

**THE ROLE OF QUALIFICATION AND EDUCATION IN THE  
DEVELOPMENT AND THE SOLUTION OF UNEMPLOYMENT OF  
GRADUATES IN CZECH REPUBLIC****Pavel Jedlička, Jaroslav Kovárník\***

**Abstract:** The paper deals with the specificities in the development of the unemployment of the schools graduates and the minors in the Czech Republic. Firstly, the authors analyze the size of this group of the unemployed and its share in the total unemployment. Through statistical data they demonstrate both the decrease in the total unemployment and the decrease in the unemployment of this chosen group. The data document a faster decrease in the unemployment of graduates in comparison with the decrease of the total unemployment. Then, the authors focus on the specific features of the unemployment of school graduates and minors development. The data analyzed show a cyclical development of the unemployment within this group with the peaks in September and the minimums in May. The data also document a contradictory development in relation to the total unemployment. In the selected periods the unemployment of graduates decreases in contrast to the growth of the total unemployment or vice versa, the unemployment of graduates increases despite the decrease in the total unemployment. The authors also analyze the social structure of this group of the unemployed. The data show that a higher level of the acquired education enhances chances for a job acquirement. At the same time they emphasize the growth in demand for graduates with the vocational certificate compared to the graduates of the secondary schools. In principle, the group of graduates with basic education and without education remains absolutely unchanged. Owing to the decrease in the total unemployment its share has been rapidly growing. The next topic of this article is the analysis of the number of unemployed within the graduates in the view of financial crisis. This analysis shows, that graduates with some level of education have higher chance to get a job than the graduates without education, even in the context of financial crisis.

**Key Words** – Graduates, Labor Market, Minors, Unemployment.

JEL Codes: J10, J20, J30

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## Introduction

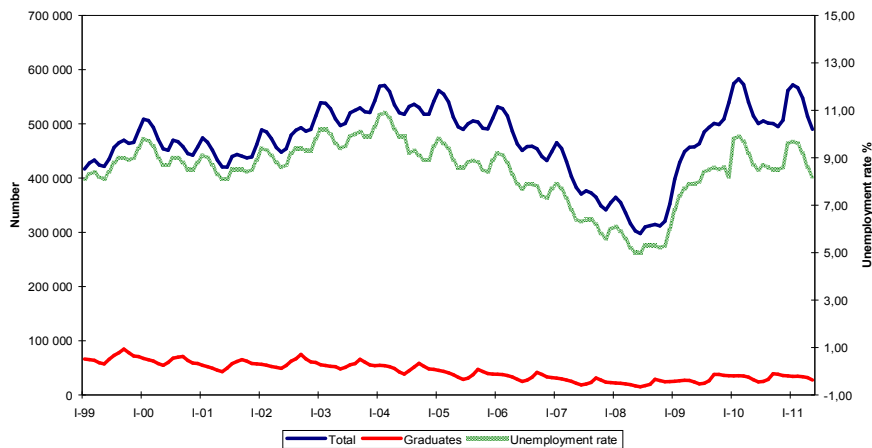
One of the most important factors of economic growth is sufficiency of qualified labor force. The qualification is influenced both by the level of achieved education and by the obtaining of sufficient professional experience. The disadvantage of this conception of qualification is the fact, that both factors are separated in time during the process of creation of qualification. Firstly, it is necessary to obtain some education, and after that it is possible to develop some professional experience. In the economic praxis it is possible to find out the tendency to absolutize the professional experience at the expense of the role of education for the possible usability at labor market. However, in the present developed society could be used the obtained education as a great advantage at labor market. It helps to get suitable job, and, moreover, it helps to get a job quicker than without any education, even in such situation, when the economy is in crisis and the unemployment is growing. One of the aims of this article is to show the influence of obtained education on the development of unemployment in Czech Republic.

Disregarding some variations in the trend, the unemployment of Czech Republic has been steadily decreasing since 2004. Among many causes of this positive trend it is undoubtedly the entrance of the Czech Republic to the European Union that appears to be the most influential one [7], [9]. Certainly, also an increasing rate of the well-educated inhabitants has been playing a considerable role. A person who has acquired a certain level of education is able to adjust to the demands on the labour market and thus finds their assertion faster. Nonetheless, acquirement of a certain level of education does not automatically guarantee an appropriate work position. Expertness in which the graduate acquired their education must meet the demands of the labour market, the labour power must be able of a transfer towards work opportunities and also the cyclical and seasonal variances in the economy of country must be taken in consideration. And that is why there exists a group of unemployed graduates of educational institutions who have not - owing to various causes - succeeded in finding a suitable job on the labour market. This article is focused on specificities of this group of unemployed graduates and minors. In this paper we will gradually discuss the size of the group of the unemployed and also the specialities of its development and finally we will analyze its structure.

## The Number and Share of the Unemployed Graduates and the Minors

The group of the graduates of the schools and of the minors, as it is reported by the labour offices, includes new school graduates who do not enter a job at all and also

such graduates who enter a job, however, within a two-year time after their graduation they lose their job again [1]. The minors of this group are represented by those who did not finish the basic school or who miss any education and did not reach the age of 18 years. This situation is described on the following Figure No. 1, where is possible to compare the numbers of total unemployed, unemployed graduates and unemployment rate.



**Figure 1: The Numbers of the Unemployed and the Unemployment Rate in the Czech Republic**

*Source: [5], own processing*

The position of graduates on the labour market is somewhat ambiguous. On one hand, they miss the work habits and experience (their work experience is not longer than two years; in most cases they have no experience at all). From this viewpoint they have nothing to offer to the would-be employers. On the other hand, they are the most important source of the new labour force. In the year 2004 178 475 graduates finished some of the levels of the secondary and higher education, in the year 2005 there were already 185 278 graduates and in the year 2006 even 193 987 graduates [4]. It is apparent that not all of the graduates enter the labour market; many continue in their studies, nevertheless, their majority enters the labour market.

The Month	XII-00	XII-02	XII-04	XII-06	XII-08	XII-010
Total	457 369	514 435	541 675	448 545	352 250	561 555
Graduates within the Unemployed	57 938	59 895	47 260	31 955	26 634	35 357
Graduates Share	12.7%	11.6%	8.7%	7.1%	7.0 %	6.3%

**Table 1: Numbers of the Unemployed in the Czech Republic (Selected Data)**

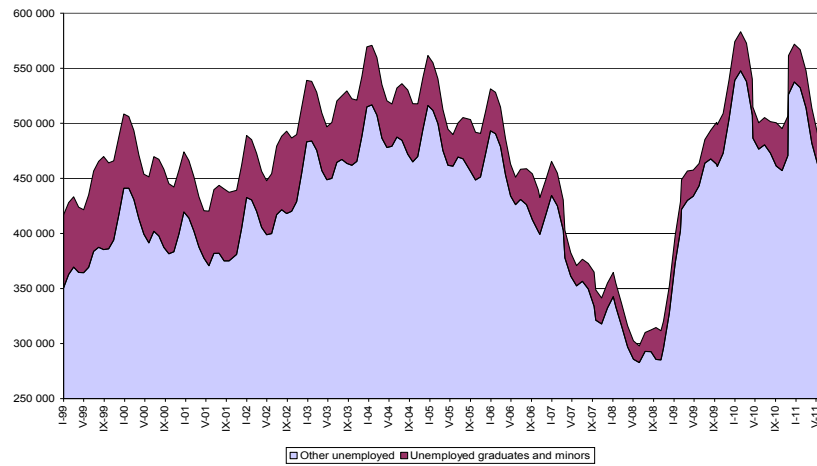
*Source: [5], own processing*

The number of the unemployed graduates throughout the monitored period of time from January 1999, when the Ministry of Labour and Social Affairs commenced a systematic monitoring of those data [3], till July 2008, varies within the interval from 84504 (in September 1999) to 15 095 persons (in June 2008). (The Table No. 1 features numbers for the end of the every year throughout the monitored period of time, the graph in the Figure No. 1 is based on monthly data). The total number of the unemployed in the monitored period varies within the interval from 583 135 persons (in February 2010) to 297 880 persons (in June 2008) [5].

The share of the graduates and the minors in the total number of the unemployed is decreasing in the monitored period (see Figure No. 2). In the beginning of the monitored period in January 1999 the share of graduates in the total number of the unemployed amounted to 15.9%. The maximum share appeared in September 1999, when it amounted to 18.0%. Since that date the share has been steadily decreasing (with some variations to be discussed further in the text) as far as to the amount of 5.1% in June 2008 and July 2009.

Through these data it is possible to demonstrate the fact that education increases chances of acquiring a job. While the total number of the unemployed has decreased since January 1999, when it amounted to 416 940 persons out of work, to 310 058 persons out of work in July 2008, i.e. by 25.6%, the number of the unemployed graduates and minors decreased from 66 319 in January 1999 to 17 151 in July 2008,

i.e. by 74.1% [3, 5]. The registered unemployment rate decreased from 8.1% in January 1999 to 5.3% in July 2008, i.e. by 34.6% [5]. In this respect it is necessary to pay attention to the fact that on the date of the Czech Republic's entrance to the European Union the methodology of the calculation of the registered unemployment rate changed. This change consisted in the following alternation: as the denominator of the formula for the calculation of the registered unemployment indicator there was newly used the indicator of the so-called registered – achievable unassigned job applicants instead of the total number of the unemployed registered at the labour offices. Thus, the calculation excludes those unemployed who are not able to enter a job immediately. These are applicants in the execution of the punishment, in some of the military service forms, on sickness leave, in the retraining course or those who perform a temporary job, draw maternity benefits or are on the maternity leave.[2]



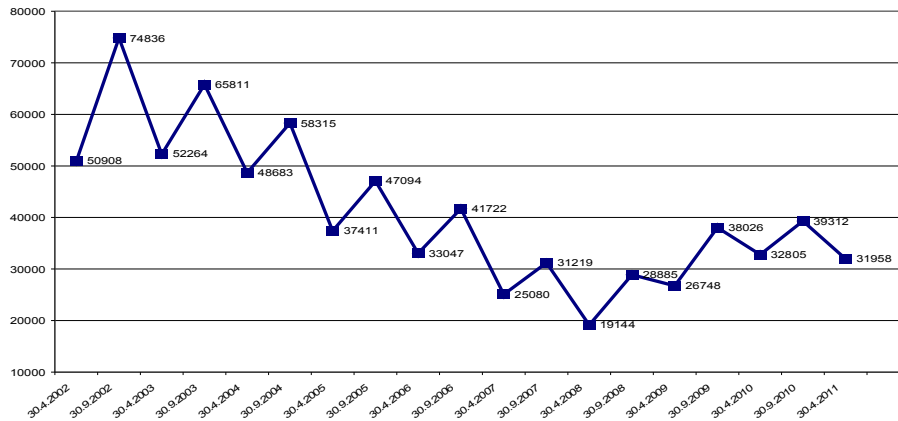
**Figure 2: The Share of the Graduates and the Minors in the Total Number of the Unemployed in the Czech Republic**

*Source: own processing*

#### The Development of the Unemployment of the Graduates and the Minors

If we focus on the development of the unemployment of the graduates and the minors, we will find out variations with a peak in September and a minimum in May (see Figure No. 3). Always after the school year end and then after the school holidays

the number of the unemployed within the graduates increases. During the following period this number steadily decreases till the end of the following school year.

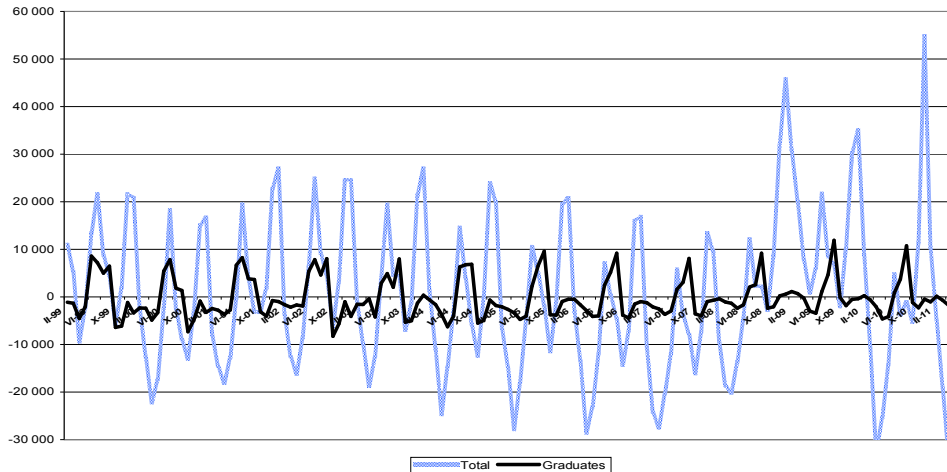


**Figure 3: The Development of the Number of the Unemployed Graduates and the Minors in the Czech Republic**

*Source: own processing*

In many cases the number of the unemployed graduates and minors develops contradictory to the total unemployment. As it is shown in the Figure No. 4, such situations when the total unemployment increases but the unemployment of graduates decreases, and vice versa, when the total unemployment decreases but the unemployment of graduates increases, are quite common throughout the monitored period. Already at the beginning of the monitored period one can see that in February 1999 the unemployment of graduates decreased by 1 117 persons, while the total unemployment increased by 11 054 persons. The greatest difference is documented at the turn of the year when the total unemployment mostly grows while the graduates' unemployment decreases. So was the situation at the turns of all monitored years from 2000 to 2008 (the greatest difference was documented in January 2003, when the total unemployment increased by 24 567 persons while the unemployment of graduates decreased by 4 106 persons). Situations when the unemployment of graduates increases while the total unemployment decreases occur always approximately in the time of the school holidays. In the monitored period it happened for the first time in July 2000 when the total unemployment decreased by 2 464 persons, however, the unemployment of graduates increased by 1 835 persons. For the last time such

situation repeated in September 2007 when the total unemployment decreased by 7 781 persons while the graduates' unemployment increased by 8 091. This difference is the greatest one in the monitored period. [3, 5]



**Figure 4: The Comparison of the Change Trends in the Total Unemployment against the Previous Month and the Unemployment of the Graduates in the Czech Republic**

*Source: own processing*

The stated data entitle us to arrive at a conclusion that the graduates' unemployment is also influenced by other factors than by those influencing the total unemployment. The active employment policy plays its role too, the labour offices try to facilitate with it the entry of the graduates to the labour market. On the other hand, the data also show the effort to exploit the soft social system.

#### The Structure of the Unemployed Graduates and Minors

Like the development of the unemployment of graduates and minors also their qualifications structure shows some specificities compared to the total unemployment. Even though the qualifications structure of the graduates and the minors has been dramatically developing (Table No. 2, Figure No. 5), it is the group of the secondary school graduates with the school leaving examination that has been remaining the most numerous one. Their share varied from 31.6% on the 30<sup>th</sup> of April 2002 to 39.6% on the 30<sup>th</sup> of September 2010. The second most numerous group were the secondary

school graduates with the vocational certificate, disregarding the steady decrease in their share from 33,6% on the 30<sup>th</sup> of September 2003 as far as to 18.3% on the 30<sup>th</sup> of April 2008. After that there was again increasing up to 24.7% on 30<sup>th</sup> of April 2010. The basic school graduates and the minors without education in principle represented in the absolute quantity a constant group; their share was relatively increasing thanks due to the decrease in unemployment from 7.5% on the 30<sup>th</sup> of September 2002 to 28.3% on the 30<sup>th</sup> of April 2008 when they overtook the graduates with the vocational certificate. After that there was again decreasing of the share as far as to 10.8% on 30<sup>th</sup> of September 2010. For these reasons we may draw the conclusion about an increasing demand for qualified graduates with the vocational certificate and on the other hand also about an over-production of the persons with the secondary education finished with the school leaving examination. The increases in the share of the persons with basic education and without any education show evidence of the necessity of a certain education level for a job acquirement.

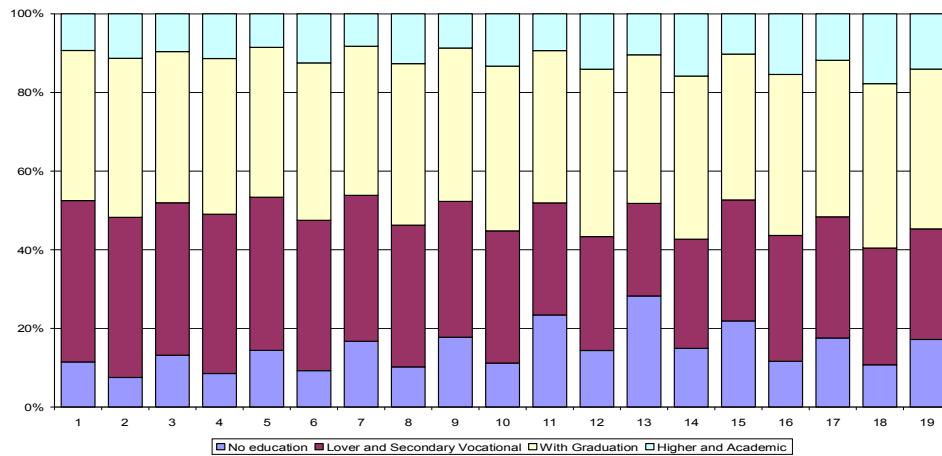
<b>Education Level</b>	<i>30.9. 2003</i>	<i>30.9. 2004</i>	<i>30.9. 2005</i>	<i>30.9. 2006</i>	<i>30.9. 2007</i>	<i>30.9. 2008</i>	<i>30.9. 2009</i>	<i>30.9. 2010</i>
<b>No Education and Basic School</b>	5 611	5 397	4 807	4 664	4 485	4 310	4 418	4 228
<b>Lower Vocational Training</b>	4 578	4 031	3 237	2 609	1 731	1 551	2 244	2 130
<b>Secondary Vocational Training with the Vocational Certificate</b>	22 085	18 260	13 737	11 421	7 318	6 465	9 935	9 539
<b>Secondary Vocational Training</b>	23 890	21 324	17 915	16 275	12 404	11 289	14 764	15 561



<b>with the School Leaving Examination</b>								
<b>Secondary General</b>	2 155	2 020	1 436	1 204	884	701	804	879
<b>Advanced Vocational Training</b>	1 867	2 042	1 964	1 658	1 055	985	1 219	1 156
<b>Tertiary</b>	5 625	5 241	3 998	3 891	3 342	3 584	4 642	5 819
<b>Total</b>	65 811	58 315	47 094	41 722	31 219	28 885	38 026	39 312

**Table 2: The Unemployment of the Graduates and the Minors according to the Education Level in the Czech Republic (Selected Data)**

*Source: [4], own processing*



**Figure 5: The Structure of the Unemployed Graduates and Minors in the Czech Republic**

*Source: [4], own processing*

The largest group in the educational structure of the total unemployment (Table No. 3) is graduates of the apprentice training centres who on the 31<sup>st</sup> of December 2002 represented 40.4% and this share of theirs was gradually slowly decreasing and on the 30<sup>th</sup> of June 2008 it amounted to 38.4%. The second greatest group is formed by persons without education and with the basic education. On the 31<sup>st</sup> of December 2002 they represented 31.5% of all the unemployed. Their share was slowly increasing and on the 30<sup>th</sup> of June 2008 it amounted to 32.2%. After that it was decreasing as far as to 27.2% on 30<sup>th</sup> September 2010. The share of graduates of secondary schools varied from 18.1% on the 31<sup>st</sup> of December 2002 to 21.7% on the 30<sup>th</sup> of September 2010.

<b>Education Level</b>	30.9. 03	30.9. 04	30.9. 05	30.9. 06	30.9. 07	30.9. 08	30.9. 09	30.9 .10
<b>No Education and Basic School</b>	162 900	161 507	152 256	139 690	113 759	94 504	134 169	136 210
<b>Lower Vocational Training</b>	17 223	17 757	16 917	15 115	11 425	9 947	17 139	17 143
<b>Secondary Vocational Training with the Vocational Certificate</b>	209 679	208 302	198 807	176 250	137 959	116 554	200 017	192 267
<b>Secondary Vocational Training with the School Leaving Examination</b>	101 733	103 331	98 329	89 071	72 799	65 627	106 669	108 426
<b>Secondary General</b>	15 734	16 101	14 861	13 163	10 578	9 145	13 361	13 836
<b>Advanced Vocational Training</b>	3 471	3 763	3 622	3 276	2 387	2 431	3 761	3 976
<b>Tertiary</b>	18 667	19 478	18 604	17 617	16 071	16 351	25 696	28 623
<b>Total</b>	529 407	530 239	503 396	454 182	364 978	314 558	500 812	500 481

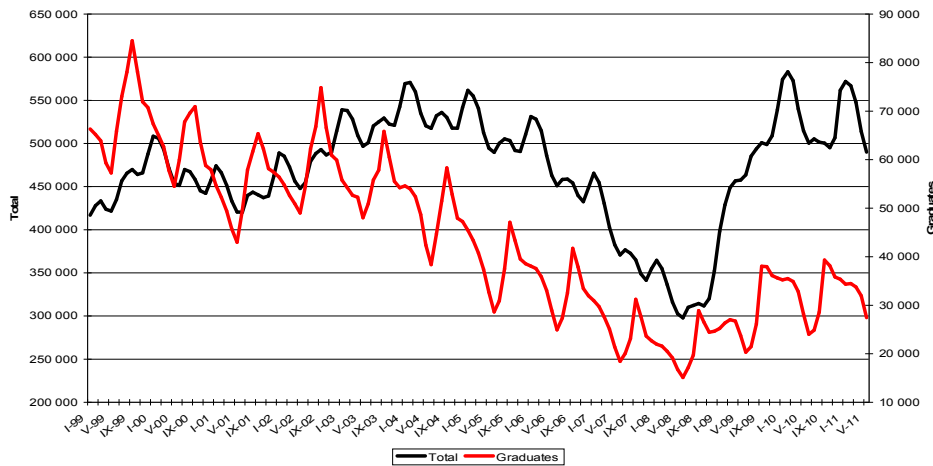
**Table 3: The Number of the Unemployed in Total according to the Level of Education in the Czech Republic**

Source: [5], own processing

The data stated above clearly document that acquirement of a certain education level enhances chances and expectations of the graduates on the labour market. At the same time it is necessary to emphasize that the professional specialisation of the qualifications is no less important. Should the graduate be able to offer qualifications of the demanded specialization, he or she has no troubles with their assertion on the labour market. In the case his qualification is in the fields either undergoing inhibition or with a great prevalence of the offer, then the graduate is likely to have troubles with their assertion.

#### The Development of the Unemployment of Graduates during the World Financial Crisis

The important role of education for usability on labor market was supported by world financial crisis during the years 2008 – 2010. In the conditions of Czech Republic there was a sharp drop of industrial production, GDP, and, moreover, there was also rapid increase of unemployment [6, 8].



**Figure 6: The Development in Total Unemployment and Unemployment of Graduates in the Czech Republic**

Source: [3, 5], own processing

In the June 2008 reached the total unemployment in Czech Republic its longterm minimum. It was the amount of 297 880 unemployed. After that there was a steady growth, and in February 2010 the unemployment reached its maximum of 583 135 unemployed, which presents the increase of 95.76 %. After that there was temporary drop, when, however, the unemployment does not

decrease under the value of 500 000 unemployed (the only exception was in October 2010). In the February 2011 there was another maximum at 571 863 unemployed.

After that there was quicker decrease of total unemployment. In the May 2011 it reached the value of 489 956 unemployed, which is more significant value under the 500 000 unemployed.

However, the development of unemployment of graduates was not in such dramatic way. This development was quite according its specific character. The longterm minimum in the amount of 15 095 unemployed was reached also in June 2008. And there was also the increase of unemployment of graduates with maximum in September 2008 on the value of 28 885 unemployed, which presents the increase of 91.35 %. After that there was typical decrease on the value of 20 330 unemployed in June 2009. Another typical development was the increase on the amount of 38 026 unemployed in September 2009. However, this maximum was lower than the minimum in June 2004 (38 377 unemployed). Another decrease reached the amount of 24 005 unemployed in June 2010, following increase reached the amount of 39 312 unemployed graduates in September 2010.

After that, there was again fluent decrease, and the last available data show the amount of 27 456 unemployed graduates in May 2011, which presents the lower amount of unemployed than in June 2005 (28 623 unemployed). The development in total unemployment and unemployment of graduates is possible to compare in Figure No. 6.

### **Conclusion**

Analyzed statistical data clearly demonstrate the important role of education for usability on labor market. It is possible to formulate these conclusions from analyzed statistical data:

- the share of unemployd graduates on the total number of unemployed is decreasing,
- the graduates with the higher level of education are able to find the appropriate job quicker,
- in the time of economical crisis is the group of the graduates with the higher level of education affected by the unemployment significantly less than the group of the graduates with the lower level of education.

### **References:**

- [1] Institute For Information On Education. *The Summary of Czech Republic – Newly Recruited Children / Pupils / Students and Graduates*. [cit. 4<sup>th</sup> July 2011]. Available on: <<http://www.uiv.cz/soubor/2767>>.
- [2] Kovárník, J. *Regional Development in Hradec Králové Region*. Tenerife, Spain. Proceedings of the WSEAS International Conference on Communication and Management in Technological Innovation and Academic Globalization, 2010.
- [3] Măcris, M., Crivac, M., Rakos, I. S. *Economic Development, Broadening of the Labor Market and Increasing Quality of Labor Forces, Economic Effects of the Europeanization of Higher Education. Timisoara, Romania*. Proceedings of the 5<sup>th</sup> WSEAS International Conference on Economy and Management Transformation, 2010.
- [4] Ministry Of Labor And Social Affairs. *The Graduates and the Minors in the Evidence of the Labour Office*. [cit. 4<sup>th</sup> July 2011]. Available on: <<http://portal.mpsv.cz/sz/stat/abs>>.
- [5] Ministry Of Labor And Social Affairs. *The Half-Yearly Statistics of Graduates*. [cit. 4<sup>th</sup> July 2011]. Available on: <<http://portal.mpsv.cz/sz/download>>.
- [6] Ministry Of Labor And Social Affairs. *The Information about the Amount of Unemployed in Czech Republic as of 31<sup>th</sup> July 2004*. [cit. 4<sup>th</sup> July 2011]. Available on: <<http://portal.mpsv.cz/sz/download>>.
- [7] Ministry Of Labor And Social Affairs. *The Statistics of Unemployment*. [cit. 4<sup>th</sup> July 2011]. Available on: <<http://portal.mpsv.cz/sz/download>>.
- [8] Pęchorzewski, D. *Study of the impact of the global financial crisis on selected local residential property market in Poland in the context of the attractiveness of locations. Bucharest, Romania*. Proceedings of the 1<sup>st</sup> WSEAS International Conference on Urban Rehabilitation and Sustainability, 2008.
- [9] Tvrdoň, M. *Impacts of the global economic crisis on the European labor market performance: the case of Visegrad Group countries. Puerto Morales, Mexico*. Proceedings of the 5<sup>th</sup> WSEAS International Conference on Business Administration, 2011.
- [10] Tvrdoň, M. *Regional Long-term Unemployment: the Case of Visegrad Group. Timisoara, Romania*. Proceedings of the 5<sup>th</sup> WSEAS International Conference on Economy and Management Transformation, 2010.

#### ROLA KWALIFIKACJI I EDUKACJI W ROZWOJU I ROZWIĄZANIU PROBLEMU BEZROBOCIA WŚRÓD CZESKICH ABSOLWENTÓW

**Abstrakt:** W artykule przedstawiono specyfikę rozwoju bezrobocia wśród absolwentów i nieletnich w Czechach. Po pierwsze, autorzy analizują wielkość tej grupy i wielkość jej udziału w ogólnej grupie bezrobotnych. Dzięki danym statystycznym, autorzy demonstrują zarówno zmniejszenie ogólnego poziomu bezrobocia jak i zmniejszenie bezrobocia w wybranej grupie. Dane przedstawiają szybsze zmniejszenia się bezrobocia wśród absolwentów w porównaniu ze zmniejszeniem się poziomu bezrobocia ogólnego. Następnie autorzy kładą nacisk na specyficzne cechy bezrobocia wśród absolwentów i nieletnich. Analizowane dane pokazują cykliczne zwiększenie poziomu bezrobocia w tej grupie – maksymalny jego poziom notowany jest we wrześniu, a minimalny w maju. Dane także przedstawiają rozwój będący w sprzeczności do ogólnego poziomu bezrobocia. W wybranych okresach bezrobocie wśród absolwentów znacznie zwiększą się w

przeciwieństwie do wzrostu ogólnego bezrobocia, i odwrotnie poziom bezrobocia wśród absolwentów zwiększą się kiedy zmniejsza się ogólny poziom bezrobocia. Autorzy analizują także strukturę socjalną absolwentów którzy są bezrobotni. Z przedstawionych danych wynika że wyższy poziom zdobytego wykształcenia zwiększa szanse na zdobycie miejsca pracy. Jednocześnie podkreślają wzrost popytu na absolwentów mających świadectwo kwalifikacji zawodowych w porównaniu do absolwentów szkół średnich. W zasadzie grupa absolwentów z wykształceniem podstawowym i grupa osób bez wykształcenia pozostają takie same. Ze względu na spadek ogólnej stopy bezrobocia, udział tych grup uległ gwałtownego zwiększeniu. Następnym tematem niniejszego artykułu jest analiza liczby bezrobotnych absolwentów związana z kryzysem finansowym. Analiza ta pokazuje że absolwenci z pewnym wykształceniem mają większe szanse dostać pracę niż absolwenci nie posiadający wykształcenia, nawet w kontekście kryzysu finansowego.

### **畢業生的失業捷克共和國的發展和解決方案的資格和教育的作用**

**摘要:**紙與發展的特殊性，在學校的畢業生和在捷克共和國的未成年人的失業。首先，作者分析了本組的失業和在失業總人數的份額大小。他們通過統計數據表明，在失業總人數的減少，在本組的失業率下降。數據文件在畢業生的失業率在與總失業率的下降比較快的下降。然後，作者高中畢業生的失業

率和未成

年人的發展的具體特點。數據分析顯示在這個組在九月和五月的最低峰的週期性失業的發展。數據還記錄的失業總人數中關係的矛盾發展。在選定期間畢業生的失業率下降相反的失業總人數的增長，反之亦然，大學畢業生的失業率增加，儘管在失業總人數的減少。作者還分析了本組的失業者的社會結構。數據顯示，增強工作取得更高層次的後天教育的機會。同時，他們強調，在比中學畢業生的職業資格證書的畢業生需求的增長。一群畢業生與基礎教育和未受過教育的原則，仍然是絕對不變的。由於在失業總人數減少，其份額已迅速增長。本文接下來的話題是在金融危機的畢業生失業人數的分析。這一分析表明，一些畢業生的教育水平有較高的機會，即使在金融危機的背景下，沒有比畢業生就業教育。