

# THE ROLE OF WORK AND LABOUR MARKET FLEXIBILITY IN WORKING LIFE PROLONGATION: CASE SLOVENIA

Klemen, Širok<sup>1</sup>  
Laura-Maria, Diaconescu<sup>2</sup>

## Abstract:

*Building upon the premise that the prolongation of working life presents an adequate approach to address the fast approaching challenges of population ageing, the paper presents labour market outcomes of older workers in Slovenia in order to explore the role of social system and labour market flexibility in retirement behaviour. By applying bivariate graphic analysis and series of logistic models, paper finds that decisions of older workers (aged 50 - 69) of whether to retire or to continue working up to legal retirement age is being predominately shaped by the pension system parameters. Economic activity beyond this age (or when retired) on the other hand predominately correlates with flexible work arrangements and work motivation. Thus, the future policies in Slovenia aiming to prolong working careers within formal or informal sector should simultaneously do both; change pension system parameters and significantly expand the system flexibility stimulating willing and capable elderly to continue working within the formal sector.*

**Keywords:** *older workers, pathways to retirement, working longer, retirement determinants, labour market, flexibility, pension system*

## 1. Introduction

**Population ageing confronts social actors on different levels of social reality with many challenges that can be addressed by prolongation of working life.** First, societies as whole face increasing pressure on public finances and prospects of lower economic growth. Second, declining labour force growth challenges employers existing resourcing approaches and their views on practices and (human resource management) relations with older workers. Third, at the individual level, the population ageing could be related to risks of diminishing financial status in a consequence also living standards. The importance of working longer to address these challenges has already been theoretically and empirically well recognised. Increase of labour force participation of elder population could in next 40 years invert the decline in labour supply (European Commission and Directorate-General for Economic and Financial Affairs, 2009; Holzmann and Guven, 2009; Muenz, 2007; Chawla et al., 2007; Vodopivec et al., 2008; Oliveira-Martins et al., 2005; Commission européenne et al., 2006).

Well explored were also numerous determinants related to retirement behaviour (for extensive list of those factors see Hakola, 2002), bridge employments into retirement (for extensive list of those see Adams and Beehr, 2003) or differently operationalized dependant variable of economic activity in later life periods. **However, rarely are the effects of different determinants in transitions from work to economic inactivity holistically quantitatively analysed, as for instance, by observing the role of certain contextual determinant during the whole transition process.** We address this deficiency, by analysing the labour market status of population aged 45+ in order to shed some light upon the role of labour market and social security system flexibility in prolongation of working life. Considering that the transition to inactivity presents a complex process, we identify determinants over different transition phases to economic inactivity.

The case of Slovenia has been selected, since it represents the example of how the system rigidity (i.e. absence of flexible retirement transition arrangements) within the context of generous state sponsored retirement system manifests itself as an obstacle to prolongation of economic activity within formal work sphere in later ages.

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<sup>1</sup> Associate Professor, Doctor, Primorska University, Faculty of Management, Koper, Slovenia, klemen.sirok@fm-kp.si

<sup>2</sup> Lecturer PhD., Constantin Brâncoveanu University of Pitești, Pitești, Romania, lauradindire@yahoo.com

## 2. Data and methodology

**Data source chosen for the analysis was Labour force survey (henceforth LFS) and accompanying retirement behaviour ad-hoc module.** LFS sampling framework and sampling plan provide representative sample for population in Slovenia (Statistical Office of the Republic of Slovenia, n.d.). Data used address the period between January 2005 and July 2006. Labour market outcomes are presented using aggregated LFS sample; retirement behaviour determinants analysis on the other hand uses the ad-hoc sub-sample. Since LFS is panel survey, we used for descriptive analysis last data points of 22.522 individuals older than 45 years, who were interviewed in reference period in at least two and maximal 6 time points. Ad hoc module data have been additionally obtained in second LFS wave in 2006 from respondents aged 50-65. This sub-sample of 4662 units is significantly smaller. Comparison of demographic data showed smaller differences between both samples in respect to gender, family status and highest attained education composition. Those differences can be attributed to different age structures of LFS sample and ad-hoc sub-sample.

**Logistic regression, more specifically binary logit and multinomial logit (henceforth MNLM) models estimations have been used for analysis of retirement behaviour determinants.** Regression dependant variable values have been operationalized by taking into consideration ILO definitions of labour statuses and following ad hoc-module survey questions: a.) whether person already met retirement eligibility criteria; b.) whether person receives his/hers retirement benefit; and c.) whether person reduced his/hers working time after the age of 50? Main categories of the dependant variable thus form mutually exclusive outcomes in the retirement process; i.e. the transition phases from work into economic inactivity. Conceptually the dependent variable enables the observation of three relevant aspects. First one describes individual's position in the transition from work to inactivity, which includes information about the labour status (employed, unemployed, inactive), work type (formal, informal) and social status (retired). Second, one incorporates the element of retaining or decreasing workload. The last one is the temporal aspect of transition from work to inactivity: early exit (prematureness), over-night retirement (directness), prolongation of working life (persistence), retaining economic activity (continuation).

Independent regression variable of retirement behaviour was operationalized as follows.

- In phase of *retaining activity* are the employed retaining working time (in numbers of hours worked per week) as before age of 50 who are not receiving old age pension.
- In phase of *prolongation of activity* i.e. postponing retirement are the employed that have already met retirement eligibility criteria, but are not yet receiving retirement benefit.
- The *decreasing activity* phase is assigned to those who are employed, work fewer hours per week after age of 50 and are not receiving retirement benefit.
- *Retirement* phase is assigned to those who are receiving old age pension.

We are aware, that presented definition of dependant variable analytically disregards those who are retired and are still economically active. In order not to weaken the analysis for over-night retirement and activity in retirement, two additional dependant variable categories have been developed as well as two additional nested regression models. The panel nature of LFS data enables us to treat over-night retirement and working in retirement as panel variables. We defined *retired over-night* as retired persons (i.e. those receiving retirement benefit) that have last time worked for payment at the age when they have also received retirement benefit. Variables affecting the retirement transition speed are interpreted as over-night retirement determinants. *Active in retirement* are those who receive retirement benefit and are economically active according to ILO labour status, and have received their first retirement benefit before they last time worked for payment. We

are aware of unemployed and the possibility that those active in retirement could have retired over-night. However, since preliminary data analysis showed numerally week groups of those early-exiting labour market and those prolonging activity, it was not possible to make any distinctions within those groups according to amount of hours worked. Due to the same reason, it is not possible to analytically develop and test regression models for unemployed and inactive retaining their labour market status waiting to meet retirement eligibility criteria.

**Independent variables or explanatory factors affecting the transition from work to inactivity have been selected into separate models taking into consideration economic theory, available empirical findings and existing data quality of 2005–2006 LFS and transition from work into retirement ad hoc module.** It needs to be noted that due to use of LFS filters some independent variables do have missing values at certain values of dependant variable and thus could not be used in all relevant regression models disallowing systematic analysis of determinants' effects across all observed phases of transition from work to inactivity. Next, due to temporal nature of transition from work to inactivity we further modify some independent variables in such manner that they either correspond to individual's past or present. Work characteristics of inactive thus relate to past (i.e person's last employment), as with active, they relate to present situation (i.e. current employment). All independent variables have been coded as dummy variables, except age, retirement age and accumulated pension-qualifying period. We present Logit coefficients (b) as well as estimated effects of independent variables in form of factorial ( $e^b$ ) and percentage (%) change in odds for unit increase of X. Marginal effect of binary independent variables is observed as the variable value changes from 0 to 1 (0->1). For categorical variables, we observe discrete change as unit changes (-1/2). Descriptive statistics are available by the request from the author.

### **3. Old workers in Slovenia and retirement pathways**

Welfare state and labour market arrangements in Slovenia provide comparatively high levels of social security, but the system itself is characterised by relatively high rigidity due to few formal pathways enabling prolongation of economic activity in unstimulative system parameters. Obligatory first pillar is provided by state and financed on Pay-As-You-Go basis - with statutory conditions that are set relatively low in comparison to EU. System offers high replacement rate, weak incentives to postpone retirement, statutory regulated seniority pay (extra payment for years of service), work-retirement bridge through unemployment insurance or disability, higher levels of employment security of older workers and limited availability of formal pathways for prolongation of economic activity. However, there are only few available formal retirement pathways enabling the prolongation of economic activity. Consequently, dominating among formal retirement pathways are those that enable either early retirement exit or overnight retirement – i.e. direct transition from economic activity to inactivity.

**Transition from work in Slovenia begins around age of 50 and ends abruptly with age of 61. Only small share of elderly remains active i.e. works later into old age. Majority of those find work in informal sector.** Transition from work in Slovenia begins at age 50 effectively ends with age of 61 (figure 1). Share of full-time formally employed decreases dramatically after age of 51 and stabilises again after age of 61, mainly on expense of significant increase of inactive population. Only few remain formally employed after age of 61, and after age of 65 their share becomes negligible. Economic activity after age of 62 is limited to predominately informal work. Proportion of elderly in informal types of work remains fairly stable from age of 60 into late 70's, whereby retired dominate in this age span. Share of part-time formally employed is small at all observed ages and

comparable to share occupied by unemployed. Unemployed gradually retreat from labour market until age of 60. Distinctive labour market status for elderly after age of 60 in Slovenia is economic inactivity, since the share of active population in age of 60 represents less than 20 per cent, and less than 10 per cent at age of 70. Share of full-time formally employed in male population decreases at slower rate and more gradual than in female population. Intensive decrease of formal employment share begins in male population around age 57, whereby in female population five years earlier around age of 52.

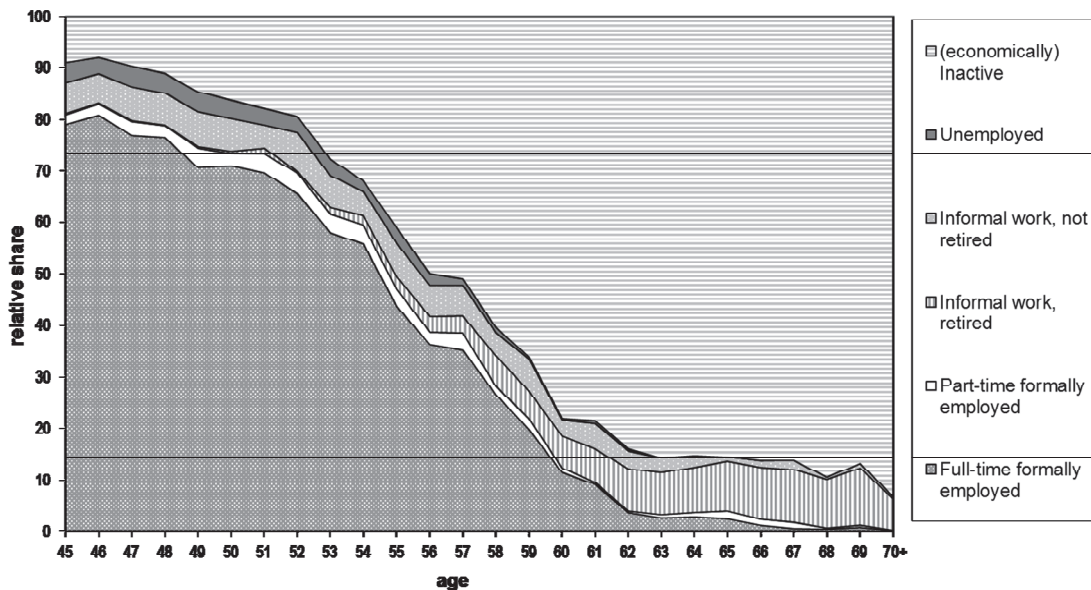


Fig. no. 1 Transition from work in Slovenia

#### 4. Old-age economic activity determinants

Below we present the estimates of logistic regression models that indicate that economic activity in later ages i.e. between age 50 and 69 significantly related with two groups of determinants: pension system parameters and flexibility of labour market and social security arrangements. Pension system parameters effect the decision to retain existing economic activity, decision to retire; they affect workforce supply and the extent of work provided at certain age. Retirement age, retirement period and accumulated pension qualified period reflect the effects of retirement circumstances in the period after independence of Slovenia set by previous retirement legislation. The effect of age, gender and attained education can also be explained as reflection of current retirement system parameters manifesting itself in all phases of the transition to inactivity process.



**Table no. 1 Estimation of MNLM model for transition from economic activity with 'retaining (current) activity' set as initial model value**

variable (initial value)	model value	postp. retirement			decreasong activity			marginal effects			
		b	e^b	%	b	e^b	%	postpone		decrease	
							0>1	-1/2	0>1	-1/2	
age		0,30***	1,35	-26,0	0,05	1,05	-4,5	0,00	0,01	0,00	0,00
gender (male)	female	0,93***	2,52	-60,4	-0,04	0,96	3,9	-0,01	0,02	0,00	0,00
marital status (single)	married / cohabiting	0,06	1,06	-5,5	0,14	1,15	-12,7	0,00	0,00	0,01	0,01
degree of urbanisation (city)	suburban and rural	-0,73*	0,48	107,0	-0,10	0,91	10,3	-0,02	-0,02	-0,01	-0,01
attained education (primary school or lower)	secondary	-0,33	0,72	39,8	-0,31	0,74	35,8	-0,01	-0,01	-0,02	-0,02
	university or more	-0,37	0,69	45,3	-0,71	0,49	102,9	-0,01	-0,01	-0,05	-0,05
professional status (employed for an employer)	self-employed	0,48	1,61	-37,9	0,70**	2,02	-50,5	0,01	0,01	0,06	0,05
occupation type (white collar)	expert	-0,57	0,56	77,2	0,25	1,29	-22,2	-0,01	-0,02	0,02	0,02
	blue collar	0,23	1,26	-20,8	0,28	1,32	-24,3	0,01	0,01	0,02	0,02
employment sector (personal and oth.	public services	-0,19	0,83	20,7	0,31	1,36	-26,7	-0,01	-0,01	0,03	0,02
	manuf. energ. civil.eng.	-0,51	0,60	65,9	-0,40	0,67	49,4	-0,01	-0,01	-0,03	-0,03
	farming, forestry	-1,47**	0,23	333,5	0,08	1,08	-7,5	-0,03	-0,04	0,01	0,01
age when retired											
retirement period											
accum. pens. qual. period		0,06***	1,07	-6,3	0,01	1,01	-1,2	0,00	0,00	0,00	0,00
pre 1999 retirement (not)	yes										
high motivation for work in old age (not)	yes	0,91**	2,49	-59,8	-0,28	0,75	32,6	0,03	0,03	-0,02	-0,02
retirement reason (reason not present)	loss of work										
	attained max. pens. age										
	health related										
	care for other(s)										
	unsuitable work cond.										
	financial opportunity										
	wish to retire										
	attained retirement cond.										
employment spell at last employment		0,01	1,01	-1,3	0,02*	1,02	-1,9	0,00	0,00	0,00	0,00
no. of hours worked / week		-0,58*	0,56	79,2	-2,04***	0,13	665,6	0,01	-0,01	-0,15	-0,16
lifelong learning (no)	yes	0,19	1,21	-17,3	0,25	1,28	-22,2	0,00	0,00	0,01	0,02
***	P> z  < 0,01		Number of obs	1908							
**	P> z  < 0,05		LR chi2	492,24							
*	P> z  < 0,10		Prob > chi2	0,0000							
			Pseudo R2	0,2344							

**Table 2 Logit model estimates: for retirement (in comparison to active), retired over-night (within the group of retired) and active in retirement (within the group of retired)**

variable (initial value)	model value	retirement					retired over-night					active in retirement				
		b	e <sup>b</sup>	%	0->1	-1/2	b	e <sup>b</sup>	%	0->1	-1/2	b	e <sup>b</sup>	%	0->1	-1/2
age		0,55***	1,73	72,8	0,00	0,12	0,37***	1,45	45,1	0,00	0,03	0,09	1,10	9,7	0,00	0,00
gender (male)	female	1,98***	7,27	626,9	0,15	0,42	-0,51*	0,60	-39,7	-0,06	-0,04	-0,70*	0,50	-50,4	-0,04	-0,02
marital status (single)	married / cohabiting	0,18	1,20	19,7	0,04	0,04	0,21	1,23	23,4	0,02	0,02	0,12	1,12	12,2	0,00	0,00
degree of urbanisation	suburban and rural	-0,21	0,81	-18,9	-0,05	-0,05	-0,14	0,87	-12,7	-0,01	-0,01	0,22	1,24	24,1	0,01	0,01
attained education	secondary	0,08	1,09	8,7	0,02	0,02	-0,17	0,85	-15,4	-0,01	-0,01	-0,43	0,65	-34,8	-0,01	-0,01
(primary school or lower)	university or more	-0,88**	0,41	-58,6	-0,18	-0,20	0,66	1,94	93,8	0,06	0,05	-0,03	0,97	-3,4	0,00	0,00
professional status (employed for an)	self-employed	-0,63**	0,53	-46,7	-0,13	-0,14	-0,98**	0,38	-62,4	-0,06	-0,08	2,88***	17,78	1677,7	0,25	0,12
occupation type (white collar)	expert	-0,28	0,76	-24,4	-0,06	-0,06	-0,73	0,48	-51,9	-0,04	-0,06	1,18*	3,25	224,6	0,06	0,04
	blue collar	0,29	1,34	33,8	0,07	0,07	-0,36	0,70	-30,2	-0,03	-0,03	0,32	1,38	38,1	0,01	0,01
employment sector (personal and oth. servic.)	public services	-0,14	0,87	-13,0	-0,03	-0,03	-0,02	0,98	-2,4	0,00	0,00	-0,24	0,79	-21,0	-0,01	-0,01
	manuf. energ.	0,04	1,05	4,5	0,01	0,01	0,01	1,01	1,0	0,00	0,00	-0,48	0,62	-37,8	-0,02	-0,02
	farming, forestry	-0,22	0,80	-19,9	-0,05	-0,05	-1,16*	0,31	-68,5	-0,06	-0,09	1,96***	7,13	613,0	0,14	0,07
age when retired							-0,62***	0,54	-46,1	0,00	-0,05	-0,26***	0,77	-23,2	0,00	-0,01
retirement period							-1,81***	0,16	-83,6	-0,34	-0,15	-0,04	0,97	-3,4	0,00	0,00
accum. pens. qual. period		0,16***	1,17	16,8	0,00	0,04	0,00	1,00	0,0	0,00	0,00	0,03	1,03	2,6	0,00	0,00
pre 1999 retirement (not)	yes						0,82	2,28	128,1	0,05	0,06	-0,52	0,59	-40,6	-0,02	-0,02
high motivation for work in old age (not)	yes	-1,59***	0,20	-79,6	-0,28	-0,35										
retirement reason (reason not present)	loss of work						0,04	1,04	3,6	0,00	0,00	-3,08***	0,05	-95,4	-0,05	-0,14
	attained max. pens. age						0,57	1,77	76,7	0,05	0,04	-3,50**	0,03	-97,0	-0,04	-0,16
	health related						1,00*	2,73	172,6	0,11	0,08	-3,68***	0,03	-97,5	-0,04	-0,18
	care for other(s)						-0,64	0,53	-47,3	-0,04	-0,05	-3,78	0,02	-97,7	-0,03	-0,19
	unsuitable work						1,92*	6,80	579,7	0,29	0,16	-1,76	0,17	-82,9	-0,03	-0,06
	financial opportunity						1,81	6,09	509,0	0,27	0,15	-0,89	0,41	-59,1	-0,02	-0,03
	wish to retire						1,34*	3,82	281,7	0,17	0,11	-5,35***	0,00	-99,5	-0,04	-0,34
	attained retirement						1,08***	2,93	193,3	0,08	0,08	-3,05***	0,05	-95,2	-0,13	-0,13
employment spell at last employment																
no. of hours worked / week																
lifelong learning (no)	yes	0,78***	2,17	117,1	0,10	0,17										
***	P> z  < 0,01			Number of obs		3332			1392					1392		
**	P> z  < 0,05			LR chi2		2761,53			456,10					845,07		
*	P> z  < 0,10			Prob > chi2		0,0000			0,0000					0,0000		
				Pseudo R2		0,6071			0,3464					0,6737		

#### 4.1. Pension system effects

Individuals retiring in period of changed labour market conditions under circumstances of more favourable 'transition' retirement legislation related to Slovenia's transition to market economy more likely retired over-night. Generally, further into the past the individual retired, the higher the probability that it retired over-night. The marginal effect is relatively strong in comparison to other explanatory variables. For every five years more into the past the probability of over-night retirement increases by 15 per cent (all figures presented in this section observe ceteris-paribus condition). Hence, the lower the retirement age, the more likely person retired over-night. For each early year of retirement, the probability of retiring over-night increases by 5 per cent.

The age effect can be explained both with existing retirement system and with biological ageing. According to existing retirement system parameters, it is obvious that with increasing age the probability of retaining existing activity after age of 50, decreases. The older the person, the higher the probability to retire, since with increasing age the person comes closer to fulfilling the old age pension statutory conditions. Every additional year of age increases the probability of retirement between ages 50-69 for 12 per cent. Age is also weakly related to postponement of retirement (1 per cent) in over-night retirement (3 per cent), but it has no effect on economic activity in retirement. Those postponing retirement are more likely older than those still being active. Persons that have attained the statutory retirement conditions are obviously older than those either retaining or decreasing

economic activity. Weak relation of age to retirement postponement can also be understood as manifestation of inadequately set age parameters for obtaining pension bonus. However, the higher the retirement age, the less probable (-1 per cent for every additional year) the economic activity in retirement, as individuals more likely face the decline of physical abilities and work motivation. In addition, the weak negative effect (4 per cent) of attained maximal pension age on economic activity in retirement can be interpreted in following way. Persons reaching maximal retirement age are already so old that due to decline in physical abilities one cannot expect economic activity.

**Weak effect of accumulated pension qualified period also suggests effects of retirement system parameters.** Amount of accumulated pension qualified period is positively related (4 percent for every additional year), with retirement in comparison to those retaining activity phase. The longer the insurance period, closer is the individual to meeting the old age pension statutory conditions and more likely, it will retire. Additionally, the increase in accumulated insurance period weakly decreases the probability of premature decrease of economic activity in comparison to postponement of retirement i.e. prolongation of economic activity. Presented results reflect the 'system fact' that persons postponing the retirement or those who are retired already met the old age pension statutory conditions and have probably higher accumulated insurance period in comparison to those decreasing or retaining current economic activity.

**Observed gender differences too suggest that older workers follow the retirement system parameters in retirement process.** Female retire at earlier age than male. Between age 50-69 females retire 15 per cent more likely than males. Interestingly, females that do not retire more likely than man (1 per cent) postpone their retirement. Males on the other hand retire at later ages. Males also more likely retire over-night (6 per cent at  $\alpha < 0,10$ ), and after retirement more likely (4 per cent at  $\alpha < 0,10$ ) remain economically active. Therefore, after meeting statutory retirement age females will likely prolong economic activity in formal work sphere. Males still motivated to work will on the other hand more likely retire and than work for payment in informal work sphere besides receiving retirement benefit.

**Attained education, more specifically the attained university education, manifests itself as relatively strong explanatory variable in the retirement phase - also demonstrating the pension system effects.** Attained university education decreases the probability of retirement and conversely economic activity at age 50-69 by 18 per cent. Those with university degree or higher enter labour market at later ages due to longer education period and need to work into later ages in order to meet the retirement eligibility criteria, or respectively to achieve full pension. In same way we explain the relation of university or higher education to smaller probability of decreasing economic activity in comparison to retaining existing level of economic activity between age 50 - 69 (at  $\alpha < 0,10$ ).

#### ***4.2. Flexibility of work and social security arrangements***

**The extent of economic activity in later ages is importantly affected by flexibility of work and employment regulations.** This is supported by uncovered effect of working in the agriculture sector or being an expert worker as well as differences when observing self-employed and employees. Premature decreasing of economic activity is on the other hand related to employments characterised by the looseness or absence of employment relation, low levels of labour market integration and sustainability of employment relation.

**The importance of labour market flexibility is demonstrated by strong effect of working in agriculture sector or by employment types characterised by looseness or absence of employment relation to economic activity in retirement. This relation simultaneously reflects the role of contextual opportunities (i.e. generosity of pension**

**system**). The role of pension system can be established out of the finding that farmers less likely postpone retirement (3 per cent), and at the same time more likely work when retired (14 per cent). Persons last employed in agriculture, forestry or fishing sector also less likely retired over-night (6 per cent). Since agriculture sector did not proved itself as significant predictor in the retirement model, we conclude that farmers wait until reaching the pension statutory conditions and then retire. Farmers therefore - when motivated - continue working in old age, but instead of postponing the retirement rather, they rather decide on economic activity in retirement (i.e. economic activity when receiving state retirement pension). Flexible nature of work on the other hand enables them more gradual transition to full economic inactivity. Working home and being self-employed enables them more flexible adjustment of work intensity and working conditions, which in consequence enables them to work in later ages.

**The significant effect of working as an expert can be interpreted as reflection of retirement rules, while the effect of unsuitable working conditions reflects the lack of flexibility related to working conditions or nature of work.** The probability (at  $\alpha < 0,10$ ) of those holding expert jobs to remain economically active in retirement is 6 per cent higher. Experts namely poses specific knowledge relevant for labour market that can be offered individually outside organisational setting. Specific knowledge has higher market value, which presents additional motivation for economic activity in later ages. Interestingly, the expert occupation is not significantly related to any other observed transition to inactivity phase, not even the phase of postponing the retirement. This, as in case of agriculture sector means, that experts less likely relinquish the additional opportunity income, and that pension system is not motivating them to postpone retirement. Conversely is the lack of work flexibility and workplace adaptation reflected by the strong effect of 'unsuitable working conditions' reason to retirement (29 per cent) in case of over-night retirement model.

**Observed differences between self-employed and employees also suggest the importance of work and employment relations flexibility.** Being self-employed (i.e. self-employed or temporary employed) increases the probability of economic activity in retirement by 25 per cent as well as decreases the probability of retirement between age of 50 - 69 by 13 per cent. Self-employed also less likely (by 6 per cent) retire over-night. Observed probability of economic activity in retirement can be explained with advantages brought by flexibility of knowledge and experience stemming from their work. Workers that are 'employees to themselves' are more familiar with products and service markets and are more flexible in sense of being independent of employer. They are used to selling their work and work results on market in contrast to employees. Employees on the other hand are used to primary offering their knowledge, abilities and competencies to employer who later sells them as products or services on the market. Thus it is easier for self-employed to continue working even when receiving old age pension in comparison to employees. **Premature decreasing of economic activity for self-employed is also determined by flexibility of work and social security arrangements.** Self-employed are the labour market group that more likely (by 6 per cent) prematurely decreases economic activity then retain existing level of economic activity. Since they are the employers to themselves, they are more flexible in determining the organization and intensity of work. This in turn means that they are less bound to a system of work and have more freedom in establishing personal preferences in retirement process. Thus have self-employed, if they need to, more options available to decrease their economic activity prematurely.

**Differences between self-employed and employees can alternatively be explained within the context of pension system.** Self-employed will more likely retire under conditions that will not entitle them to full pension or is their pension relatively low due to lower contributions. Self-employed – mostly those opportunistically employed have quite often irregular retirement contribution payments and are thus forced to work longer if they



want fulfil the statutory conditions. Consequently, it is less likely for them to be retired in ages 50–69. This in turn forces them to continue working after retirement in order to provide adequate level of quality of live. Respectively, for them it is less probable to retire over-night. This explanation corresponds with relatively strong negative effect (13 per cent) of retirement reason of having met the statutory retirement conditions on the probability of being economically active in retirement. Lower probability of over-night retirement of self-employed can also be explained with difficulties related to exact retirement planning when involved in temporary – opportunity jobs.

**Workers weakly involved in current work face more difficulties retaining the contact with labour market in later ages.** "The loss of work" as retirement reason namely represents statistically significant deterrent for economic activity in retirement (5 per cent), since people loosely attached to labour market difficulty accept other sorts of work, or offer other work outputs due to lesser flexibility. Persons losing employment later in career often find it difficult to activate themselves in older ages and thus lose their contact with the labour market. Greater weekly workload on other hand significantly increases the probability of retaining economic activity and respectively decreases the probability of premature decreasing of economic activity and postponement of retirement. Effect of greater weekly workload on retaining existing economic activity is rather strong; on every additional 20 hours of weekly workload the probability of retaining existing economic activity increases by 17 per cent, the probability of premature labour market exit and postponement of retirement, on the other hand, decreases by 1 per cent. Workers tightly involved in current work thus retain current levels of economic activity until they meet the statutory retirement condition and then retire. Longer employment spell with last employer weakly increases the likelihood of premature decrease of economic activity in comparison to retaining activity. This relation can be interpreted as if premature decrease of economic activity is being induced or enabled with certain extent of flexibility stemming from the quality of employment relation with last employer.

**Third group of variables affecting transitions to economic inactivity falls into category of individually conditioned determinants.** High personal motivation for work in old age manifests itself as important and relatively strong retirement determinant well as weak determinant in postponing retirement and retaining current extent of economic activity. Those highly motivated 3 per cent more likely postpone retirement than retain current economic activity or prematurely leave labour market. Individuals postponing retirement namely poses higher motivation for work in old age than those retaining current extent of economic activity. This finding is somewhat expected since those postponing the retirement have to be prepared to work past the statutory conditions. It is also understandable that those retaining current level of economic activity poses higher motivation in comparison to those prematurely decreasing economic activity. Retired convey even clearer picture. Presence of high motivation for work in old ages brings 28 per cent lower probability of retirement between ages 50 – 69. Individually conditioned determinants also include the (poor) health variable, which increases the likelihood of over-night retirement by 11 per cent and decreases the likelihood of economic activity in retirement for 4 per cent. When confronted with poor health in old age one usually would not expect presence of economic activity, since social security system currently provides adequate level of security. Third variable of individually conditioned determinants is urbanisation level manifesting itself as significant but weak determinant of postponing the retirement. Those living in city (urban) environment are 2 per cent less likely to retain existing levels of economic activity than postpone the retirement.

## **5. Conclusions and policy implications - discussion**

**The results show that the scope and type of work at later ages significantly relates to two groups of determinants; determinants relating to the system (social security and labour market) flexibility and pension system parameters.** Characteristic

for Slovenia are quick transitions into economic inactivity, early retirement, low percentage of active at older age and specific sectors where economic activity at older age is taking place belonging to informal work sphere. Results show that retirement decision is mostly affected by the retirement system parameters. Prolongation of economic activity is on the other hand to greater extent related to employment sectors and contextual conditions that reflect higher levels of flexibility of either work itself or employment relations.

**Slovenia thus represents interesting case demonstrating how the system rigidity (i.e. absence of flexible retirement transition arrangements) within the context of generous state sponsored retirement system manifests itself as an obstacle to prolongation of economic activity within formal work sphere in later ages.** The key question in Slovenia's retirement reform thus seems to be how to increase the system flexibility along with proper parametric changes that will induce the prolongation of economic activity within formal work sphere. Thus, the future policies in Slovenia aiming to prolong working careers within formal or informal sector should simultaneously do both; change pension system parameters and significantly expand the system flexibility stimulating willing and capable elderly to continue working within the formal sector.

The applied methodology on the other hand demonstrated the importance to analyse the transitions from work to economic inactivity holistically, which provides the deepened understanding how certain contextual determinants effect the transition process comprised of many, often interchanging states.

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