

# Reducing the Unemployment Rate in the Czech Republic with the Support of an Increased Interest in the Doing Business of the Unemployed Inhabitants<sup>1</sup>

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## **Abstract**

*One of the current macroeconomic problems of many developed economies is the persistent high unemployment rate. In addition to the natural development may cause its increase among others built-in stabilizers of the government fiscal policy. We think that one of the ways to reduce the unemployment rate is to establish a tax advantage for a taxpayer and also the support of the people who are interested in business as self-employed persons by a temporary reduction of the social insurance. Project of the Student Grant Competition, which we are currently dealing with, called "Optimization of taxation of personal income by introducing a tax bonus for the taxpayer to reduce the unemployment", was based on these hypotheses. Verification of hypotheses is performed by using a multi-criteria decision making method, a questionnaire survey and the METR method. The aim of this paper is to evaluate the results of the questionnaire survey (i.e., people's willingness to start a business) carried out in the cooperation with the employment offices in the regions of the highest unemployment rate.*

**Keywords:** Unemployment, Employment Office, Questionnaire Survey, Tax Advantage.

**JEL codes:** E24, H24

## **1. Introduction**

Unemployment and the constantly increasing unemployment rate especially are next to the inflation a problem faced by the economies of most developed countries. The aim of this paper is to present the project of the Student Grant Competition (SGC), whose members are trying with the help of the economic methods and tools to predict how the unemployed people will behave if there were

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raised the conditions suitable for business to them in some way. Another problem is a social system of the Czech Republic, although it does not appear is very generous to certain groups at the expense of other groups. The first part of the project is solved by the questionnaire survey, and in connection to the obtained data will be applied the multi-criteria decision making method. The second part will be solved by using the method METR (EP) (Marginal Effective Tax Rate for Employed Persons). The paper outlines individual methods and further is then analyzed the questionnaire solution method and results that were achieved by using this method.

## **2. Unemployment versus Unemployment Rate<sup>2</sup>**

We have to differentiate the definition of the unemployment according to the International Labour Organization (ILO) and the definition of the unemployment according to the Ministry of Labour and Social Affairs of the Czech Republic (MLSA CR).

Unemployed persons by ILO are persons, who during the reference period had no job, no paid work or reward and actively seek the work and were able to start to the work within two weeks. This method is united for the all member countries of the European Union and gives international comparable information. (ČSÚ, květen 2008) In contrast, the definition of unemployment according to the Ministry of Labour and Social Affairs is based on available resources of the Employment Offices and state statistics. (Jílek and Moravová, 2007)

In contrast, the unemployment rate is a ratio indicator, which is expressed in a percentage. The general unemployment rate according to the ILO definition (in the age group from 15 to 64 years of age) reached 6.8 %. Against the 2nd quarter of 2010 decreased of 0.4 percentage point.

Different survey methodology was reflected in a difference between the general unemployment rate (ILO) and the registered unemployment rate MLSA. The development trend of both rates were similar, the registered unemployment rate MLSA reached in the 2nd quarter of 2011 the value of 8.5 %, i.e. by 0.5 percentage point less than a year ago. (ČSÚ, říjen 2011)

These two terms are very often confused not only in practice. Unemployment is a phenomenon in the economy, while the unemployment rate is an approach to quantifying this phenomenon.

## **3. SGC Project and Methods Used**

### ***3.1 About the Project***

Project of the Student Grant Competition (see abstract) was created due to the need to point out one of the problems of the current economy, not only the Czech Republic but also other European as well as world countries. The project deals with an analysis of a labor market, jobs and a possibility of gaining jobs for disadvantaged people (e. g. women with small children, persons over 55 years, etc.) and the analysis of social benefit payments.

Idea and aim of the project is to create a system that would help the unemployed to start the business, enabled them the payment of the tax bonus or the reduction in the social insurance or handed them aggregate information related to a business administration instead of unemployment benefits.

Members of a research team are students of present and combined form of doctoral study at the Faculty of Economics VŠB-TU Ostrava, led by prof. Ing. Viola Šebestíková, CSc.

### ***3.2 Methodology Used***

In the project will be used the method of the questionnaire survey, the method METR and the multi-criteria decision making method. In the following paragraphs are briefly characterized individual method, except the method of the questionnaire survey, to which is targeted this paper and to which are devoted next chapters.

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<sup>2</sup> In the questionnaire survey we had use the definition according to the Ministry of Labour and Social Affairs of the Czech Republic.

The METR method (Marginal Effective Tax Rate for Employed Persons - The METR (EP)) indicates how much will increase taxes paid and will reduce social benefits, provided that a gross labor income will increase of unit. Resulting value of the METR (EP) indicates how many percent will effectively pay the taxpayer (or how much will pay on taxes and how much will reduce his income from social benefits) if his gross income will increase of an unit. If the value of the METR (EP) exceeds 100 %, it means that the increase in the gross income will be reflected in the decrease in a net income. In such case it would be irrational to increase labor supply and the taxpayer will be given into a trap of poverty. (Pavel, 2011)

This method should answer a question whether a subject pays off to work for economics at all. The lower value, the unemployed person is trying to spend more activity to get the job because it is disadvantageous for him to remain unemployed. Conversely, if the value is bigger than one, so the unemployed does not pay off to start work.

Essence of the multi-criteria decision making is based on defining several decision criteria. These are often not in mutual harmony, i.e. that variant which is evaluated by one criterion, is not best evaluated according to other criterion. The specific objective might be a selection of one variant which will be the basis for the final decision. (Jablonský, 2002) In the project solution by using this method can play an important role such criteria as a period of a registration of respondents at Employment Offices, their age, an education, a number of children or e.g. the number of available jobs.

## **4. Analytical Analysis of Data**

### ***4.1 Questionnaire Survey***

Survey in the area of unemployment is similar to a market survey in business sphere. To find out information about the behavior of a selected group of people and conditions that have available to, is used the method of the questionnaire survey. Ways of data collecting in this form can be divided into direct and indirect. In data collecting within the questionnaire survey was used the direct contact with respondents, when an interviewer fills each question with respondents, whether opened or closed. Indirect ways of a questioning, such as a telephone or written communication (by mail, email) were not possible in this case with a regard to a sensitivity of individual data.

### ***4.2 Data Collecting***

Within the project were identified seven regions with the highest unemployment and in these regions, two to three cities (or Employment Offices). Questions in the questionnaire were both closed and opened. We were interested in a gender of respondents, their age, an educational level, socio-economic issues related to a wage level, for which they would be willing to work, or e.g. conditions under which they would be willing to start do a business as a self-employed person and in what areas.

In the questionnaire survey was used for the distribution of structured questionnaires to unemployed a cooperation of selected Employment Offices, which are located in regions affected by the highest unemployment rate in the Czech Republic.<sup>3</sup> In total was approached 7 regions and in each region 2 to 3 Employment Offices. Within the questionnaire survey was sent (or handed over to students with a place of residence in these cities) 1620 questionnaires, of which 899 returned filled-in. Total return was 55.49 %.

In total 899 questionnaires were analyzed. At partial questions, the number of those who responded to the question is different, which is primarily due to a voluntary of respondents who did not have to answer to all questions. For respondents who did not want to answer some questions corresponds an item "did not respond" in figures.

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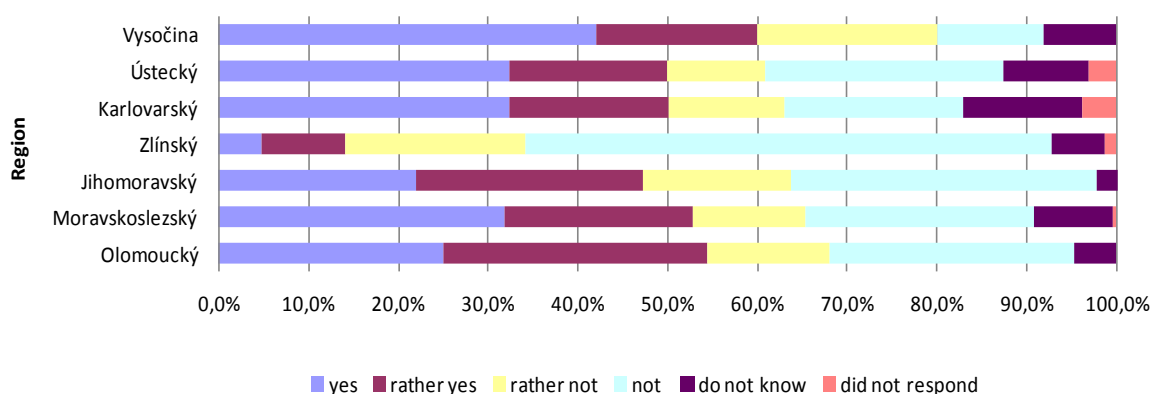
<sup>3</sup> These regions were selected on the basis of data relating to the unemployment rate in these regions for the period from March 2011, which were available on the website of the Union of Transport and Industry of the Czech Republic. (Svazu průmyslu a dopravy ČR in references).

### 4.3 Achieved Results<sup>4</sup>

From a selected sample of respondents consisted more than 60 % women, of that 45 % were within an age range from 18 to 35 years old and in the age range from 18 to 45 it was up to 70 % of respondents. Although the reached level of education of respondents in each region was different (e.g. in regions where high schools are dominated respondents with university education), so generally have been mostly represented respondents with completed secondary education. From the further question relating to the number of dependents (or children) in the household has shown to us that more than 50 % have no child and none or one child has 70 % of respondents. More than 50 % of respondents are kept at the Employment Office within a period of less than 1 year and up to 80 % of respondents are kept at the Employment Office within the period of up to 2 years. Another characteristic primarily relating to a willingness of respondents to start work, respectively do the business is contained in following paragraphs, together with a graphical representation.

The first question which related to the respondents' willingness to switch from a state of the unemployed to the state of employed (or actively participating) was the question whether the respondents would be willing to work for a minimum monthly wage (in an amount of 8 000 CZK), in the event that the state would paid out them to the minimum wage the tax advantage to the taxpayer (in the amount of 2 070 CZK). Based on date obtained from the questionnaire survey revealed that in the most regions (with an exception of a Zlínský region), respondents would accept the above condition and would be willing to start work. The range of positive answers to that question, depending on the specific region ranges from 47 to 60 %. In the case of the Zlínský region on the contrary prevailed negative responses, so that respondents would prefer to stay in the state of unemployed, even if the state would be paid out them the tax advantage to the taxpayer. This opinion prevailed in more than 78 % of respondents.

Figure 1: Willingness of respondents to work for the minimum monthly wage (in the amount of 8 000 CZK), in the event that the state would paid out them to the minimum wage the tax advantage to the taxpayer (in the amount of 2 070 CZK)

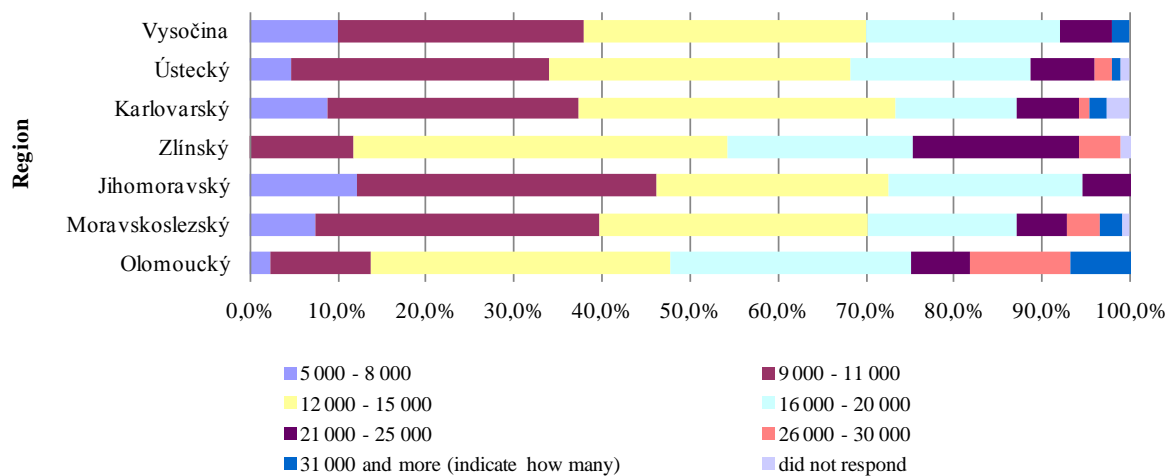


Source: Own construction

The Figure 2 shows that large differences are in net wages, for which respondents would be willing to work. "The most modest" are respondents from a Jihomoravský region, where 12.1 % and a Vysočina region where 10 % of them would be willing to work for a net wage in the range of 5 000 - 8 000 CZK, whereas in the Zlínský region respondents would be willing to work from the amount of 9 000 CZK and more. Against that, 6.8 % of respondents from an Olomoucký region would be willing to work for the amount of 31 000 CZK and more.

<sup>4</sup> All of conclusions which are mentioned with a connection of Figures (especially for Figure 1 to 4) could not be taken normatively (i.e. we could not build on them general opinions regarding the unemployment rate), because they are based on only a selected sample of respondents who were willing to cooperate within the questionnaire survey.

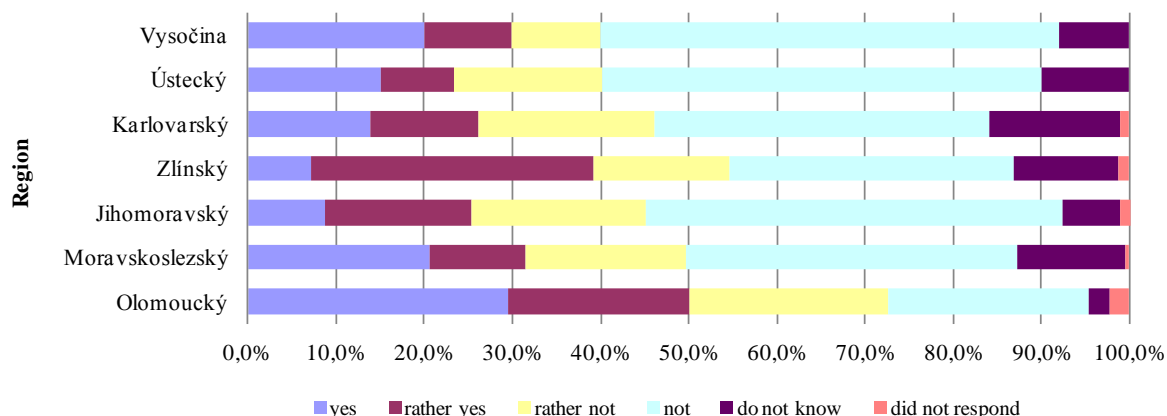
Figure 2: Amount of the net wage, for which respondents would be willing to work



Source: Own construction

Figure 3 shows that the majority of surveyed respondents would not be willing to start up a business as a trader (self-employed person), even if they did not find an acceptable job. More than 60 % of respondents from the Vysočina and Ústecký region would not want to start the business. On the contrary, in the Olomoucký region would be willing to start up the business as a sole trader 50 % of respondents. The reason of this fact can be in the cases of the Ústecký region and the region Vysočina bad entrepreneurial environment which does not support business plans because of such long-term high unemployment rate and the fact that under bad conditions for job opportunities of job seekers occurs to migration to larger or unemployment not so much affected areas. Olomoucký region is, by contrast, to these two regions (Ústecký and Vysočina) "larger", which offers more business opportunities, also has a large number of university graduates and, last but not least it is a region that was not and is not just unilaterally focused on one area of employment possibilities - an industry, but there is also a strong agricultural base.

Figure 3: Willingness of respondents to start do the business as the sole trader in the event of not finding required employment

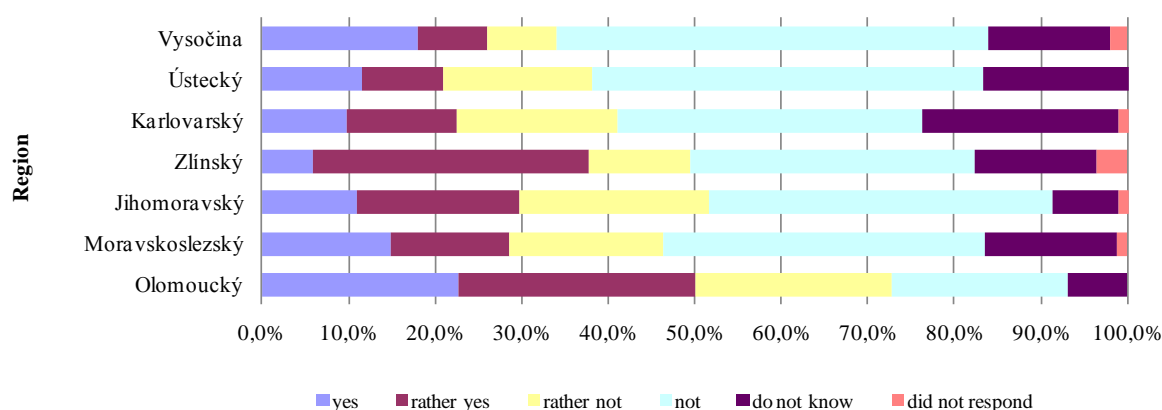


Source: Own construction

Respondents would also rather not be willing to start up the business even if they could not find the required employment and state would pay them in the first year of business a monthly tax bonus for the taxpayer up to 2 070 CZK and reduced insurance payments for a pension insurance of

the 601 CZK, which shows the Figure 4. Again, there is the exception in the Olomoucký region, where would be willing to start up the business under the given conditions, 50 % of respondents. However, despite the surprising lack of interest of respondents to start up the business under the conditions given above if they would not get the required employment, found respondents who may have already stopped “believe” that a co-operation with the Employment Office will help them to work and to the question from the questionnaire answered positively. These respondents had the greatest interest in the business in areas for example (from options available in the questionnaire): help with housework, small household tasks, baby sitting, child care, picking up the children from school/circles, companion of elderly people, care for elderly people, walking dogs (animals), small plumbing works, car maintenance, housekeeper in the household and other such as the area of computer technology, hospitality, finance, administration, advertising and trade.

Figure 4: Willingness of respondents to start do the business as the sole trader in the event of not finding required employment, where the state would pay to respondents in the first year of business the monthly tax bonus for the taxpayer up to 2 070 CZK and reduced insurance payments for the pension insurance of the 601 CZK



Source: Own construction

## 5. Conclusion

The paper describes the issues of unemployment and social benefits. Within the SGC project was presented here one of methods, the questionnaire survey. Based on the acquired data, we came to the conclusion that it is very difficult to identify partial factors that lead unemployed individuals to the fact that they do not want to start working as sole traders (self-employed persons). Furthermore, it turned out that even if the state wanted to help these respondents in the area of business by introducing the tax bonus in the first year of activity or a discount on the social insurance, these respondents mostly will not be willing to start do the business under the given conditions. Exception of surveyed regions is the region Olomoucký, where would be more willing to do the business up to 50 % of respondents. Its role in this case could play a higher percentage of women representation and the fact that the region Olomoucký ranks among regions with higher education level.

The question remains, why the majority of respondents rather want to stay in a “care” of Employment Offices. Whether it is their comfort or conversely a passivity of Employment Offices sides and a good family background because more than 50 % of respondents have no children. Another area that can play here a very important role is a constantly growing gray economy and a very generous social system of the Czech Republic.

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