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Background to trends in youth unemployment

Abstract

The next global financial crisis has already started, in the form of nearly 75 million unemployed young people around the world. If this mass of jobless youth does not find work, the consequences will be dramatic. Global changes in economic conditions and the economic changes which have taken place in the Slovak Republic have caused the disappearance of many traditional employers and the reorientation of production and services. The result has been that traditional manufacturing industries have disappeared and have been replaced by newer ones. The setting up of new small businesses and the arrival of new foreign investors have logically led to new demands and requirements concerning the knowledge, skills and competences of graduates. Education has a significant impact on employment and unemployment in Slovakia: higher levels of qualifications have improved the chances of finding a job. The labour market is expanding and there will be more and more opportunities for highly-skilled people.

Keywords: *graduate unemployment, labour, labour market, industrial change, human resources, education system, graduate qualifications structure, hiring decisions, qualification levels, work experience*

Introduction

Youth unemployment is not only a European but a global issue, with varying levels of severity between countries. The causes of youth unemployment also vary by country, and so do the solutions. Given the long-term risks of extended spells of unemployment, the importance of tackling youth unemployment can hardly be over-estimated. Youth are the potential and the future of every country, and governments with a long-term vision for welfare and development in their countries are concerned with the best ways of integrating young people into the labour force. The topic has been receiving media attention and has been discussed in many business and policy forums.

Every day since 2008, 1 000 young people have become unemployed in Europe; one-third of them remaining without prospects one year later. These six million young Europeans deserve more from Europe than just 0.7 % of the budget; at the very least, Europe should be investing massively in their future and, therefore, in ours.

The global youth unemployment rate, which had decreased from 12.7 per cent in 2009 to 12.3 per cent in 2011, increased again to 12.4 per cent in 2012 and has continued to grow to 12.6 per cent in 2013. This is 1.1 percentage points above the 2007 pre-crisis level (11.5 per cent). By 2018, the global youth unemployment rate is projected to rise to 12.8 per cent, with growing regional disparities, as the expected improvements in advanced economies will be offset by increases in youth unemployment in other re-

gions, mainly in Asia. Global youth unemployment is estimated to stand at 73.4 million in 2013, an increase of 3.5 million since 2007 and 0.8 million above the level of 2011.

Rising youth unemployment and falling labour force participation have contributed to a decrease in the global youth employment-to-population ratio, which stands at 42.3 per cent in 2013 compared with 44.8 per cent in 2007. Part of this decrease, however, is due to rising enrolment in education. The global youth employment-to-population ratio is projected to continue falling, reaching 41.4 per cent in 2018. Globally, the ratio of youth to adult unemployment rates has hardly changed in recent years, standing at 2.7 in 2013. Young people, therefore, continue to be almost three times more likely than adults to be unemployed and the upwards trend in global unemployment continues to hit them strongly (ILO, 2013).

Recent changes in the Slovak economic environment have resulted in the winding-up of many traditional employers in the country. This has also caused changes in both the production and the service sector: traditional fields of industry have been replaced with new ones. The result of these changes has been that new small employers, i.e. entrepreneurs, have appeared on the market while new foreign investors have also arrived in the country. This has led to changed expectations among employers of new graduates regarding knowledge, skills and competences. Qualifications have a substantial impact on the rate of employment and unemployment in Slovakia since the higher the qualifications that candidates have, the higher are their chances of finding a job. There are a growing number of career opportunities for highly-skilled people and this trend is expected to become even stronger in the future.

Actors in the labour market and their interaction

> *The labour market is a place where the demand for labour created by potential employers meets the supply created by job applicants, where it is not individuals who are bought or sold but rather their labour power. (MS SR, 2013) (own translation)*

On the basis of this definition, it can be stated that the labour market is a market of labour power (in economic theory, it is a production factor), in which labour power is sold to buyers (to employers or to the state) by sellers (employees or households). The labour market works on the basis of the same rules as other markets. However, there are rules which are specific to the labour market arising from the nature of labour power as a specific production factor (Hontyová *et al*, 2006).

Graduates and immigrants increase labour supply. On the other hand, there can also be a decline in labour supply caused by emigration, retirement and medical retirements.

Labour supply can be researched as:

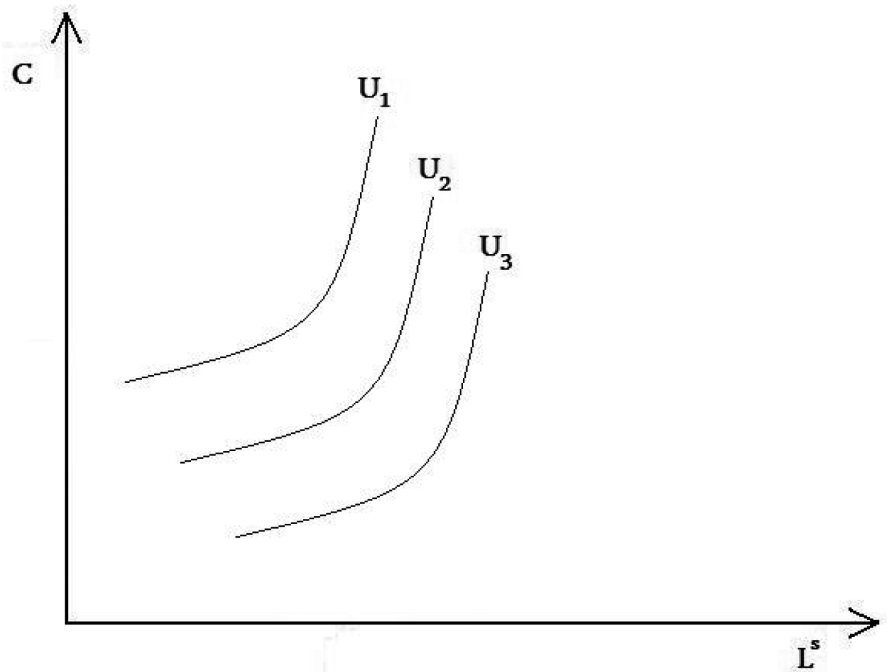
- individual supply, which is the supply of one producer. This includes a number of products from the producer, and also the price at which they would be supplied to the market
- market supply, where a product is supplied by several producers. It is the sum of the individual supplies of one product
- aggregate supply, which consists of all the products of all producers and of the prices at which they are willing to sell their products (Mura, 2011).

The relationship between the quantity of supplied labour (L^S) and the consumption of goods by households (C) can be expressed as the amount of total household utility (U). This means that:

$U = U (C. L^S)$

This relationship can also be seen in Figure 1. The labour supply of households (L^S) is shown on the horizontal axis while the value of consumption (C) is on the vertical axis. Figure 1 shows that households aim to combine leisure time and consumption in a way which allows them to have maximum utility.

Figure 1 – Labour supply



Source: own processing

Labour demand is the total amount of labour demanded at a certain wage rate by individual employers on the labour market. (Poór, 2006) (own translation)

Labour demand, just like labour supply, is created on the labour market. Labour demand is created by government and public institutions or by producers whose aim is to reach maximum profit. If we talk about labour demand at the level of the firm, prices and wages are flexible. However, if we look at it at the level of the national economy, prices and wages are set by the law. The wage costs (W_N) of firms arising from the purchase of labour power are the following:

$\mathbf{W_N = W.\ L^s}$

where W is the wage and L^S is the supplied amount of labour (Poór, 2006).

With the help of the labour that is purchased, firms produce goods and make a profit from the sale of such goods. The gross revenues of a firm (Q_Y) can be calculated with the following equation:

$\mathbf{Q_Y = P.\ O}$

where P is the price of the goods sold and O is the quantum.

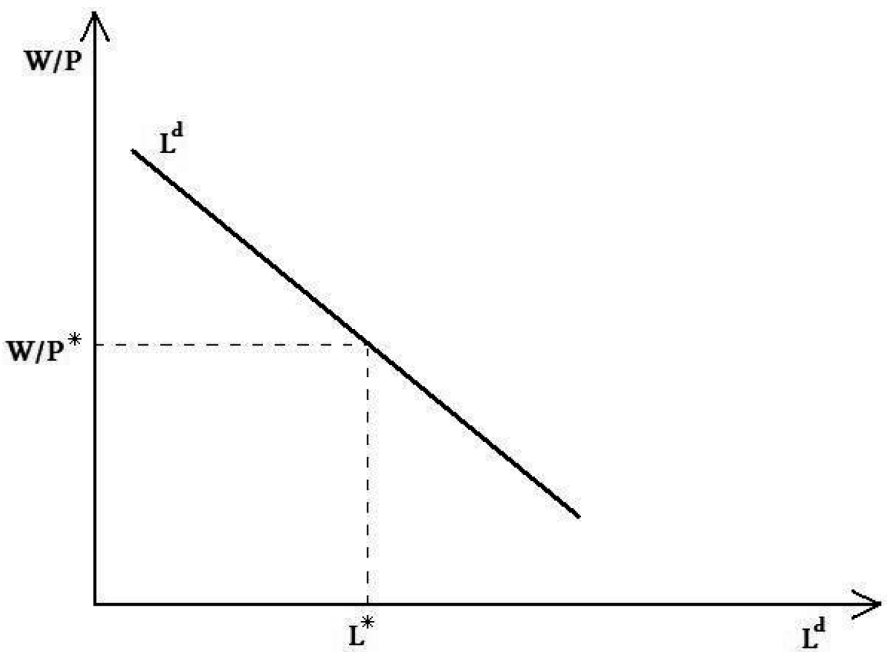
The profit of a firm (Z) is calculated as the difference between total revenues and total costs:

$\mathbf{Z = Q_Y - W_N = P.\ O - L.\ W}$

where L expresses how much labour the firm demands.

Figure 2 shows the demand of an employer for labour. The real wage rate and the ratio between the price of labour and the real wage rate are shown on the vertical axis, while the demanded level of labour (L^d) is shown on the horizontal one. On the basis of the graph, it can be concluded that the higher the wages paid out for labour, the lower is the employment rate and, therefore, the higher is the unemployment rate. On the other hand, if labour is hired at a lower wage, the employment rate rises and unemployment decreases. The ideal state is marked with a broken line.

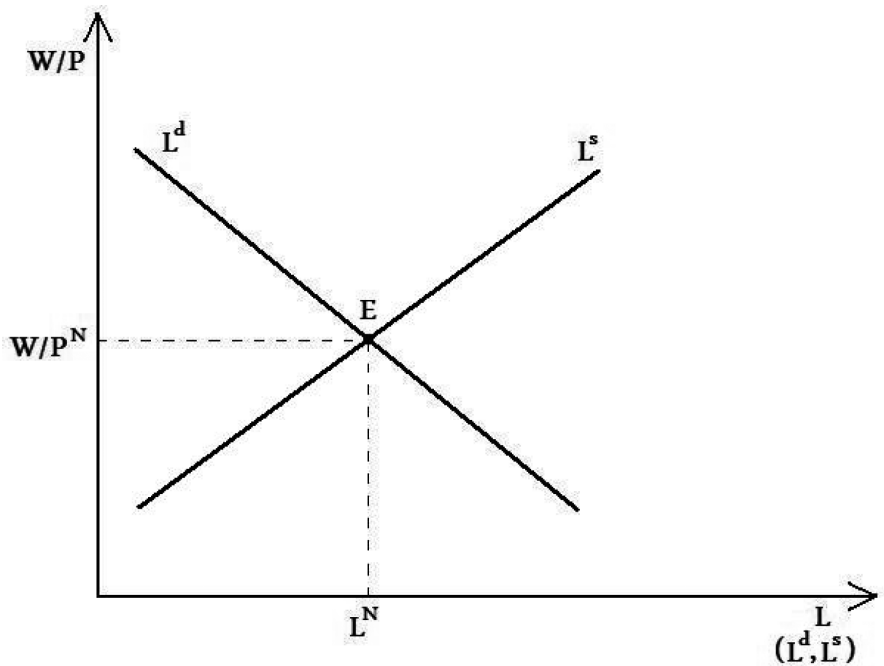
Figure 2 – Labour demand



Source: own processing

Equilibrium on the labour market is reached at the intersection of labour supply and labour demand. This is attained when aggregate labour demand is equal to aggregate labour supply. It follows from the above that, at a certain real wage rate, households supply the same amount of labour that they accept. Firms, on the other hand, will hire as much labour as they can at a certain wage rate. This situation is shown in Figure 3.

Figure 3 – Equilibrium on the labour market



Source: own processing

Point E in Figure 3 occurs at the point of equilibrium on the labour market. This is the so-called market equilibrium point. Real wages (W/P^N) are shown on the vertical axis while the amount of delivered labour (L) is shown on the horizontal one. On the basis of Figure 3, it can be concluded that, if the level of the real wage rate changes, there will not be equilibrium on the labour market.

Material and methods

In our article, we focus on the development of unemployment on the Slovakian labour market between 2005 and 2011. The aim of the research was to analyse the current situation on the labour market with a specific perspective on unemployment among graduates from Slovak universities.

The article is the result mainly of desk-based research. Data were collected from the Central Office of Labour, Social Affairs and the Family, from the Statistical Office of the Slovak Republic and from the SlovStat database.

However, field research to establish the current situation on the labour market was also carried out, implemented in the form of a questionnaire survey. Descriptive statistical methods and other scientific methods were used in data processing.

The amendment of the Law on Universities – No. 131/2002 Coll. – caused some changes on the labour market in 2002. This law is still in force and says that first-level graduates, whose study programme usually lasts three or – in some universities – four years, can choose whether to continue their studies at a higher level or look for a job on the labour market.

Only those students who have already pursued their studies for twelve or thirteen years, and have successfully passed their secondary school-leaving exams (the *maturita*), are allowed to enrol at a university. There are three levels of university studies in Slovakia:

1. bachelor degree programmes, which last three or four years
2. second-level degree programmes awarding *magister*, *inžinier* and *doktor* level degrees. These last between one and three years while their duration, combined with the relevant first-level degree programme, must not be shorter than five years
3. doctoral study programmes. The duration of full-time studies is at least three years and, at maximum, four years. The same programme lasts a maximum of five years in the case of in-service training.

The levels of academic titles in place are as follows:

Table 1 – Levels of academic titles in the Slovak Republic

	Academic title	**Abbreviation**
1st degree	Bakalár (Bachelor)	Bc.
2nd degree	Magister (Master) Inžinier (Engineer) Doktor všeobecného lekárstva (Doctor of General Medicine) Doktor zubného lekárstva (dentist) Doktor veterinárskeho lekárstva (vet)	Mgr. Ing. MUDr. MDDr. MVDr.
3rd degree	Doctor of Philosophy – doctor of philosophy Doctor of Fine Arts – doctor of arts Licentiate of (Catholic) Theology Doctor of (Catholic) Theology	PhD. ArtD. ThLic. ThDr.
Those who have passed advanced exams (rigorózna skúška)	Doctor of Natural Sciences Doctor of Pharmacology Doctor of Philosophy Doctor of Law Doctor of Pedagogy	RNDr. PharmDr. PhDr. JUDr. PaedDr.

Source: Based on data from the Ministry of Education, Science, Research and Sport of the Slovak Republic

In the period between 2000 and 2010, the number of university graduates in Slovakia almost doubled. Currently, graduates make up 28.5 % of Slovakia's population. The reason for the enormous growth in the number of university students was that new legislative measures had been passed which stipulated that people working in certain positions in public administration, the civil service and in healthcare must have at least a first-level university degree.

However, having university qualifications is, nowadays, not something that will make an employer hire a job applicant. An applicant's experience and skills are also of key importance for employers when selecting new staff.

The questionnaire for the field research was made up of 31 questions, sixteen of which were closed questions while four were semi-open and eleven were open ones. The questionnaires were filled in anonymously.

There were three groups of questions. The first group of questions was aimed at gathering personal variables. The second group aimed to find out respondents' opinions regarding their university and whether they were satisfied with the system of education. The third group sought to find out about the employment of university graduates and their opinions regarding how easy it was to succeed on the Slovak labour market.

The aim of the field research was to analyse how the composition of university graduates meets the demand on the market and to establish the extent to which graduates can succeed on the labour market. Our hypotheses were as follows:

1. 85 % of university graduates can find a job in their own field
2. a graduate sends out between forty and one hundred job applications to potential employers
3. those who have completed their studies in technical fields can find a job more easily than those who have studied social sciences.

The survey was carried out among the graduates of Comenius University in Bratislava; the graduates of Constantine the Philosopher University in Nitra; and those of the Technical University in Košice. The respondents, most of whom came from the first two of these institutions, were:

- first-level graduates who did not choose to continue their studies further
- second-level graduates.

The questionnaire survey took place between 1 January 2012 and 29 February 2012. The questionnaires were filled in electronically. All respondents were sent an e-mail in advance. The questionnaires were sent out to 200 graduates, 155 of whom filled in the questionnaire. These made up our research sample.

Analysis of the current situation in Slovakia – Results and findings

General situation

Unemployment is one of the major problems of market-oriented economies across the globe, a situation which is no different in Slovakia. On 31 December 2011, the unemployment rate in Slovakia amounted to 13.59 %, with 35.6 % of unemployed people being graduates (UPSVAR, 2013). These figures meant that Slovakia had the second highest unemployment rate among young people in the Eurozone after Spain. The total number of unemployed graduates was 6 811: 1 618 of these had a bachelor

degree (hereinafter referred to as first-level graduates); while 5 193 had finished a second-cycle degree programme (hereinafter called second-level graduates). As many as 4 925 graduates have been registered with local labour offices as job-seekers for a duration of between three and six months (ŠÚ SR, 2013).

Table 2 – Number of unemployed graduates in Slovakia on 31 September 2011

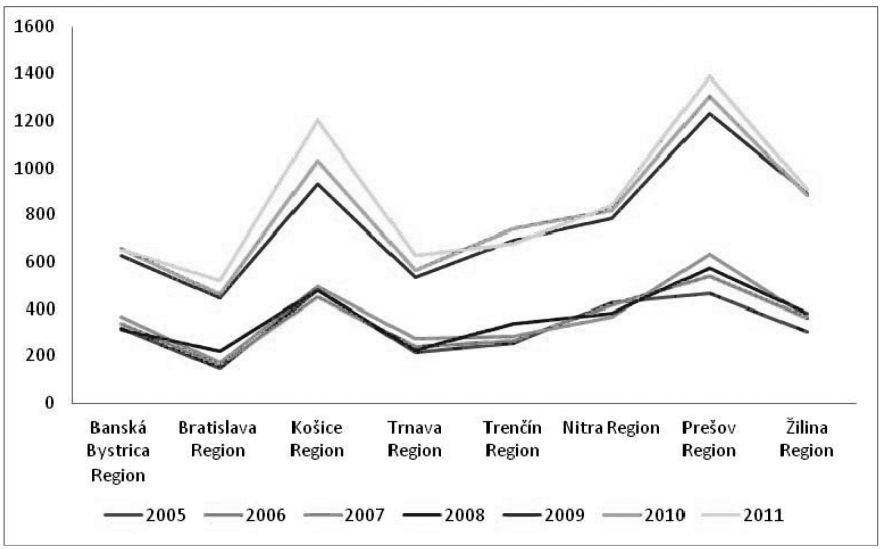
Regions	Number of unemployed graduates with degrees in individual study study fields								
	Natural sciences	Technical sciences	Medical sciences	Agricultural sciences	Social sciences	Culture	Military science	Other fields	Total
Banská Bystrica	70	92	18	28	417	19	8	0	652
Bratislava	43	70	23	5	355	18	7	0	521
Košice	60	350	28	18	668	9	69	0	1 202
Trnava	31	102	30	40	397	20	5	0	625
Trenčín	37	116	39	30	430	16	10	0	678
Nitra	57	126	32	91	497	32	4	0	839
Prešov	67	277	85	44	845	20	49	0	1 387
Žilina	65	171	46	36	526	10	53	0	907
Total	430	1 304	301	292	4 135	144	205	0	6 811

Source: Based on data from the Central Office of Labour, Social Affairs and the Family

In the regions of Banská Bystrica and Trenčín, there was a decrease in the unemployment rate of graduates, the reasons being either that graduates had moved to other Slovak regions to find jobs or that they were no longer registered with the Labour Office as job-seekers.

Figure 4 shows how graduate unemployment rates have evolved in different regions of Slovakia. It can be seen that Prešov region had the highest unemployment of all, while Bratislava region had the lowest rate each year. In 2008, there was a minor decline in unemployment in nearly all regions except for the regions of Bratislava, Trenčín and Žilina, in each of which there was only a slight increase in unemployment.

Figure 4 – Unemployment rates of university graduates in Slovakia between 2005 and 2011, individual regions



Source: own processing

Field research

Table 3 shows that the biggest group of respondents were between the ages of 23 and 25 (43.8 %). The smallest group was that between the age of 20 and 22, these being the ones who had finished their studies after gaining a first-level degree.

Table 3 – Distribution of respondents by age

Age	Number of respondents	%
20-22	22	14.2
23-25	68	43.8
26-28	41	26.6
29-31	24	15.4
Total	155	100

Source: own processing

The distribution of respondents by working status can be seen in Table 4. This clearly shows that a large proportion of respondents are employed. They make up 48.7 % of the research sample. The second biggest group, making up 32.6 %, is that of graduates who are unemployed while 13.5 % of respondents are self-employed. Less

than 6 % were continuing their studies and were either at another university or had started a doctoral programme.

Table 4 – Distribution of respondents by working status

Working status	Number of respondents	%
Employed	76	48.7
Unemployed	50	32.6
Self-employed	21	13.5
Student	8	5.2
Total	155	100

Source: own processing

The research sample was made up of respondents from across the whole of the Slovak Republic. Their distribution by the region in which they live is shown in Table 5. The most represented region in the sample was that of Trnava, respondents from which made up 21.3 % of the sample. These had pursued their studies either at Constantine the Philosopher University in Nitra or at Comenius University in Bratislava, and that was a result of their closeness to respondents' place of residence. The Trnava region was followed by the Bratislava and Nitra regions. The smallest number of respondents came from Prešov.

Table 5 – Distribution of respondents by place of residence

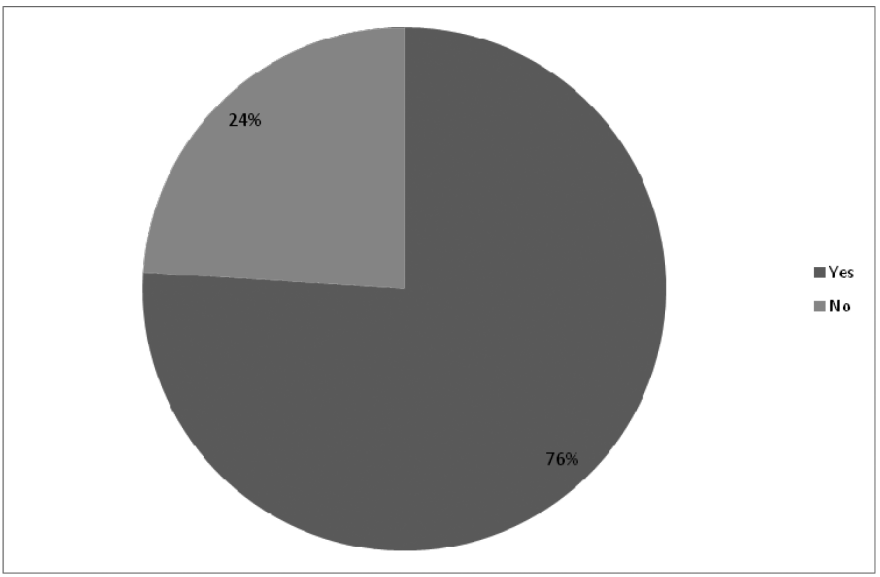
Region	Number of respondents	%
Banská Bystrica	21	13.5
Bratislava	29	18.7
Košice	15	9.6
Trenčín	11	7.1
Trnava	33	21.3
Nitra	27	17.4
Prešov	9	5.9
Žilina	10	6.5
Total	155	100

Source: own processing

In addition to our research hypotheses, our study also aimed to find out whether graduates believe that employers give preference to graduates from certain universities

over those from others; that graduates clearly believe this to be the case is shown from our results in Figure 4.

Figure 5 – Do employers give preference to graduates from certain universities and to certain study fields? (%)



Source: own processing

We saw above that the unemployment rate in Slovakia at the end of February 2012 was 13.59 % (which meant that 411 801 people were out of work) while the unemployment rate among graduates was 35.6 %. The reason for the high level of unemployment among graduates is that they do not possess enough practical skills and that they do not have sufficient experience. This was repeated by a majority of our respondents.

To a certain extent, however, it is also colleges and universities that can be blamed for high graduate unemployment. They send out a high number of graduates but what is more is that the profile of graduates does not meet the demands of employers on the labour market. The result is that there is an excess supply of the workforce on the market and, therefore, that individuals with high qualifications find it increasingly difficult to find a job. Additionally, there are many positions which could be filled by people with lower levels of qualification.

A further problem is that employers give preference to candidates with work experience. This is particularly true of the education sector. The reason for this is that employers want to hire people who are ready to fill a position straight away. They do not look for applicants who need extra attention and who need to be trained before filling a position. Most employers require at least one year of relevant work experience

from applicants. Furthermore, the Central Office of Labour, Social Affairs and the Family has stated that, if Slovak graduates had some work experience, their chances of finding a job would be 40 % higher.

To find out whether there are sufficient opportunities for practical training, or work experience, in the framework of the courses of the universities featuring in the research, the following questions were included in the questionnaire:

Do you think that universities should provide more opportunities for practical training? If yes, what should be the duration of practical training and how should it be organised?

The responses show that universities should deal with practical training to a larger extent and that this should be further developed. All respondents favoured longer periods of practical training; undergraduates and graduates alike do not feel that the work experience they have gained on their courses is sufficient.

It is a sad fact that practical training is only a formal issue in some universities. In contrast, the majority of our respondents thought that universities should focus more on providing practical skills to students and less on giving theoretical knowledge. The reason respondents gave was that theoretical knowledge was not something that they really needed; it was not something that would help them find a job. Indeed, a lack of experience is a factor in the high level of unemployment among university graduates and as many as 45 % of our respondents indicated that they had not got a job because of their lack of practical skills and experience.

The majority of respondents stated that there was a need for practical training in each semester and that these periods of training should last at least two weeks. At the same time, these training periods should be counted as relevant work experience, which would make it easier for graduates to find a job.

1st hypothesis: 85 % of university graduates can find a job in their own field

In order to find out whether the above statement is true, we gave five closed and two open questions to respondents. We found out that only 63 % of respondents could find a job in their own field of study and, thus, our hypothesis has not been proven.

There are several reasons why some respondents could not find a job they wanted. The first and biggest problem was their lack of work experience: more work experience would significantly decrease the rate of unemployment among graduates. This is also underpinned by the results of our field research. It is also the case, however, that some graduates' approach towards finding a job is another problem. It often happens that they do not take advantage of the knowledge they gained during their studies and do not put enough effort into finding a job.

2nd hypothesis: A graduate sends out between forty and one hundred job applications to potential employers

Graduates tend to get between zero and two job offers in the first year following their graduation. This applies to more than 75 % of respondents. When discussing job offers, job applications also have to be mentioned. According to our research, graduates

do indeed send out between forty and one hundred applications before they get the job they want. The second hypothesis is, therefore, proven.

The next question was aimed at finding out how many job applications the respondents had already sent out. Those who said that they had already sent out between forty and one hundred applications were unemployed at the time. This is the main reason why they had sent out so many applications. On the other hand, there were also respondents who had already found a job and still marked the same answer. The reason for this was obvious: it was difficult for them to find the kind of job they wanted to do. This could be explained by there being a weak supply of jobs on the labour market.

The government needs to support young people to a higher extent and should also support employers so that they could employ graduates without previous work experience.

3rd hypothesis: Those who have completed their studies in technical fields can find a job more easily than those who have studied social sciences

Technology has developed to an extent that, nowadays, it is used in all walks of life, in all fields and in all jobs. In our research, we also surveyed respondents who graduated from technical universities and who had studied information and communications technology. There were four closed questions in the questionnaire to find out from which university respondents had graduated; what field they had studied; how long they were or had been unemployed; and how many job offers they had received. These questions were included in the questionnaire to find out whether respondents who had pursued their studies in technical fields found jobs more easily than those who had studied social sciences.

The results showed that our third hypothesis has not been proven.

Conclusion

There is a large number of new graduate job-seekers coming on to the labour market each year. New graduates are in an especially difficult position since they lack work experience; looking for a job as a graduate is not at all easy nowadays (Machová, 2011).

At the same time, one of the main changes on the labour market in 2012 was that the number of those who aimed not to change their jobs voluntarily increased considerably. A large number of job applicants on the labour market had lost their jobs by having been laid off either in the framework of a mass redundancy situation or otherwise a small-scale redundancy.

If businesses and other organisations can choose from a large number of applicants with experience in a given field, it is certainly very difficult for a recent graduate to obtain the job. University graduates, however, can find jobs more easily than those only with secondary qualifications. The latter are in an even more difficult situation, since the number of vacancies that can be filled by applicants with lower levels of qualification has decreased. With most, the probability is that it will take longer for them to find a job.

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