

## THE NOVELTY AND CHALLENGES OF LABOUR SHORTAGE

Cseh-Papp, Imola – Varga, Erika

### Abstract

*According to global experience modern economies and societies are facing several challenges nowadays. One of them is unemployment and labour shortage. Despite the significant rise in employment there are still several controversies on the national labour market on the basis of which the situation cannot at all regarded to be favourable. Currently the labour market is characterised by the simultaneous prevalence of unemployment and labour shortage, i.e. single employees are unable to find a job and employers face the difficulty of finding employees with proper qualification. If labour shortage becomes graver, severe consequences may arise with an impact on the economic situation of a country or a region resulting in curbing production, lower investment fever and even ruining enterprises. A solution to the problem can lie in transforming education, increasing salaries, improving working conditions and employing incentives to keep the current employees. The paper presents the issue of national labour shortage in practice (by illustrating with concrete figures) and theory.*

**Keywords:** labour, shortage, economic, labour market, demand, supply, equilibrium

**JEL CODE:** J01, J24

## Összefoglalás

Globális tapasztalat, hogy a korszerű gazdaságok és társadalmak számtalan kihívással néznek szembe, melyek egyike a munkanélküliség és a munkaerőhiány. Annak ellenére, hogy a foglalkoztatottak száma jelentősen emelkedett az elmúlt pár évben, mégis több ellentmondás található a hazai munkaerőpiacon, amelyek alapján az összkép közel sem mondható kedvezőnek. A munkaerőpiac jelenlegi helyzetére a munkanélküliség és a munkaerőhiány egyidejű jelenléte jellemző, tehát az, hogy egyes munkavállalók nem tudnak elhelyezkedni, a munkáltatók pedig nehezen tudnak a szükséges képesítéssel rendelkező munkavállalókat találni. Amennyiben a munkaerőhiány kiterjedtebbé válik az akár egy ország, vagy régió gazdasági életére is súlyos következményekkel járhat: visszavetheti a termelést, csökkentheti a vállalkozások beruházási kedvét, vállalkozásokat tehet tönkre. Megoldást jelenthet a problémára a képzési rendszer átalakítása, a béremelések, a munkakörülmények javítása, illetve a munkavállalók megtartására különböző ösztönzőeszközök alkalmazása. A tanulmány a hazai munkaerőhiány kérdéskörét járja körbe elméleti és gyakorlati (konkrét adatokkal alátámasztva) kontextusban.

**Kulcsszavak:** munkaerő, hiány, gazdasági, munkaerőpiac, kereslet, kínálat, egyensúly

**JEL:** J01, J24

## Introduction

After 1990 Hungary suffered a deep crisis and it became evident that the economic structure constructed in the socialist era is not competitive in connecting to global economy so it led to closing down several companies and higher unemployment rate. The relation between labour force and job changed, participation in organisational decision making rose and the content of job descriptions was radically transformed. The structure of employment also changed with the numerical data and importance of the single categories, their appreciation in monetary terms and social prestige. For two and a half decades unemployment came to stay.

For experts the definition of István Gábor R.<sup>1</sup> (Gábor, 1990) on unemployment and labour shortage sounds familiar. János Kornai annexed this by adding that the chronic labour shortage was typical of the classical social system. Labour market sometimes produces strange things: four decades after the economic and social regime change labour shortage and unemployment coexist.

## Material and methods

### *Forms of labour shortage*

Labour shortage is a phenomenon of the labour market where available jobs cannot be filled. While analysing the term, a distinction must be made between quantitative and qualitative labour shortage (Nagy-Kónya, 2017).

Quantitative shortage occurs when demand for labour exceeds supply and it is difficult to recruit people for vacant positions. In this scenario the high ratio of vacant jobs is coupled by low rate of unemployment. Quantitative labour shortage can be caused by economic growth if there is a greater demand for the product and services of a certain sector or if the relative price of the factors of production has been changed. The decrease in labour supply can also result from demographic trends. If the number of cohorts exiting the labour market is higher than the number of career starters who enter the labour market, i.e. the ageing of the society is typical, it can also lead to shortage of labour. It is also affected by the migration of the labour force of working age. When the highly qualified part of the active aged population mi-

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<sup>1</sup> Theoretically, we speak about unemployment on the labor market of a country or area if part of those on the established payment levels cannot at all or can hardly find an acceptable job only after a shorter or longer period. Labor shortage is equilibrium reversed: on the established salary level part of the employers cannot or only after a shorter or longer period can find proper employees.

grates such as doctors or engineers, it is called brain drain. If the quantitative labour shortage is apparent on the regional level, over-demand (lower level of supply) for labour is generated due to the geographical inequalities of the supply and the demand side of the labour market. In this case labour shortage is the consequence in some regions of the country while there is oversupply in others despite of adequate labour force. The regional inequality of the labour market results in high unemployment rate and constant labour shortage due to the low mobility level of employees.

In the case of qualitative labour shortage demand for labour is higher than the supply of these segments in one of the segments of the labour market such as a particular sector, a concrete job or a given level of qualification. Qualitative labour shortage is apparent if labour demand and supply are at a relative equilibrium, i.e. the ratio of vacant jobs is great and unemployment rate is also high. This phenomenon can basically be derived from the discrepancy of the decisive features of supply and demand in the labour market which can be generated by the importer qualification level of job seekers or their job preferences. Typically, the output of education does not meet the requirements from the demand side of the labour market. One of the reasons, among others, could be the lack of adequate competences required for the job (Keczer, Szabó 2016). Differences in the preference system of employees and employers can cause problems only if the job seeker of active age fit for the job is not willing to accept the job offer under the specified circumstances such as payment and salary, or due to the low productivity level of the company the employer is not in the position of paying a decent salary to the employee. It is a special form of a case when the job preferences of the parties do not meet.

### ***Reasons for current labour shortage***

The current state of the domestic labour market can be described by labour shortage partly due to ageing population and the economic crisis and also the fact that it is difficult for the employers to find suitably qualified employees. Several recent research (Budavári-Takács – Csehné -Jekkel, 2015; Csehné-Martón-Szarvák, 2015; Juhász, 2016; Kiss-Barizsné, 2016; Csehné-Varga-Szabó-Szira-Hajós, 2017; Rudnák-Hordós, 2017) highlights that one of the greatest barriers to the labour market participation of the young is that there are few opportunities that join education and work. A special shortage is apparent in ensuring proper internship and practical training that would ease labour market entrance. One of the most delicate consequences of labour shortage is the dissatisfaction of the talented employees. Labour shortage does not by any means equal the lack of talented employees and their distinction is a must (Héder, Dajnoki, 2007, Bujdosó, 2009).

One of the principal reasons for labour shortage is that the available labour force does not possess the skills and knowledge required. On the one hand, a lot of people acquire higher education degrees and few learn a trade. On the other hand, there are grave problems in primary and secondary education that are also supported by the results of the PISA tests. Our educational system still puts the emphasis on the lexical knowledge of the young instead of improving their problem solving skills. This is the case in higher education, as well. It is accompanied by the fact that the proactivity of the young is not improving properly at these institutions (Mészáros, 2017). Another barrier is lack of adequate language knowledge. Most enterprises do not cooperate with universities or secondary schools that would lead to lack of proper specialist knowledge. Such a system of education is required that would make it possible for the companies to employ career starters and reflect labour market needs so at least 10-12 years must pass for the educational system to let the post-reform generation enter the labour market.

Labour shortage in Hungary can also have demographic origins. Due to the decrease in the working age population approximately 40-50 thousand fewer employees work in Hungary annually. Nearly 90 thousand children are born a year while it amounted to 220-230 thousand in the 1950's. This reduction can be felt on the labour market and the situation will be much graver if the so-called Ratkó children (named after the former minister of social welfare in the 1950's) retire. Unfortunately, this situation will surely not substantially change in the forthcoming decades.

A further cause of labour shortage is regional inequality typical of the Hungarian economy and also lack of geographical mobility. According to the data of the Central Statistical Office (CSO) more than half of the vacant positions can be found in the Central Hungarian region but the unemployed of the region amount only to one-quarter of the total number of unemployed. Based on the data it can be concluded that there is a significant labour force surplus in the country. Unfortunately, most labourers do not live where there would be actual demand for them. Employees are not mobile enough and would not want to work in the more remote parts of the country. The research of Czeglédi-Juhász (2015) stresses that companies are prejudiced with career starters.

With the free flow of labour within the European Union an outflow of labour force started in Hungary during which a certain layer of employees decided on leaving the country for higher salary and better living standard. It is estimated that 400-500 thousand highly qualified and vocational workers have gone to work abroad lately.

The low level of wages can also explain labour shortage. Although some labour surplus exists in Hungary there are still some who are not willing to work for low salary. As a result of high contributions wages significantly lag behind the ones of our regional competitors.

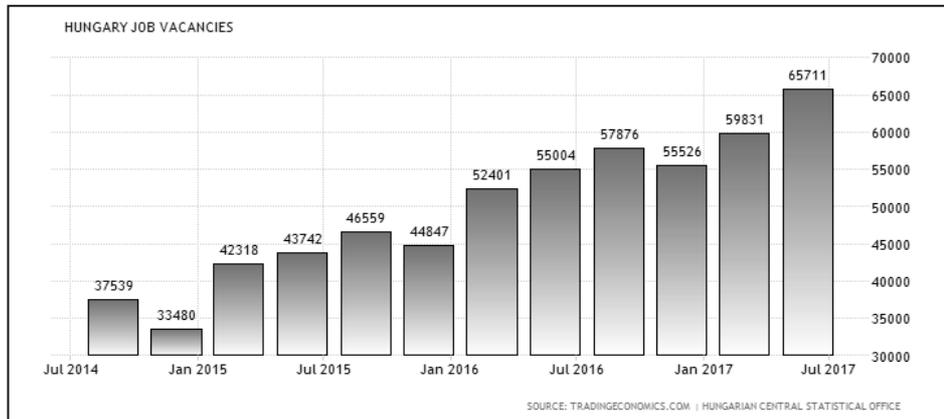
The internal corporate problems can also explain labour shortage. Too many conflicts, inadequate working conditions, bad corporate culture, overburdened employees, lack of career prospects and cooperation can make employees leave the company after a while. These are most frequently rooted in the management. Experience shows that it needs a long time for vacancies to be filled so several companies should place more emphasis on keeping their employees.

Nowadays the so called 'migrating birds' phenomenon is also regarded as one of the causes of labour shortage. Migrating birds is the label used for employees who go around a region with the hopes of higher salary and brighter prospects. Many employees follow this principle so fluctuation is high that can lead to other problems. Manufacturing firms, for example, are in a much worse situation. Owners and investors aim at returns while most managers simply stress wages and employee numbers.

## Results

### *Labour shortage in figures*

According to CSO data 43 thousand job vacancies at present or in the near future were reported in the first quarter of 2017 that were intended to be filled by the employers' measures taken previously (e.g. intermediaries, job ads etc.) This means an approximate 20 percent growth as of the similar period of the previous year, which was the highest value since monitoring job vacancies was introduced (Figure 1).



**Figure 1 Job vacancies in Hungary**

Source: <https://tradingeconomics.com/hungary/job-vacancies>

Accessed 20 November 2017

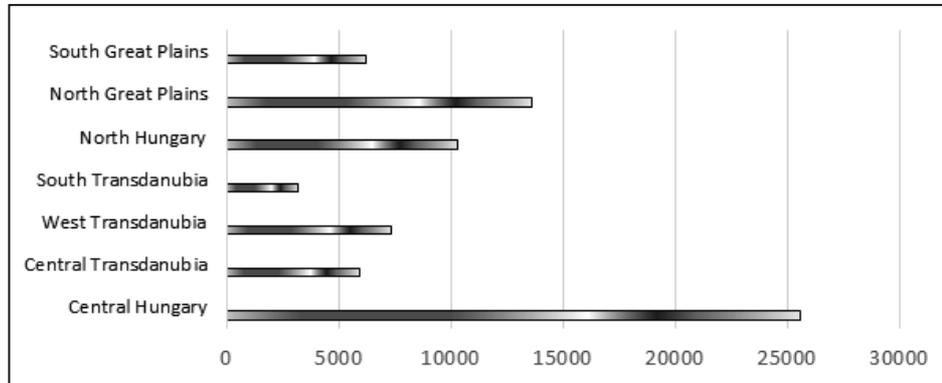
Most vacancies were prevalent in information and communication within the private sector of our national economy. Of the businesses of the processing industry as the industry that employs the highest number of employees nearly 16.5 thousand vacancies were reported. The construction industry, accommodation sector and catering are also facing labour shortage. The greatest need for new labour force arose in Budapest, Borsod-Abaúj-Zemplén and Szabolcs-Szatmár-Bereg countries, i.e. 43.9 of total demand. Typically, simple jobs in the industry and construction were offered for mechanical assembling and truck drivers.

In the labour survey 343.6 thousand self-declared to be unemployed as their labour market status, 410 thousand less than the peak of 752.8 thousand in the first quarter of 2013. This also indicates the rapid decrease of the relatively mobile labour surplus similarly to the number of employees to be counted as potential labour surplus. In the first quarter of 2017 397 thousand belonged to the category of potential labour surplus (including the unemployed, the underemployed, those wanting to work but not actively searching work, or those who can start it later) as of 490 thousand a year before. The potential labour surplus category is defined by the European Union (Mohácsi, 2016) and a great part of them can hardly be employed as most of them are underskilled.

More than half of the vacant positions can be found in the Central Hungarian region but the unemployed of the region amount only to one-quarter of the total number of unemployed in the country. Fewer than 4 unemployed compete for a vacant job or, if public workers are also added, fewer than 5. Of the six regions of the country labour supply is the lowest here but the situation is not any better in Central Transdanubia and West Transdanubia, either.

The highest supply as of labour demand is in the North Great Plains where 22 unemployed compete for a job vacant, or double this amount if public workers are also included. In addition, South Great Plains, North Hungary and South Transdanubia also have some reserves (Figure 2, Figure 3, Figure 4).

According to the figures there are some extra workforce that can be involved but most of them do not live where they would urgently be required. As the geographical mobility of the Hungarian employees is extremely low within the country, these geographical inequalities can hardly be balanced.



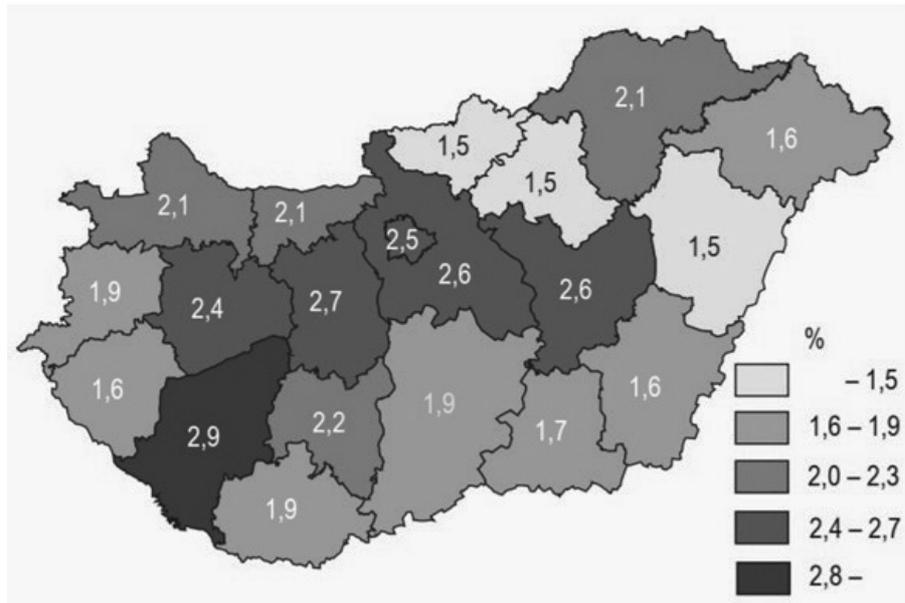
**Figure 2** The number of registered vacant jobs (January 2018, per region)

Source: <https://www.vg.hu/gazdasag/korlatozza-novekedest-munkaerobiany-2-818755/>  
 Accessed 20 November 2017



**Figure 3** The regions of Hungary

Source: <https://hungaryforyou.wordpress.com/2013/08/26/counties-districts/>  
 Accessed 22 September 2018



**Figure 4 The proportion of job vacancies per county (2<sup>nd</sup> quarter of 2017)**

Source: <http://kamaraonline.hu/gallery/ksh%202017%2009%2019%202.jpg>

Accessed 22 September 2018

For the companies, the most urgent shortage can be experienced in terms of vocational workers. Construction industry is the hardest hit as 94% of the companies cannot find vocational workers. Metallurgy is in a similarly bad situation as 93% of the companies are hit by shortage while the food industry and machinery compete for the imaginary third position. Eighty-one percent of the companies suffer from labour shortage. Every third is looking for semi-skilled workers while every fifth one complains of having too few graduates (Molnár-Tátrai, 2016). However, in administration practically there are no job vacancies.

## Conclusions and recommendations

Labour shortage can result in recession. If there is labour shortage, it can result in lagging development, smaller scale growth and higher wages and salaries. According to national economic forecasts labour shortage is supposed to grow in the future. A social communication noise will be typical: the simultaneous prevalence of unemployment and mass labour shortage. Very few innovative ideas have aroused concerning long-lasting solutions for the Hungarian labour shortage to date.

The budget benefits from the gradual pay rise of companies so a well-established measure could be decreasing the contributions. A further possible solution to ease the situation could be an option on the governmental agenda, i.e. employing contribution reduction, which is not the right instrument to abolish labour shortage in the long term and can only bring some positive impacts in several areas such as employment with more favourable costs so the volume of investment can rise resulting in further job creation.

A logical alternative to labour shortage and cost reduction could be automation. Simple, repetitive production steps can be covered by robots but their manufacturing and running call for a fewer but highly qualified employees and more capital. Efficiency is similarly enhanced by modern production controlling systems and other IT novelties but there still is a need for skilled labour force and capital. The process called Industry 4.0 practically synthesises automation and the digitalisation of the production process. Better education is the prerequisite of social utility so that the competencies of the employees can meet the higher standards of production expectations.

Research findings show that the tight networking between vocational training based on practice and market needs as well as organisations involved in vocational training and employment can serve as a collateral to regional sustainable employment. In order to improve employment it is necessary to modernise labour market institutions with special regard to employment services, and make employment, training and retraining opportunities more transparent and accessible together with a more efficient anticipation of training needs, labour market shortages and tight intersections.

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### Authors

#### **Dr. habil. Imola Cseh-Papp, PhD**

associate professor

Szent István University, Faculty of Economics and Social Sciences  
Institute of Social Sciences and Teacher Training  
[papp.imola@gtk.szie.hu](mailto:papp.imola@gtk.szie.hu)

#### **Dr. Erika Varga, PhD**

associate professor

Szent István University, Faculty of Economics and Social Sciences  
Institute of Social Sciences and Teacher Training  
[varga.erika@gtk.szie.hu](mailto:varga.erika@gtk.szie.hu)