Preliminary Observations about the Micro Determinants of Career Length in Belgium

Mimeo

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June 17, 2021

Abstract

This memo uses retrospective data from SHARE wave 7 (2017) where a representative sample of elderly people have been asked many questions about their entire career. Focusing on the respondents living in Belgium aged 65+, we identify some of the characteristics that are conducive to shorter overall careers. They essentially consists of (and by order of importance) gender, the non-EU immigration background, and also the arduousness of the career. Educational attainment or childhood health play no statistically significant role.

Keywords: Work, Occupation Arduousness, Career length

JEL Codes: I10, J26, J28

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1 Introduction

This memo presents preliminary results of the analysis of the 7th wave of the Survey on Health, Ageing and Retirement in Europe (SHARE). This wave was conducted across 28 European countries (incl. Belgium) and Israel in 2017. The 7th wave contains several "retrospective" modules providing detailed data about the respondent's history. Extensive information is assembled about, among others, education, gender, immigration status, childhood health and, what is more, job history.

Our main variables of interest are precisely those about the respondent's job history. In the 7th wave of SHARE, respondents are asked to retrace their complete job history, by providing the starting/ending year of each of their jobs, and whether these where exerted on a full- or part-time basis. This permits calculating the duration of their entire career, both in absolute years and in equivalent-full-time years. What is more, the occupation title is reported for each of the successive jobs at ISCO 4 digits. We merge that information with arduousness indices that have been estimated separately for each ISCO 4 occupation (Baurin et al., 2021, Vandenberghe, 2021). The combination of SHARE job history data and arduousness data¹ puts us in a position to compute and average career arduousness index and examine how it correlates with the length of the career.

As already mentioned, one of the strengths of SHARE data is the abundance of background variables. SHARE allows us to consider the role of educational attainment, of gender, or the immigration background, but also that of the initial health endowment. SHARE indeed contains information the on health status of the individual before the age of 15. Hereafter, we report some preliminary evidence, for Belgium only, as to the variables that correlate the most with our estimates of the length of the career of respondents aged 65+. It should be clear that this exercise does not deliver information about the more macro determinants of career length on average in Belgium compare to other countries.

¹Those we use here come from O*Net. This is survey about working conditions in the United States, which contains more than 185 variables. Those variables are included in different modules and we concentrate on the module related to the "Work context". The variables inside this module are related to interpersonal relationship at work (e.g. contact with others, responsibility for other's health and safety, face-to-face discussions), physical working conditions (e.g. exposition to contaminants, spending time bending or twisting the body, working in very hot or cold temperatures) and structural job characteristics (e.g. consequence of error, time pressure, freedom to make decisions).

²Some individuals might still work after 65, but the impact is likely to be marginal.

2 Results

Our main results are reported in Table 1. The first column reports the regression results for the determinants of the career length in years, while the second column displays those when then career length outcome measure accounts for the incidence of part-time vs full-time job spells. The transformation amounts to expressing the career in equivalent full-time years (EFT). The bottom line reports the average length for the reference group (male aged 60-64, with a low educational appointment), estimated to range from 41.08 (TFE years) to 41.7 years

By far the most important determinant of the length of a career among respondents aged 65+ is gender. Older women declare having spent 11.17 less years in paid employment than men ceteris paribus. When taking the incidence of part-time work into account, that handicap rises to more than 13 years. The other determinant is the immigration background (first generation). It translates into a shorter career of about 1.9 year ceteris paribus. Finally, the career arduousness also seems to contribute to shortening careers, but the magnitude of the impact seems lower than what we observe for gender and the immigration status. Our point estimates are for an additional percentile of arduousness. At -.027 or -.029, these suggest that someone who as endured a 10 percentile more arduous career has decided/been allowed/forced to shortened her career by 0.27 to 0.29 years. In other words, moving from the lowest to the highest percentile – an extreme move – represents a career length reduction of 2.7 to 2.9 years. The other variables are not statistically significant. That comprises education and this may come as a surprise. This said the latter result aligns with Vandenberghe (2005). It probably reflects that the well-documented higher age of retirement among graduates is not sufficient to offset their late labour market entrance due to longer studies.

Acknowledgement

This research is financially supported by ARC Research project No 18-23-088 Sustainable, Adequate and Safe Pensions (SAS Pensions) 2018-2023, funded by the Fédération Wallonie Bruxelles. This paper uses data from SHARE Waves 1, 2, 4, 5, 6 and 7. See Börsch-Supan et al. (2013) for methodological details.

The SHARE data collection has been funded by the European Commission through FP5 (QLK6-CT-2001-00360), FP6 (SHARE-I3: RII-CT-2006-062193, COMPARE: CIT5-CT-

Table 1: Determinants of Career Length. Belgium. Respondents aged 65+

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		O T 1	G I .1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Career Length	Career Length
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		in years	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Career Arduous. [perc.])	-0.0279**	-0.0293**
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.0140)	(0.0139)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Upper secondary	-0.8188	-0.7059
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.8723)	(0.8615)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Tertiary	0.1413	-0.0033
First generation immigrant		(0.8797)	(0.8689)
First generation immigrant -1.9333^* -1.9092^* (1.1020) (1.0884) Child health good -0.1256 -0.5776 (1.0940) (1.0805) -1.4849 -1.0903	Female	-11.1786***	-13.0119***
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.6713)	(0.6630)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	First generation immigrant	-1.9333*	-1.9092*
(1.0940) (1.0805) (1.0903) (1.0903)		(1.1020)	(1.0884)
Cohort 70-74 -1.4849 -1.0903	Child health good	-0.1256	-0.5776
		(1.0940)	(1.0805)
(0.0240) (0.0247)	Cohort 70-74	-1.4849	-1.0903
(0.8342) (0.8247)		(0.8342)	(0.8247)
Cohort 75-79 -2.5659** -1.6988	Cohort 75-79	-2.5659**	-1.6988
$(0.9757) \qquad (0.9645)$		(0.9757)	(0.9645)
Cohort 80-84 -3.2141** -2.7593*	Cohort 80-84	-3.2141**	-2.7593*
(1.1024) (1.0897)		(1.1024)	(1.0897)
Cohort 85+ -2.7812* -1.7717	Cohort 85+	-2.7812*	-1.7717
(1.1346) (1.1216)		(1.1346)	(1.1216)
constant 41.7011*** 41.0876***	constant	41.7011***	
(1.2294) (1.2143)		(1.2294)	(1.2143)
N 1,305 1,305	N	1,305	1,305

Source: SHARE 2004-2017, O*Net 2021 * p < 0.1, ** p < 0.05, *** p < 0.01 standard errors in parentheses

2005-028857, SHARELIFE: CIT4-CT-2006-028812), FP7 (SHARE-PREP: GA N°211909, SHARE-LEAP: GA N°227822, SHARE M4: GA N°261982) and Horizon 2020 (SHARE-DEV3: GA N°676536, SERISS: GA N°654221) and by DG Employment, Social Affairs Inclusion. Additional funding from the German Ministry of Education and Research, the Max Planck Society for the Advancement of Science, the U.S. National Institute on Aging (U01_AG09740-13S2, P01_AG005842, P01_AG08291, P30_AG12815, R21_AG025169, Y1-AG-4553-01, IAG_BSR06-11, OGHA_04-064, HHSN271201300071C) and from various national funding sources is gratefully acknowledged (see www.share-project.org)

References

- Baurin, Arno, Sandy Tubeuf, and Vincent Vandenberghe (2021). *Inferring Occupation Arduousness from Poor Health Beyond the Age of 50*. Tech. rep.
- Börsch-Supan, Axel et al. (2013). "Data Resource Profile: The Survey of Health, Ageing and Retirement in Europe (SHARE)". In: *International Journal of Epidemiology* 42.4, pp. 992–1001.
- Vandenberghe, Vincent (2005). The Low Employment Rate Conundrum: Can More Human Capital Help. Discussion Papers (IRES Institut de Recherches Economiques et Sociales) 200553. Université catholique de Louvain, Institut de Recherches Economiques et Sociales (IRES).
- Vandenberghe, Vincent (2021). Differentiating Retirement Age to Compensate for Career Arduousness. Tech. rep. GLO Discussion Paper.