Labour Market Transition between Q3 2009 and Q3 2010 (a Longitudinal Study)

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Abstract

Economic status according to ILO definition is a basic variable to measure labour activity of population. Using certain criteria we are able to determine the total number of the employed, unemployed or inactive. However, this approach shows only the essential tendencies in the labour market. If we need to obtain a detailed picture of the labour market we have to collect further information on persons employed, unemployed or inactive. This article focuses on basic changes in the labour market. The essential analysis of transition between individual economic activity statuses (employed, unemployed, inactive) is supplemented with a sector analysis and analysis of flexible employment contracts. This approach is considered to be an important and significant method to detect current changes in the labour market in the Czech Republic as well as in Europe.

Keywords

Labour market transition, labour force sample survey, economic status

JEL code

J0, J2, J4, J6

INTRODUCTION

The labour market in the Czech Republic can be described, in general, by basic statistical indicators of employment, unemployment, and economic inactivity. Statistical data defined this way corresponds to a certain state as at certain date, or resulting data may relate to a certain time interval. The employment rate, for instance, may be constructed in the Labour Force Sample Survey (LFSS) as a ratio of the number of employed persons to the total number of population by age, sex, region of the Czech Republic, etc. Then, the resultant data provides a basic overview on conditions in the labour market. This statistical state data is limited in the sense it cannot point out right to detailed causes of changes to the labour market because mutual interactions of the market respective components are not known. It is not known, for example, if an increase in the number of employed persons was caused by the fact that persons, who found jobs, had been so far economically inactive or unemployed, because respective changes over time and across these categories are not known.

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1 METHODOLOGY

The LFSS questionnaire enables to acquire data on persons in five consecutive quarters. On the basis of data obtained this way life's career of individual persons may be compiled for the period of one year. This way defined life's careers of respective persons form the basis of longitudinal studies consisting in monitoring of changes at respective persons over time. Respective life's careers must be, of course, assigned to a certain category and thus respective transitions on the labour market can be generalised.

The very basic indicator monitoring basic changes to the labour market is undoubtedly the economic status, which other basic statistical indicators as the unemployment rate, employment rate, participation rate, or, on the contrary, economic inactivity rate are derived from. Furthermore, the labour market can be characterised by basic groups of aggregated economic activities (sectors) of the national economy. For purposes of this longitudinal study basic distribution into persons employed in agriculture (primary sector), industry, including construction industry (secondary sector), and in services (tertiary sector) is made. In two recent years development in the labour market has been affected by using the flexible employment contracts, that means fixed–term employment contracts and employment contracts for a shorter working time. Important changes to the labour market by the position of persons in employment might result from changes that happened to the labour market between the years 2008 and 2010. For the sake of simplification this analysis employs basic classification if a person is the self-employed (the self-employed with employees, the self-employed without employees, and family workers), or he / she is in the position of an employee (including members of production cooperatives).

The analysis consists of two fundamental calculations. First, transitions among respective categories are quantified in the absolute number of persons. For example, generalising life's career by the economic status into the employed, unemployed, and economically inactive persons enables us to make comparisons of transitions within these categories. A person is employed in the initial quarter, in the next quarter he / she can be still employed, or may move into the categories of the unemployed or economically inactive. We can proceed similarly in the case of the unemployed, who in the next quarter, may be still the unemployed or switch into the categories of the employed or economically inactive. The second comparative method is based on so-called probability of transition in between respective quarters. In this case the quantity sought is probability that the employed will be the employed, unemployed, or economically inactive in the next quarter. According to the principal rule of the probability calculation the sum of these probability values must give 1 for each kind of the economic status. Furthermore, this indicator enables to derive how many per cent of persons remained the employed, or became the unemployed or economically inactive between quarters. Sum of percentages of these probabilities gives always 100 %.

2 DATA AND WEIGHTING

The LFSS is performed in continuous manner on the territory of the Czech Republic; evaluation of results is carried out at respective calendar quarters. Data obtained between Q3 2009 and Q3 2010 forms the basis of this analysis. The sample includes persons who were continuously answering the LFSS questions for all these five quarters. The size of this way defined sample is 10 785 persons and roughly corresponds to one fifth of the whole quarter sample of the LFSS. It is necessary, for the needs of the labour market analysis, to select persons who were older than 15 years for the entire reference period (9 305 persons).

The weighting of the LFSS is a process when each person of the sample is assigned a number of persons living in the Czech Republic, who this particular person shall represent. The weight is built as a ratio of the number of persons of population and the number of persons on the sample of the same age category, sex, and district of residence. Longitudinal studies require so-called longitudinal weights are calculated, when every individual of the sample bears the same weight over the entire reference period (Atkinson and Micklewright, 1991). A model of the longitudinal weight calculation must, moreover, take into account probability of migration and death during the reference period. In a simplified manner the model

counts with the fact the person may die or move away during the reference period. On the other hand, other person may not be included into the sample because this would violate the fundamental rule when a person must be continuously responding in five consecutive quarters.

Weights used for analysing the transitions between labour statuses were constructed in SAS programme using CALMAR macro. Input weights for calibration were the weights which corresponded to the selected persons being involved in LFSS in the 3rd quarter 2009. These weights were calibrated to make the sums of weights for persons by sex, region and age groups (0–14, 20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65+) equal to the total longitudinal population.

3 ECONOMIC STATUS

Once data was weighted, based on the construction of the longitudinal weights, the number of persons of 15+ years of age was 8 776.0 thousand in the reference period from Q3 2009 to Q3 2010. Development

Tables 1–6 Final weights

Moments			
N	10 785	Sum Weights	10 785
Mean	950.010385	Sum Observations	10 245 862
Std Deviation	414.596413	Variance	171 890.186
Skewness	1.9408903	Kurtosis	8.22328092
Uncorrected SS	1.15873E10	Corrected SS	1 853 663 762
Coeff Variation	43.6412506	Std Error Mean	3.99222919

Basic Statistical Measures			
Location		Variability	
Mean	950.010	Std Deviation	414.59641
Median	855.655	Variance	171 890
Mode	1 114.254	Range	5 485
		Interquartile Range	438.81885

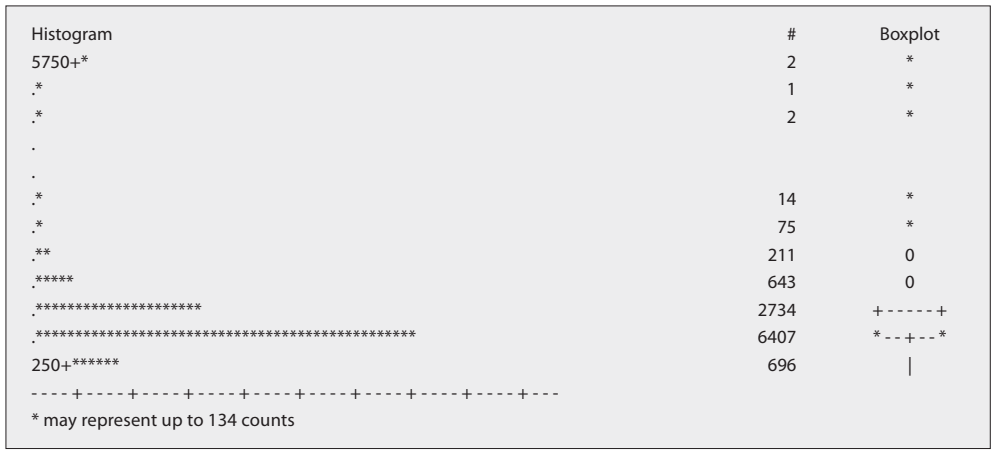
Tests for Normality				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.112046	Pr > D	<0.0100
Cramer-von Mises	W-Sq	52.58168	Pr > W-Sq	<0.0050
Anderson-Darling	A-Sq	315.2904	Pr > A-Sq	<0.0050

Extreme Observations					
Lowest			Highest		
Value	Position	Obs	Value	Position	Obs
265.857	8 363	8 429	4 819.46	4 491	4 482
265.857	8 378	8 421	4 819.46	4 464	4 498
265.857	8 359	8 385	5 279.66	4 732	4 723
265.857	8 343	8 380	5 509.43	5 587	5 533
265.857	8 360	8 376	5 750.62	4 462	4 500

Quantiles	
Quantile	Estimate
100 % Max	5 750.616
99 %	2 394.965
95 %	1 827.366
90 %	1 463.814
75 % Q3	1 114.254
50 % Median	855.655
25 % Q1	675.435
10 %	544.554
5 %	476.579
1 %	371.849
0 % Min	265.857

Source: Own construction

Figure 1 Distribution of weights



Source: Own construction

during this period was not unambiguous. At the end of 2009 the adverse effect of economic decline on the level of overall employment still persisted. Then negative trends on the labour market continued even in comparison of Q4 2009 and Q1 2010, yet since Q2 2010 a cessation, at least, of negative trends on the labour market can be seen. Economic development in 2009 and 2010 caused the number of the employed was falling during the whole year 2009 and in Q1 2010 it was 4 769.1 thousand persons.

Table 7 Population aged 15+ by economic status in between Q3 2009 and Q3 2010 in the longitudinal model (in thousand persons)

Economic status	Q3 2009	Q4 2009	Q1 2010	Q2 2010	Q3 2010
Total	**8 776.0**	**8 776.0**	**8 776.0**	**8 776.0**	**8 776.0**
Employed	4806.8	4 816.0	4 769.1	4 822.9	4 838.8
Unemployed	404.1	379.3	384.5	323.5	339.7
Economically inactive	3 565.1	3 580.7	3 622.4	3 629.6	3 597.5

Source: CZSO — LFSS

The overall increase in the number of the employed in 2010 was caused by a significant growth of the number of the formerly unemployed, who found jobs between Q1 and Q2 2010. Their number was 86.1 thousand persons while between Q4 2009 and Q1 2010 this increase was 65.8 thousand persons, and if Q3 and Q4 2009 are compared then it was even mere 64.3 thousand persons. The total increase could be assigned to generally better conditions for employment (seasonal jobs) in Q2 2010 but the number of persons, who lost jobs, was also following a positive trend in this period. A decline in economic performance can be just characterised by the transition of a number of persons from the category of the employed into that of the unemployed. It can be clearly seen there was a negative increase in between Q3 and Q4 2009 (44.8 thousand persons) and between Q4 2009 and Q1 2010 (59.1 thousand persons). In the next quarter the improved conditions in the labour market were manifested when 34.3 thousand persons lost jobs, yet if Q2 and Q3 2010 are compared this number rose again to 44.0 thousand persons. The transition between the economically active and economically inactive components of population showed an adverse effect on the labour market during economic depression. Negative trends in the labour market led to the fact that 86.2 thousand persons of the employed and 23.0 thousand persons of the unemployed left to economic

Table 8 Transitions on the labour market: by economic status of population aged 15+ in between Q3 2009 and Q3 2010 (in thousand persons)

Economic status	Q3 2009 / Q4 2009	Q4 2009 / Q1 2010	Q1 2010 / Q2 2010	Q2 2010 / Q3 2010
Employed → Employed	4 698.5	4 670.7	4 693.3	4 731.0
Employed → Unemployed	44.8	59.1	34.3	44.0
Employed → Economically inactive	63.5	86.2	41.6	47.9
Unemployed → Employed	64.3	65.8	86.1	46.6
Unemployed → Unemployed	315.6	290.6	274.1	252.8
Unemployed → Economically inactive	24.2	23.0	24.2	24.1
Economically inactive → Employed	53.2	32.7	43.5	61.2
Economically inactive → Unemployed	18.9	34.9	15.1	42.9
Economically inactive → Economically inactive	3 493.0	3 513.2	3 563.8	3 525.4

Source: CZSO — LFSS

inactivity at the turn of 2009 and 2010. On the contrary, only 67.5 thousand persons moved from the economically inactive group into the one of economically active persons.

A more detailed comparison should be based on so-called probability of transition between respective quarters. That means, for instance, what is the probability value that an employed person would become an unemployed person during the next quarter (Schmitt, 2002, Kaiser, 2006). The economically inactive and then the employed are most stable components by economic status, because majority of persons in these groups did not intend to move into the economically active, or become jobless, respectively. The most significant changes are in the group of the unemployed when, in the relatively favourable period in between Q1 and Q2 2010, probability an unemployed person would remain unemployed was mere 0.713. On the contrary, it was relatively high in the case that a person moved from the category of the unemployed into the category of the employed because this way defined probability of transition was 0.224. This means that almost every fifth unemployed person found a job during Q2 2010. Unfortunately, when Q2 and Q3 2010 are compared, the probability of finding job in the unemployed dropped to 0.144.

Relatively lowest probability of retaining job was in the comparison of Q4 2009 and Q1 2010 when approximately 3 % of persons of the total number of the employed lost job. The relative fall in employment

Table 9 Probability of transitions on the labour market: by economic status of population aged 15+ in between Q3 2009 and Q3 2010

Economic status	Q3 2009 / Q4 2009	Q4 2009 / Q1 2010	Q1 2010 / Q2 2010	Q2 2010 / Q3 2010
Employed → Employed	0.977	0.970	0.984	0.981
Employed → Unemployed	0.009	0.012	0.007	0.009
Employed → Economically inactive	0.013	0.018	0.009	0.010
Unemployed → Employed	0.159	0.173	0.224	0.144
Unemployed → Unemployed	0.781	0.766	0.713	0.781
Unemployed → Economically inactive	0.060	0.061	0.063	0.075
Economically inactive → Employed	0.015	0.009	0.012	0.017
Economically inactive → Unemployed	0.005	0.010	0.004	0.012
Economically inactive → Economically inactive	0.980	0.981	0.984	0.971

Source: CZSO — LFSS

during 2009 and the following moderate improvement in the labour market affected also the economically inactive component of population. As a result of adverse conditions in the labour market the economically inactive also strove to find jobs because they might fear it would be very hard to find a job in the next year. These were, first of all, women who cut short their parental leave. This was also in part caused by the implementation of "three-speed" parental leave when persons on parental leave may choose if they draw parental allowance for two, three, or four years. Therefore between Q3 and Q4 2010 probability of change in status from the economically inactive person into the employed person (0.015) was significantly higher than between Q4 2009 and Q1 2010 (0.009), or between Q1 and Q2 2010 (0.012). The arrival of graduates in the labour market between Q2 and Q3 2010 contributed to a higher probability of transition between the statuses of the economically inactive person and the unemployed person as well.

4 SECTORS (AGGREGATED ECONOMIC ACTIVITIES) OF THE NATIONAL ECONOMY

The first half of 2009 featured a significant drop in employment in the secondary sector; there was no such prominent decrease in the second half of the year yet the decline in the secondary sector still caused an important year-on-year decrease in employment in Q3 and Q4 2009. The evidence for such a decrease is the fact that there were, primarily, persons employed in secondary industry, who lost jobs during Q4 2009 and Q1 2010. There were 50.6 thousand persons employed in industry (incl. construction industry) who lost job in comparison of Q3 and Q4 2009. When Q4 2009 and Q1 2010 are compared then the number of persons, that lost job, was even 61.2 thousand. During the year 2010 the secondary sector was behind the halting of negative trends in the labour market, which meant that 28.2 thousand persons lost job in industry between Q1 and Q2 2010 and even solely 23.2 thousand persons between Q2 and Q3 2010. On the contrary, the secondary sector absorbed new workers in the labour market during 2010 because 53.3 thousand jobless persons found their job in the secondary sector in comparison of Q1 and Q2 2010, and between Q3 and Q4 2010 this number was 38.2 thousand. The increased demand for new workers in the secondary sector was the reason for stopping of adverse trends in the labour market but during Q3 2010 industry was not able to absorb such number of workers and it remains questionable if it recovers to ab-

Table 10 Transitions on the labour market: by activity of the national economy in between Q3 2009 and Q3 2010 (in thousand persons)

Activity of the national economy	Q3 2009 / Q4 2009	Q4 2009 / Q1 2010	Q1 2010 / Q2 2010	Q2 2010 / Q3 2010
Agriculture → Agriculture	160.7	156.2	157.5	161.9
Agriculture → Other activity of the national economy	0.9	1.2	1.4	2.9
Agriculture → Jobless[1)]	5.5	5.1	1.2	2.3
Industry → Industry	1 768.2	1 743.7	1 744.7	1 771.0
Industry → Other activity of the national economy	2.4	8.4	2.4	7.8
Industry → Jobless[1)]	50.6	61.2	28.2	23.2
Services → Services	2 765.1	2 760.8	2 783.9	2782.2
Services → Other activity of the national economy	1.1	0.5	3.2	5.2
Services → Jobless[1)]	52.3	79.1	46.5	66.4
Jobless[1)] → Agriculture	1.6	3.4	8.3	3.3
Jobless[1)] → Industry	43.0	31.7	53.3	38.2
Jobless[1)] → Services	72.9	63.4	68.0	66.3
Jobless[1)] → Jobless[1)]	3 851.7	3 861.6	3 877.2	3 845.3

[1)] Jobless persons include economically inactive persons and the unemployed.
Source: CZSO — LFSS

sorb some in the near future. The latest development shows rather that the industrial output growth in the Czech Republic will not bring an important increase in employment in the secondary sector.

During the year 2009, the drop in the number of persons in the secondary sector was compensated by the growth of the tertiary sector, or it was shown that in the time of relatively low unemployment there used to be a relatively high number of jobs in the tertiary sector. During the year 2010 jobs in the tertiary sector were lost, on the contrary. It is no surprise that in the reference period most of jobless persons (72.9 thousand) found jobs in the services sector between Q3 and Q4 2009 yet in next quarters this number was lower. The highest labour outflow from the services sector was, conversely, in the comparison of Q4 2009 and Q1 2010 (79.1 thousand persons) and between Q2 and Q3 2010 (66.4 thousand persons). In the period between Q2 and Q3 2010 the numbers of persons moving into and leaving the services sector were balanced.

Table 11 Probability of transition on the labour market: by activity of the national economy in between Q3 2009 and Q3 2010

Activity of the national economy	Q3 2009 / Q4 2009	Q4 2009 / Q1 2010	Q1 2010/ Q2 2010	Q2 2010 / Q3 2010
Agriculture → Agriculture	0.962	0.962	0.984	0.969
Agriculture → Other activity of the national economy	0.005	0.007	0.009	0.017
Agriculture → Jobless[1)]	0.033	0.031	0.007	0.014
Industry → Industry	0.971	0.962	0.983	0.983
Industry → Other activity of the national economy	0.001	0.005	0.001	0.004
Industry → Jobless[1)]	0.028	0.034	0.016	0.013
Services → Services	0.981	0.972	0.982	0.975
Services → Other activity of the national economy	0.000	0.000	0.001	0.002
Services → Jobless[1)]	0.019	0.028	0.016	0.023
Jobless[1)] → Agriculture	0.000	0.001	0.002	0.001
Jobless[1)] → Industry	0.011	0.008	0.013	0.010
Jobless[1)] → Services	0.018	0.016	0.017	0.017
Jobless[1)] → Jobless[1)]	0.970	0.975	0.968	0.973

[1)] Jobless persons include economically inactive persons and the unemployed.
Source: CZSO — LFSS

Probabilities of transitions by respective sectors of the national economy just confirm the aforementioned conclusions. At the end of 2009 the probability of job loss was significantly higher in persons working in the secondary sector; during 2010, however, the situation turned around. In comparison of Q3 and Q4 2009 the probability of job loss in persons of the secondary sector was 0.028 and those of the tertiary sector was only 0.019. On the contrary, between Q2 and Q3 2010 the probability of job loss in the secondary sector was 0.013 and that in the tertiary sector was 0.023. Probabilities of transitions from one sector of the national economy into another one were relatively low. The mentioned trend was entirely marginal primarily in the services sector when not more than 1 % of the employed left for another sector of the national economy during a quarter. Because of a relatively low total number of persons working in the primary sector the highest probability of transition was right in this sector yet this meant a relatively low number of persons there.

5 STATUS IN EMPLOYMENT

The drop in economic performance in 2009 brought, besides the fall in the secondary sector, also a drop in the number of persons employed in the position of employees (incl. members of producer coopera-

tives). A relative decrease in the number of persons in the position of employees during the year showed namely in the year-on-year comparison. For example, in Q3 2009 the number of employees, including members of production cooperatives, was reduced against that in Q3 2008 by 117.5 thousand persons. The number of the self-employed in the main job, including family workers, on the contrary, increased by 24.6 thousand persons in Q3 2009 compared to the corresponding period of 2008 and their share in the total employment rose by 0.8 percentage point to give 16.9 % compared to the previous year.

It is clear, on the basis of these state quantities, that at the end of 2009 the decrease in the number of labour force was still the highest in the category of employees. Between Q3 and Q4 2009 the number of employees that lost job was 97.0 thousand persons; between Q4 2009 and Q1 2010 this number was already 127.0 thousand persons. In similar way as the development in respective sectors of the national economy an essential change to the employment structure by the status in employment occurred during 2010. By the end of Q1 2010 the employee sector recorded a substantial loss because during Q1 2010 it absorbed solely 82.3 thousand persons, who had no job in Q4 2009. In comparison of Q1 and Q2 2010 the labour market absorbed 111.4 thousand employees, who had no job, also due to generally better conditions for employment, and, on the contrary, mere 64.8 thousand employees lost their job in this period.

Table 12 Transitions on the labour market: by status in employment in between Q3 2009 and Q3 2010 (in thousand persons)

Status in employment	Q3 2009 / Q4 2009	Q4 2009 / Q1 2010	Q1 2010 / Q2 2010	Q2 2010 / Q3 2010
Self-employed[1] → Self-employed[1]	838.3	823.0	833.6	841.1
Self-employed[1] → Employee	3.5	6.4	2.3	7.9
Self-employed[1] → Jobless[2]	11.3	18.3	11.1	6.2
Employee → Self-employed[1]	5.7	7.8	3.5	6.4
Employee → Employee	3 851.0	3 833.4	3 853.9	3 875.5
Employee → Jobless[2]	97.0	127.0	64.8	85.7
Jobless[2] → Self-employed[1]	3.7	16.1	18.2	15.4
Jobless[2] → Employee	113.8	82.3	111.4	92.5
Jobless[2] → Jobless[2]	3 851.7	3 861.6	3 877.2	3 845.3

[1] Incl. family workers.
[2] Jobless persons include economically inactive persons and the unemployed.
Source: CZSO — LFSS

The development in the self-employed category was completely different because their number increased relatively as well as in absolute figures in 2009. On the contrary to the employees the entirely low number of the self-employed persons moved into the employee position or terminated business activities (14.8 thousand persons) between Q3 and Q4 2009. There was no essential labour outflow from the position of the self-employed even in the respective quarters of 2010. On the other hand, the number of the self-employed did not show any marked growth during 2010 because the principal increase on the self-employed number occurred already in the first half of 2009.

The given conclusions also confirm probability of transition by the status in employment. The share of persons, who lost the status of the self-employed over one quarter, has been falling under the limit of 2 % over a long term. It was higher (2.9 %) between Q4 2009 and Q1 2010 when a portion of the self-employed terminated their business activities by the end of the year. The share of employees, who lost the status of the employee in between Q3 and Q4 2009, was 2.6 % and similarly as in the case of the self-employed this share was the highest between Q4 2009 and Q1 2010 when it went up to 3.4 %.

Table 13 Probability of transition on the labour market: by status in employment in between Q3 2009 and Q3 2010

Status in employment	Q3 2009 / Q4 2009	Q4 2009 / Q1 2010	Q1 2010 / Q2 2010	Q2 2010 / Q3 2010
Self-employed[1] → Self-employed[1]	0.983	0.971	0.984	0.983
Self-employed[1] → Employee	0.004	0.008	0.003	0.009
Self-employed[1] → Jobless[2]	0.013	0.022	0.013	0.007
Employee → Self-employed[1]	0.001	0.002	0.001	0.002
Employee → Employee	0.974	0.966	0.983	0.977
Employee → Jobless[2]	0.025	0.032	0.017	0.022
Jobless[2] → Self-employed[1]	0.001	0.004	0.005	0.004
Jobless[2] → Employee	0.029	0.021	0.028	0.023
Jobless[2] → Jobless[2]	0.970	0.975	0.968	0.973

[1] Incl. family workers.
[2] Jobless persons include economically inactive persons and the unemployed.
Source: CZSO — LFSS

6 FLEXIBLE EMPLOYMENT CONTRACTS

The respondent point of view, taking into account commonly worked time by the respondent, is the decisive aspect in defining working time under the employment contract in the LFSS. The working time of the employment contract became a principal subject of discussions during the economic depression. The move to a shorter working time could contribute to the retaining of the levels of employment and unemployment. On the other hand, companies could mostly get rid of employees with shorter working time in the time of the economic depression.

From the future development point of view the usage of part-time jobs appears, especially in the case of mothers with little children, as a suitable instrument for harmonising of family life and work. The Czech Republic may, concerning this, consult ample experience of numerous Western European countries, which employment policies have been striving to accept this phenomenon for already a long time (Mejstřík, 2005). The choice of working time undoubtedly improves the potential of having family and work duties orchestrated. The expanding of possible shorter working time employment contracts seems advantageous concerning future trends connected mostly to the population ageing. Maintaining of a certain employment level can be achieved just by the increased employment rate in mothers with children, old-age pensioners, or students (Mejstřík and Nývlt, 2006).

Despite slight absolute and relative increases in the number of part-time employment contracts, mostly in the first half of 2010, the spread of these working time employment contracts remained relatively low when in Q2 2010 solely 5.7 % persons in the main employment was working part-time of the total number of employees. Moreover, in Q3 2010 the share of part-time contracts decreased to 5.5 %. The completely negligible number of persons with a part-time employment, who lost their job, contributed right to a slight increase in the number of part-time jobs in the first half of 2010. If Q3 and Q4 2009 are compared, probability of leaving the job in persons with a part-time employment was 0.069; in the comparison of Q1 and Q2 2010 it was mere 0.019. Conversely, the probability level of leaving the job in persons working full-time was relatively stable. It can be stated on the basis of these data that the reduction of working time in the national economy in 2009 also found its consequence in laying-off persons working part-time and a gradual growth in the number of these jobs appeared as conditions on the labour market were improving during 2010.

The hiring for the fixed-term employment contract has become a principal issue due to changes to the labour market. The increasingly used fixed-term employment contracts bring a certain higher flexibility to the labour market, on one hand, and enable the young to obtain their first work experience in simpler man-

Table 14 Probability of transition on the labour market: by the type of the employment cotract in between Q3 2009 and Q3 2010

Type of the employment contract	Q3 2009 / Q4 2009	Q4 2009 / Q1 2010	Q1 2010 / Q2 2010	Q2 2010 / Q3 2010
Full-time → Full-time	0.979	0.970	0.983	0.985
Full-time → Part-time	0.001	0.001	0.001	0.002
Full-time → Jobless[1)]	0.020	0.029	0.016	0.014
Part-time → Full-time	0.021	0.022	0.043	0.031
Part-time → Part-time	0.910	0.926	0.937	0.863
Part-time → Jobless[1)]	0.069	0.052	0.019	0.106
Jobless[1)] → Full-time	0.024	0.019	0.027	0.022
Jobless[1)] → Part-time	0.006	0.006	0.005	0.005
Jobless[1)] → Jobless[1)]	0.970	0.975	0.968	0.973

[1)] Jobless persons include economically inactive persons and the unemployed.
Source: CZSO — LFSS

ner, for instance. Yet, on the other hand, a substantial spread of fixed-term employment contracts may lead to substantially adverse effects in society. If the employee cannot find a job under an indefinite employment contract following certain work experience acquired, then it may affect their decision to establish their own household, or may lead to the postponing of childbirth in the family to a later time.

In general, the indicator by working time of the employment contract is surveyed merely for the employees. A person may, during one quarter, work under the same type of employment contract for all the time, or may change the employment contract, or may cease to be an employee. In majority of cases this means the employee has lost job, yet quite exceptionally the person has been able to acquire the status of the self-employed. Because validity of fixed-term contracts is related to the end of the calendar year it is no surprise there is a relatively high probability of loss of the fixed-term job if Q4 2009 and Q1 2010 are compared when 24.1 % employees terminated their fixed-term contracts, of which 12.7 % were transferred under indefinite employment contracts. A relatively high number of employees under fixed-term contracts (10.5 %), who ceased to be employees, occurred also between Q3 and Q4 2009; on the contrary, the lowest number of such employees was between Q1 and Q2 2010 (5.5 %). Likewise in the case of

Table 15 Probability of transition on the labour market: by duration of the employment contract in between Q3 2009 and Q3 2010

Duration of the employment contract	Q3 2009 / Q4 2009	Q4 2009 / Q1 2010	Q1 2010 / Q2 2010	Q2 2010 / Q3 2010
Fixed term → Fixed term	0.854	0.759	0.893	0.835
Fixed term → Indefinite	0.042	0.127	0.052	0.065
Fixed term → Other[1)]	0.104	0.113	0.055	0.100
Indefinite → Fixed term	0.003	0.001	0.002	0.002
Indefinite → Indefinite	0.979	0.973	0.984	0.983
Indefinite → Other[1)]	0.019	0.026	0.014	0.015
Other → Fixed term	0.013	0.010	0.014	0.014
Other → Indefinite	0.011	0.008	0.010	0.007
Other → Other[1)]	0.976	0.982	0.977	0.979

[1)] Other includes the self-employed and jobless persons.
Source: CZSO — LFSS

part-time employment contracts this indicates that in 2009 the self-employed frequently dealt with the economic depression by means of laying-off persons working under part-time employment contracts, or did not extend fixed-term employment contracts.

CONCLUSION

In the course of 2009 and 2010 the labour market was often affected by quite contradictory trends. In 2009 the labour market was influenced by falling economic performance and, conversely, at the beginning of 2010, especially in Q2 2010, basic indicators of the employment and unemployment levels were improving. Negative trends on the labour market led to the fact that by the end of 2009 a higher number of persons of the employed category moved into the one of the unemployed than vice versa. The turn of 2009 and 2010 was, in addition, characteristic for the leave of a substantial number of persons into the economic inactivity while this decrease was not compensated in full by counter current transition from the category of economically inactive persons into the category of the employed. The labour outflow from the secondary sector and from the group of employees was the most important. The decline in the economic performance was demonstrated predominantly by laying off persons having flexible employment contracts, that means persons working under a part-time employment contract and persons with a fixed-term employment contract, respectively. The group of persons in the position of the self-employed retained high stability over the entire reference period when quite a negligible number of the self-employed became employees, or jobless persons.

The total increase in the number of the employed in 2010 was caused by a significant growth of the number of the formerly unemployed, who found jobs between Q1 and Q2 2010. It was, first of all, the secondary sector, which largely contributed to improved conditions in the labour market. This was demonstrated in the low number of persons who lost jobs in industry between Q1 and Q2 2010. Furthermore, improvements in conditions in the labour market showed influence in the spread of flexible employment contracts right in time of seasonal jobs. Unfortunately, the turn of Q2 and Q3 2010 already indicated halting of favourable trends on the labour market.

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