Step or trap? Transition from fixed-term contracts in Central Eastern Europe

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This article investigates the transition from fixed-term contracts to permanent jobs from the viewpoint of the 'stepping stone versus trap' theoretical framework. The main contribution of this research is that it examines what function fixed-term contracts have in the EU new member states, countries that have not yet been investigated in this regard. This research tests which individual characteristics influence the transition to permanent employment and how labour market institutions can help in understanding the differences among countries. The analysis covers the eight post-communist countries which joined the EU in 2004. The period analysed is 2005–10. We make use of the EU-SILC dataset and employ multinomial logistic regression to perform the analysis. The findings reveal that, on average, a temporary job is more a trap than a stepping stone, although considerable differences exist across countries. Surprisingly, most of the individual demographic and human capital characteristics do not have an effect on the transition to permanent employment. Only the age category and work experience significantly increase the chances for a successful transition. Institutions such as employment rigidity and industrial relations explain a considerable amount of the country variations. More rigid labour markets and stronger trade unions lower the probability of successful transition. We argue that the reason is that companies use FTCs as a tool to increase flexibility in rigid labour markets. The concluding part discusses some limitations of the research, links it back to the theoretical literature and suggests some challenges for future research.

Non-standard employment has become a stable part of European labour markets in recent decades. On the one hand it helps employers to screen job applicants or deal with sudden fluctuations in their labour requirements. On the other hand, temporary positions mean less stability of employment and income and uncertainty about the worker's future. As shown by the literature, in combination with different labour market regulation a temporary job might lead to a permanent contract or might be a trap of repeated spells of temporary jobs and/or unemployment (Muffels *et al.* 2002, Giesecke and Gross 2003, D'Addio and Rosholm 2005, Gash 2008).

There are no recent studies on the transition from temporary to permanent jobs in Central Eastern Europe (CEE). Therefore the main contribution of this article is that it sheds some light on the transition from non-standard employment in the region, also taking into account labour market institutions. The notion of non-standard forms of employment in this study is limited to fixed-term contracts (FTCs), also referred to as 'temporary jobs'.

In CEE fixed-term contracts have become popular only recently. The economies of the post-communist states experienced radical economic transition during the 1990s, including changes in labour markets and related social and industrial policy areas.

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Currently the use of fixed-term contracts in CEE is rather below the EU-15 average except in Slovenia, where it is at about the EU-15 level, and Poland, which has a higher proportion of fixed-term contracts.

Contemporary research on fixed-term contracts suggests that temporary jobs might be either stepping stones to a better and more permanent career or a trap for the worker. This research explores what function fixed-term contracts have in EU new member states. Moreover, the research question is not only whether temporary employment leads to permanent employment; an important question also is how labour market institutions (LMI) influence the transition from temporary employment. The selection of the Central Eastern European countries which joined the EU in 2004 corresponds to the 'most similar research design' by choosing cases with many similar characteristics (historical legacies, economic development) and variation in the key variables of interest (LMI).

First we review the theoretical background of the transition from non-standard employment and the possible role played by labour market institutions. Next we describe the dataset used and the research method employed. Discussion of the results follows and the latter are summarised together with some limitations and suggestions in the concluding part.

Theoretical background

Temporary jobs: stepping stone or trap?

Most of the relevant literature starts from the two competing theories of the 'stepping stone versus trap' (Booth *et al.* 2002, Scherer 2004, Baranowska *et al.* 2011) or 'integrative vs. exclusionary function' of temporary jobs (Muffels *et al.* 2002). The first approach suggests that temporary employment helps workers to gain experience and/or on-the-job training and also serves as a probationary period. This is the way employers overcome the problem of lack of information about an employee. Simply, employers might use the period of the temporary job to screen the potential of the worker (Wang and Weiss 1998). On the other hand, according to the labour market segmentation theory (Doeringer and Piore 1971) fixed-term employment is used in secondary markets for its low costs and also as a form of flexible employment in countries with rigid markets and strict employment protection legislation; it thus leads to entrapment of the worker in spells of repeated unemployment and temporary contracts.

Recent studies have identified several individual determinants as crucial in the transition from temporary jobs. D'Addio and Rosholm (2005) investigated most of the EU15 members and found that women had higher chances of exiting into a permanent job than men. They also found that young workers had a lower probability of transition from a temporary to a permanent job compared to prime age workers. Having previous experience of unemployment or low qualifications or bad health decreased the chances of getting a permanent job. An interesting result came out of the comparison of sectors. Working in the public sector was associated with higher risk of getting into non-employment than working in the private sector. This held true for both men and women, although the size of the effect was slightly different. Surprisingly, D'Addio and Rosholm (2005) found that the probability of moving into a permanent contract increased with the duration of the temporary one. Regarding the public vs. private sector difference, Giesecke and Gross found that a position in the public sphere 'protects people from becoming unemployed [after the temporary job] the most' (2003, p. 171).

Gagliarducci (2005) confirmed the positive effects of higher qualifications and longer FTC duration on chances for successful transition. He discovered that repeated and interrupted temporary job spells decreased the chances of transition from a temporary job to

a permanent one. Gash (2008) revealed that the chances of transition to a permanent job increased with a higher level of education. However, the effect of the type of job a worker held differed among countries. The effects of a person's qualifications on a successful transition to permanent employment also varied across countries in Scherer's study (2004).

Labour market institutions and temporary employment

Why are there differences across European countries? Recent research has shown that whether temporary employment serves as a bridge or a trap is to a certain extent dependent on the labour market regulation in the country (mainly the costs and difficulties of hiring and firing).

Gash (2008) investigated the effect of labour market regulation on the transition from temporary jobs in the UK, West Germany, Denmark and France. She concluded that German temporary workers were the most likely to make a transition to permanent employment, while Danish ones were the second most likely. Gash also pointed out that West Germany 'provided the best routes to a permanent job' (2008, p. 663).

What Muffels *et al.* (2002) call a 'national style of regulation' is transformed in several classifications which focus on different aspects of regulation (employment protection legislation by OECD, welfare regimes by Esping-Andersen, varieties of capitalism by Hall and Soskice (2001) etc.). The logic behind such phenomena suggests that the incidence of temporary jobs will not be randomly distributed across the labour force. For instance, substantial firing costs in the case of permanent jobs will make firms relatively reluctant to hire new workers. Instead, new entrants will be placed in temporary jobs where their productivity can be assessed before a permanent offer is made.

Concerning the rigidity of employment, the corresponding legislation differs to a considerable extent across countries and could explain some of the differences. Labour markets with rigid legislation are expected to have low job-to-job mobility (OECD 2004). Temporary workers not only present an alternative form of flexible source of labour but also face a higher risk of unemployment, since the 'permanent' jobs are already taken. In order to analyse whether the differences between countries can be explained by employment rigidities, the widely accepted indicators of the World Bank are used: Difficulty of Hiring Index (DHI) and Difficulty of Firing Index (DFI). As discussed later, the DHI, in particular, is linked to the FTC legislation.

Looking at the labour market institutions only through the perspective of employment rigidity might result in omitting other important institutions and processes on labour markets. Gash (2008) pointed out that research on the relation between institutions and transition from temporary employment should not 'limit itself to the ease with which employers can hire or fire workers' and that there were more important areas. She adds that 'national variations in education and industrial relations systems are also vital to our understanding of market outcome' (2008, p. 664). The main line of argument for broader understanding of institutions is that strict employment legislation might also lead to positive outcomes if it is supported by an additional structure. This means, for instance, that strong trade unions would protect the whole workforce, including people in non-standard employment.

In addition to the EPL and industrial relations, there are also other labour market institutions that matter. First, the influence of active labour market policies (ALMPs) on labour market transition has been documented (e.g. Schmid 2002, van Ours 2004). The role of unemployment benefit, especially its duration and replacement rate, is also important for transitional labour markets (van Ours and Lubyová 1999, Bover and Gomez 2004). However, the literature links the two LMIs mainly in relation to transition from

unemployment or out of employment (for theoretical background see Atkinson and Micklewright 1991) and not so much between different types of employment. Therefore we will not draw any hypotheses involving the two LMIs.

Muffels and Luijkx (2008) investigated contract mobility in the Western European countries and found that the more regulated labour markets were lowering the chances of transition to a permanent job. In addition to the institutional indicators such as ALMPs and EPL, they tested the regime typology, using Esping-Andersen's welfare regimes. Welfare regimes explained about the same amount of variation in transition to a permanent job as institutional indicators. The odds of getting a permanent job were higher in Anglo-Saxon than Continental countries.

In addition to the institutional aspects there are also macroeconomic and structural differences among the countries. In the literature these are usually measured by economic development indicators, unemployment rates or the unemployment/vacancy ratio. In this study we include the GDP growth measure to capture the macroeconomic differences across countries.

Hypotheses

As Baranowska *et al.* (2011) put it, most of the current research on temporary employment has been largely limited, in geographical terms, to 'the West'. We investigate to what extent the indicators of industrial relations (IR) and employment rigidity explain the labour market outcomes – in terms of non-standard employment – in Central Eastern Europe.

One of our main goals is to investigate whether and how individual characteristics influence the probability of successful transition from temporary to permanent employment. Investigating the effects of individual characteristics is also important owing to the lack of similar research in this region. The following hypotheses will be tested. In line with the literature, we expect that when exiting temporary jobs (1) *men have higher chances of getting a permanent contract than women*; (2) *workers at a prime age have a higher probability of transition to a permanent job than younger workers*; (3) *people with chronic health problems will have lower chances of a permanent job than people without health problems*.

It is reasonable to expect that the individual variables are not the only ones to influence the transition from a temporary job. The chances of getting into permanent employment are expected to vary across countries with different labour market institutions. The 'flexibilisation' approach tells us that temporary jobs are used as an alternative form of flexible employment in countries where the employment protection legislation is strict. Based on this we can expect that (4) *holding individual characteristics constant, the chances of successful transition are increasing with decreasing employment rigidity*.

As discussed above, employment rigidity is sometimes not the only factor that makes the difference. We should investigate the effect of IR on transition from temporary jobs carefully. Different industrial relations are also supposed to influence the probability of getting into full-time employment, owing to the difference in trade unions' power. This also tests the trap hypothesis, since non-standard employment is mostly used by firms to fill short-term gaps in labour supply ('trap' scenario). Thus (5) *people with the same individual characteristics will be less likely to get into permanent employment with increasing union density and collective bargaining coverage*. In other words, controlling for industrial relations, the differences among countries should decrease.

Regarding the sector level and the position of sectors on the market, public employers are not exposed to market pressures to the same extent as private ones. Additionally, trade

unions are stronger in the public sector (given also historically in the post-communist European states) and therefore should be in a better position to protect the interest of all workers, not only permanent employees. Based on this, (6) *people with temporary jobs in the public sector should have a higher probability of getting permanent employment than those in the private sector.*

Methodology and data

Dataset and control variables

This research makes use of the EU-SILC dataset (European Commission 2005–2010). The EU-SILC is a panel dataset, which allows us to follow individual careers of respondents and thus investigate the job status of a worker before entering a temporary job and the destination after the transition. The 2004–10 waves were available at the time of carrying out the analysis. The dataset includes basic demographic, labour market and human capital characteristics of individuals and includes the EU new member states.

The dependent variable was created using several items in the questionnaire. Most importantly, the question whether a respondent had a fixed-term contract in the reference year helped us to identify the people in temporary jobs. Information on current economic status and the most recent change in the individual's activity status were used to identify whether a worker stayed in the temporary job, exited into a permanent position or into a form of non-employment.

Only persons observed for at least three consecutive years were kept in the sample. The EU-SILC uses a rotational design and replaces part of the sample every year, having the same households in the sample for four years. In order to use as many observations as possible and thus ensure the robustness of the results, a pooled sample over the years 2004–10 was used. In order to keep a respondent in the analysis, we need to observe the person for three years and have information on the previous status (the year before the temporary job) and the exit option (the year after). In total, there were 5904 observed transitions with complete information. Only one person was observed to be in a temporary job for the whole observation period of four years. This observation was excluded from the analysis.

Regarding the individual level variables, we included years of work experience, gender, whether a person lives in a partnership, education and age category (younger workers up to 30 and prime age workers from 30 to 55). People aged more than 55 were excluded from the analysis because of exit options for early retirement and standard retirement and the impact on incentives for searching and getting into permanent employment.

In addition to the personal characteristics of workers it is important to include the LMI. This concerns particularly the issues of employment rigidity and industrial relations. The indicators measuring the labour market institutions were taken from the World Bank Doing Business reports and the ICTWSS database (Visser 2011). Following the World Bank indicators, the Difficulty of Hiring Index (DHI) is closely related to this research. The index measures '(i) whether fixed-term contracts are prohibited for permanent tasks; (ii) the maximum cumulative duration of fixed-term contracts; and (iii) the ratio of the minimum wage for a trainee or first-time employee to the average value added per worker' (World Bank 2011). Therefore the DHI is used as a control variable for FTC-related legal provisions.

The Difficulty of Firing Index (DFI) contains eight sub-components which are not directly related to fixed-term contracts but measure the need for coordination between employer and unions (or government) when firing a worker or a group of workers. The DFI is commonly used as a proxy measure of employment rigidity.

Traditional measures of industrial relations refer to association density within employers' and employees' representative organisations, as well as issues regarding collective bargaining (e.g. Pavlopoulos *et al.* 2008). The measures on union density and collective bargaining coverage will be used as industrial relations indicators in this study.

A possible problem we need to address is unobserved heterogeneity. If there is an unobserved factor that causes people to end up in a temporary job in the first place and simultaneously forces workers into a given type of job or sector, the estimates would be biased. The analysis partly controls for this by introducing information on previous status. Since we observed each transition type in each of the countries, Table 1 provides basic descriptive statistics only on the individual variables.

Econometric model

We apply a probability model which takes into account the fact that the dependent variable is categorical with three categories, which are not ordered. To estimate the probabilities of different choices (here transitions to different exit options) the multinomial logit model[1] is the most appropriate. It is defined by the following equation:

$$Z_{ij} = \sum_{r=1}^{R} \beta_{jr} X_{ir} \qquad (1)$$

Table 1.   Descriptive statistics of control variables by exit options of transition from temporary job.

Destination:	Staying in Temporary Employment				
	Obs	Mean	Std.	Min	Max
Years worked	2497	11.38486	9.718868	0	37
Prime age	2574	0.4425019	0.4967795	0	1
Occup. type	2566	0.5066251	0.6241993	0	2
Education	2574	1.048563	0.5530292	0	2
Female	2574	0.535742	0.4988178	0	1
Living with partner	2574	0.5384615	0.4986154	0	1
Chronic health issues	2539	0.1370618	0.3439804	0	1
Destination:	Permanent employment				
Years worked	2546	12.90242	10.23359	0	40
Prime age	2546	0.415161	0.4928466	0	1
Occup. type	2536	0.5386435	0.6293959	0	2
Education	2546	1.064415	0.5597628	0	2
Female	2546	0.5357423	0.4988188	0	1
Living with partner	2546	0.5667714	0.4956189	0	1
Chronic health issues	2532	0.1449447	0.3521146	0	1
Destination:	Non-employment				
Years worked	1137	9.934916	9.570586	0	38
Prime age	1230	0.4943089	0.500171	0	1
Occup. Type	1219	0.4479081	0.569794	0	2
Education	1230	0.9406504	0.5609096	0	2
Female	1230	0.4390244	0.4964699	0	1
Living with parter	1227	0.4489976	0.5000828	0	1
Chronic health issues	1217	0.1668036	0.3729537	0	1

Note In the case of dummy variables the mean represents the proportion of people in the category of value 1. For example, the mean for the 'Female' variable(0 = male, 1 = female) in the exit option 'non-employment' indicates that 44% of observations in this group are women.

where Z is the predicted probability of choice j for the i-th individual, X stands for personal characteristics and β represents the effect of the corresponding r-th characteristic on choosing the j-th option.

The probability of successful transition is then modelled as

$$P(Z_{i1}|X_{ir}) = \frac{\exp(\beta_{jr}X_{ir})}{1 + \sum_{j=1}^{3}\exp(\beta_{jr}X_{ir})}$$

P denotes the probability of choice 1 given the observed characteristics. The estimation technique used in this analysis is the 'maximum likelihood estimation' (MLE). Owing to the overlap of the same individuals resulting from the sample pooling, the standard errors estimation was adjusted for within-person correlation of error terms.

The multinomial logistic regression model assumes independence of irrelevant alternatives (IIA). In practice this means that an additional choice in the dependent variable does not change the odds of choosing one of any two previously available choices. As McFadden (1973) puts it, the categories should be 'plausibly assumed to be distinct and weighed independently in the eyes of each decision maker' (McFadden in Long 1997, p. 183). In this light it is reasonable to assume that workers as well as employers clearly see the three choices (temporary job, permanent job and no job) as different.

There is the Small–Hsiao test of the IIA assumption. However, it does not allow dummy variables in the models tested and the results also change with each additional predictor. The empty model (no predictors) was tested using the Small–Hsiao test of IIA and no violation of IIA was found.

Empirical analysis

Descriptive statistics

Before testing the hypotheses we investigate the general pattern of transitions from temporary jobs. Table 2 presents transition exits from fixed-term contracts according to the previous job type. In total, the share of people getting a permanent job is slightly over 40%. More than 19% of the observed transitions ended in non-employment. This could indicate that the fixed-term contract is more a trap since more than a half of people end up in non-

Table 2. Transitions from temporary jobs by previous status.

Previous status (before the current temp. job)	Transition to:			
	Staying in temp. employment	Permanent employment	Non-employment	Total
Temporary job	1304	924	429	2657
	49.08%	34.78%	16.15%	100%
Permanent job	437	969	213	1619
	26.99%	59.85%	13.16%	100%
Non-employment	832	657	586	2075
	40.10%	31.66%	28.24%	100%
Total	2573	2550	1228	6351
	40.51%	40.15%	19.34%	100%

Note: The table presents absolute number and conditional percentages (by previous status) of persons who made a transition from a temporary job.
Source: EU-SILC.

employment or a temporary job again. However, out of those who held a permanent position before the temporary one, almost two thirds got a permanent position again. It is also important to note that there is no clear transition pattern across the CEE countries. Approximately two thirds of the transitions in Slovakia and Estonia were into permanent employment, while there were less than 30% of such cases in Poland. This highlights the need to be cautious when interpreting the function of temporary jobs in the CEE region as a whole.

Regression results

We tested several multinomial logit models to investigate the influence of individual characteristics on successful transition. The full results are in Table A.1 in the Appendix, presenting the results for transition from a temporary job to a permanent job. The models use the pooled sample of the CEE region, starting with the base model including only personal characteristics. Subsequently, models 1–5 add institutional time-variant characteristics in the regression. Model 6 combines the significant institutional indicators. The summary statistics show that model 6 fits the observed data best. Therefore, this model serves as the explanatory model for the substantive conclusions. In model 7 we replaced the institutional indicators with country dummies to compare the explanatory power of the institutions and the country dummies.

Hypotheses 1–3 concerned the individual characteristics of a worker. The analysis confirmed only one of the three hypotheses, regarding the age category (hypothesis 2). Prime age workers have a higher probability of successful transition from a temporary job. On the other hand, there seems to be no substantial difference between men and women, nor between workers with or without chronic health problems, in terms of probability of transition to permanent employment. Another interesting result is the insignificance of education, which would mean that human capital is either not an influential element or that education is not taken as the human capital signalling mechanism by employers. In our study education was operationalised as three categories of the highest achieved education: primary, secondary and tertiary. We recognise that other forms of operationalisation, such as the orientation of the degree obtained (e.g. humanities, medicine, natural sciences etc.) might prove more significant in future research. Information on the training and skills obtained outside the education system might also improve the explanation of transition to permanent employment.

Using the DFI as a measure of employment rigidity, we confirmed hypothesis 5. Controlling for personal characteristics and job type, we found a negative relationship between the chances of successful transition and employment rigidity. Simply, people in the more rigid labour markets have a lower probability of transition to permanent employment.

Hypothesis 5 anticipated a positive effect of corporatist industrial relations. However, the resulting picture is rather blurred. Although the relative risk ratio for the union density effect is below one, which means that higher union density is associated with lower probability of getting a permanent job, the effect is not statistically significant. As for collective bargaining coverage, the effect is negative as well. Higher bargaining coverage leads to lower probabilities of successful transition. This effect of IR indicators is substantially in line with the employment rigidity hypothesis.

In hypothesis 7 we expected different probabilities of successful transition between the private and public sectors. The analysis failed to confirm this hypothesis. Although the coefficient for public paid jobs, in terms of the relative risk ratio, is higher than one, the result is not statistically significant. Therefore we cannot conclude that holding a temporary position paid from a public budget would increase the chances of getting a permanent job.

Comparison of the models' fit statistics tells us how well a given model explains the transition from a temporary job. The base model with only individual predictors fits the data worst, as expected. Models with the indicators of employment rigidity and industrial relations fit the observed data much better than the base model. The best fit is achieved by model 6, which combines several institutional indicators. This model fits the data even better than the model with country dummies (the lowest AIC and BIC statistics). This indicates that economic development, DHI, DFI and bargaining coverage explain the country differences best.

The findings of non-significant effects of some individual characteristics are surprising in view of the contemporary research on Western European countries. We tested separate models for each country in order to see whether the opposite direction of the individual effects could be cancelled out in the pooled sample and thus produce insignificant results. However, this suspicion was not confirmed as the individual factors in question remained insignificant in the separate country-by-country analysis (see Table A.2 for the regression results). However, it should be noted that the sample size is considerably smaller in a single country model. Still, we conclude that personal characteristics do not play an important role when making the transition from a temporary to a permanent job.

Discussion and conclusions

This study investigated transitions from temporary jobs in Central Eastern Europe. Looking at the region as a whole, we found that temporary contracts were more a trap than a step. Roughly 40% of workers made a transition to a permanent job after the first fixed-term contract. However, there are considerable country differences. In Poland only 27.31% of people exited a temporary job into a permanent one, while in Estonia and Slovakia there were 62.14% and 67.99% of such transitions respectively.

The main contribution of this article is investigation of the transition patterns in Central Eastern Europe and explanation of the effects that individual as well as institutional factors have on these transitions. The results showed the importance of labour market institutions in the transition from temporary jobs. The main conclusion is that more flexible labour markets as well as lower collective bargaining coverage lead to a higher probability of transition from a temporary to a permanent job.

The empirical analysis shows that the differences among countries can be explained to some extent by labour market institutions. As expected, the difficulty of firing negatively influences the chances of transition to permanent employment. On the other hand, greater difficulty of hiring seems to increase the chances of transition. This could be explained by looking at the sub-components of the DHI and what they measure. Simply, greater DHI means stricter legal regulation on the use of FTCs. The stricter legal rules thus prevent firms from repeated use of temporary employment.

The finding of a negative effect of the industrial relations indicator on transition to permanent employment is rather important. This result contradicts the expectations based upon Gash (2008). One explanation might be that unions defend the positions of the core staff and thus stronger unions hamper the chances of temporary workers making the transition. Another possible scenario is that strong trade unions without a supporting structure from other fields of the economy are perceived as a factor that makes the labour market rigid and therefore employers use temporary jobs as a tool to increase flexibility. The two explanations are not mutually exclusive and both might play a certain role in reality.

The analysis showed that, of the individual characteristics included, only work experience and age influence successful transition from a FTC. On the other hand, gender,

education, health issues or cohabitation status seem to play no role in the transition from temporary employment.

The research in this article was constrained by some limitations. The dataset contained no information on the type of education or particular training a person might have undergone. Also, the sector of a person's job is not provided directly and the information used in the analysis is only a proxy constructed from the European Commission's occupation classification ISCO-88. The analysis would surely benefit from additional sectoral breakdown (e.g. industry, construction, services etc.). However, the information provided by the dataset does not allow this in a satisfactorily precise way. Owing to low use of FTCs in most countries the sample size for the separate country models was small and thus problems such as multi-collinearity or lack of statistical power arose. These limitations constitute challenges to be addressed by future research.

Although this study provides significant insight into temporary jobs in Central Eastern Europe, there is still considerable scope for further research on the transition from non-standard employment. Based on our analysis, future research on non-standard employment in the EU new member states could look in two possible directions. On the one hand, it should attempt to include more detailed information on a person's training, skills and occupation. On the other hand, future research should also consider further institutional and policy arrangements in the individual countries which go beyond merely employment rigidity and trade union power and include LMIs such as unemployment benefit schemes and ALMPs.

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Note

1. Multinomial probit models were also tested and the results in terms of probability were almost identical.

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Appendix

Table A.1. Regression results of multinomial logistic regression for the selected models, comparing the outcome of transition to permanent employment to the base outcome (zero transition).

	Base model	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Transition to permanent								
Year has worked	1.017**	1.017**	1.016**	1.015**	1.017**	1.018**	1.013**	1.008
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Previous status (b = permanent)								
Temporary	0.338***	0.337***	0.342***	0.351***	0.338***	0.345***	0.384***	0.4666***
	(0.033)	(0.033)	(0.033)	(0.034)	(0.033)	(0.033)	(0.038)	(0.048)
Non-employment	0.395***	0.395***	0.409***	0.404***	0.395***	0.394***	0.446***	0.520***
	(0.042)	(0.042)	(0.044)	(0.043)	(0.042)	(0.042)	(0.049)	(0.058)
Occupation (b = manual)								
Non-manual	1.029	1.026	1.041	1.006	1.035	1.089	1.074	1.115
	(0.092)	(0.092)	(0.093)	(0.091)	(0.093)	(0.097)	(0.098)	(0.104)
State budget paid	1.389	1.386	1.395	1.292	1.397	1.462*	1.302	1.306
	(0.240)	(0.240)	(0.240)	(0.227)	(0.242)	(0.251)	(0.230)	(0.233)
Education (b = primary)								
Secondary	0.931	0.931	0.986	0.919	0.933	0.959	1.064	1.107
	(0.112)	(0.112)	(0.117)	(0.112)	(0.112)	(0.115)	(0.129)	(0.132)
Tertiary	0.890	0.889	0.912	0.902	0.884	0.831	0.892	0.912
	(0.142)	(0.142)	(0.145)	(0.147)	(0.140)	(0.132)	(0.148)	(0.144)
Female	1.010	1.009	1.011	1.018	1.011	1.996	1.003	1.989
	(0.083)	(0.082)	(0.083)	(0.085)	(0.083)	(0.083)	(0.086)	(0.086)
Chronic health problems	1.006	1.011	1.001	1.009	1.008	1.033	1.035	0.977
	(0.107)	(0.108)	(0.106)	(0.109)	(0.107)	(0.109)	(0.108)	(0.107)
Prime age workers	1.331*	1.333*	1.349*	1.313*	1.333*	1.353*	1.363*	1.306*
	(0.170)	(0.171)	(0.173)	(0.170)	(0.171)	(0.174)	(0.180)	(0.178)
Living in a partnership	1.059	1.060	1.096	1.044	1.057	1.043	1.085	1.168
	(0.099)	(0.099)	(0.103)	(0.099)	(0.099)	(0.098)	(0.105)	(0.116)
GDP growth	1.000*							1.000***
	(0.000)							(0.000)
Difficulty of Hiring Index		1.010***						1.019***
		(0.002)						(0.002)
Difficulty of Firing Index				0.986***				0.976***
				(0.003)				(0.003)
Union density					0.997			
					(0.006)			

Collective bargaining coverage					0.986*** (0.003)	0.982*** (0.003)	
Countries (base = Slovenia)							
HU							2.002*** (0.348)
CZ							0.866 (0.139)
SK							3.493*** (0.625)
PL							0.664** (0.097)
LT							2.336*** (0.513)
LV							2.455*** (0.632)
EE							9.005*** (3.368)
_cons	1.839** (0.373)	1.837** (0.372)	1.401 (0.282)	3.009*** (0.660)	1.920** (0.444)	2.997*** (0.724)	4.741*** (1.214)	1.023 (0.247)
Model fits statistics							
LL	−68703234	−66921580	−68468133	−68341304	−68277729	−68384716	−65506110	−65770921
AIC	1.37e + 08	1.34e + 08	1.37e + 08	1.37e + 08	1.37e + 08	1.37e + 08	1.31e + 08	1.32e + 08
BIC	1.37e + 08	1.34e + 08	1.37e + 08	1.37e + 08	1.37e + 08	1.37e + 08	1.31e + 08	1.32e + 08

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Notes: The coefficients are shown as relative risk ratios. Below the coefficient, in parentheses, we report the standard errors. An RRR higher than one means that an increase in the value of the predictor is associated with an increasing chance of the given outcome as opposed to the base outcome. An RRR lower than one means the opposite relation. In the case of categorical variables the RRR represents how much higher the chances of the given choice are for the given category of variable compared to the base category of the same variable.

Table A.2.   Regression results of multinomial logistic regression for the selected models, comparing the outcome of transition to permanent employment to the base outcome (zero transition), countries.

	SI	CZ	HU	SK	PL	LT	LV	EE
Transition to permanent								
Years has worked	0.980	0.991	1.003	1.029	1.006	1.017	0.979	1.064
	(0.021)	(0.012)	(0.015)	(0.019)	(0.008)	(0.029)	(0.035)	(0.056)
Previous status (b = permanent)								
Temporary	0.277***	0.474***	0.419***	0.331***	0.484***	0.319**	0.675	0.113*
	(0.089)	(0.091)	(0.110)	(0.093)	(0.070)	(0.136)	(0.401)	(0.118)
Non-employment	0 291***	0.481**	0.846	0.413*	0.422***	1.076	0.282*	0.223
	(0.107)	(0.114)	(0.211)	(0.154)	(0.067)	(0.553)	(0.172)	(0.215)
Occupation (b = manual)								
Non-manual	0.943	1.066	0.980	1.135	1.273	1.524	0.762	1.730
	(0.325)	(0.202)	(0.263)	(0.306)	(0.159)	(0.652)	(0.440)	(1.642)
State budget paid	0.395	0.845	0.968	4.863*	1.883*	3.849*	0.844	0.054*
	(0.245)	(0.244)	(0.434)	(3.558)	(0.481)	(2.437)	(0.824)	(0.066)
Education (b = primary)								
Secondary	0.848	0.836	1.221	0.622	1.377	0.954	1.933	1.275
	(0.346)	(0.263)	(0.328)	(0.325)	(0.238)	(0.553)	(1.091)	(1.058)
Tertiary	1.142	0.626	0.656	0.564	1.401	0.423	2.825	0.862
	(0.662)	(0.260)	(0.240)	(0.376)	(0.305)	(0.276)	(1.915)	(0.789)
Female	0.684	0.896	0.979	1.254	1.142	0.929	1.083	1.589
	(0.207)	(0.162)	(0.226)	(0.322)	(0.128)	(0.373)	(0.553)	(1.245)
Chronic health problems	1.823	1.152	0.612	0.779	0.723*	2.064	5.321*	0.760
	(0.581)	(0.262)	(0.164)	(0.249)	(0.116)	(1.049)	(3.485)	(0.577)
Prime age workers	0.669	1.194	0.931	1.034	1.106	1.500	3.007	5.112
	(0.288)	(0.317)	(0.321)	(0.419)	(0.166)	(1.090)	(2.201)	(4.919)
Living in a partnership	1.399	1.037	0.881	1.075	1.108	3.072*	0.767	0.291*
	(0.466)	(0.202)	(0.227)	(0.346)	(0.134)	(1.346)	(0.389)	(0.166)
_cons	3.529	1.805	3.227*	5.595*	0.569*	1.363	1.889	17.334
	(2.486)	(0.858)	(1.595)	(4.268)	(0.153)	(1.338)	(1.659)	(25.987)
N	381	919	678	515	2791	274	169	177

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.
Notes: The coefficients are shown as relative risk ratios. Below the coefficient, in parentheses, we report the standard errors. An RRR higher than one means that an increase in the value of the predictor is associated with an increasing chance of the given outcome as opposed to the base outcome. An RRR lower than one means the opposite relation. In the case of categorical variables the RRR represents how much higher the chances of the given choice are for the given category of variable compared to the base category of the same variable.