

## **Comparison of Employment Policy and Social Management Between France and the Czech Republic**

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**Abstract:** Employment policy in the Czech Republic and France is controlled by several institutions in the practical application of tools complement each other. The formation of national policies and management institutions in both countries are in charge of the relevant ministries. However, differences can be seen in the organization and institutions. France has a long history of application of employment policy instruments and related hierarchical structure of labor offices which is in the Czech Republic, since 2011. In the Czech Republic, there is an established rule that office work is devoted to job placement and payment of unemployment benefits, which was introduced to France in 2008. In the Czech Republic, there are a total of 409 labor offices, including contact and field offices. Due to the population of the Czech Republic, this falls into 25,753 people in working offices. In France, the employment offices total to 956 local sphere which represents the equivalent of 68,020 people in one office. Long-term trends and employment policy in most developed countries alike and their main objective is to fight against unemployment. Both states are required to regard the European employment strategy and other measures taken by the European Union when creating these programs. Both countries offer their subscribers a variety of contributions to the integration of the unemployed into work. The area of active employment policy in France is slightly wider, focusing primarily on various financial contributions or tax relief. Even passive employment policy instruments do not differ. Minor differences can be seen in the fact that France, despite the changes facing their aid still to specific groups of job seekers (young, elderly, underprivileged, etc.). And has thus instruments aimed directly at individual groups while instruments in the Czech Republic are mostly intended for unemployed regardless of which group they belong to.

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**Key words:** Unemployment, employment and social development, young, job seeker, instruments

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### **INTRODUCTION**

In general, the unemployment rate is currently one of the biggest social and economic problems in the European Union. Comparison is difficult because there are examples of countries with extreme values (Greece and Spain). The problem of low rate employed but remains in other states. At the lowest level values for the last 20 years gets even France, one of the largest countries in the European Union. In comparison with Spain is not Greece or France in the achievement of the worst jobs but employment remains the priority development of the current president Francois Hollande from 2014-2015. In January, the unemployment rate in France climbed to 11.11%. From the same period of 2013, it increased by 0.6%, leading to 3,300,000 people without employment. Employment in

France holds at around 64.51%. It is about 4% points worse than the Czech Republic. It is evident that the values which aimed to Lisbon strategy (70% employed) and the Europe 2020 strategy (75% of the employed population), is unlikely to be achieved. One must ask what values can be realistically achieved with an appropriate combination of active employment policy instruments and how the Czech Republic expects to expand the management of social development with French inspiration?

**Aim of the research:** The aim of the research is based on time series analysis and forecasting of results of the development of employment and other selected indicators in France between the years 2000-2013. Using this information suggestions can be made for qualitative tools

of developing employment in the Czech Republic. Another aim is to propose possible procedural changes in the implementation of tools for developing employment and management of social development.

**MATERIALS AND METHODS**

Analytical tools are used in the study calculating the trend of time series and comparative tools for comparison with developments in the Czech Republic. The processing of selected indicators were selected methods of time series. Models that allowed short-term prognosis were created for individual indicators. This is a classic trend function, exponential smoothing models and ARIMA models. All data was obtained from the Eurostat database. Secondary data was processed in IBM SPSS statistical software.

**Time series and their methodical application:** Time series of the numerical sequence materially and spatially comparable observations (data) which are clearly arranged in time in the direction from past to present. The following is a prediction that is already the result of the analysis. The analysis (or forecast) time series then means a set of methods that are used to describe these series (and possibly to predict their future development); (Brdek and Jarova, 1998). Time series can be analyzed from different perspectives. The basic division is one of the time series at some point which are numerical values recorded a point in time or on a specific date and time series interval, which indicate how many cases or events created, accumulated or is terminated for a certain time interval. In the analysis of time series also appear other factors such as frequency, cyclicity or type of indicators. Frequency divided into short-term time series that are <1 year and long-term time series, the interval is >1 year. Breakdown by type of monitored indicators distinguishes time series of primary (primary) and secondary (derived) characteristics. When analyzing the development of non-periodic time series quite simply a relatively small range of trendy features. They are mathematically simple which means that we follow: minimum number of members in the equation:

- Minimum possible power argument
- Linearity in the parameters
- Connection
- Minimum number of extremes and inflection points

In graphic form, then use the equalization curve functions (Svatosova and Kaba, 2008):

- Linear  $T_t = a+bt$
- Quadratic  $T_t = a+bt+ct^2$
- Logarithmic  $T_t = a+b \log t$

- Exponential  $T_t = ab^t$
- Inverse  $T_t = a+b/t$
- Cubic  $T_t = a+bt+ct^2+dt^3$

Selection of the trend function corresponds to the empirical description. Structural parameters of the trend function is estimated using the Least Squares Method. When using this method, it is the sum of squared deviations of the individual values of the time series from the trend, so that was minimal (Svatosova and Kaba, 2008):

$$\sum_{t=1}^n (y_t - y'_t)^2 = \min$$

Where:

- $y_t, t = 1, \dots, n$  = The observed values of the time series
- $y'_t, t = 1, \dots, n$  = The expected (theoretical) values of the monitored variables, calculated by using some of the features

**Choosing an appropriate model trend:** When constructing Mathematical-Statistical Model is a very important point estimate of the structural parameters of the trend function. However, it is important to estimate include the stochastic structure of the model, also called the degree of compliance. The degree of conformity characterize the degree of compliance with the established model of empirical data. Frequently used indicator that is used to describe the degree of conformity of the model with empirical data, the index of determination  $I^2$ :

$$I^2 = 1 - \frac{\sum_{t=1}^n (y_t - y'_t)^2}{\sum_{t=1}^n (y_t - \bar{y})^2}$$

where,  $\bar{y}$  is the arithmetic average of the empirical time series  $y_1, \dots, y_n$ . Determination Index is a dimensionless number satisfying session:

$$0 \leq I^2 \leq 1$$

The model better reflects the phenomenon under review when  $I^2$  close to one. However if the value of  $I^2$  close to zero, suggests that less and less compliance model time series. It is therefore, necessary to select a function which gives the maximum value of the index of determination  $I^2$ . This enables functions best and most accurately captures the real evolution of the studied phenomenon in the past and therefore, it can be assumed that in the future the same way reflect the fact (Svatosova and Kaba, 2008). In addition to the index determination, we can meet with the index correlation:

$$I = \sqrt{I^2}$$

Here, the same rules apply as in the correlation analysis. If the correlation value of the index closer to one, then the model better describes the evolution of the patterns of time series and vice versa. Suitability trend can also be assessed using the relative error of the forecast:

$$\frac{(P_t - S_t)}{S_t} 100\%$$

Where:

P = The value prediction over time

S = The fair value at time t

Higher the value of the relative error is lower, the trend function more accurate. Modern statistical software have also implemented additional criteria for selection of a suitable model trend estimate of the Mean Error ME (Mean Error):

$$ME = \frac{\sum (y_t - y'_t)}{n}$$

Mean squared error MSE (Mean Squared Error):

$$MSE = \sum_t \frac{(y_t - y'_t)^2}{n - k} = \frac{e_t^2}{n - k}$$

Or its root RMSE (Root Mean Squared Error):

$$RMSE = \sqrt{MSE}$$

Mean absolute error MAE (Mean Absolute Error):

$$MAE = \frac{1}{n} \sum_t |y_t - y'_t|$$

Mean percentage error MPE (Mean Percent Error):

$$MPE = \frac{100}{n} \sum_t \left( \frac{y_t - y'_t}{y_t} \right)$$

Mean absolute percentage error MAPE (Mean Absolute Percent Error):

$$MAPE = \frac{100}{n} \sum_t \left| \frac{y_t - y'_t}{y_t} \right|$$

Each of these calculations we perform a comparison when we try to prioritize the model with the lowest values of the indicators. For a comparison of alternative models can be used all the presented measures. Assessment of

sub-models for different time series is based only on the relative degrees which are variables independent of the units of measurement indicators examined, MPE a MAPE (Hindls *et al.*, 2007).

## RESULTS AND DISCUSSION

### Theoretical bases of management of social development and active employment policy:

Employment policy in the Czech Republic and France is controlled by several institutions in which the practical application of tools complement each other. The formation of national development concepts of employment and management of the responsible institutions in both countries have to worry relevant ministries (in the Czech Republic for the Ministry of Labour and Social Affairs). However, differences can be seen in the system and organization of the relevant institutions. France has much more experience with the hierarchical structure of the labor offices which is new in the Czech Republic, since 2011, when it began to reform the labor offices which were until then only 77 at the formation of the labour office in Prague. Not only that existing labor offices have lost their legal personality but basically there to centralize decision-making on employment policy at the regional level. The Czech Republic is an established rule that office work is devoted to job placement and payment of unemployment benefits which France introduced in 2008. In the Czech Republic, there are a total of 409 labor offices (including detached and contact centers). Due to the population of the Czech Republic falls as 25,753 people on a working office. In France, the employment office total of 956 local sphere which represents the equivalent of 68,020 people in one office. Long-term trends and employment policy in most developed countries alike and their main objective is to fight against unemployment. Both states are required to take when creating these programs regard to the European employment strategy and other measures taken by the European Union. The main strategic document is then the Europe 2020 strategy which aims to increase employment to 75% of women in the employment level of employment and 60% of people over 55 years to a level of 55%. The document has called for. Lisbon Strategy (2000-2010). France and the Czech Republic provide its citizens with differentiated contributions to the integration of the unemployed into work. The area of active employment policy and management of social development in France is slightly wider than the Czech Republic, focusing primarily on various financial contributions or tax relief. It is a suitably selected combination of active and passive support tools. Tools passive employment policies do not differ. System

differences can be seen in the fact that France, despite currently being carried out reforms and changes constantly seeks their assistance to specific groups of job seekers (young, elderly, underprivileged, etc.). And has the tools, geared directly to each group. The social assistance system in France can be described as selectively targeted (or addressable) assistance while Czech Republic tools are mostly designed for unemployed no matter which group belongs. This causes the sensitivity of the social system to improper use or abuse in certain cases. The Employment Act (No. 437/Sb. year 2006) Identifies certain groups who are paid attention and assistance into the labor market and in mediation. Risk groups are the subject of focused assistance. France, unlike the Czech Republic used to increase the success of the integration of the unemployed into the labor market opportunity to provide people who have found employment outside his residence, transport allowance or housing and offers them to help even after returning to work. The unemployment rate in France is long, somewhat higher than in the Czech Republic (Toth *et al.*, 2014). Development recorded significant fluctuations in the time of economic changes and thus can be considered stable. Focusing on specific groups of the population, however is applied in France for many years and the amount of government spending on employment policy remains largely without major changes. The explanation for the higher unemployment aid, despite the quality of labor market participants in France may therefore be the fact that this is a country with a significantly larger number of people than the national average and therefore, there exists a greater number of persons who may be considered unemployable. Other differences between employment in the Czech Republic and France seem to stem from the fact that France is concerned with the question of employment a little longer than the Czech Republic and many of the measures in the Czech Republic is still developing, they were introduced during many years of practice. Thus is the situation on the French labor market is more stable, especially in periods of economic reversals. Czech employment policy is starting to currently focus on the example of the development of part of employment relationships, youth unemployment, balancing work and family life or the structure of institutions in the areas of employment, i.e., the measures that are applied in France for many years. France, I currently make the necessary adjustments that would help streamline the activities of active employment policy. In late 2008 for example, there was a big reform of labor offices where their activities were expanded. There has been a procedural and organizational reform not unlike that which took place in the Czech Republic between 2010

and 2011, both countries are currently trying to approach the ideal model of the Danish labor market. The inspiration is flexicurity model which is at maintaining social protection of workers (social security) labor market flexibility (flexibility) (Halaskova and Renata, 2008).

The model is considered to be the optimal solution of problems in the labor markets in most countries of the European Union. A frequent criticism that it is a social-democratic political opinion does not meet the European institutions with positive acclaim with support for flexicurity is primarily intended to develop the competitiveness of European markets and regions. If we had to establish recommendations for the Czech Republic and France, it would be particularly efforts to implement policies and measures to support growth of labor market flexibility while reforming social security systems. Employment policy does have the ability to a certain extent influence the behavior of individuals and institutions in the labor market in order to optimize employment according to accepted criteria. The actual development of employment policy in most countries, however, depends not only on the actions undertaken by its creators but also on many other factors. Among them we can name for example, the political situation in the country, world economic development or prevailing mood among citizens and their willingness to actively participate in events on the labor market. Whether, the individual policy tries to fight unemployment, however, the labor market will always find a certain percentage of people out of work because unemployment is a natural phenomenon in any free society based on democracy and the market mechanism. But the important thing is that the principles of employment policy were set so that the period of economic fluctuations in the labor market situation of the most stable and negative effects of the economic recession were minimal (Svatoaova and Kaba, 2008).

**The results of calculations and employment:** If we research at the long term development of employment in France, we can say that it is the oscillation in the average to other European Union countries. Although, there are profound regional differences but overall employment in France is for the whole period slightly below the EU average. The values showing a rising trend which for 13 years increased by 2% points. France was the peak of employment in 2008 and 64.8% in value but with the advent of the economic crisis followed the decline that occurred in most EU countries. At present, the values are above the EU average.

Figure 1 and calculations show that employment growth in the European Union as a whole has almost

Table 1: Employment for the years 2000-2013 in France, the EU and the Czech Republic

Roky	Years													
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
European Union	-	-	62.3	62.5	62.9	63.4	64.3	65.3	65.7	64.5	64.0	64.1	64.1	64.1
Czech Republic	65.0	65.0	65.4	64.7	64.2	64.8	65.3	66.1	66.6	65.4	65.0	65.7	66.5	67.7
France	62.1	62.8	63.0	63.9	63.7	63.7	63.6	64.3	64.8	64.0	63.9	63.8	63.9	64.1

Table 2: Forecast of employment rate

Models	2014	2015
<b>France</b>		
Forecast	64.3	64.4
UCL	65.3	65.8
LCL	63.3	63.0

Eurostat, own processing

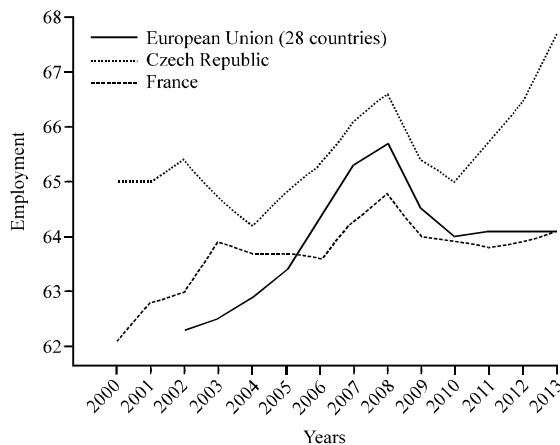


Fig. 1: Employment in France, the Czech Republic and the EU: Eurostat, own processing

stopped due to the economic crisis. In contrast, the development of employment in the Czech Republic for the last 2 years closer to 2007 period cause can be seen in the fact that the Czech Republic in the volume of investments quickly recovered. Investment in the manufacturing sector is back to pre-2008 and by slightly increasing the number of new jobs in the secondary sector. The number of unemployed graduates of secondary schools and universities remains more or less the same, since been gaining jobs in the tertiary sector and in services, respectively. in public administration (Table 1).

**Development and prediction of employment in France:**

Employment in France and the Czech Republic will grow moderately in the coming years. Employment will be in accordance with predictions show a slow growth until the year 2016 has been calculated value of 64.3%. So, there is a trend of social development and employment in line with the Europe 2020 strategy for France to meet the employment target of 75% will have to accelerate the pace of investment activity and support job creation. Index determination of the value was 0.180 (Table 2 and Fig. 2).

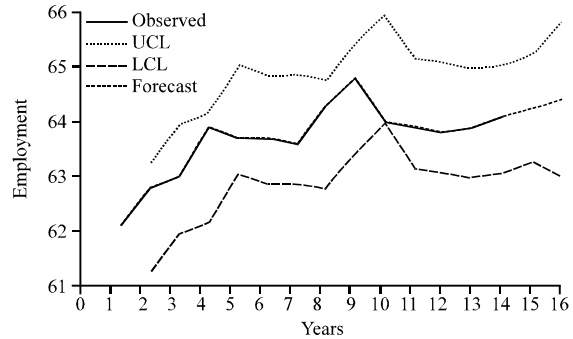


Fig. 2: Prediction of employment in France for the years 2014-2015 in the Czech Republic (The x axis represents years from 2001-2014 onward and forecast 2015): Eurostat, own processing

The calculations show an increase in employment in the order of tenths of a percent, a rate relatively weak. If we want France to meet the Europe 2020 target will need to develop employment in the order of several percent each year until the end of 2020 long-term strategy must include support tools for job creation through investments but also through the development of public services.

Unemployment in France during the reporting period very volatile. Values to some extent follow the developments in the EU. The lowest value was in 2008 (7.5%). Since, 2008 he has seen a steep rise. In 2013, unemployment exceeds 10%, the highest rate in 13 years. In comparison with the Czech Republic, France for the 2013 difference of 3.3%. The French government is therefore trying to reverse the negative development and unemployment is becoming one of the main priorities of the current government (Table 3 and Fig. 3).

**Prediction of unemployment for France:** The rise in unemployment should be according to the forecast in France, slowly begin to stagnate and stabilize the value of 10.3% for the following years. In the Czech Republic can expect stagnation of unemployment in values between 6.1 -6.4%. This level is not ideal and need to continue to take steps to reduce it. Index Determination was determined to be 0.219 (Table 4 and Fig. 4).

Table 3: The unemployment rate for the years 2000-2013 in France, the EU and the Czech Republic

Roky	Years													
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
European Union	8.9	8.6	9.0	9.1	9.2	9.0	8.2	7.2	7.0	9.0	9.6	9.6	10.4	10.8
Czech Republic	8.8	8.1	7.3	7.8	8.3	7.9	7.1	5.3	4.4	6.7	7.3	6.7	7.0	7.0
France	9.0	8.2	8.3	8.6	8.9	8.9	8.9	8.0	7.5	9.1	9.3	9.2	9.8	10.3

Eurostat, own processing

Table 4: Forecast of wages rate

Models	2014	2015
<b>France</b>		
Forecast	10.3	10.3
UCL	11.7	12.2
LCL	8.9	8.4

Eurostat, own processing

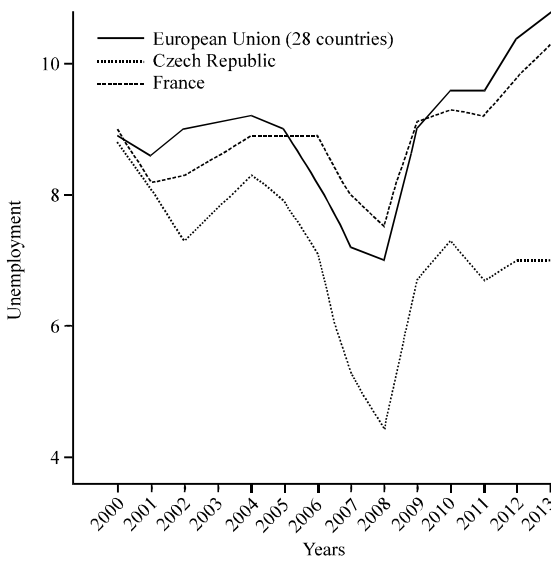


Fig. 3: Unemployment in France, the Czech Republic and the EU: Eurostat, own processing

**Wages and their impact on the development of employment:** A very effective tool for job creation, wage policy. It is a very differentiated the labor market and in average wages in the EU are major differences. The average annual income in the EU for 2013 is €19,712/year. France has throughout the period increase with an average annual increase of about 500 eur/year. In 2000, wages in the value of €16,864/year but for 13 years rose to €22,209/year. If the spectacle of the Czech Republic, we find that the state is still a world of difference and their gradual rapprochement nothing to show. Very deep are differences in hourly wages for ordinary services. Remember that for an hour a plumber works in the Czech Republic for somewhere between 250 and 400 CZK whereas in France and Germany it is 50-55 Euro (Table 5 and Fig. 5).

Estimated future development of wages is due to the high index of determination 0.970, one of the most accurate. This is due to small variations of the curve.

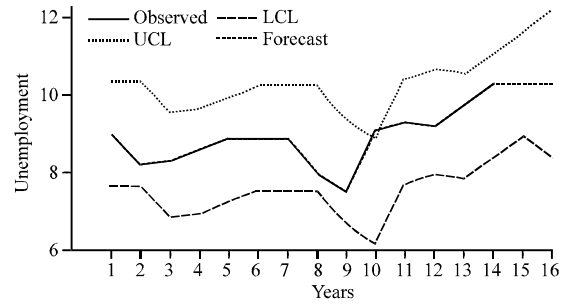


Fig. 4: Prediction of unemployment in France for years 2014-2015. (The x axis represents years from 2001-2014 onward and forecast 2015): Eurostat, own processing

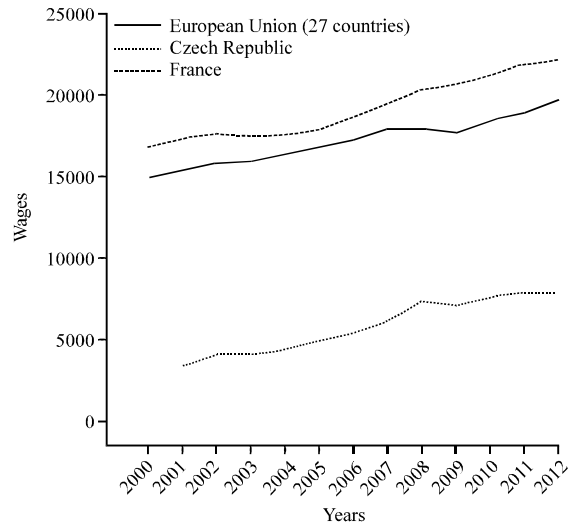


Fig. 5: Average wage in France, the Czech Republic and the EU: Eurostat, own processing

Wages should continue to rise. The forecast for 2015 is at €23,546/year. The trend should France continue to hold. In our interpretation wages are rising in both countries equally and external interference in wage systems are weak, respectively. The sensitivity of the external influence factors is higher than in other areas of the economy (Table 6 and Fig. 6).

Model projections indicate a steady increase in wage developments both in France and in the Czech Republic. The next 2 years will depend on whether wage systems

Table 5: Average annual wages for the years 2000-2013 in France, the EU and the Czech Republic

	Years												
Roky	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
European Union	14909	15376	15844	15933	16407	16810	17236	17917	17971	17721	18463	18926	19712
Czech Republic		3449	4101	4157	4425	4965	5563	6095	7378	7144	7614	7915	8004
France	16864	17359	17631	17421	17562	17939	18823	19536	20307	20614	21166	21926	22209

Table 6: Average wages in France (years 2013-2015)

Models	2013	2014	2015
<b>France</b>			
Forecast	22655	23100	23546
UCL	23346	24078	24744
LCL	21963	22122	22348

Eurostat, own processing

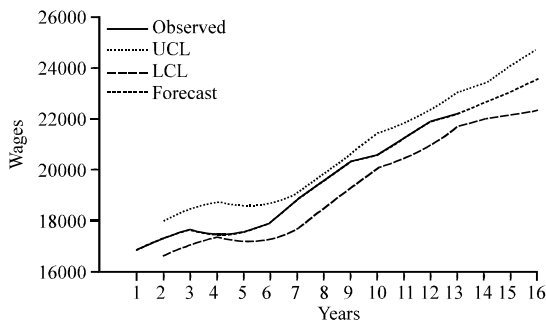


Fig. 6: Forecast of average wages in France for the years 2014-2015. (The x axis represents years from 2001-2014 onward and forecast 2015): Eurostat, own processing

remain resistant to the effects of the external economic environment. In economic discussions are being made that will lead to “export” of jobs to Asian countries that there will be downward pressure on wages in the agriculture and manufacturing sectors. Because of the efficiency wage theory and the principle of wage rigidity, however, suggest that the slight increase will continue and will not be a barrier economic development in selected European countries.

### CONCLUSION

French employment policy is similar to Czech. Type Continental European social model in which both countries ranks, proves to be not very effective and it is necessary that both countries have undergone a number of reforms. The main problem of active employment policy is called.

Creaming when the cost of retraining and strengthening preparedness to enter or return to the labor market are not directed at individuals with the highest risk but rather active for those who can responsibly when

preparing for changes in the labor market. Employment policies with a more or less German trends which should accelerate the fulfillment of the targets of the EU in this area. The indicators examined to see greater stability France, especially the smaller fluctuations induced in a time of global economic crisis. This is mainly due to long-term comprehensive view of the problem of employment is in the Czech Republic is still in its infancy.

The first indicator was examined employment. France has stagnated in recent years and its values are the same as the EU average. In comparison with the Czech Republic, France is about 3% points worse. It is necessary to continue to vigorously promote active employment policy, returned to France on the first rung in the EU. Unemployment is currently in France at historic highs. The values of around 10.3% becoming alarming. The French government Fortunately, this unfortunate trend which is so typical for most of the EU is fully aware of and fight with him is one of the main priorities of the ruling parties. In the average annual income is France over EU values. The annual growth is around <500 euros. The sum of wages for 2013 climbed to €22,209/year which is two and a half times more revenue than the Czech Republic. You should France keep the trend and continue to raise the wage level. Youth employment in the period do not change much. As evidence of the return to 28.6% after 13 years. Values are not perfect and are below the EU average but France has better targeted assistance to particular groups of the population than the Czech Republic which certainly helps reduce impacts on this population group.

A much bigger problem however, remains unemployment of young people under 25 years of age. The people in the working age population is currently difficult to apply in the labor market. France attacking the 25% of people between 15 and 25 years of work. It is necessary to attract this workforce for employers because these groups can escalate very negative social climate. One important step is to connect the private sector or enterprises to reform education in order to better shape the school pupils to follow their profession and requirements that are in demand in the sector. Again, it is

possible to make use of knowledge in this area, Germany and integrate their mechanisms have very good efficiency in combating this problem.

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