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When Do People Want to Retire? The Preferred Retirement Age Gap Between Eastern and Western Europe Explained

Wouter De Tavernier & Ave Roots*

Abstract

Debates surrounding working longer focus mainly on increasing legal and effective retirement ages, leaving the preferred retirement age largely overlooked. There is a large East-West divide in Europe regarding the latter, with individuals in Eastern Europe wanting to retire earlier. We aim to explain this gap in terms of differences in working conditions and state-level legal conditions. Using the 2010 European Social Survey data on employed individuals aged 50-70 in 24 countries enriched with country-level information, we find that part of the explanation is found in the lower levels of job control found in Eastern Europe. Moreover, the results suggest that Karasek's job demand/control model fits better in Western than Eastern European countries. Another explanation is found at the country level, where the legal retirement age accounts for a major part of the gap in preferred retirement ages between East and West.

Keywords: Preferred retirement age, job demand, job control, legal retirement age, Europe.

Introduction

With the Europe 2020 strategy, the European Union set five ambitious targets for socio-economic development. One of them is the goal to have an employment rate of 75 per cent among the population of active age. In order to reach such a goal, efforts are usually oriented towards keeping older individuals in paid employment longer. Countries mainly try to attain the latter by restricting policies allowing for early exit or by simply raising the legal retirement age. Less attention is paid to accompanying measures regarding the organisation of work that would physically and mentally allow individuals to work longer. Moreover, decisions regarding the extension of working life are usually backed with arguments of financial sustainability rather than social support, and they often do cause social unrest. As many Eastern European countries have been in the process of raising the official retirement age since the collapse of the Soviet Union – or will have to do so in the near future in order to reach the European employment targets –, it is a relevant question to ask ourselves: at what age would individuals in Eastern and Western Europe like to retire, and which characteristics of individuals, countries or societies influence this preferred retirement age.

Karasek's demand/control model (Karasek & Theorell, 1990) has been used several times in the early retirement context. The model was originally developed to explain phenomena such as occupational health and stress, and if job demand and control indeed do affect mental and physical wellbeing, it is not a far-fetched idea to assume it will also shape individuals' retirement preferences. According to the model, high job demands have detrimental consequences for the body and the mind, unless they coincide with high job control: the ability to regulate one's own labour allows individuals to cope with these demands. Hence, not only are job demands and job control important determinants, so is their interaction. Unfortunately, many studies extending Karasek's model to the early retirement

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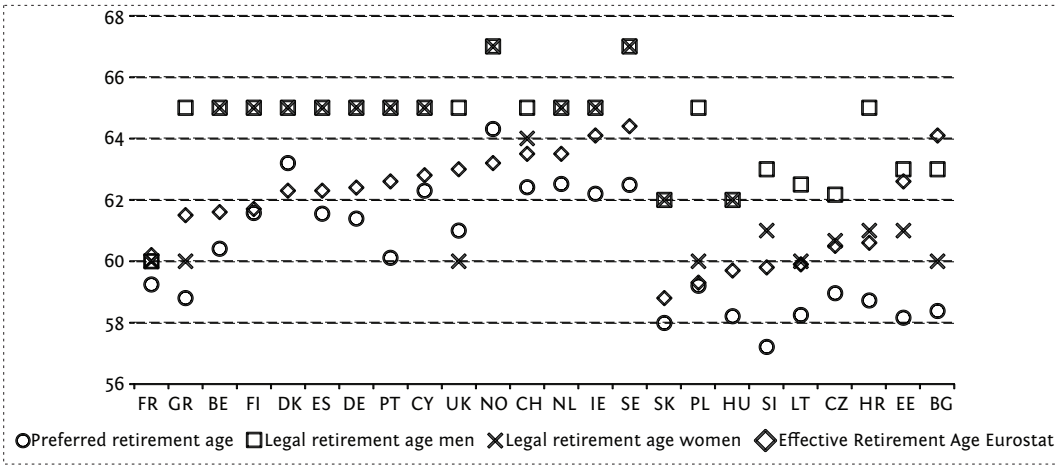

Figure 1: Overview of legal, effective and preferred retirement ages of individuals aged 50-64, by country in 2010
Source: own calculations based on European Social Survey (2014a), Eurostat (2013) and MISSOC (2010)

literature have overlooked this interaction (Schreurs, De Cuyper, Van Ammerik, Hoteliers & De Witte, 2011; Siegrist & Wahrendorf, 2010; Wahrendorf, Dragano & Siegrist, 2013) or did not include job control altogether (Volkoff, Buisset & Mardon, 2010; Esser, 2005a), even though it is at the core of the model.

Not only do individual traits such as job characteristics shape retirement preferences, societal and state features do so as well. Out of the many institutions possibly influencing individuals' retirement decisions, we are mainly interested in how the legal retirement age influences when individuals want to retire. To that end, we apply two institutionalist approaches: Hodgson (2012) and Archer (2004) both argue that institutionalist theories should explain how exactly institutions causally affect behaviours, but they do so in different ways. In Hodgson's theory, institutions are internalised in such a way that individuals start acting in accordance with them out of habit. Archer, on the contrary, has a more rationalist approach in which individuals decide upon a course of action after 'internal conversation', while institutions merely restrict or enable certain possible options. Both approaches are compatible and can be applied to the role of the legal retirement age in the formation of retirement preferences. Initially, the legal retirement age can be an institution that limits the possible retirement options to choose from, in line with Archer's view on institutionalism, a preference that can then be internalised in a way similar to Hodgson's habit.

We conduct this research against a background of East-West differences in Europe. The mark that Soviet rule left on individuals' lives is still apparent today, not least in terms of lower life expectancies (de Beer, 2006). The Soviet Union also still lingers in many policies of Eastern European countries, among others in retirement policies. The principle that women should retire earlier than men, for instance, has been abandoned in most Western European countries but is still present in most post-Soviet states. One could argue that there is more uniformity in legal retirement ages in Western Europe in general, as can be seen in Figure 1: while the retirement age in the majority of Western European countries is 65, for both men and women, in Eastern Europe retirement ages fluctuate between 60 and 62 for women and 62 to 65 for men. When looking at the effective retirement age, more variation is found in both East and West. Men and women in Estonia and Bulgaria on average even work beyond their respective legal retirement ages, likely the consequence of low pension benefits (Romans, 2007). Finally, the preferred retirement age of the population aged 50 to 64 is also included in Figure 1. It reveals a substantive East-West divide: in most Western European countries, individuals on average would like to work well beyond the age of 60 – except in France, Greece and, to a certain extent,

Portugal and Belgium. In all of the Eastern European countries, on the other hand, the preferred retirement age is below 60. As a result, the discrepancy between effective and preferred retirement age is larger in former socialist countries than it is in the rest of Europe.

This observed difference in preferred retirement age between East and West is the starting point for this article. After elaborating on the theoretical framework and discussing data and methods used, we try to explain this difference in the results section. Finally, we feed our findings back to the theory in the conclusion, ending with some suggestions for policy-making and directions for future research.

Theoretical framework

Job demand and job control

In organisation studies, it is often stressed that if we want people to work longer, we should change jobs so that they allow people to work longer. Usually, Karasek's psychological demand/decision latitude model (Karasek & Theorell, 1990) is referred to in this regard. According to that model, two specific aspects of a job are key to explaining stress and bad physical and mental health: job demand and job control. Job demand refers to the workload of a job. For certain jobs, such as watchmen and janitors, the workload is rather limited, while for instance waiters are found at the higher end of the spectrum. The other dimension, job control, refers to the level of decision latitude in a job, which is linked to educational level and training. This freedom to make decisions can refer to job content as well as to aspects such as the timing or division of labour. In line with tailorism, assembly line work is highly repetitive, with superiors deciding what the assembler has to do, when he has to do it, and how fast it should happen. Scientists, on the contrary, have a high freedom to decide what to investigate, and when they want to work.

According to Karasek's model, job demand and job control interact in their influence on stress, mental and physical health. Low-strain jobs are characterised by low levels of job demand and high levels of job control, typically leading to low stress levels and high job satisfaction. The European Working Conditions survey shows that jobs in education, public administration and skilled agricultural work fall in this category (Eurofound, 2012, p. 125). Active jobs also have high levels of job control, but combine these with high job demands. These jobs are highly challenging and stimulating, and hence coincide with high job satisfaction. Stress caused by high job demand is limited by the freedom to organise one's own work. The main risk in these jobs, according to Karasek and Theorell (1990, p. 35), is not stress but fatigue. Typical cases are managers, professionals and technicians, but also jobs in financial services and construction are more likely to be active ones (Eurofound, 2012, p. 125). High strain jobs combine high job demand and low job control. People in these jobs are confronted with the highest stress levels and the mental and physical health problems they cause, making these jobs very unsustainable. Blue-collar workers are likely to be in this category, as are people working in industry and transportation (Eurofound, 2012, p. 125). Finally, passive jobs have both low levels of job demands and job control. Though stress is limited in these jobs, they lead to demotivation and ultimately de-skilling. Service and sales workers are typically found in passive jobs (Eurofound, 2012, p. 125).

Many studies have related Karasek's framework to retirement, and among those studies including job control, there is a consensus that low job control triggers early retirement or the wish thereof. In different populations, job control has been linked to a decrease in early retirement intentions (Schreurs et al., 2011), higher odds of being in employment at age 60 (Siegrist & Wahrendorf, 2010) and fewer early retirement thoughts (Elovainio, Forma, Kivimäki, Sinervo, Sutinen & Laine, 2005). In Wahrendorf, Dragano and Siegrist's (2013) study, those with low job control indicated more often that they want to retire as early as possible, and Heponiemi, Kouvonen, Vänskä, Halila, Sinervo, Kivimäki and Elovainio (2008) also stipulate the importance of job control.

There is less agreement on whether job demand influences (the wish for) early retirement in the literature. Schreurs et al. (2011) and Elovainio et al. (2005) confirm such an effect, and also Volkoff, Buisset and Mardon (2010) and Esser (2005a) link job demand to early retirement wishes. Siegrist and Wahrendorf (2010), on the contrary, found no relation between job demands and being in employment at age 60. This disagreement might be the consequence of some of these studies not taking job control into account (Volkoff, Buisset, & Mardon, 2010; Esser, 2005a), while others do not include the interaction between job demand and job control (Schreurs et al., 2011; Siegrist & Wahrendorf, 2010; Wahrendorf, Dragano, & Siegrist, 2013), which is key to Karasek's model, as job control can 'buffer' the impact of job demands (Demerouti & Bakker, 2011).

Elovainio et al. (2005) did include the interaction and found it was very important in explaining early retirement thoughts: retirement thoughts occurred least among individuals in low-strain jobs and only slightly more among those in passive jobs, while the gap between workers in active and high-strain jobs, both found to consider early retirement considerably more, was much more substantial. However, the little difference found between individuals in low-strain and passive jobs might be the consequence of the indicators used to measure early retirement thoughts: being able to cope with one's work until the official retirement age and having considered seeking disability or early retirement pension. The first item may capture mental and physical strain rather than demotivation, and though the second item does encompass it, it might be very dependent on age: one would assume that a 20-year-old in a demotivating job has considered applying for some kind of pension much less than a 50-year-old in the same situation. Hence, the indicators Elovainio et al. (2005) used in combination with the sample stretching from age 20 to 65 may have failed to sufficiently account for the demotivating character of passive jobs.

If we link Karasek's model with preferred retirement age via mental and physical well-being, we can make a set of expectations about how job demand and job control would affect when individuals would want to retire. As low-strain jobs (low demands, high control) are most enjoyable and least harmful, we could expect individuals in such jobs to want to work the longest. Active jobs (high demands, high control) are challenging though they cause some stress and fatigue, so individuals in those jobs will want to work long as well, though less long than those in low-strain jobs. People in passive and high-strain jobs would want to retire earlier, though they have different reasons to want to do so. While those in high-strain jobs may want to retire early due to high stress levels and resulting mental and physical health problems, demotivation is a sizable trigger for individuals in passive jobs to want to leave the labour market. Therefore, we will hypothesise that people in passive and high-strain jobs will want to retire at the same time. Hence, we hypothesise first that the preferred retirement age increases with increasing job control (1a); second, that the preferred retirement age is not influenced by the level of job demand (1b); and third, that the interaction of job demand and job control will have a negative effect on the preferred retirement age (1c).

All the reviewed literature has studied the influence of working conditions on retirement age in Western countries. However, there are significant differences in working conditions between East and West in Europe: jobs tend to be less secure in Eastern Europe, pay by effort is more common and compensation for overtime and weekend work are rarer than in Western Europe. Moreover, Eastern and Southern Europeans are at a greater mental health risk at work (Eurofound, 2013). These differences in the working conditions are partly caused by the different labour market structures: compared to the West, unskilled workers are overrepresented and skilled workers underrepresented in Eastern European labour markets (Cörvers & Meriküll, 2007). Despite these differences, we have no theoretical reasons to believe working conditions affect preferred retirement age differently in Western and Eastern European countries and hence assume in our hypotheses that this impact is in accordance with the Karasek model in both parts of Europe. Besides working conditions, there are also differences in terms of work ethic. Previous research has shown that individuals in more prosperous countries, and especially in countries with higher social benefits, have a more traditional

work ethic: they are more convinced that working is a duty to society (Esser, 2005b). In Western Europe people agree more that work offers self-fulfilment and is a social obligation (Giorgi & Marsh, 1990). Of all Western Europe, work commitment is highest in Scandinavia and the lowest in liberal market economies (Hult & Svallfors, 2002). The study does not contain Eastern European countries, but as many are liberal market economies, we can assume that the work commitment will be rather low in a European perspective.

State level institutions

The individual is not totally free in making the decision to retire. Such decisions are shaped by their historical context and the formal and informal institutions they entail: not only the legal framework, but also norms constrain individuals' retirement decisions. While the causal mechanisms discussed above are situated at the micro-level, in this section we go into how countries and societies (macro) matter for individuals' retirement behaviour and preferences. In this study, we mainly focus on retirement policies.

Hodgson (2012, p. 301) acknowledges that "institutions have the power to mould the dispositions and behaviours of agents in fundamental ways; they have a capacity to change aspirations, instead of merely enabling or constraining them", and describes a process through which institutions change these behaviours and dispositions as "reconstitutive downward causation". Habit is key to this process: while initially individuals may deliberately act in accordance with a certain institution such as a policy, this behaviour can be internalised via the creation of habits, even to such an extent that it can change individuals' perceptions of what is appropriate and what is not (Hodgson, 2004; 2012; Hodgson & Knudsen, 2004). These preferences then form the background according to which an individual decides to behave in a certain way. Indeed, normative compliance of the individual is at the core of institutionalist theory (Peters, 2005, pp. 39-40).

Archer (2004) offers an alternative though complementary explanation, linking institutions to individual behaviour in a more reflexive way. When having to decide on a course of action, Archer says, individuals have an 'internal conversation' in which they try to find a compromise between their needs and concerns, and the restrictions and enablements posed by institutions (Fleetwood, 2008). Hence, individuals deliberately and reflexively choose to act or behave in a certain way, though not necessarily rationally in the economic, maximising sense (Fleetwood, 2008). Sztompka (1991) develops a similar argument where structures such as institutions constrain the situation of the individual, creating a certain frame within which individuals make decisions according to their needs and desires.

It seems plausible that the preferred retirement age is the result of an internal conversation in which the individual considers factors such as legal retirement age, (perceived) effective retirement age and a series of personal elements such as family, well-being and job appreciation. In this logic, the legal retirement age would essentially be used as a reference point, from which the individual would deduct a certain amount of years depending on how he or she assesses his or her personal situation. As pointed out above, however, Hodgson's and Archer's arguments are compatible: it takes some time for a habit to develop, and in the context of retirement preferences a habit is likely to emerge based on an earlier internal conversation. This may become apparent in situations where the legal retirement age recently changed, where individuals who are closer to retirement and hence may have thought about retirement before, might use the previous retirement age rather than the current one as their reference point. In conclusion, we hypothesise first that legal retirement age influences individuals' preferred retirement age (2a); and second, that preferred retirement age of older individuals in countries that have changed their retirement age recently would be influenced by the previous rather than the current retirement age (2b).

Data and methods

We use the 2010 European Social Survey (European Social Survey, 2014a) data, as this wave contains a special module on family, work and well-being. From 27 countries available in the dataset, we exclude three countries that are not members of the European Union or the European Free Trade Association due to availability of country-level information.[1] As certain questions related to Karasek's model are only asked from employees, we limit our sample to employees aged 50 to 69. Individuals younger than 50 are further away from retirement and thus may have given retirement less thought. Jensen, Andersen and Breidahl (2006, p. 73), for instance, find that people in their forties have the least realistic retirement expectations. Regarding the country-level, legal data are drawn from MISSOC (2010), socio-economic data from Eurostat (2015) and attitudes towards elders from the ageism module of the 2008 European Social Survey (2014b).

Preferred retirement age, our dependent variable, is operationalized using the question "At what age would you like to retire?" Our key independent variables at the individual level, job demands and job control, are composed variables with an eleven-point scale (0-10). Job control consists of whether the management allows you to "decide how your own daily work is organised", "influence policy decisions about the activities of the organisation" and "choose or change your pace of work", and whether one agrees with the statements "there is a lot of variety in my work" and "my job requires that I keep learning new things". Factor analysis renders ambiguous results: using the eigenvalue greater than one criterion only one factor should be maintained, while the eigenvalue scatterplot renders a two-factor solution, grouping the first three and last two items. Based on theoretical grounds – for Karasek, they are two sides of the same coin –, the strong correlation of both factors in the two-factor solution and the good Cronbach's Alpha when combined (0.78), we decide to turn them into one variable 'job control'. Creating the job demands construct with the items available in the dataset is less straightforward, and after factor and reliability analysis only two items could be maintained: the agreement with the statements 'my job requires that I work very hard' and 'I never seem to have enough time to get everything done in my job'.

A general measure for 'feeling good' is created, including items referring to satisfaction with life, happiness, cheerfulness, being relaxed and being active. Factor analysis yields ambiguous results very similar to those for job control, with one or two highly correlated factors. This might be the result of the fact that the first two questions are asked in general terms, while the latter three specifically refer to one's mood during the last two weeks. Based on the above and the good Cronbach's Alpha (0.80), we decide to make one construct 'feeling good'. All constructs made are also tested using separate factor and reliability analyses for Western and Eastern Europe. Even though most of these concepts were originally developed for use in a Western context, the performance measures in the East are very similar to those in the West, and some are even slightly better.

We employ multilevel linear regression (SAS proc mixed). First, we run random intercept multilevel models containing only individual-level variables, where we test our hypotheses related to Karasek's model. We run separate models for Eastern and Western European countries, to assess to what extent the effects of working conditions on preferred retirement age are different across both parts of Europe. Then we put all countries together and add a dummy variable distinguishing post-socialist countries from the rest of Europe. We try to account for this East-West difference by inserting other country-level variables such as the legal retirement age in subsequent models. We also made structural equation models (SEM) using the R package lavaan (Rosseel, 2012) to investigate some indirect individual-level effects. These models are not presented due to the limitations on article length, but can be requested from the authors.

1 The countries in our analysis are Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Lithuania, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Results

Post-Soviet countries diverge from the rest of Europe in terms of job control, job demand and well-being. In Table 1, their mean scores are presented and significant differences between East and West indicated. The regions differ substantially on job control: On an 11-point scale, job control is 1.3 points lower in the East than in the West. Western Europe scores higher on all job control items, especially on having control over the organisation of daily work (2.0) and being able to influence work policy (1.6). The difference in job demand is smaller (0.5): respondents in the East of Europe on average declare to work slightly harder, those in the West more often say they lack time to get their work done. Regarding mental and physical well-being, the West consistently scores better than the East. Individuals in the West feel better (0.6), mainly due to higher life satisfaction and happiness levels. They have somewhat higher job satisfaction levels (0.3) and experience a little less work-family spillover (–0.2) than those living in the East. Finally, respondents living in post-socialist countries reported somewhat worse health.

In Table 2, three random intercept models explaining preferred retirement age are presented: one with control variables, a second where job demand, job control and their interaction enter the model, and a third where well-being variables are included. Every model is run twice: once for post-socialist countries ('East') and once for the rest of Europe ('West'). With an average R^2 of 0.45, the full model (Model 3) has good explanatory power when run for all countries separately (lowest in Germany, 0.18; highest in Greece and Croatia, 0.78). In Model 1, we see that the effect of sex differs strongly between

Table 1: Mean scores of job characteristics and well-being variables in two models, by region in Europe

Karasek model	Scale	East	West	p
Job control	0-10	4.85	6.04	***
Organise daily work	0-10	5.09	7.04	***
Influence policy decisions	0-10	2.35	3.97	***
Choose pace of work	0-10	4.97	6.17	***
Variety in job	0-3	1.73	2.07	***
Learning in job	0-3	1.63	1.73	**
Job demand	0-10	5.71	6.23	***
Hard work	0-4	2.89	2.71	***
Lack time	0-4	1.68	2.27	***
Mental and physical well-being				
Feeling good	0-10	6.34	6.93	***
Satisfied with life	0-10	6.26	7.10	***
Happy	0-10	6.73	7.47	***
Cheerful and in good spirits	0-5	3.10	3.46	***
Calm and relaxed	0-5	3.02	3.18	***
Active and vigorous	0-5	3.18	3.24	†
Job satisfaction	0-10	6.73	7.05	***
Satisfied with job	0-10	7.21	7.56	***
Satisfied with time balance	0-10	6.16	6.48	***
Work-family spillover	0-10	4.61	4.43	**
Tired after work	0-4	2.02	1.94	**
Lack family time	0-4	1.64	1.58	†
Subjective health: in bad health	0-4	1.41	1.22	***

† $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Source: autors' compilation based on ESS data

both parts of Europe: in Eastern Europe, women want to retire on average more than two years earlier than men, in the West only half a year. This could be the consequence of gender differences in legal retirement ages being more common in Eastern European countries. Further, older people want to retire later: per one year increase in age, the preferred retirement age increases by about three months.

Education does not affect preferred retirement age. The absence of an effect of higher education is especially striking as individuals with a higher education degree would typically enter the labour force at a later age, but apparently they are not willing to work until a later age. The SEM models do attribute some strong indirect effects to education, linking it to sufficiency of household income and job characteristics. They indicate educational inequalities in terms of job demand and especially job control, most notably in Eastern Europe. Strikingly, Western European respondents living together with individuals older than 75 on average want to work a year and a half longer than those who do not – an effect not found in post-socialist countries. Possibly, live-in elders are in need of some kind of care or help, in which case out-of-house work can mean a time-out from caring. Regarding migration, we find that first generation migrants – again, only in the West – on average want to work almost

Table 2: Random intercept models explaining preferred retirement age in Eastern and Western Europe, individual-level effects (in months)

	Model 1				Model 2				Model 3			
	West		East		West		East		West		East	
	B	p	B	P	B	p	B	p	B	p	B	p
Control variables												
Female	−5.7	**	−25.9	***	-3.9	*	−28.0	***	−3.7	†	−28.4	***
Age	3.3	***	2.7	***	3.6	***	2.8	***	3.5	***	3.0	***
Education												
< higher secondary (R.C.)												
Higher secondary	−0.1		2.3		−1.1		1.5		0.0		2.9	
Tertiary	1.3		6.9		1.2		5.3		3.0		7.9	†
Lives with child(ren) (< 18)	0.2		−3.9		0.7		−2.4		0.7		−2.2	
Lives with elder(s) (> 75)	18.6	***	5.3		17.2	***	6.5		18.6	***	7.2	†
Migrant: 1st generation	9.6	**	1.8		10.3	***	1.6		8.8	**	0.5	
Migrant: 2nd generation	−2.3		−1.3		−1.7		−5.2		−1.0		−7.2	
Household income insufficient	−1.7		−4.3	**	−0.6		−3.5	*	2.5	†	−1.1	
Karasek model												
Job control					5.0	***	2.8	*	4.1	***	3.0	*
Job demand					0.5		1.5		0.8		2.7	*
Job control * job demand					−0.3	†	−0.4	†	−0.3	†	−0.5	*
Mental and physical well-being												
Feeling good									2.2	***	−1.3	*
Job satisfaction									2.7	***	2.8	***
Work-family spillover									0.7	†	−0.7	
Bad health									−4.2	***	−8.3	***
N	3,075		1,563		2,976		1,497		2,973		1,483	

† p < 0.1; * p < 0.05; ** p < 0.01; *** p < 0.001

Note: The control variables in the models are education, presence of children and elders in the household, migration background, sufficiency of household income, job contol, job demand, the interaction of control and demand, well-being, job-satisfaction, work-family spillover and subjective health. Inclusion of the country-level variables does not aff ect any of the individual-level eff ects, apart from the eff ects of female and age (presented here) and work-family spillover becoming insignificant

Source: autors' compilation based on ESS data

ten months longer than natives. Second generation migrants have the same retirement preferences as the latter, though the SEM models show an indirect effect through feeling good in the whole of Europe. Finally, Eastern Europeans with insufficient household income (a four-point scale) want to work up to one year less – likely a spurious effect as it disappears after inclusion of job characteristics and well-being variables.

The variables connected to Karasek's theory are introduced in Model 2. The results confirm our hypotheses: job control has a positive effect on preferred retirement age (1a), job demand does not affect the dependent variable (1b) and their interaction has a negative effect – though only at $\alpha = 0.1$ (1c). There are, however, some differences between post-socialist and other European countries in terms of effect sizes, most notably that job control has twice the impact on preferred retirement age in the West compared to the East. Individuals in low-strain jobs (job control = 8; job demand = 3) want to work more than 20 months longer than those in passive jobs (job control = 3; job demand = 3) in the West, compared to eight months in the East. Those in high strain jobs (job control = 3; job demand = 8) do not differ from individuals in passive jobs in their retirement preference, both in the East and West. Finally, and most surprisingly, while Western individuals in active jobs (job control = 8; job demand = 8) want to retire one year later than those in passive jobs, there is no difference in the East. Hence, our predictions based on Karasek's model seem to work better in Western than in Eastern Europe. This becomes all the more clear when adding variables concerning well-being (Model 3). In Western Europe, they indeed work as intermediary variables to a certain extent, explaining about 20 per cent of the effects of job control and the interaction term. Among Eastern European countries, on the contrary, they act as suppressors for job demand: after controlling, the effect of job demand almost doubles and becomes significant ($\alpha = 0.05$). This suggests that the variables on mental and physical well-being are mainly related to job control in Western Europe, and job demand in the East. Finally, health impacts retirement preferences in Eastern Europe twice as strongly as in the West, though this could be the consequence of health having a stronger indirect effect via feeling good in Western Europe according to the SEM models.

The finding that Karasek's model works better in Western than in Eastern Europe might be related to differences regarding job satisfaction. According to Fargher, Kesting, Lange and Pacheco (2008), job satisfaction is strongly related to the broader social and cultural context in the West, while it is mainly related to income and how important one considers work in the East. If merely having a job matters, and if possible a well-paying one, this could explain why job demand and job control have similar effects on preferred retirement age in Eastern Europe, when controlled for the detrimental consequences of high job demand on well-being. Our finding that people feeling good want to work longer in the West and less long in the East indeed shows that this explanation is a plausible one. However, this does not explain why Eastern Europeans in active jobs on average do not want to work longer than those in passive jobs.

To what extent is the difference in preferred retirement age between Eastern and Western Europe the consequence of differences in policies, and more specifically legal retirement age? Some 16 per cent of the variation between individuals can be the result of differences between countries. We take the third model of Table 2 for all individuals together and add a dummy variable 'East' distinguishing Eastern from Western European countries. The resulting model (Table 3, Model 1) shows a 27-month difference in preferred retirement age between Eastern and Western European countries. Subsequently, we add the legal retirement age for men and women (for methodological reasons, the latter is constructed as the difference between male and female retirement ages multiplied by the variable 'female'), explaining about 45 per cent of the difference between Eastern and Western European countries. This halves the effect of sex, indeed suggesting that a large part of the gender effect is the consequence of many countries, especially in the East, having different legal retirement ages for men and women. In countries with equal retirement ages for men and women, the preferred retirement age for women is on average about four months less than that of men. In countries with

a lower retirement age for women, women want to retire on average another three months earlier per year of difference between the male and female retirement ages. The legal retirement age for men has a stronger impact on individuals' retirement preferences: a raise of one year coincides with a five-month increase in the preferred retirement age. However, the coefficient being less than one means that the gap between people's preferences and the official situation is bigger in countries with a higher legal retirement age.

In order to test whether the effect of legal retirement age is not a spurious one, we run a series of models including male and female legal retirement ages and one, exceptionally two other control variables at the country level (not presented here). Sixteen such control variables are tested: six socio-economic variables (effective retirement age, life expectancy at age 65, at risk of poverty and social exclusion rate among people aged 65+, empirical pension replacement rate, median income in PPS and life-long learning), six variables connected to ageism (age at which people are considered old, importance of being unprejudiced against other age groups, importance of being seen as unprejudiced against other age groups, and whether individuals aged 50 to 70 feel they are being prejudiced, not respected and treated badly because of age) and four variables regarding policies allowing for the advancement or postponement of retirement (early retirement age, financial penalty for early retirement, bonus for postponing retirement, combinability of pension and employment income). Only three of these variables affect the dependent variable significantly ($\alpha = 0.1$) when included in a model with the legal retirement age variables: effective retirement age, median income in PPS and lifelong learning. None of these variables cause a reduction in effect size or significance of the male and female retirement ages, thereby confirming Hypothesis 2a.

The effective retirement age does not contribute to a reduction of the difference between East and West and the effect of lifelong learning disappears when controlled for median income. Therefore, they are not included in Table 3. Model 3 shows that the difference between Eastern and Western European countries can be completely explained with three variables: the male and female legal retirement ages and median income – the latter likely being an indicator of the socio-economic development of a society as a whole.

Table 3: Random intercept models explaining preferred retirement age, country-level effects (in months)

	Model 1		Model 2		Model 3		Model 4	
	B	p	B	p	B	p	B	p
Control variables								
Female	−7.9	***	−4.3	*	−4.4	*	−4.1	*
Age	3.4	***	3.4	***	3.4	***	3.4	***
Country level								
East	−26.9	***	−14.6	**	−2.7			
Legal retirement age (LRA) men			5.4	***	5.1	***	7.3	***
(LRA men - LRA women) * female			−3.0	***	−2.8	***	−3.0	***
LRA 2010 - LRA 2004 (men)							−0.1	
(LRA 2010 - LRA 2004) * age							0.3	
Median income (PPS, in thousands)					1.3	*		
N (individual)	4,456		4,456		4,456		4,146	
N (country)	24		24		24		22	

† $p < 0.1$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Note: The following control variables are included in the models but not shown here: being married or in a partnership, household size, working for a public organisation, company size, sector (19 categories, based on NACE) and occupation (9 categories, based on ISCO-88)

Source: autors' compilation based on ESS data

Finally, we do not find support for Hypothesis 2b in Model 4. In this model, we add the difference in legal retirement ages for men[2] between 2010 and 2004, as well as the interaction of this variable with age. However, with only three countries having changed the retirement age in this period, it should not be surprising that no effect is found.

When performing simple Ordinary Least Squares regression of countries, the dependent variable being the male and female country averages of the preferred retirement age, we can analyse the residuals of the countries (i.e. the difference between the countries' real values on the dependent variable and the values predicted based on the independent variables). For this test, we use the country-level variables presented in Table 3. We will only discuss the 'outliers', that is, the countries with residuals more than one standard deviation from the predicted value; none are two standard deviations away. Denmark and the UK have a real value higher than the predicted value for both men and women, just like women in Lithuania and men in Ireland. The availability of partial retirement schemes could offer an explanation for Denmark, allowing for a phasing out of the labour market via part-time employment (The Social Protection Committee, 2007). The position of Ireland and the UK could be the consequence of the absence of early retirement schemes (The Social Protection Committee, 2008); and the high poverty rate among Lithuanians above age 65 might explain why Lithuanian women are less eager to retire than could be expected. At the lower end we find Belgium and Greece for both sexes, as well as Swedish men and Slovenian women. For Belgium, this is likely the consequence of the very extensive early retirement facilities (The Social Protection Committee, 2007; 2008); and in Greece the fact that one can attain a full pension after 37 career years may play a role (The Social Protection Committee, 2007). Based on the information collected, it is difficult to find a reason for Slovenia's position. However, the fact that Swedish men have a preference for earlier retirement than what could be expected based on the independent variables may be related to the rise in the Swedish legal retirement age from 65 to 67 between 2004 and 2010. Even though we could not confirm Hypothesis 2b, as too few countries changed their retirement age over this period for meaningful analysis, this result does indicate that it remains an open question for future research.

Conclusion

Many Eastern European countries still carry an inheritance of the Soviet Union in their pension system in the form of low and gendered retirement ages. Due to increasing life expectancies and the European Union's employment targets, many of these countries are in the process of raising the official retirement age or will have to do so in the future. Therefore, this study aims to investigate when individuals want to retire, and which individual, societal and institutional factors influence this preferred retirement age. We specifically try to explain for the gap in preferred retirement age between Eastern and Western European countries. Using European Social Survey data from 2010, which includes the information of some 4,500 employees aged 50 to 69 in 24 European countries, we find that two main elements explain this East-West division in preferred retirement age: job characteristics and retirement policies.

Applying Karasek's job demand/control model, our study shows that job characteristics are essential in shaping individuals' retirement preferences. While Karasek points out that workload and being able to make decisions regarding the organisation of your own work are key to mental and physical well-being and hence to being able to work longer, we show that they also play an important role in making people want to work longer. Having decisional discretion has a particularly significant effect on preferred retirement age, and even though job control does influence mental and physical

2 With four country-level variables in a model with only 22 countries, Model 4 is already overloaded. Therefore, we do not include the female retirement age in 2004.

well-being, the effect on retirement preferences goes well beyond. However, post-socialist countries differ from the rest of Europe in two ways in this regard. First, individuals in the East have worse working conditions, in particular low job control. Especially influential is the fact that they have fewer opportunities to organise their daily work themselves and to influence policy decisions at work. Second, while the Karasek model seems to fit Western European countries well in terms of explaining when people want to retire, the effects are rather different in the East of Europe. There the positive effect of job control on the preferred retirement age is only half the size it is in the West, and when the negative impact of job demand on well-being is controlled for, job demand has a similar effect on the dependent variable as job control. It is difficult to determine what could cause this difference between the East and West, though it might be related to differences in how people perceive their jobs in both parts of Europe. Fargher et al. (2008) find that job satisfaction in Eastern European countries is mainly related to wage and how important one considers working in general, while in the West, job satisfaction is determined by a much wider set of social and cultural variables. The authors suggest that this might be the consequence of work ethics promoted by the Soviet Union. Our finding that people who are feeling happy and satisfied with life want to retire later in Western countries and earlier in Eastern countries might indeed reflect this different relation between work and the rest of life. It should be noted, however, that also in Western Europe the intermediary variables related to mental and physical well-being only partly account for the effects of job demand and job control. This may be the consequence of job demand and control being related to much more than mere well-being. Possibly, they are also related to identifying with one's work or seeing work as self-realisation, which in turn may stimulate individuals to work longer.

Individuals' retirement preferences are also determined by legal retirement age. The lower legal retirement ages and gender discrimination in retirement policies in many Eastern European countries explain a large part of the difference in preferred retirement age between Eastern and Western Europe. When asked when they want to retire, individuals probably use the legal retirement age as a 'reference standard' and weigh their personal situation off against it. This may work in a process similar to what Archer described as 'internal conversation', where they decide that, based on how hard the work is they do, how long they have worked etc., they would like to work a few years less than the official retirement age. However, the discrepancy between the legal and preferred retirement ages is larger in countries with a higher legal retirement age. Lacking a sufficient amount of countries that changed the legal retirement age between 2004 and 2010, we could not confirm whether a preference, in this case the preference to retire early, develops into a 'habit'. It is up to future research to determine to what extent a change in legal retirement age affects different age groups in terms of retirement preferences.

While Esser (2005b) does not see the need to raise the legal retirement age – one can change individuals' retirement preference by adapting the welfare and production regimes –, our results suggest that changing these preferences can also be done by changing the legal retirement age. As such, this article is good news for politicians seeking to heighten the legal retirement age in an attempt to make people work longer. However, it also points at the need for accompanying measures improving working conditions in general and employee job control in particular, which might in the end be a more effective way to motivate people to work longer. Even though we discuss the effects of job characteristics only at the individual level in this paper, it is clear that they are strongly connected to macro-level policies. The effects can, for instance, be linked to Esser's (2005b) finding that there is a stronger preference for later retirement in more regulated labour markets and in countries where more effort is geared towards training older individuals.

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