# KOMPARACE VÝSLEDKŮ VÝZKUMU ZAMĚŘENÉHO NA VNÍMÁNÍ PROBLEMATIKY NEDOSTATKU KVALIFIKOVANÝCH PRACOVNÍKŮ ZÁSTUPCI AKADEMICKÉ SFÉRY PŘI SLEZSKÉ UNIVERSITĚ V OPAVĚ, OBCHODNĚ PODNIKATELSKÉ FAKULTY V KARVINÉ A PŘI VYSOKÉ ŠKOLE BÁŇSKÉ TECHNICKÉ UNIVERSITY V OSTRAVĚ, EKONOMICKÉ FAKULTĚ

A COMPARISON OF THE SKILLS SHORTAGE ISSUE PERCEPTION AMONG ACADEMIC STAFF OF SILESIAN UNIVERSITY IN OPAVA, SCHOOL OF BUSINESS ADMINISTRATION IN KARVINA AND VYSOKA ŠKOLA BANSKA TECHNICAL UNIVERSITY, FACULTY OF ECONOMICS, OSTRAVA

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#### Abstrakt:

Tento článek srovnává výsledky výzkumu provedeného na Slezské universitě v Opavě, Obchodně podnikatelské fakulte v Karviné a na Vysoké škole báňské Technické Universitě v Ostravě, ekonomické fakultě. Cílem výzkumu je identifikovat obecné povědomí akademických pracovníků o problematice nedostatku kvalifikovaných pracovníků na trhu práce jako jevu, který ovlivňuje vývoj míry nezaměstnanosti. Obě university se nacháze v Moravskoslezském regionu, kterýžto je znám jako region s nadprůměrnou a stále se zvyšující mírou nezaměstnanosti v rámci České republiky. Nedostatek kvalifikací je podstatnou bariérou na trhu práce, jež zabraňuje rozvoji tohoto trhu v souladu s restruktualizační politikou v rámci strategického rozvoje regionu.

## Klíčová slova:

Nedostatek kvalifikací, kariérní plánování, nezaměstnanost, vzdělávací programy, kariérní poradenství.

#### Abstract:

This publication is providing outcomes from researches carried out at Silesian university in Opava, School of Business Administration in Karvina and Vysoka skola banska Technical University, fakulty of Economics, Ostrava. The aim of the research is to identify basic knowledge of academic staff members with regards the skills shortage as a phenomenon influencing the unemployment. Both universities are situated to Moravian - Silesian region that is recognised to be a region with high and increasing unemployment rate in compare to the rest of Czech Republic. Lack of skills is a barrier preventing the region from further growth, that would be in consensus with the policy of industrial transformation.

# **Keywords:**

Skills shortage, career management, unemployment, academic staff, educational programmes, career consultancy.

JEL: J21, J19, J29

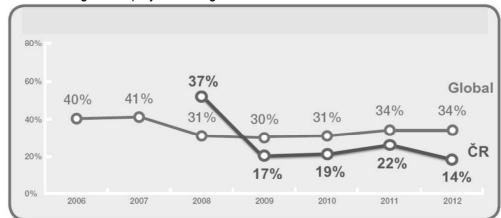
#### 1 Introduction

According to the internet portal 'budoucnostprofesim.cz' that is focused on the prediction of the Czech labour market development, this market is influenced by demographic development, socio-cultural factors, trends within the area of investments and outsourcing and a shift within the values chain.

Current development of new technologies is accelerating the need for new professions (IT, High tech products, etc.) and at the same time some of the professions are no longer required or the demand is decreasing due to the economy shakeout processes.

Despite of upper mentioned, the unemployment among fresh graduates is becoming a critical issue especially in the countries with already high unemployment rate. According to Czech Chamber of Commerce Czech industry employs 42% qualified workers, however only 29% of students are entering technical colleges. The difference makes 13% and that roughly equates the shortage of qualified workers on Czech labor market.<sup>21</sup>

Following picture demonstrates the development of percentage of employers that are struggling to find qualified workers to fill their vacancies.



Picture 1: Percentage of employers having difficulties to fill their vacancies due to skills shortage

Source: Manpower inc. 2012<sup>22</sup>

Czech republic, due to its comparably low natural reserves, needs to focus more towards research and development rather than assembly and primary production from the outsourcing point of view. To achieve that, basic issues needs to be resolved. At the very moment the educational system does not contain tools and processes that would allow flexible prediction and customization according

to labour market needs.

There are initiatives and projects designed to deal with this issue, subsidised from various support programmes from European union, national governments as well as from the corporate sector (corporate academies), working together to resolve this paradox and prevent further acceleration of skills shortage. To name a few, Czech Chamber of Commerce is suggesting the implementation of a 'Dual educational system' inspired by experience from Austria and Germany. National Educational Institution (NUV) is launching a pilot version of a project called Pospolu, focused on direct cooperation between employers and educational institutions. There is also a system of requalification of job seekers in order to provide them by qualification required on the labour market.

<sup>21</sup> Euroactiv - EU information portal. 2014. Available from: http://www.euractiv.cz/print-version/clanek/vzdelani-neni-politicke-ale-ekonomicke-tema-upozornuji-podniky-spcr-cnopk-dualni-system-pospolu-skolstvi-010446

<sup>&</sup>lt;sup>22</sup> MANPOWER INC., 2012. *Jak čelit nedostatku odborníků*. Analysis by Manpower Inc.. Available from: www.manpower.cz

The shortage of skills may be interpreted as a result of the communication and cooperation between the corporate sector, educational system and the government in the respect of strategic planning reflecting the trends on the labour market in relation to technological development across the industrial sectors.

During my research I have realized that skills shortage, although it has been identified long time ago, and it was a problem already during economical conjuncture, it remains an unsolved issue worsening the economy efficiency during the times of recession with more significant negative effect.

I believe there is a systematic solution to this phenomenon, as itself, as it is a result of a overall system malfunction. Obviously this issue is very complex and it requires many brains to achieve a satisfactory solution. To begin, there must be a consensus that this issue has a relevant impact on global economy. Whether is one or not, I am trying to demonstrate in this article.

# 2 Methodology

While deciding upon the research strategy I was not sure whether research among academic staff of economical faculties is relevant. My pros were the fundament making role within the field of economical modelling and theory making. Cons were, however, that the issue of staff shortage on the labour market is mainly affecting technical specializations rather than humanities. After further digging for information, I have realized the demand is creating its own supply within the technical field. On the other hand humanities fresh graduates are the most affected by unemployment. They are not economically strong enough to make a change. Also the technical field needs more systematic approach and that should be provided from the economical point of view.

This research is part of my thesis on the topic of Education and labour market, focused on lack of skills during times of high unemployment. To identify current development on the labour market, I am following the regular annual study of international human resource corporation Manapower Inc.<sup>23</sup> as well as the annual report on Czech graduates, issued by National educational Institution (NUV).

To determine key factors, I have carried out secondary data research on official data providers such as Eurostat, national statistical offices and specialized human resource research and planning authorities, through internet.

Based on this research I have set up a questionnaire to identify, how strongly is lack of skills perceived among the academic staff and what is their personal experience with specialization decision making.

I have carried out my primary research during my stay at Kocaeli University, Turkey as a part of exchange programme in 2011 and compared the results to data gathered at VSB TU Ostrava, Ekf on year later, results were published at Slovak Scientific Journal management: science and education<sup>24</sup>. To obtain a better visibility on the perception of this problematic by the academic staff within the Moravian - Silesian region I have carried out one more research at SLU Karvina, OPf., and its outputs are presented in this work paper.

Moravian - Silesian region belongs to the area most affected by structural unemployment. Therefore it is especially endangered by the skills mismatch issue due to the long transformation of the local business infrastructure from primary into the tertial sector.

The questionnaire consists of 22 questions in total, both opened and closed questions have been chosen. Each research has been evaluated individually. To respect the logic of comparison all values have been recalculated to percentage. The research in VSB TU, Ekf acquired 65 replies and the research at SLU, OPf Karvina 60 replies. Research has been carried out for a period of one month

<sup>23</sup> MANPOWER INC., 2012. Jak čelit nedostatku odborníků. Analysis by Manpower Inc.. Available from: www.manpower.cz

<sup>&</sup>lt;sup>24</sup> HALAMÍK, J. A comparison of the Skills Shortage Issue Perception Among Academic Staff of Kocaeli University in Turkey and VSB TU Ostrava, Czech Republic. *Slovak Scientific Journal management: science and education*. Žilina: University of Žilina, 2013, s. 26-30. ISBN 1338 - 9777.

in both cases. Due to publishers limits only partial results may be presented. I have selected such part of research that would provide an illustrative picture on researched topic results.

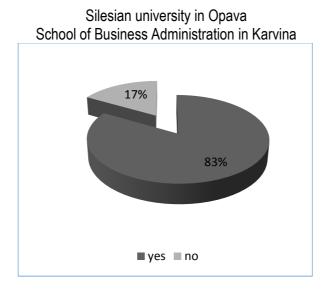
The research at VSB TU, Ostrava has been carried out in January 2013. The responders were in both cases members of academic staff of the faculty of economics. In Ostrava there were 53, 8% of male and 46,2% of female responders, in Karvina 62% were female and 38% were male responders.

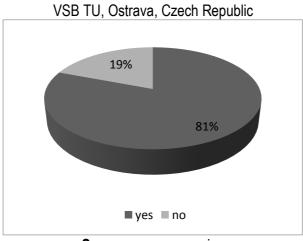
On top of it I have been testing selected projects designed to prevent further increase of the unemployment rate such as, project Staze ve firmach or Staze pro Mlade<sup>25</sup>, mainly preventing the long term unemployment, that is a result of inaccurate strategic labour planning. The results of my observations allow me to demonstrate the results of my research in practical example from practice

# 3 Research outcome

There is a near match with regards opinion of both parties of respondents to the question related to skills shortage negative impact to unemployment as phenomenon. Picture number 5 is showing the comparison of individual research results.

Figure 1: Do you agree that lack of skills is worsening unemployment?





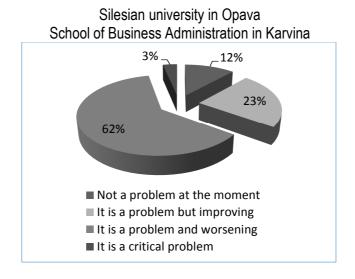
**Source**: own processing

<sup>&</sup>lt;sup>25</sup> Projects realized by Fond Dalsiho Vzdelavani, available on www.fdv.cz

As shown on figure 1 only 17 % of respondents from SLU and 19 % from VSB TU do not agree that skills shortage is worsening unemployment. This can be interpreted as a positive result with regards, ability to identify the problem as a presumption to potential of resolution. This also means that vast majority of academic staff realize the impact of skills shortage to national economy. That is a elementary fundament for further research activities, required for more detailed understanding of this topic.

Following question aims to identify the tendency of the skills shortage issue development. It is interesting that the answers differ by structure. The common agreement is that skills shortage is a problem. The perception of the tendency however varies.

Figure 2: Perceiving of lack of skills





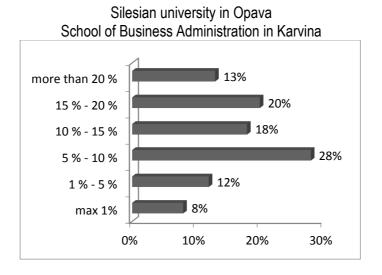
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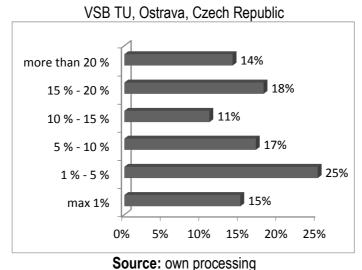
On figure 2 first to notice is that 18% of respondents from VSB TU, Ostrava do not perceive skills shortage as a problem. This also correspondents to previous question, where 19% of these respondents did not believe lack of skills is worsening unemployment. It would not make any sense should they believe this issue have a negative impact on unemployment but did not consider it a problem. On the other hand out of 17% of respondents from SLU that did not agreed to negative impact of skills shortage to unemployment, only 12% do not even consider this phenomenon to be a relevant problem.

To conclude 88% of respondents from SLU and 82 % of respondents from VSB TU, Ostrava recognises skills shortage as a problem. 23 % of respondents from SLU and 28 % of respondents from VSB TU, Ostrava, believe problem is improving, 62 % of respondents from SLU and 48 % of respondents from VSB TU, Ostrava consider the tendency is worsening and 3 % of respondents from SLU Karvina and 6% of respondents from VSB TU, Ostrava recon the problem is critical.

To provide a better visibility on how serious impact do the academic staff members perceive skills shortage has on total unemployment, respondents were asked to express the percentage of total unemployment they believe is caused by skills shortage. Picture number 7 illustrates the replies of both parties.

**Figure 3:** What do you think is the percentage of total unemployment caused by the skills shortage?

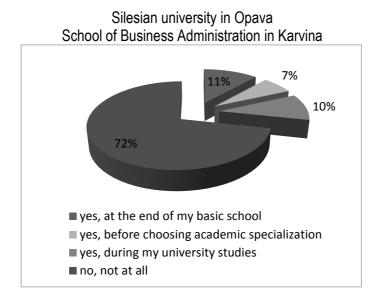


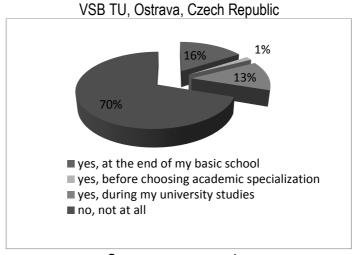


Although we can see the replies on figure 3 vary, we can still summarise that 33% of respondents from SLU and 32 % of respondents from VSB TU, Ostrava believe that part of total unemployment caused by skills shortage is higher than 15%. Highest percentage of respondents from SLU is 28 % of respondents and these believe the share of skills shortage on total unemployment is between 5-10 %. Respondents from VSB TU, Ostrava reached highest percentage at 25 % and there respondents believe the share is between 1 % to 5 %.

Following part of research is focused on respondents' perception of skills management level based on their personal experience. This should help to identify the fundaments of the issue throughout the individual stages of educational system. In this case academic staff proves to be relevant target group for this research as all of the respondents have accomplished highest education level.

**Figure 4:** Have you been offered a career consultancy at any stage of your studies?





Source: own processing

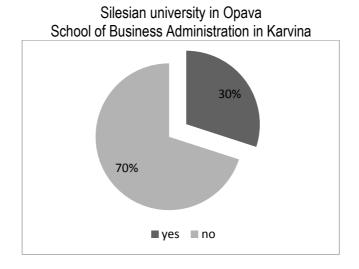
As shown on figure 4 number 8, 72 % of respondents from SLU and 70 % of respondents from VSB TU, Ostrava have not been offered a career consultancy at any stage of their studies. Only 11 % of respondents from SLU and 16 % of respondents from VSB TU, Ostrava have been provided career consultancy during the basic school. 7 % of respondents from SLU and 1 % of respondents from VSB TU, Ostrava have been offer career consultancy before choosing university specialization and 10 % of respondents from SLU and 13 % of respondents from VSB TU, Ostrava.

According to my opinion this is one of the main systematic failures. Should there be equilibrium between skills available and skills required, proper career planning is a must. If the children are not professionally guide on what specializations are required and what education out of these would be suitable to students' capacities and qualities, it is very likely they will be influenced their environment,

which results in high numbers of unemployed with irrelevant skills on one side and lack of required skills on the other side.

Figure number 5 displays the opinion of the respondents on whether the national educational programs are reflecting employers' requirements.

**Figure 5:** Do you believe that current educational programmes are effectively reflecting employer's requirements?





Source: own processing

As we can find out from figure number 5, 70 % of respondents from SLU and 66 % of respondents from VSB TU, Ostrava do not believe that the educational programmes are effectively reflecting employers' requirements. It is very interesting that two countries with different demographic and geographic parameters are facing similar difficulties with regards the lack of skills issue based on similar systematic failure.

### 4 Conclusion

Skills shortage is a phenomenon affecting employers in the respect of expansion limits. For systematic change that would allow the supply of skills match the demand for skills, the key barriers, preventing the market getting back to equilibrium, must be identified. This research proves that majority of academic staff from both universities perceive skills shortage to be a problem having a negative impact on employment. Also over 70% of respondents were not provided any career consultancy throughout their studies. At the same time over 64% of respondents do not believe that current

educational programmes reflect employers requirements for skills of fresh graduates. Very interesting finding is also the fact that the academic staff from both universities had such similar results. Out of 11 comparable answers from the original questionnaire, 7 have been near matches differing by couple of percent. This shows this is a recognized issue.

There is a near mach with regards the research outcomes from the above mentioned Czech universities in compare to the result obtained at Kocaeli university in Turkey. It is possible to conclude that the academic workers from three out of three universities, are perceiving that the skills shortage is problem with worsening tendency. This finding is even more interesting considering the difference in the demographic structure, geographic location and many others socio - economical factors.

Since this research proves lack of skills is a recognized issue, it evokes the necessity to carry out further research, focused on eliminating the systematic failures, thus readjusting the educational system to reflect the employers needs more flexibly.

During the 3 years of research I have managed to observe that should the educational institutions be able to connect with commercial sector, this cooperation must be market driven, with long term perspective and simplified as much as possible. I have managed to organize a grand of over 500 000 CZK from local authorities to enable a cooperation between the academic sector and commercial sector. Although I must admit that the involved academic staff have been very eager and helpful, we have identified that there is lack of project planning and target focus allowing to bring this initial attempt further.

The output from this research is proving my hypothesis that lack of skills is a recognized issue among academic staff of the universities above. This allows me proceed with my research, which will result in identifying the correlation between the cost of unemployment and the cost of educating the unemployed people in order to clear the skills mismatch.

To conclude, lack of skills is a recognized issue that has been recognized by the academic staff and there is a mutual consensus on its negative impact on the unemployment rate development. This consensus needs to be taken further to set up tools and processes that will reduce the gap between the skills supply and demand.

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