.76 in 2014. (Rating of the Czech Republic fell from the 16th to the 21st place.) Similarly the labour market and employment sub-index, deteriorated from 4.35 in 2012 to 4.18 in 2014. From the point of view of labor market development conditions, alarming worsening of the evaluation in the field of education and training over the last four years has been observed.

Conclusion

The statistical analysis allows the following conclusions to be drawn: In the context of economic recovery, the professional activity of the population in the Czech Republic increased. The demand for jobs has invoked people outside the labor market, but most of them have low or insufficient qualifications due to current labor market requirements. As a result, labor market imbalances are exacerbated, impeding the growth of labor market efficiency in the Czech Republic.

The Global Competitiveness Index and the Competitiveness Index of the EU countries only reflect the current labor market problems in the Czech Republic. Data showing the effectiveness of the labor market and employment within the Global Competitiveness Index has not improved favorably over the last six years and the final assessment in 2016 remained below the value of the start-up year. The evaluation of ECI, in particular education and training and the labor market and employment sub-index, has deteriorated.

It is, of course, gratifying that the Czech Republic is considered in the WEF documents as a country characterized by an efficient labor market with a healthy relationship between wage and labor productivity. The reason for the relatively positive overall assessment and relatively small capture of the current problems in the labor market in the Czech Republic is seen in relatively small representation of objective (hard data). WEF, the Global

Competitiveness Report, the output of the Global Competitiveness Index and the EU-28 Competitiveness Report publishers, relies heavily on questionnaire surveys (four fifths of individual indicators for GCI and nearly two-thirds in the 2020 index).

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