# Czech University of Life Sciences Prague Faculty of Economics and Management

**Department of Economics** 



#### **Bachelor Thesis**

The analysis of unemployment in the Czech Republic – Case study of Prague

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#### CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

## **BACHELOR THESIS ASSIGNMENT**

Tereza Štulíková

**Economics and Management** 

Thesis title

The analysis of unemployment development in the Czech Republic - Case study of Prague

#### **Objectives of thesis**

The aim of this work is to describe the issue of unemployment and its development in Prague. The objective is to assess development of the unemployment rate since the establishment of the independent Czech Republic to 2014. Another Objective is comparison with the Czech Republic and analysis of unemployment in Prague by gender, education and age group in years 2006 – 2014.

#### Methodology

Descriptive and comparative methods will be used in the thesis. To develop theoretical part there will be used professional publications, textbooks, books and websites dealing with unemployment. The theoretical part will deal with the explanation of terms that are important to clarify the issue of unemployment. At first there will be described how to measure unemployment, its types, relationship to inflation, natural rate of unemployment, groups at high-risk, causes, costs and tools of active labor market policy. The practical part will focus on tables and graphs, which will be made in MS Word and MS Excel with data from the Czech Statistical Office.

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#### **Recommended information sources**

BUCHTOVÁ, B. Nezaměstnanost: psychologický, ekonomický a sociální problém. Praha: Grada, 2002. ISBN 80-247-9006-8.

ČESKÝ STATISTICKÝ ÚŘAD. Statistická ročenka České republiky = Statistical yearbook of the Czech Republic 2014. Praha: Český statistický úřad, 2014. ISBN 978-80-250-2580-2.

HOLMAN, R. Ekonomie. Praha: C.H. Beck, 2005. ISBN 80-7179-891-6.

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Declaration	
I declare that I have worked on my bachelor thesis titled "The analysis unemployment in the Czech Republic – Case study of Prague" by myself and I have used the sources mentioned at the end of the thesis. As the author of the bachelor thesis, I dec	only
that the thesis does not break copyrights of any their person.	
In Prague on  Tereza Štulíková	

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## Analýza nezaměstnanosti v České republice – Případová studie Prahy

#### Souhrn

Tématem bakalářské práce je Analýza nezaměstnanosti v České republice – Případová studie Prahy. Nezaměstnanost je jedním z nejdiskutovanějších ekonomických problémů dnešní společnosti. Nezaměstnanost postihuje všechny státy, bez ohledu na to, jak rozvinuté jsou. Jistá míra je i přínosná, protože pomáhá udržovat zdravé napětí mezi nabídkou a poptávkou práce. Nejzávažnější následky nezaměstnanosti jsou ekonomické, politické a sociální a ovlivňují funkčnost celého státu. Ovlivněny jsou také i rodiny nezaměstnaných. Ekonomické následky se promítají hlavně ve státním rozpočtu, kdy s růstem míry nezaměstnanosti, stoupají i výdaje na podporu nezaměstnaných a tím pádem se zmenšují příjmy do státního rozpočtu. Nezaměstnanost je jedním z nejdůležitějších ukazatelů státní ekonomiky.

Teoretická část této práce je zaměřená na základní terminologii nezaměstnanosti. Praktická část se zabývá obecným popisem Prahy, vývojem míry nezaměstnanosti od vzniku samostatné České Republiky. Dalším cílem je porovnat nezaměstnanost v Praze se zbytkem České Republiky a provést analýzu nezaměstnanosti v Praze podle pohlaví, vzdělání a věku.

Klíčová slova: nezaměstnanost, trh práce, Praha, Česká republika

# The analysis of unemployment in the Czech Republic – Case study of Prague

#### **Summary**

Topic of this bachelor thesis is The analysis of unemployment in the Czech Republic – Case study of Prague. Unemployment is one of the most discussed economic problems of our society. Unemployment affects all countries, regardless of how developed they are. A certain level of unemployment is perhaps even necessary to keep a healthy tension between supply and demand of labour. There are different impacts of unemployment. These are mainly economic, political and social problems, which affect the functioning of the entire state, but it can also have an impact on individual families related to the unemployed. Economic problems are mainly reflected in the state budgets of countries as with the rise of unemployment, expenditure on welfare for the unemployed people naturally grows, which reduces revenues of the state budgets. Unemployment is one of the most important indicators of the national economy.

The theoretical part of this bachelor thesis is focused on fundamental terminology of unemployment. The practical part deals with the description of Prague, development of the unemployment rate from the time that the independent Czech Republic was estabilished. Another objective is comparison of unemployment rate in Prague to the rest of the Czech Republic and the analysis of unemployment in Prague according to gender, education and age group.

Keywords: unemployment, labour market, Prague, the Czech Republic

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#### 1 Introduction

Unemployment is one of the most discussed economic problems of our society. According to the International Labour Organization, the average unemployed person is defined as being older than 15 years, who, during a specified period, is not employed, is actively searching for a job and is available to start work within two weeks.

Unemployment affects all countries, regardless of how developed they are. A certain level of unemployment is perhaps even necessary. The natural rate of unemployment is the lowest sustainable rate of unemployment, which leads to healthy tension between supply and demand of labour. This amount is different for each economy. There are different impacts of unemployment. These are mainly economic, political and social problems, which affect the functioning of the entire state, but it can also have an impact on individual families related to the unemployed. Economic problems are mainly reflected in the state budgets of countries as with the rise of unemployment, expenditure on welfare for the unemployed people naturally grows, which reduces revenues of the state budgets. Unemployment is one of the most important indicators of the national economy.

Prague is the largest regional labour market in the Czech Republic. Due to its position as the capital and the largest city of the Republic it offers a large representation of jobs with a large spread of professions. In terms of sectoral structure, Prague is most strongly represented by the tertiary sector, which employs more than three quarters of workers here. Prague continuously has the lowest unemployment rate of the whole country. Even though Prague achieves the best statistical results in the Czech Republic, there is still unemployment, which has already undergone some development, and this is the subject of this bachelor thesis.

### 2 Objectives and methodology

#### 2.1 Objectives

The aim of this work is to describe the issue of unemployment and its development in Prague. The objective is to assess development of the unemployment rate since the establishment of the independent Czech Republic to 2014. Another Objective is comparison with the Czech Republic and the analysis of unemployment in Prague by gender, education and age group in years 2006 - 2014.

#### 2.2 Methodology

Descriptive and comparative methods will be used in the thesis. To develop theoretical part there will be used professional publications, textbooks, books and websites dealing with unemployment. The theoretical part will deal with the explanation of terms that are important to clarify the issue of unemployment. At first there will be described how to measure unemployment, its types, relationship to inflation, natural rate of unemployment, groups at high-risk, causes, costs and tools of active labor market policy. The practical part will focus on tables and graphs, which will be made in MS Word and MS Excel with data from the Czech Statistical Office.

#### 3 Literature Review

#### 3.1 Definition of unemployment

Unemployment is one of the most discussed economic problems of our society.

According to the International Labor Organization, an average unemployed person is defined as older than 15 years, who during the specified period, isn't employed, is actively searching for a job and is available to start work in two weeks. If the person doesn't fulfil these conditions, he/she is considered as economically inactive (such as students, retirees or discouraged workers) or employed. The labor force or, in other words – 'economically active persons' are a combination of the unemployed and the employed. (Maitah, 2015)

The unemployment rate is stated as a percentage and calculated by dividing the number of people who are unemployed by the total number of economically active people. (Pavelka, 2007)

$$u (\%) = \frac{U}{L} \times 100$$

Where:

u ... rate of unemployment

U ... number of unemployed

L ... number of economically active people

The labor force participation rate is the proportion of the population that are economically active. That means that all people who supply labor for the production of goods and services and is measured in percentage as the labour force devided by the adult population. (Maitah, 2015)

The statistical office performs these calculations and so provides data that is useful for a number of reasons. The government uses unemployment as one of the indicators for macroeconomic and labour market management. In the area of social policy, unemployment indicates relative hardship.

#### 3.2 Unemployment classification

Economists often differentiate between various types of unemployment. The most common differentiation is distinguishing between cyclical, frictional, and structural unemployment based on the length of time a person has been unemployed.

#### 3.2.1 Frictional unemployment

Frictional unemployment is a result of normal turnover in the labor market and refers to the short time when workers are finding new jobs. Even in the case of full employment, there would be still people who seek a job after graduating from college, women after maternity leave or people moving to other places, for whom it still takes time to find out about new job opportunities, to be interviewed and hired. Most of the time this type of unemployment is voluntary and temporary. (Pavelka, 2007)

#### 3.2.2 Structural unemployment

Structural unemployment occurs when there are mismatches between the demand and supply of certain types of worker. In other words, employers can neither find enough qualified workers nor can workers find jobs they are skilled to do. These workers are unemployed because of the change in the structure of the economy has made their skills outdated. Therefore we can encounter imbalance in some occupations, because whilst one sector develops, another one declines. Among this type of unemployment belongs people with few skills and little work experience. (Pavelka, 2007)

#### 3.2.3 Cyclical unemployment

Cyclical unemployment occurs when the economy slows down and there is a lack of demand for labor to employ all workers seeking a job. It's named 'cyclical' because of the cycles the unemployment rate undergoes as a result of the expansion and contraction phase of the business cycle. Thus when the economy reenters the expansion phase, the unemployed get rehired. Cyclical unemployment is temporary, although during a recession it can last longer and during a depression even more. (Pavelka, 2007)

#### 3.2.4 Other types of unemployment

Among other types of unemployment could be mentioned for example seasonal unemployment, mainly linked to fluctuating demand for seasonal work such as construction or agriculture. Unemployment can be further subdivided into voluntary (self-imposed decision, the person doesn't seek for a job and isn't registered at the Labour Office) and involuntary (active aim towards finding a job). In terms of time, unemployment can be divided into short-term (up to 3 months), meditum-term (up to 12 months) and long-term (over 12 months) (Krebs, 2007)

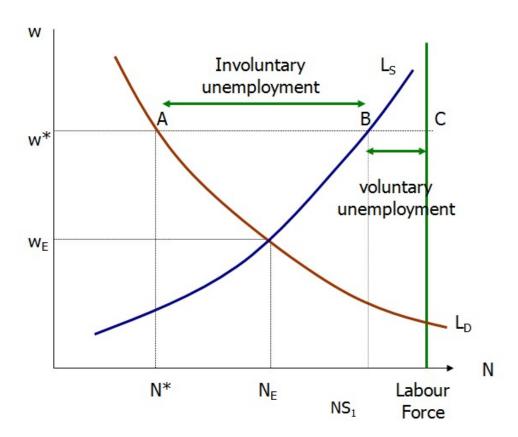


Figure No. 1: Voluntary and Involuntary unemployment

 $Source: \ http://utopiayouarestanding in it.com/2014/08/03/job-finding-probability-under-work-for-the-dole-when-then-there-is-involuntary-unemployment/$ 

#### 3.3 The natural rate of unemployment

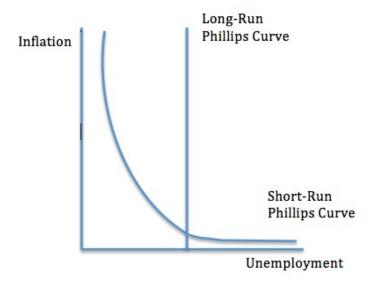
The natural rate of unemployment is the sum of the frictional and structural unemployment rates. The natural rate of unemployment is often called voluntary unemployment and is described to be more stable than the overall unemployment rate. Because the cyclical unemployment is zero in a boom, the natural rate of unemployment is equal to the observed unemployment rate in a boom. In a recession, the observed unemployment rate is greater than the natural rate by the cyclical unemployment rate. It is generally that we have full employment when the unemployment rate is equal to the natural rate and cyclical unemployment is zero. Thus, the full employment does not say that the unemployment is zero. (Jochumzen, 2010)

The natural rate is the lowest sustainable unemployment rate, in which the labour market is in a long-term balance. When the economy reaches the natural rate of unemployment, then all people who want a job (at a given wage rate), can work. The natural rate of unemployment appears in the range of 5.5% - 6%. But it depends on individual state economies. "Some economists object to using the term natural to refer to unemployment that is partly structural, because it seems to imply that the human suffering that accompanies structural unemployment is acceptable in some normative sense. They instead use the term no accelerating – inflation rate of unemployment (NAIRU). The two terms are interchangeable." (Maitah, 2015)

#### 3.4 Phillips curve

In real economics there is a significant relationship between inflation and unemployment. The tradeoff between these two concepts is represented by the Phillips curve. A. W. H. Phillips published his study in 1958. In the development of macroeconomics, this was seen as a fundamental milestone, as the two main aims of an economy are to keep both inflation and unemployment low. Phillips noticed an inverse relationship between the rate of unemployment and the rate of wage inflation in the United Kingdom, 1861-1957. Inflation rose as unemployment fell, and inflation fell as unemployment rose. As shown in a Figure No. 2, the Phillips curve has a negative slope, hyperbolic shape and an intersection point with the horizontal axis. (Maitah, 2015)

Figure No. 2: The Phillips Curve



The Phillips Curve

Source: http://www.macrobasics.com/chapters/chapter13/lesson132/

The Phillips curve is only valid for short periods of time. The short-term tradeoff occurs when the economy suffers from a rapid and unexpected increase in inflation. This takes a while as people adapt to the change in the value of money. Then, they adjust their salary expectations upwards to compensate for the decrease in the value of money. As a result, people spend more time by looking for the right job and thus the rate of unemployment increases. (Maitah, 2015)

The opposite happens in disinflation, when workers realize that they have too high wage expectations and thus lower them. This results in a shorter time when searching for a job and a decrease in the unemployment rate. (Maitah, 2015)

In the long run there is no relationship between inflation and unemployment. The Phillips curve becomes a vertical line which merges with the natural rate of unemployment.

#### 3.5 Groups at high-risk of unemployment

Loss of employment is undoubtedly a difficult matter. Everyone experiences it differently. Each individual has his or her own reason to work. The most common motivatational factors are:

- money (to satisfy one's needs),
- activity,
- self-fulfillment (being successful, useful),
- social interaction,
- economic independence. (Buchtová, 2002)

The strength of each motive is related to the reaction to loss of unemployment. One can be stressed just by the thought that it may happen in the near future. To successfully find a job, is affected by many factors (for example gender, age, education, health status) which may classify people into high risk groups of losing their job or being unemployed for a long period. These are groups of people whose futures may be uncertain, such as graduates, who are looking for their first job, the elderly, women, the disabled, people with lower education, or socially maladjusted people.

#### 3.5.1 The youth

This risk group consists of young people and graduates of high schools and universities. It is the youngest group of candidates without any qualifications or work experience and are negatively influenced by the social status of their patente, who may have an unwillingness to seek employment and may prefer social benefits over working income. Another problem of the unemployment of young people is the shift in the age limit for retirement, which means jobs aren't released. Thus, it is better to take a job, which is lower paid and below educational level in order to acquire the necessary work habits and to maintain knowledge and skills. It is more benefitial for a person to work than to spend time idling. Possible solutions include further study, retraining or intership positions. (Buchtová, 2002)

#### 3.5.2 The elderly

The older a person is, the stronger their stereotypes are and the more difficult it is to adapt to new situations in life. Elderly people are used to staying in one profession all their life, they aren't used to the uncertainty of losing a job as much as we are now. The cause of unemployment for the elderly may be inadequate qualifications, which don't match today's needs, lower adaptability or worsening health conditions. Nowadays, employers demand a good knowledge of foreign languages, the ability to work with modern technologies, and flexibility. A lot of older people can not offer these skills. Another thing to mention is the problem of higher salary expecations, stemming from their long work experience. Therefore, the unwillingess of employers to hire the elderly and an increasing age limit for retirement is like being caught in a vicious circle. In addition, our society has demographic ageing, which means that the average age of the population is increasing and, as the group of the elderly grows, the financial support for them burdens the younger generation. A possible solution of preventing this type of unemployment is to offer retraining based on the current requirements of the labor market. (Buchtová, 2002)

#### 3.5.3 The disabled

With a great emhasis on productivity and performance, people with physical limitations have less chance of getting a job. Even worse, if they are older or have a low level of education. It is not just economic, social and psychological problems, but also dignity and having a sense of purpose in life. Social benefits can often be greater than the income of a job, however it is still more important to the disabled to feel useful, needed and to enjoy being with other people. As for the employers, it is not attractive to employ the disabled. The Ministry of Labor and Social Affairs implemented some instruments to try to motivate employers. When employers have more than 25 employees, 4 percent of them must be 'disabled' people. This obligation can be replaced by buying products from companies where half of the employees are disabled. If the employers do not choose either of these options, they must pay 2.5 times the average monthly wage to the state budget (in the national economy for the first to third quarters of the previous year) for every disabled person the employer should have employed. Another possible motivation for getting contributions from the government is to create sheltered workshops. (Buchtová, 2002)

#### 3.5.4 Child care

In our culture, there is an idea that if a woman loses her job, it's not as bad as a man losing his job. However for a woman, work is a source of self-esteem and social recognition, and not just a matter of income. The unemployment rate of women is higher than the rate of male unemployment. Employers prefer men because their job performance is not affected by caring for the household and children. In addition, when a woman repeatedly takes career breaks or works less hours than men, it has a negative impact on her career development. The unemployment of women is a global problem. It is difficult to balance working and maternal duties. A possible solution could be to offer more part-time jobs for mothers. (Buchtová, 2002)

#### 3.5.5 Unqualified workers

Currently, the largest group of unemployed people (approximately one third out of all) are those with basic education. They are mainly young people, who are difficult to educate, often with not much interest in the job. This group also contains people with behavioral problems - alcoholics, offenders, people released from correctional facilities, and other people who are socially maladjusted. These are people who are separated from society and live off financial aid provided by the government. Qualifications and skills are crucial in finding a job and bring more possibilities. Employer always want to hire somebody who will be benefitial to the company. Unemployment of unqualified workers is a serious problem because companies are less and less interested in employing people who may be a potential threat to society. (Buchtová, 2002)

#### 3.6 Causes of unemployment

#### 3.6.1 Minimum wage

The minimum wage is the lowest possible salary that an employer is obligated to pay to workers, and is considered as a reason of unemployment by many economists. As it is shown in Figure No. 3, when the minimum wage is above the market equilibrium price, it increases the labour supplied and decreases the labour demanded. It creates a labor surplus, in other words unemployment. Thus, the opponents of estabilishing a minimum wage claim that

when the labour of unqualified workers becomes more expensive, employers do not want them. A higher minimum wage can also contribute to illegal employment, which means levy leakage from the national budget. However as there are two sides to every story, and the proponents of the minimum wage law argue that it can help to reduce poverty and also motivate people to work rather than relying on unemployment benefits. Economists still can not reach an agreement on whether estabilishing a minimum wage is better or worse for the economy. (Mankiw, 1999)

Wage

Surplus of labor = unemployment

Minimum wage

Labor supply

Labor demand

Labor demand

Figure No. 3: Minimum wage

Source: Mankiw, 1999

#### 3.6.2 Labor unions

Labour unions are defined as associations formed to help workers to protect their work, economic, political, social and other interests. A union member acts on the worker's behalf and negotiates with employers or the government for a raise in salary or for better work conditions. It negatively influences the perfect competition model on the labour market since the labour union is a monopolist. The result of aiming higher than the equlibrium price is unemployment, and it therefore reduces wages in other parts of the economy. (Mankiw, 1999)

#### 3.6.3 Efficiency wage theory

As in the two cases mentioned above, unemployment is caused by wages that are set above the equilibrium wage rate. According to the theory of 'Efficiency Wages', companies work more efficiently when paying higher wages than the equilibrium. Therefore, it may be advantageous for the company to maintain higher wages, although there is a surplus of labor supplied. Due to an increase in wages, the company gains employees with better health conditions, higher productivity and it will attract better workers. (Mankiw, 1999)

#### 3.6.4 The unemployment benefit

Most economists believe that an abolition of unemployment benefits would reduce the unemployment rate. When benefits are high, it is more advantageous for the unemployed to be financially supported by the government than to take a lesser well paid job.

#### 3.6.5 The employee protection policy

Employment protection laws restrict the termination of employees. However when the government instructs employers to release employees that they are not satisfied with, then the employer will be hesitant in employing more workers. Even if this law is designed to protect the employee, it actually increases the unemployment rate. As well as payroll taxes paid and mandatory social and health insurance contributions, labor costs discourage hiring new employees. (Maitah, 2015)

#### 3.6.6 The occupational licensing

This is another cause of unemployment defined as a form of a government regulation that involves having to have a license to carry out a particular profession. This is understandable for professions that may have a negative impact on individuals, for instance doctors or lawyers, but is it really necessary a hairdresser? After all, the customers can say themselves who cuts their hair well or not. When the government approves licensing, it creates a legal problem for entring the market, resulting in an increased unemployment rate and higher prices for the consumer.

#### 3.7 Costs of unemployment

We can distinguish between the impact on society or individuals and the consequences from an economic and social point of view. They are closely related and interconnected. Assuming that the long-term unemployment is high, there will be a greater social expenditure and reduction of wages which has a negative impact on the psyche of individuals and influences the lives of families.

#### 3.7.1 Impact on economy

Losses that occur at a time of high unemployment account for the biggest waste of resources in the present-day economy. Most of the time we talk about cyclical unemployment. This is expressed by Okun's law which is based on the fact that when the real unemployment rate is greater than the natural rate of unemployment, the actual product declines below the potential output and the economy is not as efficient as it could be, thus not using its potential possibilities. Okun's law states that when the unemployment rate increases by 1%, the actual GDP falls below the potential output by 2%. <sup>1</sup>

Another impact on the economy is the cost of unemployment benefits, social benefits, pensions for early retirees or costs of retraining. Social benefits given to the unemployed are non-taxable, which is a burden for the social policy. Long-term unemployment has significant impact on the health of an individual, which requires the cost of prevention, treatment, rehabilitation, thus generally increasing health care costs. The solution for long-term unemployment is a state employment policy, which should be focused on the retraining of the unemployed and supporting the business area in order to create new jobs.

#### 3.7.2 Impact on society

Long-term unemployment greatly affects the life of individuals, families and society. Unemployment brings along with it despair, unhappiness and anguish, which all lead to social isolation. Each person deals with this stressful situation differently. It depends on an

<sup>&</sup>lt;sup>1</sup> http://ekonomie-otazky.studentske.cz/2008/07/ekonomick-dsledky-nezamstnanosti.html

individual's personality, endurance, health, education and his or her willingness and incentives to work. (Pavelka, 2007)

The negative social effects are:

- loss of income
- reduced standard of living
- loss of skills usage
- tension within the family
- social outcasting
- stress, depression and other health problems
- alcoholism
- increased rate of crime
- higher suicides

#### 3.8 Active labor market policy

Active labour market policies (ALPMs) are government programmes that intervene in the labour market to help the unemployed people in finding work. <sup>2</sup>

Types of active market policy:

- a) incentive reinforcement
  - tax credits
  - time limits on recipiency
  - benefit reductions
  - benefit conditionality
  - sanctions
- b) employment assistance
  - job subsidies
  - placement services
  - counselling
  - job search progammes

<sup>&</sup>lt;sup>2</sup> https://en.wikipedia.org/wiki/Active labour market policies

#### c) occupation

- job creation schemes in the public sector
- non-employment related training programmes

#### d) human capital investment

- education
- vocational training<sup>3</sup>

#### 4 Practical part

#### 4.1 Measurement of unemployment

Unemployment can be measured in various ways. In the Czech Republic there are two basic ways, one uses the Czech Statistical Office and the other the Ministry of Labour and Social Affairs. This thesis uses the definition of the Czech Statistical Office, which measures unemployment by the International Labour Office, where unemployed are all people older than fifteen years that have not been employed in a given period, they are ready to start work no later than fourteen days and the last four weeks were actively seeking work. Thus, the reported unemployment rate is called the general unemployment rate. <sup>4</sup>

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<sup>&</sup>lt;sup>3</sup> http://www.sps.ed.ac.uk/ data/assets/pdf file/0010/39268/REC-WP 0110 Bonoli.pdf

<sup>&</sup>lt;sup>4</sup> Source: http://www.penize.cz/80354-co-je-nezamestnanost

#### 4.2 Characteristics of Prague

"Prague is the capital in the Czech Republic. It is the 14th largest city in the European Union, situated in the north-west of the country on the Vltava River, the city had a population of about 1.26 million people in 2014.

Prague is a city with a high concentration of jobs, but it is also the most important center of education of the Czech Republic. The education system in the Czech Republic is regarded as one of the the best in Europe. Prague is also a center for jobs on a national scale. The salary in Prague is generally higher than that of other Czech cities. Prague is a region with an above average production of gross domestic product and income. One reason for the high GDP value is that a big number of jobs are taken by commuters. Prague's Labour Office ensures employment through the Central Office and another eight local offices. <sup>6</sup>

#### 4.3 Development of the unemployment rate in Prague 1993-2003

From the time that the independent Czech Republic was estabilished until 1996, the general unemployment rate in Prague was steadily declining - from 3.45% in 1993 to 1.97% in 1996. This was achieved due to significant growth in the Czech economy. There were large number of economically active people. The birth rate radically declined after 1993, because young people were choosing to postpone the birth of their first child, which also accounted for very high employment. A decline in economic performance after 1997 was a result of bank debts and restrictive monetary and fiscal policies. Then the unemployment rate began to increase rapidly until 2000, when it was 4.2%. In the next two years the unemployment rate fell slightly in Prague. However, in 2003, the unemployment rate rose again and offset the current maximum of 2000. Even though the first years of the millennium have brought economic recovery, which stemmed from the overall industrial restructuring, improvement of competition or inflow of new investments, the total increase in labor productivity did not result in a reduction of unemployment and the number of people in long-term unemployment increasing. (Czech Statistical Office)

<sup>&</sup>lt;sup>5</sup> https://www.czso.cz/csu/xa/obyvatelstvo-xa

<sup>-</sup>

<sup>&</sup>lt;sup>6</sup> https://www.czso.cz/documents/10180/25964515/33012014chen.pdf/dbf6c64f-12f1-4b53-b7c9-d5f4ecb8827d?version=1.2

Table No. 1: Unemployment rate in Prague (1993 – 2003)

Year	Unemployment rate (%)
1993	3.45
1994	2.82
1995	2.53
1996	1.97
1997	2.38
1998	3.25
1999	3.98
2000	4.2
2001	3.86
2002	3.64
2003	4.19

Source: Czech Statistical Office

## 4.4 Development of the unemployment rate in Prague 2004-2014

From 2004 to 2008, the unemployment rate declined in Prague, when it reached lowest unemployment rate (1.9%) for the entire monitored period. This downward trend for the period 2004 – 2008, was mainly caused by the overall condition of the Czech economy, where real GDP grew by more than 5% per year, and an increase in foreign commerce. Another important aspect was the entry of the Czech Republic into the EU, which brought a positive development to unemployment in several aspects. One of the positive impacts was the flow of EU funds to new projects that created job vacancies. Another positive factor was the availability of certain European labour markets for citizens of the Czech Republic, who were able to work abroad, thereby reducing the number of applicants for Czech jobs. Additionally, when the Czech Republic joined the European Union, an institution was created which dealt with administration connected to the EU. This resulted in the requierement of administrative workers. (Pavelka, 2006)

As shown in the Table No. 2, in 2009, the unemployment rate in Prague was 3.1%, representing an annual increase of 1.2%. This increase was the highest figure for the entire monitored period. It was caused by the financial crisis in 2008. The most significant impacts of the Recession are always in the area of employment. The economic downturn was also reflected on the Prague labour market by a decrease in job vacancies. The labour market reacts to economic development, usually, with a slight delay. Therefore, the unemployment rate in Prague had already decreased to 1.9% in 2008, the year that the financial crisis fully broke out. In 2009 it rose to 3.1%. This affected all groups of people. <sup>7</sup>

The unemployment rate in 2011 was 3.6% and in 2012 and 2013 it declined slightly to 3.1%. The last period (2011-2013) was characterized by austerity budgets, declining real incomes and people being generally uncertain about the future. <sup>8</sup>

At the end of 2014, statisticians measured a figure of 2.5% as the unemployment rate. Prague, along with the German region of Upper Bavaria were the areas with the lowest unemployment rate in the European Union. According to Deloitte's chief economist David Marek, the success of Prague is only partly surprising. Earlier data had shown that only a few European countires had lower unemployment than the Czech Republic. Mark also noted that the result was a proof of a well functioning Czech labour market. There was a positive trend from 2013 when the unemployment rate fell by 0.6% in Prague. In five of the seven remaining Czech regions unemployment fell even faster. According to Mark, this was due to the regional economic structure. While Prague has dominated employment in the service sector, which is relatively stable, the rest of the country is dominated by industry, which is prone to cyclical crises.<sup>9</sup>

<sup>&</sup>lt;sup>7</sup> http://www.parlamentnilisty.cz/zpravy/tiskovezpravy/CSU-Trh-prace-1993-2013-329507

<sup>8</sup> http://www.parlamentnilisty.cz/zpravy/tiskovezpravy/CSU-Trh-prace-1993-2013-329507

<sup>&</sup>lt;sup>9</sup> http://ekonomika.idnes.cz/nejnizsi-nezamestnanost-v-evropske-unii-je-v-praze-fxs-/ekonomika.aspx?c=A150427 115914 ekonomika rny

**Table No. 2: Unemployment rate in Prague (2004 – 2014)** 

Year	Unemployment rate (%)
2004	3.89
2005	3.51
2006	2.80
2007	2.44
2008	1.90
2009	3.06
2010	3.80
2011	3.60
2012	3.10
2013	3.10
2014	2.50

Source: Czech Statistical Office

#### 4.5 Labor market in Prague

Prague is the largest labor market in the Czech Republic. Prague decreases the unemployment of the Central Region, because a number of its residents commute to work. In comparison to other regions, Prague boasts a higher qualification of its workforce. The average gross wage in Prague in 2014 was estimated at 33 347 CZK, which was a little more than 20% higher than the national average. (Czech Statistical Office)

#### The largest employers in Prague

- a) more than 10.000 employees
- Česká pošta, s.p.
- Česká spořitelna, a.s.
- České dráhy, a.s.
- Dopravní podnik hl.m. Prahy
- Správa železniční dopravní cesty
- Vězeňská služba České republiky

- b) 5000 9.999 employees
- Česká správa sociálního zabezpečení
- České vysoké učení technické v Praze
- Fakultní nemocnice v Motole
- Generální ředitelství cel
- Krajské ředitelství policie hlavního města Prahy
- Všeobecná fakultní nemocnice v Praze

(Czech Statistical Office, on the date 31.12.2014)

#### 4.6 SWOT analysis of Prague

#### **Strengths**

- Prague's position in the heart of Europe
- permanent and professionally developed labour market
- highly qualified labour force
- well connected to continental and global transport network
- good inner city transportation
- prevalent representation of the tertiary sector
- high potential of education
- high level of economic activity
- high average wage

#### Weaknesses

- increasing number of citizens in retirement
- rising crime
- high operating costs for businesses
- high cost of living
- not enought support of small and middle businesses
- low utilization of research base
- insufficient integration of vulnerable categories into society

#### **Opportunities**

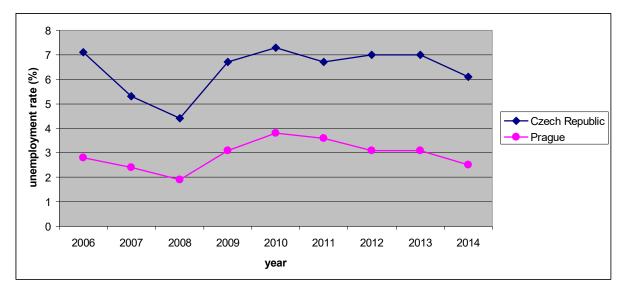
- use of higher education within the labour force
- utilization of production possibilities for new technologies
- excellent location in the centre of Europe for important national and international institutions
- use of extraordinary cultural and historical wealth/variety for travel tourism
- development of the school system
- collective action and cooperation of the Prague's institution in solving problems
- the use of European funds for the country

#### **Threats**

- decrease of prestige of the city
- drop in Prague's importance for economic and cultural authorities in Europe
- growing competition and lower profitability
- rising cost of raw material
- underestimating the growth sustainability and overstimating of short-term economical results
- lack of finance for improvement of transport infrastructure
- urban and technical infrastructure
- a growing part of the population in post-productive age
- growth of general crime
- increase concentration of hard adaptable citiziens

#### 4.7 Prague in comparison to the rest of the Czech Republic

Prague in comparison to the rest of the Czech Republic has a much lower rate of unemployment due to the high concentration of job opportunities. Between the years 2006 – 2014 Prague unemployment rates have ranged from 1.9 to 3.8%, while in the rest of the country from 4.4 to 7.3%. As shown in the Graph No. 1, the unemployment rate in Prague copies the pattern of the unemployment rate in the Czech Republic with lower values. Since 2009, the unemployment rate has increased both in Prague and in the whole country due to the economic crisis.



Graph No. 1: Unemployment rate (%) in Prague and the Czech Republic 2006 – 2014

Source: Czech Statistical Office

The highest figure of the unemployment rate was reached in 2010. In that year, the unemployment rate in the Czech Republic was 7.3% and 3.8% in Prague. Then in Prague it declined until 2014, when it was measured at 2.5%. In the Czech Republic, 2011 the unemployment rate fell to 6.7%, and in 2012 and 2013 increased to 7% and by 2014 had fallen again to 6.1%. The lowest unemployment rate recorded in Prague and the Czech Republic was in 2008 and the highest was in 2010, when there were the most exhibited effects of the economic crisis. Development of the labor market is caused due to many factors, including the impact of demographic trends, economic restructuring, integration of national economies into the world market, social and cultural development, etc.

Table No. 3: Unemployment rate (%) in Prague and the Czech Republic (2006 – 2014)

	Unemployment rate (%)				
year	Czech Republic	Prague	Diference		
2006	7.1	2.8	4.3		
2007	5.3	2.4	2.9		
2008	4.4	1.9	2.5		
2009	6.7	3.1	3.6		
2010	7.3	3.8	3.5		
2011	6.7	3.6	3.1		
2012	7	3.1	3.9		
2013	7	3.1	3.9		
2014	6.1	2.5	3.6		

Source: Czech Statistical Office

#### 4.7.1 Prague in comparison to other regions of the Czech Republic

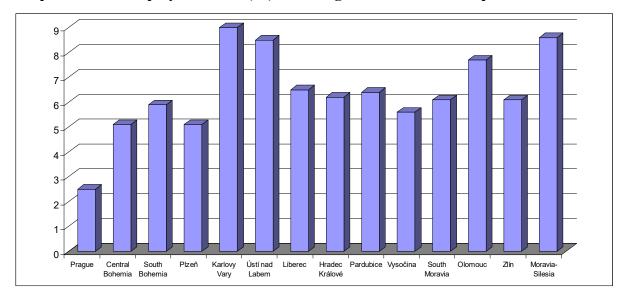
The development of unemployment in Prague affects the unemployment in other regions, due to the fact that Prague is the only region in the country where the number of workers is significantly higher than the number of people living here. It has the strongest connection to the Central Bohemian Region. According to the Czech Statistical Office, in 2010 there were 98600 people commuting to work in Prague from the Central Bohemian region. On the contrary, only 14500 people commuted from Prague to the Central Bohemian region. Another reason for the increasing number of commuters to the capital city is that many city residents move to the vicinity of Prague, to have the advantages of both rural areas and the capital city. In 2014, the unemployment rate of Prague was 2.5% but it was 5.1% in the Central Bohemian and Plzeň region, which were the two regions with the lowest unemployment rate of the entire country.

The Plzeň region has a low rate of unemployment due to the interests of developers investors, caused by a particularly excellent location, near the German border, excellent accessibility thanks to the D5 motorway, and the traditional industrial character of the region.

The highest number of unemployed was in the Ústí nad Labem region, where the average unemployment rate between 2006 and 2014 was 10.15%. In Prague, during the same period, the average unemployment rate was 2.92%. "The Usti Region belongs to the region

with the least favourable situation on the labour market, which was caused especially by the big structural changes in economy during the transformation. In the long term one of the highest unemployment rates and relatively onesided specialization of labour forces in the past ranges the region with the regions struck by structural problems, and the enterprisers and investors, who come here, get more incentives and support than in other regions." <sup>10</sup>

Two other regions seriously affected by unemployment are Karlovy Vary and the Moravian-Silesian Region. In 2014, the unemployment rate in the Karlovy Vary Region was 9%, in the Moravian-Silesian region it was 8.6%.



Graph No. 2: Unemployment rate (%) in the regions of the Czech Republic 2014

Source: Czech Statistical Office

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<sup>10</sup> http://www.kr-ustecky.cz/VismoOnline\_ActionScripts/File.ashx?id\_org=450018&id\_dokumenty=1651661

Table No. 4: Unemployment rate (%) in the regions of the Czech Republic (2006 - 2010)

	2006	2007	2008	2009	2010
Region					
Prague	2.8	2.4	1.9	3.1	3.8
Central Bohemia	4.5	3.4	2.6	4.4	5.2
South Bohemia	5.1	3.3	2.6	4.3	5.3
Plzeň	4.6	3.7	3.6	6.3	5.9
Karlovy Vary	10.2	8.2	7.6	10.9	10.8
Ústí nad Labem	13.7	9.9	7.9	10.1	11.2
Liberec	7.7	6.1	4.6	7.8	7.0
Hradec Králové	5.4	4.2	3.9	7.7	6.9
Pardubice	5.5	4.4	3.6	6.4	7.2
Vysočina	5.3	4.6	3.3	5.7	6.9
South Moravia	8.0	5.4	4.4	6.8	7.7
Olomouc	8.2	6.3	5.9	7.6	9.1
Zlín	7.0	5.5	3.8	7.3	8.5
Moravia-Silesia	12.0	8.5	7.4	9.7	10.2

Source: Czech Statistical Office

Table No. 5: Unemployment rate (%) in the regions of the Czech Republic (2011 – 2014)

	2011	2012	2013	2014
Region				
Prague	3.6	3.1	3.1	2.5
Central Bohemia	5.1	4.6	5.2	5.1
South Bohemia	5.5	5.7	5.2	5.9
Plzeň	5.2	4.8	5.2	5.1
Karlovy Vary	8.5	10.5	10.2	9.0
Ústí nad Labem	9.9	10.8	9.4	8.5
Liberec	7.2	9.3	8.3	6.5
Hradec Králové	7.1	7.1	8.2	6.2
Pardubice	5.6	7.7	8.4	6.4
Vysočina	6.4	6.4	6.7	5.6
South Moravia	7.5	8.1	6.8	6.1
Olomouc	7.6	7.7	9.2	7.7
Zlín	7.6	7.4	6.8	6.1
Moravia-Silesia	9.3	9.5	9.9	8.6

Source: Czech Statistical Office

# 4.8 The analysis of unemployment in Prague according to different criterion

#### 4.8.1 The analysis of unemployment in Prague according to gender

At the beginning of the monitored period, in 2006, there were 18.1 ths unemployed job applicants, from which males formed the bigger part - 10.2 ths. The impact of the economic crisis was visible in Prague in 2009 when there were 12.5 ths unemployed in 2008 and only one year later, about 8.3 ths more. From the given data we can see that only between 2006 - 2008 women suffered from the higher unemployment rate. The rest of analyzed years, Prague women had better results than men, although the difference was not significant.

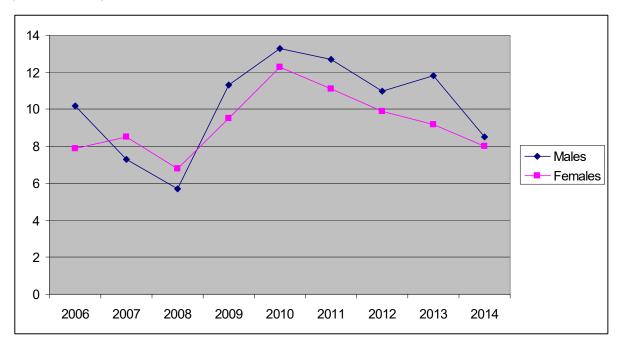
The biggest diference between unemployment of males and females was in 2013, when it was 11.8 ths of unemployed males and 9.2 ths of unemployed females. This year was characterized by austerity budgets, declining real incomes and people being generally uncertain about the future.

Table No. 6: Unemployment in Prague according to gender 2006 – 2014 (in thousands)

Year	Males	Females	Diference
2006	10.2	7.9	2.3
2007	7.3	8.5	1.2
2008	5.7	6.8	1.1
2009	11.3	9.5	1.8
2010	13.3	12.3	1
2011	12.7	11.1	1.6
2012	11.0	9.9	1.1
2013	11.8	9.2	2.6
2014	8.5	8.0	0.5

Source: Czech Statistical Office

**Graph No. 3: Unemployment in Prague according to gender 2006 – 2014** (in thousands)



Source: Czech Statistical Office

#### 4.8.2 The analysis of unemployment in Prague according to age group

Another aspect that we can use to divide the unemployed is age group. We can distinguish six categories from ages 15 to 24 years, up to category 55 plus.

In 2008, the age group 25-29 was the least unemployed, on the contrary, the most unemployed were 55 plus. A year after the economic crisis, unemployment has risen in all age groups. The biggest difference was in the age group of 35-44, 15-24 and 25-29. Year 2010 was the most risky for age groups 25-29 and 55 plus. Between the years 2011 - 2013 unemployment of age group 35-44 did not fall below 5.9 thousand. During this period, all the other age groups were ranging from 2.3 to 4.2 thousand. The possible reason could be that people in age 35-44 have certain work experience, higher salary requirements, thus they are less attractive for potential employers. In 2014, all age groups were in the range of 2.1 to 3.5thousand.

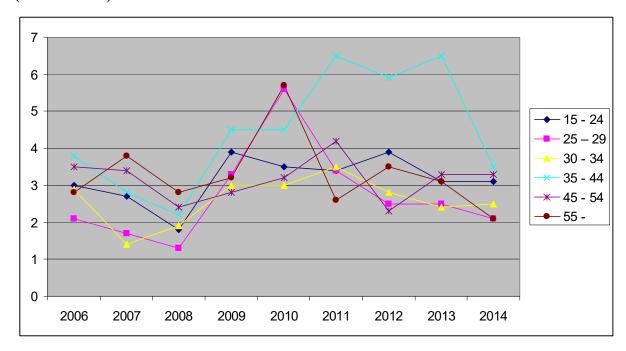
The age group 35-44 proved to be the highest risk group in the majority of years in the monitored period. In 2014 this group accounted for 21.1% of the 43,499 people unemployed. A large part of the age group 35-44 was formed by women who were trying to return to work after having children but who did not have enough experience and were not so flexible as men, due to household duties. Men in this age group achieved very good results, most likely because they already had acquired the experience. Another contributing factor is the fact that men assume the role of breadwinner father. Therefore men are more motivated to work harder and consequently interested in professional growth.

Table No. 7: Unemployment in Prague according to age group 2006 – 2014 (in thousands)

	Age group					
Years	15 – 24	25 – 29	30 - 34	35 - 44	45 - 54	55 -
2006	3.0	2.1	2.9	3.8	3.5	2.8
2007	2.7	1.7	1.4	2.8	3.4	3.8
2008	1.8	1.3	1.9	2.2	2.4	2.8
2009	3.9	3.3	3.0	4.5	2.8	3.2
2010	3.5	5.6	3.0	4.5	3.2	5.7
2011	3.4	3.4	3.5	6.5	4.2	2.6
2012	3.9	2.5	2.8	5.9	2.3	3.5
2013	3.1	2.5	2.4	6.5	3.3	3.1
2014	3.1	2.1	2.5	3.5	3.3	2.1

Source: Czech Statistical Office

**Graph No. 4: Unemployment in Prague according to age group 2006 – 2014** (in thousands)



Source: Czech Statistical Office

#### 4.8.3 The analysis of unemployment in Prague according to education level

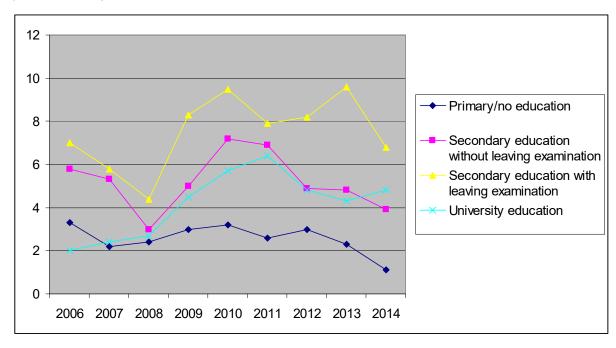
In terms of level of education, Prague delivers the highest university education. In the long term, people with higher education, in Prague, make up the lowest figure of the unemployed people. The highest level of unemployment is made up of people who have graduated from secondary education with a leaving examination. Prague, the Czech Republic's capital city, where headquarters of many state institutions and private companies are located often prefer a man with university education. The lowest number of unemployed people in 2007-2014 have basic education. People with basic education do not have professional experience, but they do not have high salary requirements, which many companies welcome for basic work that does not require a high level education.

Table No. 8: Unemployment in Prague according to level of education 2006 - 2014 (in thousands)

	Education level					
Year	Primary/no education	Secondary education without leaving examination	Secondary education with leaving examination	University/higher education		
2006	3.3	5.8	7.0	2.0		
2007	2.2	5.3	5.8	2.4		
2008	2.4	3.0	4.4	2.7		
2009	3.0	5.0	8.3	4.5		
2010	3.2	7.2	9.5	5.7		
2011	2.6	6.9	7.9	6.4		
2012	3.0	4.9	8.2	4.8		
2013	2.3	4.8	9.6	4.3		
2014	1.1	3.9	6.8	4.8		

Source: Czech Statistical Office

Graph No. 5: Unemployment in Prague according to level of education 2006 - 2014 (in thousands)



Source: Czech Statistical office

#### 5 Results and Discussion

I chose this topic mainly because I will one day, like most of us, look for a job. According to data which were analyzed, females between 25 to 29 years are the most successful when applying for a job in Prague. Regarding gender, I can not agree with the idea that men find work more easily than women. Regarding education, most of the unemployed are those with only secondary education. Thus, investment in education will certainly facilitate job search. Work experience is another important factor. If a person does not have higher education, a potential employer may value work experience that comes with age. The age group 30-34 years is, on average, the second lowest number of unemployed.

In 2009, unemployment in Prague was 3.1%, representing an annual increase of 1.2%. This increase was the highest for the entire monitored period 2006 - 2014. It was caused by the Financial Crisis. The most significant impacts of the Great Recession are always in the area of employment. The economic downturn was reflected in the Prague labour market by a decrease in job vacancies. The labour market reacts to economic development, usually with a slight delay. Therefore, the unemployment rate in Prague in 2008 decreased to 1.9% in Prague and 4.4% in the Czech Republic, the year when the Financial crisis had already fully broken out. Then, in 2010 it rose to 3.8% in Prague and 7.3% in the Czech Republic. The most affected were men in age group 25 – 29 and 55 plus with a secondary education and leaving examination.

The age group 35-44 with secondary education and leaving examination had the worst results in years 2011 - 2014, the reason was the continuing consequences of the economic crisis. A big part of the age group 35-44 were women who were trying to return to work after having children but who did not have enough experience and they are also not so flexible as men because they still maintain a household. Possible solution could be creating more job vacancies with flexible working hours or part-time jobs. Men in this age group achieved very good results, most likely because they already had acquired the experience. Another contributing factor is the fact that men assume the role of breadwinner father. Therefore men are more motivated to work harder and consequently interested in professional growth.

According to the comparison of the unemployment rate in Prague with a total unemployment rate of the Czech Republic, it was confirmed that Prague is doing very well. This statement was confirmed also by comparing the rate of unemployment of Prague with the other regions of the Czech Republic, where Prague had the lowest rate and just verified its position of the capital city of the state.

#### 6 Conclusion

The aim of my bachelor thesis is to clarify the issue of unemployment in the capital city of the Czech Republic, Prague. In the beginning, unemployment was described and measured in terms of its types, relationship to inflation, natural rate of unemployment, groups at high-risk, causes, costs and tools of active labor market policy. The practical part was focused on the description of Prague, development of the unemployment rate in Prague since the establishment of the independent Czech Republic, description of labor market, comparison with the Czech Republic and the analysis of unemployment in Prague by gender, education and age group between the years 2006 - 2014.

Prague is a city with a high concentration of jobs, but it is also the most important center of education. The educational system in the Czech Republic is seen as one of the the best in Europe. It is also the center of jobs on a national scale. Average salary in Prague is generally greater than in other Czech cities.

From the time that the independent Czech Republic was estabilished until 1996, the general unemployment rate in Prague was declining due to significant growth of the Czech economy. There was a big number of economically active people. Fertility radically declined after 1993, because young people were postponing the birth of their first child, which also supported very high employment rates. A decline in economic performance after 1997 resulted mainly from bank debts, restrictive monetary and fiscal policy. Even though the first years of the millennium have brought economic recovery, which stemmed from the overall industrial restructuring, improving competitiveness or inflow of new investments; the total increase in labor productivity didn't result in a reduction of unemployment and the number of people who face long-term unemployment was increasing.

Since 2004, the unemployment rate was declining in Prague until 2008, when it was the lowest unemployment rate for the entire monitored period. This downward trend was mainly caused by the overall good condition of the Czech economy, where real GDP grew up by more than 5% per year, and also an increase of the foreign commerce. Another important aspect was entry of the Czech Republic into the EU, which meant the inflow of EU funds to new projects that created job vacancies. Another positive thing was the availability of certain European labor markets for citizens of the Czech Republic, who were able to go to work abroad and reduce the number of candidates for jobs.

The year 2009 was represented by the highest increase of unemployment rate for the entire monitored period. It was caused by the financial crisis that broke out in 2008. Labor market reacts to economic development, usually with a slight delay. This affected all groups of people. The most influenced were men in the age groups of 25 – 29 and 55 plus with a secondary education with leaving examination. The period 2011-2013 was characterized in the economic field by austerity budgets, declining real incomes and people being generally uncertain about the future. By the end of 2014, Prague, together with the German region of Upper Bavaria were the ones with the lowest unemployment rate throughout the European Union. Between the largest employers in 2014 in Prague belonged Česká pošta, s.p.; Česká spořitelna, a.s.; České dráhy, a.s.; Dopravní podnik hl.m. Prahy; Správa železniční dopravní cesty; Vězeňská služba České republiky.

Due to the comparison of the unemployment rate in Prague with a total unemployment rate of the Czech Republic, it was confirmed that Prague is doing very well. This statement was also confirmed by comparing the rate of unemployment of Prague with the other regions of the Czech Republic, where Prague had the lowest rate and just verified its position of the capital city of the state.

According to data that was analyzed, females between 25 to 29 years are the most successful in a job search in Prague. Regarding sex, I can not agree with the idea that men find work more easily. Except for the two cases in Prague where there were fewer unemployed women than men. Although the differences were not significant. Regarding education, the most of the unemployed citiziens are the people with a secondary education. Thus investment in education will certainly facilitate job search. Work experience is another important factor. If a person does not have a higher education, a potential employer may value

work experience that comes with age. The age group 30-34 years is on average the second lowest number of unemployed citiziens.

There are some ways how to redukce unemployment, I see a big importance in tools of active labor market policy. These are mainly retraining programmes, community work, creation of sheltered workshops. In my opinion, it is also necessary to create conditions that would motivate the unemployed person to start a business by reducing the financial and administrative burden that entrepreneurs must deal with. I also believe that an abolition of unemployment benefits would reduce the unemployment rate. If the benefit is high, it is more advantageous for the unemployed person to be financially supported by the government than to take a less paid job. A large part of the unemployed people is formed by women who try to return to work after having children but who do not have enough experience and are not so flexible as men, due to household duties. Possible solution could be creating more job vacancies with flexible working hours or part-time jobs.

There isn't any simple or universal method how to regulate unemployment. Even though the government can intervene through tools of active employment policy, the whole society has to be involved to reduce unemployment. The inhabitants of the country should focus on their education and subsequent deepening and gaining of additional knowledge and skills.

#### 7 References

#### Literature sources:

- BUCHTOVÁ, B. *Nezaměstnanost: Psychologický, ekonomický a sociální problém.* Praha: Grada, 2002. ISBN 8024790068.
- BURDA, M., WYPLOSZ, CH. *Macroeconomics*. *A European text*. 4th edition. Oxford University Press, 2005. ISBN 0199264961.
- ČESKÝ STATISTICKÝ ÚŘAD. Statistická ročenka České republiky = Statistical yearbook of the Czech Republic 2014. Praha: Český statistický úřad, 2014. ISBN 978-80-250-2580-2.
- HOLMAN, R. Ekonomie. Praha: C.H. Beck, 2005. ISBN 80-7179-891-6.
- JOCHUMZEN P. *Essentials of macroeconomics*. Ventus Publishing ApS, 2010. ISBN 978-87-7581-558-5.
- KREBS, V. Sociální politika. Praha: Aspi, 2007. ISBN 978-80-7357-276-1.
- MAITAH, M. *Macroeconomics*. Praha: Reprografické studio PEF ČZU, 2015. ISBN 978-80-213-1904-2.
- MANKIW, N.G. Zásady ekonomie. Praha: Grada, 1999. ISBN 80-7169-891-1
- PAVELKA T. *Makroekonomie*. Základní kurz. 2.vydání. Slaný: Melandrium, 2007. ISBN 9788086175522.
- PAVELKA, T. *Rok 2006 ve znamení snižování nezaměstnanosti*. Sondy týdeník pro sociální otázky, 2007. ISSN 1213-5038.
- SCHWARZ, W. *Unemployment*. Harmondsworth: Penguin Books, 1989. ISBN 0140808825.

#### Electronical sources:

Active labour market policies [online]. [accessed 18-11-2016]. Available at: <a href="https://en.wikipedia.org/wiki/Active labour market policies">https://en.wikipedia.org/wiki/Active labour market policies</a>>.

*Czech labour market in 1993 – 2013* [online]. [accessed 14-1-2016]. Available at: <a href="http://www.parlamentnilisty.cz/zpravy/tiskovezpravy/CSU-Trh-prace-1993-2013-329507">http://www.parlamentnilisty.cz/zpravy/tiskovezpravy/CSU-Trh-prace-1993-2013-329507</a>.

Characteristics of Prague [online]. [accessed 28-1-2016]. Available at: <a href="https://en.wikipedia.org/wiki/Prague">https://en.wikipedia.org/wiki/Prague</a>.

Characteristics of Prague [online]. [accessed 28-1-2016]. Available at: <a href="https://www.czso.cz/documents/10180/25964515/33012014chen.pdf/dbf6c64f-12f1-4b53-b7c9-d5f4ecb8827d?version=1.2">https://www.czso.cz/documents/10180/25964515/33012014chen.pdf/dbf6c64f-12f1-4b53-b7c9-d5f4ecb8827d?version=1.2</a>.

*Impacts of unemployment* [online]. [accessed 18-11-2016]. Available at: <a href="http://ekonomie-otazky.studentske.cz/2008/07/ekonomick-dsledky-nezamstnanosti.html">http://ekonomie-otazky.studentske.cz/2008/07/ekonomick-dsledky-nezamstnanosti.html</a>.

*Macrobasics – the Phillips curve* [online]. [accessed 18-11-2016]. Available at: <a href="http://www.macrobasics.com/chapters/chapter13/lesson132/">http://www.macrobasics.com/chapters/chapter13/lesson132/</a>.

Population in Prague [online]. [accessed 18-11-2016]. Available at: <a href="https://www.czso.cz/csu/xa/obyvatelstvo-xa">https://www.czso.cz/csu/xa/obyvatelstvo-xa</a>.

*Prague's labour market in 2014* [online]. [accessed 25-1-2016]. Available at: <a href="https://portal.mpsv.cz/upcr/kp/pha/zprava\_2014.pdf">https://portal.mpsv.cz/upcr/kp/pha/zprava\_2014.pdf</a>>.

The Ústí region [online]. [accessed 28-1-2016]. Available at:
<a href="http://www.kr-ustecky.cz/VismoOnline\_ActionScripts/File.ashx?id\_org=450018&id\_dokumenty=1651661">http://www.kr-ustecky.cz/VismoOnline\_ActionScripts/File.ashx?id\_org=450018&id\_dokumenty=1651661</a>

Tools of active labour market policies [online]. [accessed 10-02-2016]. Available at: <a href="http://www.sps.ed.ac.uk/\_\_data/assets/pdf\_file/0010/39268/REC-WP\_0110\_Bonoli.pdf">http://www.sps.ed.ac.uk/\_\_data/assets/pdf\_file/0010/39268/REC-WP\_0110\_Bonoli.pdf</a>.

*Unemployment according to different criterion* [online]. [accessed 15-1-2016]. Available at: <a href="https://vdb.czso.cz/vdbvo2/faces/index.jsf?page=statistiky&katalog=30851&filtr=G~F\_M~F\_Z~F\_R~F\_P~\_S~\_U~301-\_null#katalog=30853>."https://vdb.czso.cz/vdbvo2/faces/index.jsf?page=statistiky&katalog=30851&filtr=G~F\_M~

Unemployment in Prague in 2014 [online]. [accessed 28-1-2016]. Available at: <a href="http://ekonomika.idnes.cz/nejnizsi-nezamestnanost-v-evropske-unii-je-v-praze-fxs-/ekonomika.aspx?c=A150427\_115914\_ekonomika\_rny">http://ekonomika.idnes.cz/nejnizsi-nezamestnanost-v-evropske-unii-je-v-praze-fxs-/ekonomika.aspx?c=A150427\_115914\_ekonomika\_rny</a>.

*Voluntary and involuntary unemployment* [online]. [accessed 11-11-2016]. Available at: <a href="http://utopiayouarestandinginit.com/2014/08/03/job-finding-probability-under-work-for-the-dole-when-then-there-is-involuntary-unemployment/">http://utopiayouarestandinginit.com/2014/08/03/job-finding-probability-under-work-for-the-dole-when-then-there-is-involuntary-unemployment/</a>.

Wages [online]. [accessed 28-1-2016]. Available at: <a href="https://www.czso.cz/csu/czso/cri/prumerne-mzdy-2-ctvrtleti-2015">https://www.czso.cz/csu/czso/cri/prumerne-mzdy-2-ctvrtleti-2015</a>.

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