

## Labour market decisions of Self-employed after 65 years old in the Netherlands

Amparo Nagore García, LISER<sup>1</sup>

Mariacristina Rossi, University of & Netspar<sup>2</sup>

Arthur van Soest, Tilburg University & Netspar<sup>3</sup>

### Abstract

We investigate retirement decisions of the self-employed in the Netherlands using administrative data. We focus on the time period around which individuals reach the statutory retirement age (SRA, 65 years in most cases). After the statutory retirement age, each Dutch resident receives the Old Age State Pension annuity (AOW), providing an income at the subsistence level. Both the timing and the magnitude of this state pension are well known in advance. According to a rational behavior, receiving AOW should therefore have no impact on labour supply choices. While employees often face the demand side restriction of mandatory retirement, this does not apply to the self-employed. We investigate whether retirement and earnings of the self-employed change at the SRA and whether any such change varies with, e.g., the level of financial wealth. We find a peak in retirement at the time at the SRA. The evidence suggests that the benchmark of retiring at 65 is acting as a driver, due to anchoring or a social norm.

*Key words:* Life cycle model, retirement decision, reference point, social norm

*JEL:* D91, D31, J26, L26

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<sup>1</sup> Amparo Nagore Garcia, Campus Belval Maison, des Sciences humaines, 11, Porte des Sciences, L-4366 Esch-Sur-Alzette ; E-mail: [amparo.nagore@liser.lu](mailto:amparo.nagore@liser.lu)

<sup>2</sup> Mariacristina Rossi, University of Turin, CeRP-CCA and Netspar; E-mail: [mariacristina.rossi@unito.it](mailto:mariacristina.rossi@unito.it)

<sup>3</sup> Arthur van Soest: Netspar & Department of Econometrics and Operations Research, Tilburg University, PO Box 90153, 5000 LE, Tilburg, The Netherlands; E-mail: [avas@uvt.nl](mailto:avas@uvt.nl)

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## **Extended abstract**

In the Netherlands, a State Pension income (AOW) at the subsistence level (currently approximately €1,160 for individuals living alone and €800 for individuals in couples) is given to everyone who has always been a Dutch resident and reaches the Statutory Retirement Age (SRA, from now on), irrespectively of employment status, labour market history, or other income. More specifically, the amount given only depends on the number of years of residence in the country, declining by 2%-point for every year not lived in the Netherlands. For most employees, the SRA coincides with their age of mandatory retirement.

For the self-employed, however, eligibility for the state pension does not impose any restrictions on their work. They have no institutional constraints for working beyond the SRA and can decide on their working hours either before or after the SRA on the basis of their preferences and health status. This makes it interesting to study if (and how) their labour supply responds to reaching the SRA. According to a standard life cycle model, in absence of demand side restrictions and with constant marginal tax rates, we would expect that the self-employed smoothly decline their work intensity due to ageing (and the accompanying changes in preferences, health, or productivity). Reaching the SRA should have no impact on retirement or labour supply unless individuals overreact to cash-receipt (see Borella, Fornero, & Rossi, 2009 and Rossi & Trucchi, 2016), e.g. due to liquidity constraints.

A large strand of literature has focused on whether cash receipts change consumption and saving patterns. Were people rational and without financial restrictions, they should react to unpredicted shocks to income only, and consumption should be based on their permanent income. A predicted change in income or wealth should not generate a change in consumption, as it does not affect permanent income. Hence the timing at which income is cashed should not matter for consumption decisions. Over-sensitivity to income can, however, be easily explained if individuals are liquidity constrained (Deaton, 1992; Guariglia & Rossi, 2002). In this case, their optimal consumption path cannot be achieved and the best consumption path they can afford may just be to consume their current income. When income rises, individuals can get closer to their optimal level by increasing their consumption.

While the reaction of consumption to income changes is well documented, longitudinal studies of what happens with leisure and labour supply decisions when non-labour income changes are less common. The economic reasoning is the same as with consumption. If utility depends on both leisure and consumption, optimal leisure and consumption are chosen by individuals on the basis of lifetime full income, irrespective of the timing when income is cashed in. In absence of other changes such as demand side restrictions, we should, hence, observe no labour supply response, or, specifically, no peak in retirement, at a specific age like SRA, except for those who are liquidity constrained and cannot rely upon their wealth to smooth leisure and consumption. Liquidity constraints might constrain individuals to work until they cash the state pension income at SRA.

In other words, the income change at the SRA is fully anticipated, part of the intertemporal budget constraints, and incorporated in the lifecycle consumption profile. It should not lead to any reaction in labour supply. Things would be very different if the income change were unexpected (see, e.g., Brown, Coile, & Weisbenner, 2010), in which case we would expect a response due to a change in (expected) permanent income. In the empirical literature on the life cycle, mainly focused on the effect of predicted changes in consumption and saving patterns, findings tend to confirm the theory that the realisations of fully predicted income changes have little effect on economic decisions (see Borella, Coda Moscarola, & Rossi, 2014 for example). Brown et al. (2010) find that inheritance receipt is associated with earlier retirement and this effect is stronger when the inheritance is unexpected.

Since the AOW amount does not depend on life-time earnings, it is much higher in relative terms for low income and low wealth groups than for the wealthy. Moreover, the wealthy will typically not face liquidity constraints. The ex-ante expectation is therefore that the rich should react less to the AOW receipt than the poor. Excess sensitivity by the richest to receiving AOW could still be explained by behavioural phenomena, such as social norms (see, e.g., Behaghel and Blau, 2012, or Van Erp et al., 2014). As the median employee retires at 65, this could set a social norm that may also influence workers who do not face mandatory retirement, liquidity constraints, or other standard economic arguments for retiring at the SRA.

Self-employed workers represent a substantial segment of the Dutch working population, 15.15% in 2011.<sup>4</sup> This proportion increases to 50%<sup>5</sup> for those between 65 and 74 years old. Self-employed, differently from employees, do not face a compulsory retirement age and do not have to accommodate their preferences for working according to the company where they work, giving them more freedom to adapt their working choices to their preferences, particularly when they get older. Retirement decisions of self-employed, in other words, are entirely decided by the workers and not subject to any pension rule or benefit related to exit from the labour market. Self-employed are entitled by law to the State Pension, which is not dependent on the contributions paid during their working life. For those who have been self-employed all their life, any other form of pension comes from private savings, e.g. a third pillar pension. The state pension is a pay-as-you-go pension, funded by income tax contributions of those who have not yet reached the SRA (17.9% of income in the lowest tax bracket).

Our scope is to detect the effect of SRA receipt on retirement decisions for those who have no constraints in their choices by their employers. For this reason the self-employed, represent the best sample to run our analysis. We additionally select, within self-employed, those who did not have employment spells as employees so as to rule out workers who have been self-employed only temporarily, thus not being representative of the self-employed category. For this reason, we consider the largest category (around 60%)<sup>6</sup> of self-employed: the entrepreneurs. This group, we claim represents the closest to self-employment category in their freedom of shaping their labour choices, without showing working spells as employees.

In addition, to rule out possible external factors shaping retirement choices, we only select entrepreneurs who are unmarried. Studying self-employed in couples is more complicated, for example because of the effects of the partner allowance, a state pension for non-working partners below SRA whose partner has reached SRA.

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<sup>4</sup> Source: OECD (2017), Self-employment rate (indicator). doi: 10.1787/fb58715e-en. This indicator includes the employment of employers, workers who work for themselves, members of producers' co-operatives, and unpaid family workers. All persons who work in corporate enterprises, including company directors, are considered to be employees.

<sup>5</sup> Source: Eurostat. [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfst\\_r\\_lfe2estat&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lfst_r_lfe2estat&lang=en)

<sup>6</sup> Excluding directors.

To carry out this study we will make use of a unique administrative dataset including the whole population of self-employed in The Netherlands with detailed information on demographic characteristics, job characteristics, incomes, household wealth. The use of this administrative dataset distinguishes this study from most of the previous ones on self-employment that usually use survey data with small samples. The use of a rich administrative dataset is especially relevant when analysing the behaviour of the self-employed given their high heterogeneity.

We model the transitions out of self-employment into wage employment or retirement using a discrete hazard model with a multinomial logit functional form. The effect on the transition probability into retirement identifies the treatment effect of reaching the SRA (receiving AOW) at the extensive margin.

We find an overreaction to reaching the eligibility age and receiving the state pension. This suggests that people are, contrary to theoretical predictions, oversensitive to income. This evidence can be reconciled with the social norm of retiring at 65, which indeed acts as a driver for employees since it is the mandatory retirement age. In line with our predictions, our results show that richer people are less sensitive to AOW receipt.