

# How voluntary is the active ageing life? A life-course study on the determinants of extending careers

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**Abstract** In Switzerland, as in many other European states, there is an increasing emphasis in public policy on promoting later retirement from the labour market. But this accelerating drive in Swiss policy-making to extend occupational activity does not mean that every worker is currently likely to retire late, nor does it imply that all those who do retire late do so voluntarily. This article uses a life-course approach, first to study the determinants of late retirement, and secondly to analyse whether the decision to postpone retirement is made voluntarily or involuntarily. Both objectives are addressed on the basis of data from the Swiss survey *Vivre/Leben/Vivere*. The results of logistic regression modelling indicate that, whereas self-employed and more highly educated individuals are more likely to retire late, people with access to private pension funds and workers who have benefited from periods of economic growth have a lower tendency to retire late. Regarding voluntariness, those who are more likely to opt for voluntary late retirement tend to be Swiss citizens, more highly educated, and also benefited from periods of economic expansion, while the self-employed, men and widowed

individuals leaving the labour market late tend to do so involuntarily. In conclusion, the article discusses the absence of a social inequality debate in the design of active ageing policies.

**Keywords** Late retirement · Voluntariness of retirement · Active ageing policies · Life-course determinants

## Introduction

In recent years, decreasing rates of early retirement, combined with an increase in the proportion of older people still in employment have been observed in most European countries. These developments have made the topic of active ageing a highly relevant one in this region (Blossfeld et al. 2006; Ebbinghaus 2006; Hofäcker et al. 2016). Indeed in 2012, the European Union proposed that certain states should integrate social policies aimed at extending the active life of older workers, in view of the financial threats to public expenditure and private pension funds associated with the massive ageing population in those countries (Rosende and Schoeni 2012; Foster and Walker 2013).

Switzerland has both high employment rates of older workers, compared to other Western States, and also a rising effective retirement age (OECD 2012). In addition, active ageing policies such as the provision of economic benefits for late retirement by public and private pension funds, or financial penalties for early retirement in the public pension structure, have been proposed and approved (OFS 2012a; Kuehni et al. 2013). However, this does not mean that every Swiss worker is currently likely to retire late, nor does it imply that those who retire late do so voluntarily. Instead, retirement decisions in Switzerland, such as when or why to retire, are usually forced by various

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factors of the life course including societal, workplace and individual characteristics (Madero-Cabib 2015; Madero-Cabib et al. 2015).

The life-course approach offers a very useful and holistic perspective in which to understand the determinants of retirement decisions, since it not only emphasises the impact of traditional economic and health constraints but also of a wide range of life-course determinants of the transition to retirement (Kohli et al. 1991). In particular, in terms of the distinction between voluntary retirement (i.e. a decision based mainly on worker preferences) and involuntary retirement (i.e. a result of life/work restrictions), it has been remarked that, at international level, the influence of factors in workers' life courses is of the utmost importance (Dorn and Sousa-Poza 2010).

Moreover, although we are currently witnessing increasing proportions of active older people in many social contexts, academic research into late retirement is clearly underdeveloped when compared to the vast number of international studies centred on early retirement (see for example Lund and Villadsen 2005; Dorn and Sousa-Poza 2010; Radl 2013). There is an extensive literature on early retirement in Switzerland as well, whereas the issue of the continuity of professional activity after the legal retirement age remains barely explored. In light of the current debate about active ageing and the voluntariness of retirement, and also considering the life-course factors that could impact upon this labour process, our study aimed to deepen our knowledge of this contingent and almost untreated aspect of the Swiss older population: the extension of occupational activity beyond the state pension age, and the voluntariness of late retirement. More concretely, we sought to study two issues in late retirement: first, analysis of the life-course determinants of retirement timing, focusing mainly on those who retire late; second, evaluating whether the decision to extend occupational activity is made voluntarily or involuntarily. In addition, we also measured the impact of life-course factors on the voluntariness of late retirement. Both objectives were addressed using data from the Swiss survey *Vivre/Leben/Vivere*.

The article is organised in six sections. First, in order to contextualise the study, we describe the main aspects of retirement in Switzerland. Second, we review previous research focused on the life-course determinants of both retirement timing and voluntariness of retirement. We then present the data, variables and statistical methods used in the study. In the fourth section, we present separately the results of bivariate and regression analyses, and in the fifth section we discuss these results. The final part of the article draws conclusions about the absence of a debate on social inequalities in the construction of active ageing policies.

## Older workers and the retirement context in Switzerland

Data provided by the Federal Statistical Office of Switzerland (OFS) indicate that, in 2000 and 2010, the proportion of workers aged 55 and older in the active labour force was, respectively, 15.1 and 17.5 % (OFS 2011). According to this source, the proportion of older workers will continue to grow, possibly representing 21.2 % of the active labour force in 2060, with a peak of 22.3 % between 2025 and 2027 (OFS 2012b). Moreover, in an international perspective, statistics show that, in 2009, 68.4 % of Swiss people aged between 55 and 64 were employed, while in the European Union as a whole this proportion was 48 % (Rosende and Schoeni 2012).

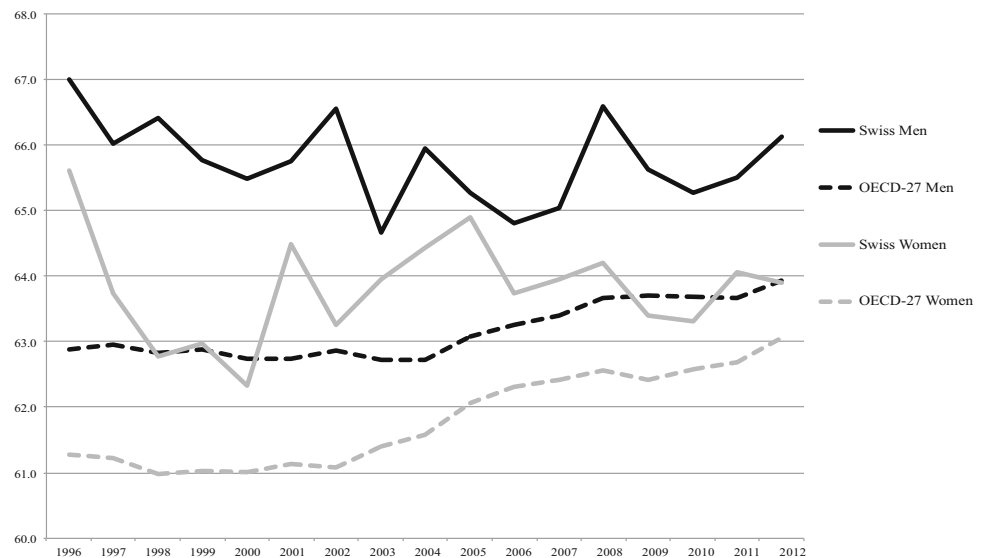
In terms of age at retirement in Switzerland, in recent years, this has undergone a significant rise, reaching an average age of 66.1 for men and 63.9 for women (OECD 2012). This means that older workers have tended to postpone their retirement at least until the state pension age—which is 65 for men and 64 for women—thereby reducing the proportion of workers retiring earlier. Also, as Fig. 1 shows, Switzerland had high retirement ages among both men and women between 1996 and 2012, compared to the OECD-27 nations.

Another particular aspect of the Swiss retirement context concerns the pension institutions. In Switzerland, the pension structure comprised three different funds: first, a public pension fund called AVS (*assurance-vieillesse et survivants*), which is managed by the state and is compulsory for every active and inactive individual living in Switzerland. The second pension fund derives from occupational pension planning; this component is administered by private insurance companies and is paid into by each worker. Finally, the third pension component comprises the private savings accumulated by individuals through insurance companies or sometimes banks (OFS 2012c, d).

To complete this picture, five institutional mechanisms are aimed at extending occupational activity in Switzerland. The occupational pension fund incorporates two provisions which aim to keep workers within the labour market at least until the state pension age. The first of these is that even if the income of a worker drops by more than half after age 58, the worker has the right to claim his/her occupational pension based on the last salary before that reduction. Additionally, the occupational pension fund allows workers to claim occupational pension savings up to 5 years after the state pension age (OFS 2012a).

On the other hand, the public AVS pension fund also includes at least two important provisions in this sense. The first consists of an exemption of 1400 Swiss Francs per month (i.e. \$1570 or €1150) on pension contributions for those who decide to postpone their retirement until after the

**Fig. 1** Average of effective retirement ages of older workers by gender in Switzerland and OECD-27 countries between 1996 and 2012. *Source* OECD (2012)



state pension age. In addition, the AVS pension fund provides for a financial penalty if a worker decides to stop working prior to the state pension age: retiring 1 year early involves a discount of 6.8 % of the AVS pension savings; and, for those who retire 2 years early, the reduction amounts to 13.6 % of the total public pension (OFS 2012e). There is also the possibility of additional training which older workers can receive in the context of the AVS pension fund, which is designed to increase the intellectual capabilities and the physical skills of older workers (OFS 2012a). Moreover, although this is not yet compulsory, there is an officially established option in Switzerland to continue working for 5 years beyond the state pension age (i.e. up to age 69 for women and age 70 for men), for workers who choose to continue accumulating public pension funds (Esping-Andersen 2011).

The retirement environment in Switzerland is thus characterised by relatively large numbers of older workers as well as by institutional policies which aim to promote late retirement from the labour market. Nevertheless, as mentioned above, this national context does not necessarily imply a universal trend towards late retirement; nor does it mean that all those who retire late do so voluntarily. Indeed, as we explain below, we suggest that a number of life-course characteristics of workers can have a greater impact; first, on the likelihood of a worker retiring late; and, second, on the voluntariness of late retirement.

### Determinants of retirement timing and voluntariness of retirement

Our study focused on the impact of micro- or individual life-course determinants of both retirement timing and voluntariness of retirement. Individual life-course

determinants refer to those personal conditions of workers such as marital and parenthood statuses, citizenship, educational level, health conditions, gender, birth cohort, occupational and financial situation—including state benefits, private insurance and pension funds. The selection of these specific individual factors is theoretically based on the life-course schema, which usually recognises two kinds of determinants of career processes; namely, life events in social domains and positional factors (Levy et al. 1997, 2005).

The concept of life events corresponds to the individual experiences, transitions or trajectories that people concurrently confront in social domains such as family, health, labour or political spheres (Levy et al. 2005). Accordingly, we suppose that retirement timing and voluntariness of retirement are not only influenced by employment aspects but could also be affected by other social involvements such as family obligations, health conditions or legal citizenship. Positional factors refer to the characteristics that comprise the social status of an individual, which determines the social possibilities across the life course (Levy et al. 1997). Put in concrete terms, positional factors are, for instance, individual characteristics such as educational level, gender, occupational status, birth cohort or financial condition. We next review the literature on the influence of both life events and positional factors on retirement timing and voluntariness of retirement.

### Influence of life events on retirement timing and voluntariness of retirement

As mentioned above, we particularly focused on life events such as family events, health conditions and citizenship. With regard to family events, the Swiss retirement structure has traditionally been characterised by not compensating

those people, typically women, who are compelled to interrupt or terminate their careers because of familial responsibilities (Rosende and Schoeni 2012). Indeed, a recent Swiss study shows that individuals with familial trajectories marked by parenthood have a high propensity to take late retirements (Madero-Cabib et al. 2015). Marital status also raises the issue of retirement transition. In Switzerland, divorced and separated women are more likely to retire late from the labour market, mainly because of the shortfall in financial savings which is due to the absence of a spouse (Bütler et al. 2004). Also, considering how the work status of the spouse affects the own retirement transition, it has been noted that if the spouse is already retired and the household's financial resources are sufficient, a preference for leisure activities compared to work might be valued (Debrand and Sirven 2009).

In terms of the health domain, in most occupations, although research has highlighted dissimilarities between economic sectors, the influence of health status is that workers with health problems and/or disabilities tend to retire early from the workforce (Dorn and Sousa-Poza 2004; Madero-Cabib et al. 2015). Health issues and/or disabilities here include not only physical impairments but also psychological difficulties (see, for instance, Siegrist et al. 2007). Finally, when citizenship is considered, there are no clear findings about the specific impact of such a legal status upon retirement timing (Ackers and Dwyer 2004); however, because immigrants usually start to contribute to or invest in pension funds only when they arrive in a host nation, they might not have a chance to retire early but, conversely, are more likely to be compelled to extend their period of occupational activity.

### **Influence of positional factors on retirement timing and voluntariness of retirement**

In terms of positional factors, we reviewed the impact of educational level, financial situation, occupational status, gender and birth cohort. As regards the educational level of workers, research has indicated that people with a high level of education, such as professionals or scientists, report more job satisfaction and show greater propensity to postpone the moment of retirement, even despite ill-health (Dorn and Sousa-Poza 2004). By contrast, less educated workers are more likely to retire early from the labour market, which may be explained by their jobs sometimes involving demanding work (Beehr et al. 2000; Dorn and Sousa-Poza 2004; Marshall et al. 2001).

Concerning the influence of financial conditions on retirement timing, it is noteworthy that, in the academic research done thus far in Switzerland, there is near-unanimity about the robust relationship between financial status and early retirements (Cattacin 2006; OFS 2011, 2012a; Kuehni et al. 2013; Madero-Cabib 2016). This is

because the existing Swiss pension structure is designed to allow people with continuous work careers and sufficient pension savings to retire early. Conversely, workers with low financial status have long been forced to retire after the state pension age in order to accumulate enough pension savings for old age (Balthasar et al. 2003; Bütler et al. 2004). Similarly, two Swiss studies show that early retirement is more typical of executives and professional occupations than of workers in less prestigious jobs (Gaillard et al. 2003; Madero-Cabib 2015). Furthermore, the self-employed have no access to insurance through an occupational pension scheme, and consequently tend to make a less abrupt withdrawal from the labour market, only rarely retiring early (Dorn and Sousa-Poza 2004).

The impact of gender upon retirement timing also needs to be considered. Recent research in Switzerland reveals relevant differences between women and men in various aspects of retirement. An illustrative case is the timing of retirement: men usually retire earlier than women, and also start to claim income from pension savings, especially from occupational pension schemes, earlier than women (Bütler et al. 2004; Kuehni et al. 2013; Le Feuvre et al. 2014; Madero-Cabib 2016). This finding is also replicated on an international level (Finch 2014).

Finally, another significant positional determinant of retirement timing is that of birth cohort. Studies indicate that different birth cohorts constitute different industrial development generations (Chauvel 1998). In particular, research highlights how people who benefited from the very productive economic period known as 'The Glorious Thirties' (1945–1975) enjoyed less interrupted careers and also display higher employment activity rates than people from younger cohorts, which may have allowed the former to invest uninterruptedly in pension funds and so to have a greater chance of retiring early from the labour market (Chauvel 1998; Guillemard and Rein 1993).

## **Methods**

### **Data**

Our study was based on the Swiss database *Vivre/Leben/Vivere* (VLV). VLV deals with living and health conditions of people aged 65 and above, living in Switzerland. The Centre for the Interdisciplinary Study of Gerontology and Vulnerability carried out the survey between 2011 and 2012 in five regions of Switzerland (Geneva, Central Wallis, Bern, Basel and Ticino). The survey was conducted in two phases. First, the respondents received a self-administered questionnaire and a life-event calendar; in the second phase, an interviewer conducted a face-to-face interview. The final sample, stratified by age and sex,

included 3080 people living in French-, Italian- and German-speaking cantons in Switzerland. The response rate was 36 %, which approximates the average response rates of Swiss surveys on older adults (De Luca and Peracchi 2005) and of Swiss surveys conducted through face-to-face interviews (Stähli and Joye 2013). As the total sample is stratified by age, sex and canton, and as individuals were randomly selected, we weighted each observation according to its age group, sex and canton of residency to achieve comparability the reference population.

## Variables

### *Dependent variables*

The dependent variables were timing of retirement and voluntariness of late retirement. ‘Timing of retirement’ was derived from the merging of two source variables ‘*Do you have a paid professional activity?*’ (Answer categories: ‘yes’ or ‘no’) and ‘*If you do not have a paid professional activity, when did you cease professional activity?*’ (Answer categories: ‘early’, ‘legal’ or ‘late retirement’). Thus, the target variable ‘timing of retirement’ indicated whether a person continued to work after mandatory retirement age, and was divided into two categories, namely ‘late retirement’ and ‘early and on-time retirement’. ‘Timing of retirement’ was answered by 2752 out of 3080 cases, which approximates to 89 % of the respondents.

‘Voluntariness of late retirement’ was derived from the coding of the answers to the self-administered questions ‘*If you still have a professional activity, what are the reasons for this?*’ and ‘*If you retired early or late, what are the reasons for this?*’ In the latter case, we only coded mentions related to late retirement. We classified the respondents’ answers into two categories: ‘voluntary late retirement’ and ‘involuntary late retirement’. ‘Voluntary late retirement’ applies to persons who have delayed their retirement according to individual choices and because they were able to do so (for example, ‘*Out of interest*’, ‘*Because of my expertise*’, ‘*To structure my day*’), while ‘involuntary late retirement’ refers to cases of being forced to keep working, mainly for financial reasons (for example, ‘*AVS is not enough to make a living*’, ‘*To put butter on bread*’, ‘*Because of my low income*’). We also considered answers mentioning self-employment as ‘involuntary late retirement’, since the self-employed are excluded from Swiss occupational pension schemes, and may, therefore, be compelled to continue working for financial reasons. Some individuals mentioned more than one reason, which made the answer ambiguous (for example, ‘*Out of interest and for financial reasons*’). We decided to code such responses as ‘involuntary late retirement’ since they were not totally free from constraining factors. Valid answers for

‘Voluntariness of late retirement’ were obtained for 424 individual cases out of 480 of late retirees, i.e. 88.3 % of those who reported having continued their professional activity after the legal retirement age.

### *Covariates*

In reviewing the literature relating to the impact of individual life-course factors on both timing of retirement and voluntariness of retirement, we focused specifically on two kinds of covariates: first, life events and second, positional factors. As shown in Table 1, whereas the first kind particularly agglomerates family events, health condition and citizenship status, the second kind brings together individual variables such as financial situation, along with indicators of gender, last occupational status, educational level and age category (proxy of birth cohort).

About covariates, it is worth noting four aspects. First, health condition was measured by means of a self-reported Likert scale, with values ranging from *deteriorated* to *improved*. Specifically, this is a measure that asked people to compare their current health status with that of 10 years ago. We used this measure as a proxy of health condition given that VLV does not provide the health status of people neither at the moment of retirement nor during the professional activity beyond 65 years old. We presume that it would have been better to have had the information of the health status at the moment of the retirement transition in order to avoid a possible bias in the analysis. Secondly, last occupational status refers to the employment situation immediately before retirement. Thirdly, we decided not to consider in the sample of late retirees ( $N = 424$ ) the occupational status ‘non-active’ ( $N = 2$ ), given that non-active people did not actually have a job from which they retired voluntarily or involuntarily. By contrast, we kept the ‘non-active’ category in the sample for analysing retirement timings, since here it is the age, and not the occupational status, which is the main criterion for entry into retirement. Fourthly, our study measured the individual’s financial status by means of financial aid from public and private organisations, and savings in the three different pension funds. The particular choice of pension funds as proxies of financial status is based on the evidence that in Switzerland the possibility of having access to financial aid and, especially, to the three pension funds is strongly associated with the financial status of the individual. For instance, individuals with very low incomes often do not contribute to the public pension plan (OFS 2012a), and also, the occupational pension fund is available only to employees and civil servants with annual salaries higher than 20,880 Swiss Francs (i.e. \$22,063 or €20,080).

Concerning the missing values of covariates, for the first sample—i.e. the sample for studying timing of retirement

**Table 1** Covariates

Covariates	Specific covariates	Sample for studying timing of retirement ( <i>N</i> = 2752)		Sample for studying voluntariness of late retirement ( <i>N</i> = 424)		
		Categories	%	Categories	%	
Life events	Marital status	Married	60.0	Married	65.2	
		Single	8.0	Single	7.1	
		Divorced	11.5	Divorced	11.9	
		Widower	20.5	Widower	15.8	
	Number of children	Continuous variable	–	Continuous variable	–	
	Current health status considering 10 years ago	Deteriorated	16.1	Deteriorated	13.0	
		Weakly damaged	42.8	Weakly damaged	46.0	
		Remained the same	32.4	Remained the same	34.3	
		Weakly enhanced	3.8	Weakly enhanced	2.9	
	Citizenship	Improved	5.0	Improved	19	
Non-swiss		14.2	Non-swiss	19.0		
Positional factors	Financial aid of public insurances	Swiss	85.8	Swiss	81.0	
		No	89.9	No	91.4	
	Financial aid of private organisations	Yes	10.1	Yes	8.6	
		No	97.7	No	96.7	
	Public pension	Yes	2.3	Yes	3.3	
		No	3.2	No	4.6	
	Occupational pension	Yes	96.8	Yes	95.4	
		No	34.3	No	52.1	
	Private pension	Yes	65.7	Yes	47.9	
		No	71.1	No	63.5	
	Gender	Yes	28.9	Yes	36.5	
		Women	51.7	Women	44.2	
	Last occupational status	Men	Women	48.3	Men	55.8
			Unskilled non-manual	10.9	Unskilled non-manual	9.4
		Non-active	Non-active	4.0	Non-active	0.4
			Unskilled manual	26.2	Unskilled manual	17.2
		Skilled manual	Skilled manual	11.8	Skilled manual	5.9
			Farmers and independent	9.1	Farmers and independent	20.4
		Intermediate occupations	Intermediate occupations	12.1	Intermediate occupations	9.0
			Higher professions	25.9	Higher professions	37.7
Educational level		Primary	10.6	Primary	7.2	
		Lower secondary	6.4	Lower secondary	3.9	
	Vocational training	37.0	Vocational training	25.4		
	Upper secondary	16.5	Upper secondary	16.5		
	Technical or vocational school	15.5	Technical or vocational school	19.1		
	University or ETH	13.8	University or ETH	27.9		
Age category	65–69	32.3	65–69	35.6		
	70–74	25.6	70–74	29.5		
	75–79	20.1	75–79	17.1		
	80–84	12.7	80–84	7.8		
	85–89	7.0	85–89	7.0		
	Over 90	2.4	Over 90	3.0		

( $N = 2752$ )—the number of missing values in covariates was 50 or less, which represents 1.8 % of the sample, while, for the second sample—i.e. the sample for studying voluntariness of late retirement ( $N = 424$ )—the number of missing values in covariates was 11 or less, which is 2.6 % of the sample.

### Statistical methods

First, in order to measure the relationship between different financial statuses (e.g. public and private financial aid, and pension funds) and the dependent variables, we performed a bivariate analysis, using the  $\chi^2$  statistic. The reasons for applying a bivariate analysis here is that the covariates relating to the financial situation could be considered as economic benefits which began to be received after the moment of retirement. However, one might also state that these economic benefits—mainly the savings in pension funds—are the result of financial contingencies faced through the whole life course, so they directly reflect the positional status held before the retirement transition. We therefore decided to use these financial covariates, particularly the investment in pension funds, as descriptors of the two dependent variables as well as predictors of them.

Secondly, in order to assess the association of the covariates with the likelihood of retiring late or earlier (i.e. early and ‘on-time’ retirement) as well as the likelihood of voluntarily or involuntarily retiring late, we employed weighted logistic regression models. This model has the potential to evaluate how various covariates impact on a discrete variable (Dobson 1990). In our study, we worked with two discrete variables: timing of retirement, i.e. late retirement (value 1)/early and ‘ontime’ retirement (value 0), and voluntariness of late retirement, i.e. voluntary late retirement (value 1)/involuntary late retirement (value 0). We used logistic regression models to measure, step-by-step, the impact first of life events, and secondly of positional factors.

Furthermore, the categories of variables used as reference in regression models are chosen based on the following rationale: considering ‘marital status’, since the category ‘married’ is the standard situation for the cohorts under study, this is used as reference. In the case of the covariate ‘citizenship’, we were interested in the difference between Swiss people and any other national origin, so we chose the category ‘non-Swiss’ as reference. For ‘health status’, we used as reference the poorest health status, that is, the category ‘deteriorated’. As regards both ‘educational level’ and ‘last occupational status’, we used as reference the categories indicating the lowest social status, that is, ‘primary education’ and ‘unskilled non-manual’, respectively. Finally, for age category, we used the youngest age group as reference (‘65–69’).

The level of significance at 0.1 corresponds to the accepted confidence threshold in the weighted logistic regression models. The Akaike Information Criterion, or AIC (Pan 2001), allowed us to choose the most explicative weighted logistic regression model. Using the VIF coefficient, we examined multicollinearity among covariates; and no covariates were removed from the regression logistic models due to this criterion. All the computations presented below were made using the R statistical software (R Core Team 2012), specifically through the *svytable*, *svychisq* and *svyglm* libraries, which belong to the *survey* package (Lumley 2013) that was designed for analyses of weighted data.

### Results

Some bivariate findings are presented first. Table 2 shows that in the case of retirement timing (left side of table), there are statistically significant differences in some cases. However, we here focus particularly on the higher differences between late retirement and ‘earlier retirement’, i.e. on the covariates ‘occupational pension’ and ‘private pension’. According to Table 2, whereas 69.2 % of those who retire early and ‘on time’ receive pensions from occupational pension funds, only 48.8 % of late retirees have savings in this type of pension plan. Conversely, while 27.7 % of people who retire early have access to private pension funds, 34.7 % of individuals who postpone their retirement to after the state pension age receive payments from this type of pension fund.

Table 2 also shows, on the right side, that the only statistically significant difference between involuntary and voluntary retirement is having savings in occupational pension funds. The proportion of individuals who receive payments from occupational pension funds is higher in the case of those who voluntarily retire late (55.2 %) than for those who do so involuntarily (40.6 %).

The second step of the results concerns logistic regressions on timing of retirement, i.e. late retirement (weighted frequency = 17.1 %) versus early and ‘on-time’ retirement (weighted frequency = 82.9 %). In Model 5 of Table 3—the best model according to the AIC—we observe, firstly, that individuals having occupational pension savings are not likely to retire late. Moreover, we note that whereas farmers and self-employed workers are more likely to retire late, those who used to be non-active are less likely to work after the state pension age. In terms of educational level, we observe in Table 3 that increasing educational levels show stronger propensity to retire late. Finally, we observe that people aged 80–84 are less likely to experience late retirement.

**Table 2** Association between dependent variables and financial statuses

Financial covariate	Early and 'on-time' retirement ( <i>N</i> = 2272)	Late retirement ( <i>N</i> = 480)	Involuntary late retirement ( <i>N</i> = 208)	Voluntary late retirement ( <i>N</i> = 216)
Financial aid of public insurances	10.4	8.7	10.6	6.5
Financial aid of private organisations	2.1	3.5 <sup>+</sup>	4.0	2.6
Public pension	97.4	94.1***	96.8	94.0
Occupational pension	69.2	48.8***	40.6	55.2**
Private pension	27.7	34.7**	35.8	37.2

Significance of differences between people who retired late or earlier, and people who voluntarily and involuntarily retired late, was measured through a  $\chi^2$  test (\*\*\*)  $p < .001$ , \*\*  $p < .01$ ; \*  $p < .05$ , +  $p \leq .1$ )

The final step of results concerns logistic regression models on voluntariness of late retirement, i.e. voluntary late retirement (weighted frequency = 50.4 %) versus involuntary late retirement (weighted frequency = 49.6 %). Model 5 of Table 4—the best model according to the AIC—indicates on the one hand that individuals more likely to voluntarily retire late are Swiss people, persons with occupational pension savings, people with university or ETH<sup>1</sup> educational level and individuals belonging to the age category 75–79. Table 4 shows, on the other hand, that people less likely to voluntarily retire late or, in other words, more likely to involuntarily retire late, are first widowed individuals, secondly persons with public pension savings, thirdly men, and fourthly farmers and independent workers.

## Discussion

Determinants of late retirement and voluntariness of retirement postponement were examined to address the adequacy between Swiss policies evolution towards extending occupational activity and the individual determinants related to retirement calendar. Several elements show the inadequacy between policies and people's experiences of retirement. Being (or not being) able to make significant contribution to the pension system plays a major role in retirement timing and voluntariness of extending professional activity. For instance, the results of the bivariate analysis show clear differences in terms of access to occupational and private pension funds between people who retire after the state pension age and those who retire before that age. This can be explained by the fact that the self-employed, who are the main group of people retiring belatedly from the Swiss labour market (OFS 2012b), are excluded from occupational pension schemes; consequently, they tend to invest in private pension funds (Dorn and Sousa-Poza 2004a). Moreover, the bivariate result indicating that those who voluntarily retire late have

greater access to occupational pension funds might be due to the financial benefits in the frame of the second pension fund, which encourage workers to claim occupational pension savings up to 5 years after the state pension age (OFS 2012a).

Considering now the results of the logistic regressions on timing of retirement, we can say firstly that, as the literature suggests, most of the individuals having investments in occupational pension funds do not tend to retire late possibly given the accumulation of sufficient financial resources for their old age. Furthermore, the fact that farmers and self-employed workers are the occupational groups most likely to retire late may be due, as mentioned above, to lack of opportunities to invest in an occupational pension fund with the result that they tend to have insufficient pension savings to enable them to retire earlier. Moreover, it holds true, as previous research has also noted, that people with higher educational levels such as those in professional or scientific occupations, display more job satisfaction and less deterioration in health, and are more likely to continue working after the mandatory age of retirement (Dorn and Sousa-Poza 2004). Regarding the impact of health on retiring late, it turns out not to be significant in relation to either outcome unlike earlier studies on the topic (see for example Blau and Gilleskie 2001 or Siegrist et al. 2007). This might be explained by the fact that the health measure of the VLV questionnaire does not take into account the health status neither at the retirement transition nor during working-time above 65-year old. In that sense, longitudinal studies would be more appropriate to analyse the interaction between health and the retirement transition. Moreover, belonging to a certain generation also contributes to explaining the timing of retirement. In particular, the lower likelihood of belated retirement in the 80–84 age category may be related to the fact that individuals from this birth cohort entered the labour market around 1945, and possibly experienced the positive labour conditions of the 'Glorious Thirties'; i.e. between 1945 and 1975, such as uninterrupted long-term and upwardly mobile careers. This may have allowed them to invest in public and private pension funds and so to

<sup>1</sup> An ETH educational level corresponds to a degree from one of the Swiss Federal Institutes of Technology.



**Table 3** Logistic regression models of retirement timing (dependent variable: 1: late retirement, 0: early and on-time retirement. Odds ratio)

Covariates	Model 1	Model 2	Model 3	Model 4	Model 5
Marital status (reference: married)	–	–	–	–	–
Single	0.84	0.78	0.83	0.92	0.98
Divorced	0.92	0.91	0.93	0.92	0.91
Widower	<i>0.66**</i>	<i>0.68**</i>	<i>0.65**</i>	0.82	0.85
Number of children	0.99	0.99	0.98	0.97	0.99
Health status (reference: deteriorated)	–	–	–	–	–
Weakly damaged	–	1.29	<i>1.34<sup>+</sup></i>	<i>1.37<sup>+</sup></i>	1.30
Remained the same	–	1.28	1.28	1.30	1.27
Weakly enhanced	–	0.79	0.81	0.85	0.80
Improved	–	0.80	0.88	0.92	0.88
Non-swiss (reference)	–	–	–	–	–
Swiss	–	<i>0.67*</i>	<i>0.75<sup>+</sup></i>	<i>0.73<sup>+</sup></i>	0.86
No public pension (reference)	–	–	–	–	–
Public pension	–	–	<i>0.61<sup>+</sup></i>	<i>0.62<sup>+</sup></i>	0.73
No Occupational Pension (reference)	–	–	–	–	–
Occupational Pension	–	–	<i>0.43***</i>	<i>0.40***</i>	<i>0.38***</i>
No private Pension (reference)	–	–	–	–	–
Private pension	–	–	<i>1.49**</i>	1.23	1.08
Women (reference)	–	–	–	–	–
Men	–	–	–	1.02	1.02
Last occupational status (reference: unskilled non-manual)	–	–	–	–	–
Non-active	–	–	–	<i>0.15**</i>	<i>0.12**</i>
Unskilled manual	–	–	–	0.90	0.67
Skilled manual	–	–	–	0.71	0.62
Farmers and independent	–	–	–	<i>3.38***</i>	<i>2.24**</i>
Intermediate occupations	–	–	–	1.20	0.71
Higher Professions	–	–	–	<i>2.51***</i>	1.11
Educational level (reference: primary)	–	–	–	–	–
Lower secondary	–	–	–	–	1.16
Vocational training	–	–	–	–	1.53
Upper secondary	–	–	–	–	<i>1.99*</i>
Technical or vocational school	–	–	–	–	<i>2.43**</i>
University or ETH	–	–	–	–	<i>4.73***</i>
Age category (reference: 65–69)	–	–	–	–	–
70–74	–	–	–	–	1.22
75–79	–	–	–	–	0.92
80–84	–	–	–	–	<i>0.65*</i>
85–89	–	–	–	–	1.11
Over 90	–	–	–	–	1.47
Constant	0.24***	0.27***	0.57 <sup>+</sup>	0.42*	0.25**
AIC	2498.4	2440.4	2369.2	2204.9	2153.3
Observations	2752	2752	2752	2752	2752

Significant odds ratios in italics (\*\*\*)  $p < .001$ , \*\*  $p < .01$ ; \*  $p < .05$ ; +  $p \leq .10$ )

secure a greater chance of leaving the labour market earlier.

Finally, as regards the results on voluntariness of late retirement, the fact that Swiss citizens are more likely to

leave the labour market late voluntarily than non-citizens may be explained because immigrants usually start making pension contributions only from the time of their arrival in the host country; consequently, they may be compelled to

**Table 4** Logistic regression models of voluntariness of late retirement (Dependent variable: 1: Voluntary late Retirement, 0: Involuntary late Retirement. Odds ratio)

Covariates	Model 1	Model 2	Model 3	Model 4	Model 5
Marital status (reference: married)	–	–	–	–	–
Single	0.70	0.61	0.57	0.46	0.44
Divorced	0.65	0.65	0.65	<i>0.50<sup>+</sup></i>	0.51
Widower	0.72	0.70	0.78	0.62	<i>0.53<sup>+</sup></i>
Number of children	0.88	0.86	0.86	0.83	0.83
Health status (reference: deteriorated)	–	–	–	–	–
Weakly damaged	–	0.83	0.84	0.87	0.91
Remained the same	–	1.10	1.09	0.98	1.13
Weakly enhanced	–	1.12	1.08	0.75	0.82
Improved	–	0.91	0.89	0.90	1.00
Non-swiss (reference)	–	–	–	–	–
Swiss	–	1.56	<i>1.72<sup>+</sup></i>	<i>2.13<sup>*</sup></i>	<i>2.43<sup>*</sup></i>
No public pension (reference)	–	–	–	–	–
Public pension	–	–	<i>0.31<sup>*</sup></i>	<i>0.28<sup>*</sup></i>	<i>0.26<sup>*</sup></i>
No occupational pension (reference)	–	–	–	–	–
Occupational pension	–	–	<i>2.00<sup>**</sup></i>	<i>1.92<sup>**</sup></i>	<i>1.94<sup>*</sup></i>
No private pension (reference)	–	–	–	–	–
Private pension	–	–	–	1.05	0.93
Women (reference)	–	–	–	–	–
Men	–	–	–	<i>0.61<sup>+</sup></i>	<i>0.53<sup>*</sup></i>
Last occupational status (reference: unskilled non-manual)	–	–	–	–	–
Non-active	–	–	–	–	–
Unskilled manual	–	–	–	<i>0.39<sup>+</sup></i>	0.49
Skilled manual	–	–	–	1.07	1.40
Farmers and independent	–	–	–	<i>0.29<sup>*</sup></i>	<i>0.32<sup>*</sup></i>
Intermediate occupations	–	–	–	1.19	1.14
Higher professions	–	–	–	1.09	0.86
Educational level (reference: primary)	–	–	–	–	–
Lower secondary	–	–	–	–	1.84
Vocational training	–	–	–	–	1.01
Upper secondary	–	–	–	–	1.03
Technical or vocational school	–	–	–	–	1.03
University or ETH	–	–	–	–	<i>2.80<sup>+</sup></i>
Age category (reference: 65–69)	–	–	–	–	–
70–74	–	–	–	–	1.42
75–79	–	–	–	–	<i>2.93<sup>**</sup></i>
80–84	–	–	–	–	1.49
85–89	–	–	–	–	1.41
Over 90	–	–	–	–	1.51
Constant	1.46	1.13	2.27	<i>4.74<sup>+</sup></i>	2.52
AIC	586.6	580.2	573.0	542.6	538.5
Observations	424	424	424	424	424

Significant odds ratio in italics (\*\*\*)  $p < .001$ , \*\*  $p < .01$ ; \*  $p < .05$ ; +  $p \leq .10$ )

retire late by financial shortfalls in their pension provision. Further, although people with occupational pension savings do not tend to retire late, those who effectively retire belatedly might do so, as mentioned above, because of the financial benefits associated with the late retirement. As the

literature also indicates, individuals with a high level of education, who usually enjoy the greatest job satisfaction (Dorn and Sousa-Poza 2004) may have a greater propensity to voluntarily postpone the moment of retirement. Moreover, those who had the opportunity to benefit from the

prosperous economic conditions of the ‘Glorious Thirties’ may have had more possibilities not only to retire earlier—as Table 3 indicated—but also to continue working voluntarily after the mandatory age of retirement.

On the other hand, one reason why late retirements are more likely to be involuntary for men may be that, in the Swiss gendered labour market, men have greater opportunities to have continuous careers in which to invest uninterruptedly in pension savings (Le Feuvre et al. 2014; Madero-Cabib 2015), as consequence, they could be expecting to be financially able to retire earlier and not to remain active in the labour force after age 65. Similarly, the finding that individuals with access to public pension funds continue working beyond the state pension age involuntarily could be explained by considering that these are people who invest mandatorily during the whole life on this pension fund, therefore, they may want to retire not later than the legal retirement age. Furthermore, while self-employed—e.g. farmers and independent workers—retire later than other workers, this does not mean that they do so voluntarily. Indeed, this outcome contradicts the normal reasoning that the self-employed postpone their retirement because they identify strongly with their own occupations or businesses (Gaillard et al. 2003). Finally, the fact that widowed individuals tend to involuntarily retire late from the labour market may be, as Büttler et al. (2004) showed, because they have experienced a significant reduction in financial resources due to the absence of their spouses and, consequently, are compelled to continue working to ensure they have sufficient financial resources for their old age.

## Conclusion

Policies related to active ageing claim to be responding to the impact of the ageing of the population on the sustainability of pension systems by extending professional activity. Policy discourses argue that current legal retirement ages are no longer adapted to growing life expectancies. However, in a way which is consistent with the wider literature on transition to retirement, this article has shown that not everyone wants to—or is able to—continue working beyond retirement age: both timing of retirement and voluntariness of retirement are socially constructed through the life course, and depend on citizenship, educational level, financial situation, occupational status, gender and birth cohort.

In international comparative terms, Switzerland is considered to be an excellent performer in terms of active ageing, because of its high senior employment rate and multi-risk coverage through its three-pillar pension system. Nevertheless, the contribution of this article has been to

show that, even in this favoured context, continuing professional activity may be forced by workers’ life-course factors. The study thus goes beyond the existing literature on retirement timing, and demonstrates that choosing or being forced to retire late reflect social inequalities accumulated throughout several dimensions of the life course.

In Switzerland, these social determinants are to some extent overlooked in the political rhetoric on pension system reforms. Active ageing rhetoric uses the argument of the inevitability of extending working life: because people live longer, they should work longer. To reinforce this argument, some politicians argue that extending professional activity is the answer to the aspiration of older people to remain socially integrated through work activity. However, our study shows that working beyond 65 years of age does not correspond to the majority of older people’s current situations: in the VLV sample, about 17.1 % of people retired late, and only around 50.4 % did so voluntarily.

The consequence is that incentives to discourage early retirement and to provide motivations for continuing to work as long as possible run the risk of forcing those who have been unable to accumulate financial resources to continue working after retirement age, or of discriminating against those who are compelled to retire early by other constraints in their lives. If policy measures focus only on reforming pension systems, they are liable to fall foul of the complex associations of the various domains that condition forced or voluntary decisions about timing of retirement. In other words, measures related to active ageing tend to ignore the relevant life-course determinants of retirement timing, and the way individuals choose to—or have to—manage this transition. This statement holds true for Switzerland, even if this country is considered as a model in terms of pension policies. However, our findings might suggest that this may also apply to other countries where average retirement age is still lower than the state pension age, and also where most of the pension benefits in old age are highly dependent on characteristics of individuals’ life courses. We hypothesise thus that in those countries, as in Switzerland, social inequalities are at the core of extending professional activity.

Our study demonstrates the important role played by a variety of individual characteristics, particularly in the late retirement process. Further investigations are, nevertheless, needed to understand the effects of meso- and macro- life-course determinants of the timing of retirement as well as of the voluntariness of retirement transitions. For instance, we still do not understand how environmental factors such as labour market structures, measures for tackling senior unemployment, opportunities for lifelong learning or age discrimination influence the decision to continue working after the legal retirement

age. Such studies might expand the findings presented here on the determinants of extending occupational activity and on the voluntariness of late retirement. However, it is worth to note that this article does strongly suggest that citizenship, birth cohort, educational level, financial situation, occupational status and gender are key determinants of the moment of retiring. In this way, we showed that choosing or being forced to work after the state retirement age is socially constructed. Also, we argued that extending professional activity without taking into account social determinants might reinforce social inequalities.

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