



Royal Netherlands Academy of Arts and Sciences (KNAW) KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN

Self-employment among older individuals in the Netherlands

Damman, M.; van Solinge, H.

2018

document version

Publisher's PDF, also known as Version of record

document license

CC BY-NC-ND

[Link to publication in KNAW Research Portal](#)

citation for published version (APA)

Damman, M., & van Solinge, H. (2018). *Self-employment among older individuals in the Netherlands*. (Netspar Discussion Papers; No. DP 05/2018-028). Network for Studies on Pensions, Aging and Retirement (NETSPAR). <https://www.netspar.nl/publicatie/self-employment-among-older-individuals-in-the-netherlands/>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the KNAW public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain.
- You may freely distribute the URL identifying the publication in the KNAW public portal.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

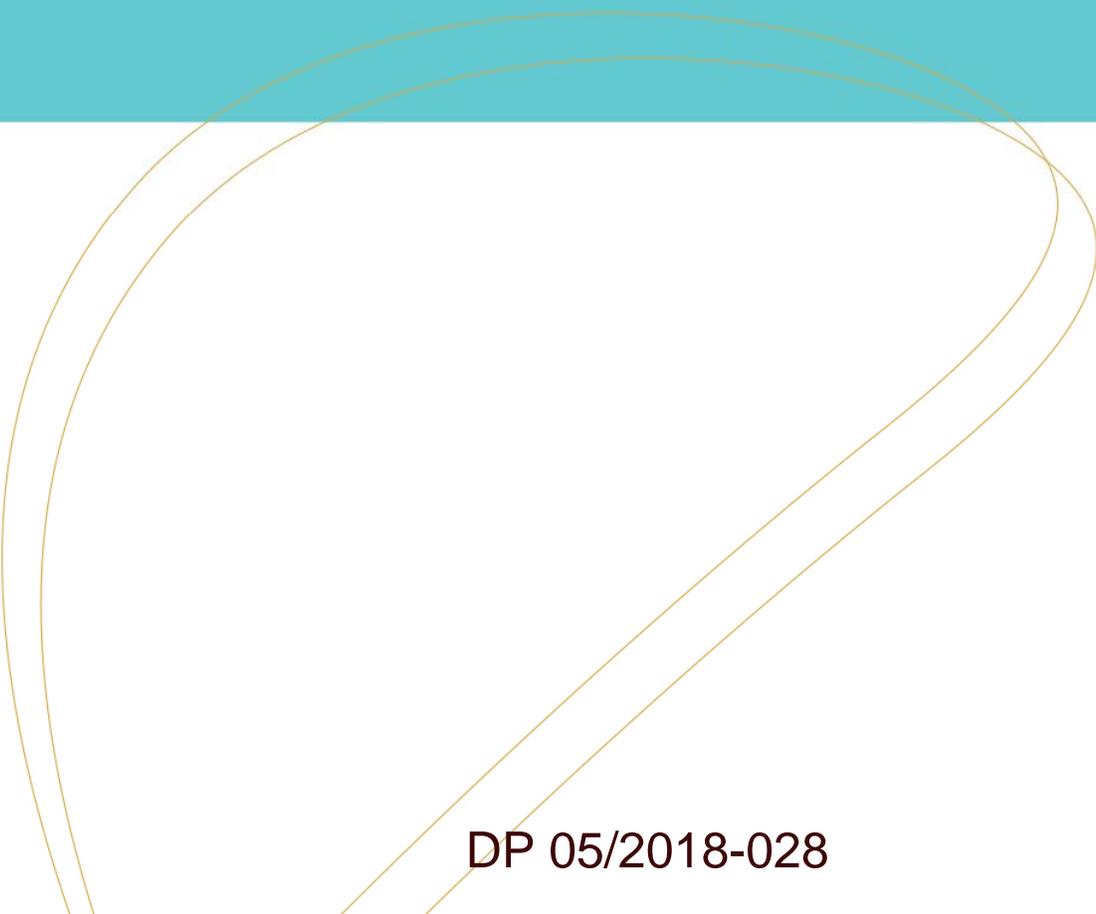
E-mail address:

pure@knaw.nl

Self-employment among older individuals in the Netherlands

Marleen Damman & Hanna van Solinge

NETSPAR ACADEMIC SERIES



DP 05/2018-028

Self-employment among older individuals in the Netherlands

Marleen Damman¹² & Hanna van Solinge¹²

¹Netherlands Interdisciplinary Demographic Institute (NIDI-KNAW), The Hague, The Netherlands

²University Medical Center Groningen (UMCG), University of Groningen, Groningen, The Netherlands

Corresponding author:

Marleen Damman

P.O. Box 11650

NL-2502 AR The Hague

The Netherlands

E-mail address: Damman@nidi.nl

Funding:

This work was supported by the Netherlands Organization for Scientific Research NWO [VICI Grant 453-14-001 to K.H.; VENI Grant 451-17-005 to M.D.] and Netspar.

May 2018

1. Introduction

In the Netherlands, self-employment and entrepreneurship among older age groups (here defined as after state pension age) are rising. On the one hand, this is due to an increase in career self-employed persons and their tendency to work until older ages than employees. On the other hand, this seems to be related to the development – which is not unique for the Netherlands – that employees enter self-employment after their retirement from a wage-and-salary job, as a way to bridge the period between career employment and full-time retirement (Von Bonsdorff, Zhan, Song, & Wang, 2017; Wang, Zhan, Liu, & Shultz, 2008). In order to get a better understanding of senior self-employment in the Netherlands, we will therefore make a distinction between two groups of senior self-employed persons based on their work history: (a) career self-employed individuals who continue their employment activities beyond the state pension age, and (b) career wage-and-salary workers who re-enter the labour market after retirement as being self-employed. These two groups may have different options and motives for continuing / starting work as an entrepreneur after state pension age. More particularly, in this paper we try to find out whether continuing / starting to work in self-employment beyond state pension age is predominantly driven by opportunity, or intrinsic motives, or rather by driven by financial needs and a lack of opportunities in the primary labour market.

After this short introductory section, we will continue with a descriptive paragraph (Section 2), which sketches the senior self-employed in the Netherlands in terms of size and composition. Thereafter, we will look more in depth into the two groups of the senior self-employed. In Section 3, we focus on the career self-employed. In Section 4, we focus on post-retirement self-employment of former wage-and-salary workers. By synthesizing insights from the existing empirical literature on the senior self-employed in the Netherlands and by analysing recent data on postretirement self-employment plans of Dutch older workers, we aim to provide a better understanding of the motives to continue / start self-employment beyond state pension age. To conclude, Section 5 provides a summary and discussion of the existing empirical evidence on senior self-employment in the Netherlands, and describes relevant directions for future research.

2. Senior self-employed in the Netherlands: size and composition

The term self-employment in general refers to “those who own and work in their own business” (OECD, 2017, p.110), and consists of both employers (i.e., the self-employed with employees), and own-account workers (i.e., the self-employed without employees; the “solo” self-employed). In the Netherlands, in particular this latter group of solo self-employed individuals has grown remarkably during the last decade, also in comparison with the growth observed in other EU countries (Kösters, 2017; Kösters & Souren, 2014; see Box 1). Whereas in 2003 about 8 percent of the Dutch working population was solo self-

employed, this percentage increased to 12 percent in the last couple of years (see Figure 1). Also the character of solo self-employment has been changing. Traditionally solo self-employment was the domain of individuals who produce or sell goods / commodities, such as farmers or shopkeepers (Janssen et al., 2015). The ‘new’ solo self-employed rather sell services (they work for instance as a consultant, graphical designer, or in the construction sector, see Kösters, 2009), and generally do not need much financial capital to start their businesses (Mastrogiacomo, 2016).

Among Dutch senior persons the self-employed form an important group on the labour market. About half of the senior working persons are self-employed (see Figure 2). We look here at individuals who are age 65plus, given that age 65 has been the state pension age for decades and the age is still important to define the older age group in existing data sources of Statistics Netherlands¹. In particular the solo self-employed form a large share of the older working population: 43 percent of the working people in the age group 65-75 years were solo self-employed in 2017, and about 6 percent were self-employed with employees. Furthermore, it is worthwhile to mention that the senior self-employed constitute a growing share of the total population of the solo self-employed. In 2003 about 5 percent of all people having solo self-employment as their main job were in the age group 65-75 years. In 2017 this share has increased towards 8 percent (Statistics Netherlands, 2018).

How can the senior solo self-employed – who form such a large share of the older working population – be characterized in terms of their demographic background, and the type of work they do²? Table 1 provides information about the demographic composition of the group of senior solo self-employed and (as a reference) about those who work as employees and about the total group of individuals age 65-75 years. About three out of four older self-employed persons are men. This percentage is, however, fairly similar to the percentage among working employees in this age group. The senior self-employed appear to be relatively highly educated. Whereas in the general population in the age group 65-75 about one out of five individuals is higher educated (21%), in the group of solo self-employed individuals this is about half of the people (48%). This is also a considerably higher percentage than among employees (26%) working in this age range. In terms of partner status, the self-employed do not differ much from the broader population. Furthermore, the share of individuals with a migration background is among the self-employed slightly lower (9%) than among employees and among the general population in this age range (12%).

¹ The age of 65 has been the state pension age in the Netherlands since its introduction in 1957. From 2012 onwards the state pension age has been increasing gradually. In 2018 the state pension age was 66, and it will increase further to age 67 in 2021. After 2021 the Dutch state pension age will be linked to the life expectancy.

² The demographic characteristics of the older solo self-employed are based on data from the Dutch Labour Force Survey (LFS), whereas information about the sector of employment is based on registrations from the Dutch tax authorities. In the Dutch Labour Force Survey the labour force status is determined based on the main job of a person (i.e., the job in which most hours are worked by the respondent). In the tax data, income sources are used to detect solo self-employed individuals.

Table 2 shows the top-three branches in which solo self-employed individuals work, by type of self-employment (main income vs. any income from self-employment) and age group (65plus vs. all ages). Historically, solo self-employment was the area of work of individuals who produce or sell goods/commodities. When looking at individuals aged 65plus for whom their self-employment offers their main source of income, it can be observed that a considerable share of this group is still employed in these traditional industries, such as in the agricultural (19%) or retail (17%) industries. When looking at the older self-employed who have any income as self-employed person – so also including older persons who earn some income in addition to their pension – a different picture arises. In this broader group of senior entrepreneurs, specialized business services (19%) and health and social work activities (14%), are the main branches of employment, both reflecting ‘new’ forms of self-employment, in which services are provided. Also when looking at the solo self-employed of all ages, specialized business services is the largest branch.

3. Work and retirement behaviour of career self-employed individuals

This section focuses on retirement and retirement-related behaviours of career self-employed persons. We explore to what extent the self-employed have different retirement trajectories than wage-employed older workers. Are the self-employed more likely to continue working beyond the state pension age? And if they prolong their employment, what can we say about potential underlying motives? Entrepreneurship in the general population is supposed to be frequently driven by pull or opportunity dynamics (Blanchflower, 2000). As such, the self-employed are likely to enjoy their work and to be highly committed to their company, which may drive them to continue working in old age. While Dutch wage-and-salary workers are often bounded by organizational policies about work hours and mandatory retirement ages, the self-employed are more flexible in the way they shape their late careers and retirement (Hochguertel, 2015). The self-employed therefore may have more opportunities to continue working until older ages, and to shape their work week in the way they prefer (e.g., retiring stepwise by gradually reducing working hours).

However, also necessity drivers may play a role in the continuation of work until older ages, which is related to the unique position of the self-employed in the Dutch pension system. In the Netherlands, the large majority of wage-and-salary workers are automatically covered by ‘quasi-mandatory’ second pillar employer-sponsored pensions (OECD, 2015; see Box 2). In contrast, the self-employed carry the full responsibility to prepare for their own supplementary pensions. Self-employed individuals are assumed to be ‘entrepreneurial individuals’ who have the forward-looking abilities, knowledge, and financial capital to adequately prepare for old age (Dekker, 2010; Mastrogiacomo, 2016). They need to decide themselves whether, how, and how much they will save for their old age. Self-

employed individuals with no or few additional pension savings, may therefore feel forced to continue working beyond state pension age.

Empirical insights regarding retirement plans and behaviours – including continued work beyond the state pension age – of the self-employed are relatively scarce. The existing studies that do examine these late-career work and retirement processes of the self-employed are generally based on countries with highly different labour market and institutional structures than the Netherlands, such as the United States (e.g., Devaney & Kim, 2003; Ekerdt, DeViney, & Koloski, 1996; Ekerdt, Hackney, Kosloski, & DeViney, 2001) and Britain (e.g., Parker & Rougier, 2007). In the first part of this section we will focus on the retirement trajectories of the self-employed and its potential drivers, by integrating insights from a few existing empirical studies containing information about retirement transitions of the Dutch self-employed (see 3.1). In the second part of this section, we will synthesize existing literature on retirement preparation of younger cohorts of Dutch self-employed individuals (see 3.2). This provides information about the potential financial necessity to work in self-employment beyond state pension age of future cohorts of older adults.

3.1 Employment and retirement of the older self-employed

With regard to retirement trajectories of the Dutch self-employed and its potential drivers, empirical insights are still relatively limited. This is related to the fact that there is not so much data available about the late career work trajectories of self-employed individuals in the Netherlands. One important data source on retirement trajectories – which includes data from the Netherlands – is the Survey of Health, Ageing, and Retirement in Europe (SHARE). Based on SHARE data collected in 2004 and 2006/7, Hochguertel (2015) made a comprehensive start to address the knowledge gap on late-career labour market behaviour and retirement transitions of the self-employed. He examined late-career work hours, retirement aspirations, and retirement behaviour among male household heads of age 50-75 years in 11 OECD countries (including the Netherlands), and thereby paid detailed attention to differences between the self-employed and wage-and-salary workers.

The central conclusion of Hochguertel's (2015) study is that "self-employment at older working ages offers substantial flexibility in many regards" (p.252). Across the studied countries, the self-employed appeared to work on average considerably more hours per week than employees, and the work hours of the self-employed showed a much larger variation than among employees (for whom a large spike around 36-40 hours is observed). Furthermore, self-employed older individuals were less likely than employees to indicate that they want to retire as early as they can, even when taking many work-related factors into account. With regard to retirement behaviour, a similar conclusion was drawn: the self-

employed were considerably less likely to retire during the two-year study period than wage-and-salary workers, even when controlling for age, demographic factors, health, and financial characteristics.

Also when specifically looking at findings for the Netherlands, the general conclusion holds that the self-employed retire later than wage-and-salary workers. Hochguertel's descriptive findings on work hours and retirement transitions based on SHARE data for the Netherlands show that the older Dutch self-employed work on average more hours and retire later than wage-and-salary workers (Hochguertel, 2015, p.219 and p.226). The findings of a recent study by Visser and colleagues (2016) using data from the male participants of the Family Survey Dutch Population (years 1998, 2000, 2003, and 2009) point in a similar direction. They showed that career trajectories characterized by self-employment – as compared to full-time work histories in wage employment – decreased the likelihood of retiring early. The authors speculate about two potential mechanisms that may drive these differences between the self-employed and wage-workers. On the one hand, these findings may indicate that strong attachment to the company keeps these older individuals in employment until older ages (i.e., opportunity driven prolonged employment). On the other hand, the necessity to work due to a shortage of retirement savings may be another mechanism driving prolonged employment (Visser et al., 2016).

With regard to the question whether the prolonged employment of the self-employed is rather opportunity or necessity driven, the analyses conducted by Geijtenbeek and colleagues (2012) based on data from the social statistical datasets of Statistics Netherlands provide some insights. The authors compared the labour market position, income, and wealth of Dutch individuals who were age 67 in 2008 and who worked either in self-employment or in wage-and-salary employment in 1999 and/or 2003. The findings showed that at age 67 almost half of the studied self-employed individuals – about 46 percent – still was engaged in paid work. This share was much higher than among wage-and-salary workers (i.e., 13 percent). Even though the self-employed were less likely than employees to receive pension income in addition to the basic state pension (AOW), they had much more wealth than (former) employees, which compensated their limited pension income. Consequently, most (former) self-employed people appeared to be in a comparable financial position at the age of 67 as the (former) employees. Moreover, the self-employed who remained active on the labour market earned on average more in 1999/2003 than those who stopped working, which suggests that the more successful self-employed individuals are relatively more inclined to continue working beyond the state pension age (Geijtenbeek et al., 2012).

These research findings seem to suggest many self-employed individuals do not continue working beyond state pension age out of financial necessity. They may therefore continue because they run successful businesses and most likely enjoy the work they do (but for instance also succession-related difficulties may play a role). We need to be cautious with drawing these conclusions though, not only because the empirical base is still small, but also given that the cited studies are based on data collected a

decade ago. As recently noted by policy makers and researchers (e.g., Josten, Vlasblom, & Vrooman, 2014; Mastrogiacomo, 2016; SZW, 2013), the wealth situation of the cohort of older self-employed individuals as studied by Geijtenbeek and colleagues is not representative for the situation of the current younger cohorts of self-employed individuals. As compared to these older cohorts, the current self-employed individuals require less capital to start a business, and are much more diverse in character (including a considerable share of forced self-employed individuals). The following paragraph therefore focuses on the pension acquisition of the younger cohorts of (solo) self-employed individuals in the Netherlands, who are still in the retirement preparation phase. This may provide an indication of the financial necessity to work beyond retirement age in the future.

3.2 Retirement preparation of younger cohorts of self-employed individuals

With the growth of the group of solo self-employed individuals, the self-employment population is becoming increasingly diverse. Traditionally self-employment was the domain of persons selling goods / commodities. Nowadays, the 'new' solo self-employed rather sell services. The solo self-employed differ widely in educational level, and generally do not need much financial capital to start their businesses. Furthermore, solo self-employment is not necessarily a life-time position, can be combined with wage- and salary employment, and can be 'opportunity driven' or 'necessity driven'. Entry into self-employment may offer a way for individuals with a disadvantaged position on the labour market to remain employed (Been & Knoef, 2015). This diversification of the self-employed group, raises the question whether the younger cohorts of self-employed individuals will also be sufficiently well-off financially after reaching the retirement age in the future. How well are the younger cohorts of (solo) self-employed individuals financially prepared for their old age?

By providing insights regarding pension ambitions and pension savings of the Dutch self-employed Mastrogiacomo (2016) provided insights in this understudied topic. His research suggests that pension ambitions do not differ much between the self-employed and employees, but that the self-employed do not take sufficient measures to realize their ambitions (Mastrogiacomo, 2016). As expected, the self-employed accumulated less pension rights in the second pillar than employees (Mastrogiacomo, Li, & Dillingh, 2015). In the third pillar, however, the self-employed do not seem to compensate this. About a third of both self-employed and wage-employed individuals appear to have individual pension products, suggesting that a majority of the self-employed do not have third pillar savings. However, the self-employed who have third pillar pension products, save on average more than employees who have these types of products (Mastrogiacomo & Alessie, 2014), highlighting the large heterogeneity in terms of pension situation within the group of self-employed persons.

This large variation is also mentioned in recent studies by Zwinkels and colleagues (Zwinkels, Knoef, Been, Caminada, & Goudswaard, 2017a; 2017b), specifically focusing on the self-employed without personnel. Based on large-scale income, wealth, and pension data of Statistics Netherlands, these economists estimated wealth accumulation of both Dutch solo self-employed persons and employees. The estimations show that the solo self-employed acquire more frequently than employees a replacement rate below 70 percent of the gross household income (which is commonly considered as an adequate pension). About 43 percent of the households consisting of solo self-employed individuals does not reach this 70 percent level, as compared to 31 percent of employee households. In particular in the higher income groups the replacement rates are relatively low for the solo self-employed. In the lowest income group the differences between the solo self-employed and employees are small, because for these groups the public basic old age pension is already sufficient to reach the 70 percent replacement level. The solo self-employed also appear to be much more dependent upon fourth pillar sources (see Box 2) than employees, such as general savings and wealth accumulated by home ownership. These types of income sources do, however, not cover the longevity risk (Zwinkels et al., 2017a; Zwinkels et al., 2017b).

When looking at perceptions of the solo self-employed themselves about their financial situation after retirement, a comparable picture emerges. Results of a recent study among the solo self-employed in the Netherlands show that 30 percent of the solo self-employed think that their pension savings and other income sources are not sufficient to live comfortably after retirement. About 38 percent think they acquire sufficient sources, and the remaining 32 percent form the middle group (Conen, Schippers, & Schulze Buschoff, 2016). These expectations appear to be clearly related to the pathway into self-employment; i.e., whether becoming solo self-employed was a voluntary decision resulting ‘out of opportunity’ or a forced transition resulting ‘out of necessity’ (Hershey et al., 2017). The voluntary self-employed persons reported more retirement savings adequacy as compared to the forced group (which consisted of about 20 percent of the Dutch solo self-employed respondents). Also when taking other relevant socio-demographic factors (e.g., household income, supplementary pension rights) and psychological characteristics (e.g., financial knowledge, future time perspective) into account, the effect of self-employment voluntariness on retirement savings adequacy remained statistically significant.

All in all, the current older cohorts of (former) self-employed individuals seem to be sufficiently financially prepared to live a comfortable life in old age. Their financial situation in old age when taking wealth into account does not differ much from employees. For the younger generations of solo self-employed individuals – who are the older individuals of the future – the empirical findings suggest that many of them are not sufficiently financially prepared for old age. For the self-employed it is assumed that they are ‘entrepreneurial individuals’ who have financial knowledge, planning skills, ability to take action, and the capability to refrain from immediate consumption. However, given the heterogeneity in

the group of solo self-employed workers, not only including successful entrepreneurs but increasingly also more marginalized workers, for a substantial share of the solo self-employed population these assumptions may not hold. Factors such as inertia, procrastination, complexity of decisions to be made, and social norms may all be underlying causes of insufficient retirement savings (Mastrogiacomo, Dillingh, & Bangma, 2014). Making pension plan contributions mandatory, is a frequently suggested way to deal with these behaviours. However, survey research shows that many self-employed persons would not be in favour of that policy option, given that this is not in line with their entrepreneurial spirit and decision-making agency (Van Dalen, Henkens, Conen, & Schippers, 2015). In the future, it may thus be the case that more career self-employed persons need to continue working until older ages out of financial necessity.

4. Entry into self-employment after retirement from a wage-and-salary career job

This section considers the factors associated with planned and actual engagement in self-employment among older adults in the Netherlands after their retirement from a wage-and-salary job. Several authors (e.g., Baucus & Human, 1994; Singh & DeNoble, 2003) have argued that self-employment decisions are affected by different factors at different stages in the individual's life course and that the dominant models explaining transitions into self-employment in the general population of working age may not apply to self-employment transitions at older ages. More specifically, it has been suggested that self-employment entry at older ages is often driven by necessity (e.g., the lack of employment opportunities in the primary labour market) and that self-employment is often a last choice option, and thus frequently involuntary (Kautonen, Palmroos, & Vainio, 2009). This in contrast to entrepreneurship in the general population that is supposed to be predominantly driven by pull or opportunity dynamics (Blanchflower, 2000). The guiding question in this section is whether post-retirement transitions into self-employment can be considered as arising out of opportunity or rather necessity.

In the remaining part of this section (see 4.1), we will first present a summary of the results of a study on post-retirement self-employment conducted between 2001 and 2011 (Van Solinge, 2014). The Dutch retirement context is, however, changing very rapidly. Early retirement routes have been blocked and the state pension age is rising gradually. These reforms have taken place within a macroeconomic context of increasing job and pension insecurity. Higher retirement ages and reduced pension security may affect older adults decisions on as well as their motives for post-retirement work engagement. As a result, future cohorts may face very different opportunities and constraints in their late careers. A relevant question is therefore whether future older adults will be involved in post-retirement self-employment to the same extent as in previous periods. And if so, will they primarily continue to work for enjoyment reasons (out of opportunity), which may reflect a voluntary decision, or feel forced to work for financial

reasons (and thus may work out of necessity). In order to explore this, in a second paragraph (see 4.2), we will present the results of a more recent study among older workers. Rather than actual engagement in post-retirement self-employment, this study focuses on planned engagement.

4.1 Who opts for self-employment after retirement? Results from a 10-year follow up (2001-2011)

In this section, we take a closer look at post-retirement work arrangements of wage-and salary workers based on data from the NIDI Work and Retirement Panel (NWRP; 2001-2011). This is a multi-actor panel study, where older workers and their spouses have been followed for a period of ten years. The first wave of this longitudinal study was carried out in 2001 (follow-ups in 2006 and 2011). In three large Dutch multinational companies in the private sector (Unilever, IBM, VendexKBB), and in the public sector (Civil service), data were collected in collaboration with the Human Resource Management departments. Baseline age in the NWRP ranged from 50 to 64 (mean age: 54.0). A large majority (85%) of the participants that could be followed in all study waves retired (average age at retirement: 59.2). Of the 1,304 older adults that retired from their career job in the period 2001-2011, 70 percent took full-retirement after leaving the career job, whereas 30 percent engaged in some form of post-retirement employment. Approximately one third of the latter group became self-employed.

A comparison of those engaged in post-retirement employment (any form) with those who opted for full retirement reveals that bridge employees were more likely to be men, better educated and have higher levels of psychological work attachment than full retirees. Further, compared with full retirees, bridge employees also retired at younger ages and had significantly better perceived labour market opportunities in preretirement years. No significant differences were found with regard to the voluntariness of the retirement transition, however.

A comparison of the post-retirement self-employed with post-retirement employees in wage jobs reveals that the self-employed significantly differ from wage earners on several characteristics. The study reveals that self-employment is more common among higher educated persons and people with more accumulated wealth. The self-employed also differ from the wage-employed in terms of psychological variables: they have higher scores on self-efficacy (Van Solinge, 2014). For the majority of self-employed retirees the post-retirement job is a continuation of the career job: 65 per cent has more or less the same work as during the career job (only 39 percent of wage-employed retirees). The self-employed thus seem to profit much more from their career skills and competences. This may be one of the reasons that demotion is less common among the self-employed: more than half earn (on an hourly basis) more or less the same, or even more than in the career job. This in contrast to the wage-employed, 70 per cent of which earn less than in the career job (for more information: Van Solinge, 2015)

All in all, these findings suggest that the self-employment option was primarily chosen by retirees who were more privileged in terms of financial (wealth) and human capital (education) as well as those who possessed more entrepreneurial attitudes (self-efficacy). This suggests that in the Netherlands in the period under study (2000-2011), the decision to engage in self-employment after retirement was predominantly driven by opportunity, or intrinsic motives. As such, the results did not support the necessity hypothesis put forward in the literature with regard to self-employment transitions at older ages (Block & Wagner, 2010; Kautonen, Palmroos, & Vainio, 2009).

4.2 Who has plans for engagement in self-employment after retirement (2015)?

The Dutch retirement landscape has changed a lot in the past 10-15 years. Probably one of the bigger and more fundamental changes is the rise of the pension eligibility age. The fact that this reform came quickly after the closing of early retirement opportunities urged the cohorts born in 1950 and later to adjust their retirement outlooks rapidly. In practice, these cohorts had to extend their working lives with a number of years. This may have an impact on their plans and motivation to be involved in post-retirement work. More recent Dutch data – the NIDI Pension Panel (NPPS; 2015) – on particularly this cohort of older workers, may shed light on this issue. The NIDI Pension Panel is a prospective cohort study among 6,800 wage-employed older workers (60-65 at baseline) enrolled in three of the bigger Pension Funds in the Netherlands. The funds represent the following sectors: Civil Servants, Education, Care, Welfare and Construction. The data for the first wave of this panel have been collected in 2015. Given that all respondents were still working in a wage job in this first wave, we focus on plans for engagement in self-employment after retirement.

The cohort under study is the first that has to deal with a retirement age that is much higher than before. The participants in this study, on average expect to retire at age 65.8 (SD = 1.5). This is already considerably higher than the previously fixed state pension age of 65, and much higher than the average effective retirement age of around 60 for previous cohorts (CBS, 2016) and the average retirement age in the panel described in section 4.1 (59.1 year on average).

Given this higher state pension age, it is remarkable that still one third of the participants (i.e., 33 percent) has plans to continue working after retirement. About 16 percent has plans to work in self-employed after retirement. Four in every 100 participants has concrete plans for post-retirement self-employment, and for the other 12 percent the plans are still vague (see Table 3). Twenty percent of these older adults with plans for post-retirement self-employment has experiences with self-employment earlier in the life course. Although intentions and plans predict actual retirement behaviour, there may be large discrepancies between the two (Henkens & Tazelaar, 1997). Follow-up data will reveal how many of these older adults will actually start as an entrepreneur after retirement.

An interesting question is to what extent older adults who plan to be engaged in post-retirement work in general differ in terms of antecedents from those who do not have plans to continue working, and to what extent those who consider self-employment differ from those who consider wage-employment. A comparison of older adults who consider post-retirement employment (any form) with those who opt for full retirement reveals that the first were more likely to be men, better educated, healthier and have higher levels of psychological work attachment than those who opt for full retirement. This is consistent with results from the earlier Dutch panel (section 4.1).

A comparison of people with self-employment plans with those with wage-employment plans reveals that the self-employed significantly differ from those with wage-employment plans on several characteristics (Table 4). Consistent with the findings in the previous study (section 4.1), this study reveals that self-employment plans are more common among higher educated persons. The self-employed also differ from individuals with wage-employment plans in terms of psychological variables: they have higher scores on self-efficacy. However, in contrast to the findings in the earlier study, we did not find strong evidence of a more privileged financial position in terms of accumulated wealth of those with self-employment plans (i.e., the wealth pattern is much less pronounced than in the previous study). Moreover, we found that a perceived pension shortage was more common among those with self-employment plans, than among the other groups.

In summary, the proportion of older workers that has plans for post-retirement work engagement (33%) in the 2015 NIDI Pension Panel is more or less equal to the proportion actually engaged in post-retirement work in the earlier 2001-2011 panel. Although the 2015 data refer to plans rather than actual behaviour, this is somewhat surprising given the large increase in retirement age since then. On the one hand, one may expect that post-retirement work becomes less attractive as the retirement age increases. On the other hand, a growing pension insecurity may trigger post-retirement working plans. As a result post-retirement work, self-employment in particular, may increasingly be done out of necessity.

Indeed, the findings of the 2015 study suggest that in the current retirement context in the Netherlands, financial reasons may play a larger role in the decision to keep on working after retirement than in the previous years. Consequently, the finding in the previous study that engagement in self-employment after retirement in the Netherlands is predominantly driven by opportunity, or intrinsic motives needs to be nuanced. The fact that older employees with self-employment plans are more likely to have a pension shortage, suggest that they have a more insecure labour market and retirement position. As a result the self-employment transition after retirement from the career job, may nowadays thus be more driven by financial needs than in the past. Instead of looking for a bridge job in wage-employment, these older adults may use their human capital (education and psychological resources) to work for profit in self-employment.

5. Conclusions and directions for future research

In this paper, we studied senior self-employment – defined as working in self-employment beyond state pension age – in the Netherlands. In order to get a better understanding of the driving forces behind senior self-employment, we made a distinction between two groups of self-employed persons based on their work history: (a) career self-employed individuals who continue working beyond state pension age, and (b) career wage-and-salary workers who re-enter the labour market after retirement as being self-employed. By integrating insights from the existing empirical literature and by analysing new Dutch data on postretirement self-employment plans, we aimed to answer the question whether or not these groups have different options and motives for continuing / starting work as an entrepreneur after state pension age. More specifically, we tried to find out whether continuing / starting to work in self-employment after state pension age is predominantly driven by opportunity, or intrinsic motives, or rather by driven by financial needs and a lack of opportunities in the primary labour market.

Even though the Dutch data and literature on this topic are still scarce and fragmented, the existing empirical evidence seems to suggest that for both groups of senior entrepreneurs – both continuers and starters – prolonged employment was in the recent past predominantly driven by opportunity. The career self-employed appear to retire later than wage-and-salary workers and for recent cohorts, this did not seem to be primarily due to financial necessity to prolong working lives. Also postretirement self-employment after a career in wage-employment seemed – until recently – mainly be driven by non-financial motives. However, times are changing. In a context of major pension reforms, growing pension insecurity, and a diversification of the group of self-employed individuals, working beyond state pension age seems increasingly to be driven by the financial necessity to work. Our analyses of Dutch data suggest that among career wage-employed workers, the impact of financial factors on post-retirement self-employment is changing over time. With regard to the future financial situation in old age of the current cohorts of younger career self-employed individuals, the findings highlight limited pension savings, which may result in more financial necessity of prolonged employment.

Despite the growing body of literature on senior self-employment, studies are predominantly explorative. There is scant theoretical work on the judgemental processes underlying late-careers and retirement decision-making of senior entrepreneurs. In particular our understanding of prolonged employment and retirement processes of the career self-employed is still highly limited. This is also reflected in the current paper: our conclusions on opportunity vs. necessity motives for the career self-employed are derived rather indirectly (i.e., based on one study that compares their financial situation with the situation of (former) employees). Examining the late careers and retirement processes of the career self-employed more in depth by means of survey research or qualitative studies would therefore be

a valuable avenue for the future. In the next paragraphs we propose a few potentially relevant areas that can be covered in such future studies, either among the career self-employed or those who start self-employment after retirement.

First, it seems relevant to pay attention to the large heterogeneity within the group of senior self-employed individuals. The group is highly diverse in terms of *work history* (history in wage employment / hybrid entrepreneurs), *motives* for starting self-employment, and *sector* (e.g., the two largest sectors among solo self-employed persons – specialized business services and construction – differ a lot in terms of potential to physically continue the work until high ages). This heterogeneity may have consequences in terms of agency in the retirement process, that is, the extent to which various sub-groups are able to design their retirement in accordance with their work-retirement preferences. Moreover, self-employment at older ages appears to be a predominantly male experience. It would be interesting to compare male and female workers who are self-employed. They may differ in terms of antecedent profiles and may have opted for self-employment for different reasons.

Second, late career employment decision making does not take place in a vacuum. Work-retirement transitions are shaped by social relationships within the family and society. In general studies on decision making on retirement, this social embeddedness has been acknowledged (see Feldman & Beehr, 2011, for an overview). Studies on retirement behaviour of self-employed individuals, have paid only limited attention to the household context in which these decisions are made. With the growing labor force participation of women, retirement will increasingly be experienced by both partners. In order to understand work-retirement choices of senior self-employed persons, the partner's pension entitlements as well as household wealth may be relevant factors.

Third, in the literature on the self-employed, much attention is paid to the motivations for starting a business, which may be either opportunity or necessity driven (Hershey et al., 2017; Kösters & Smits, 2017). Little is known, however, about subjective motivations for continuing a business beyond state pension age (opportunity or necessity driven) and its antecedents. It therefore, seems particularly relevant to pay attention to voluntariness. Future work should supply more empirical evidence on whether late career transitions are voluntary and respond to opportunities or advantages, or whether they are involuntary and driven by a lack of alternative employment possibilities or insufficient accumulation of retirement resources. For the self-employed with employees, it would in this respect also be relevant to examine succession-related questions around retirement.

Last, the increasing dynamic character of the retirement transition (people may gradually retire, or opt for self-employment before complete withdrawal from the labour force) and adjustment to retirement, requires longitudinal data that follow a group of late career older adults over time. Although longitudinal surveys on retirement are gradually more available, most research on retirement choices of

self-employed individuals is still founded on cross-sectional data. Longitudinal studies will improve our understanding of the retirement transitions of the self-employed and its predictors. Relevant questions are, for instance, whether the self-employed – as compared to wage-and-salary workers – show more gradual exit pathways, differ in their likelihood to realize their retirement plans, and are different in their ease of adjustment to retirement.

The topics of pensions, prolonged employment, and retirement of the self-employed has received much attention in the public and policy debates in the Netherlands during the last years. Given the increasing flexibility on the labour market, the unique position of the self-employed in the Dutch pension system, and more general discussions about pension system reforms, the retirement preparation and retirement transitions of the self-employed are often debated. The current paper suggests that in the future, it may become more common that individuals work in self-employment beyond state pension age, because of the financial necessity to work. An important societal question therefore is whether policies regarding pension acquisition of the self-employed should be changed, to accommodate the fact that many solo self-employed individuals do not save much for their retirement. Political parties, as well as employers organizations and labour unions, differ however widely in their opinions about how to tackle this issue.

References

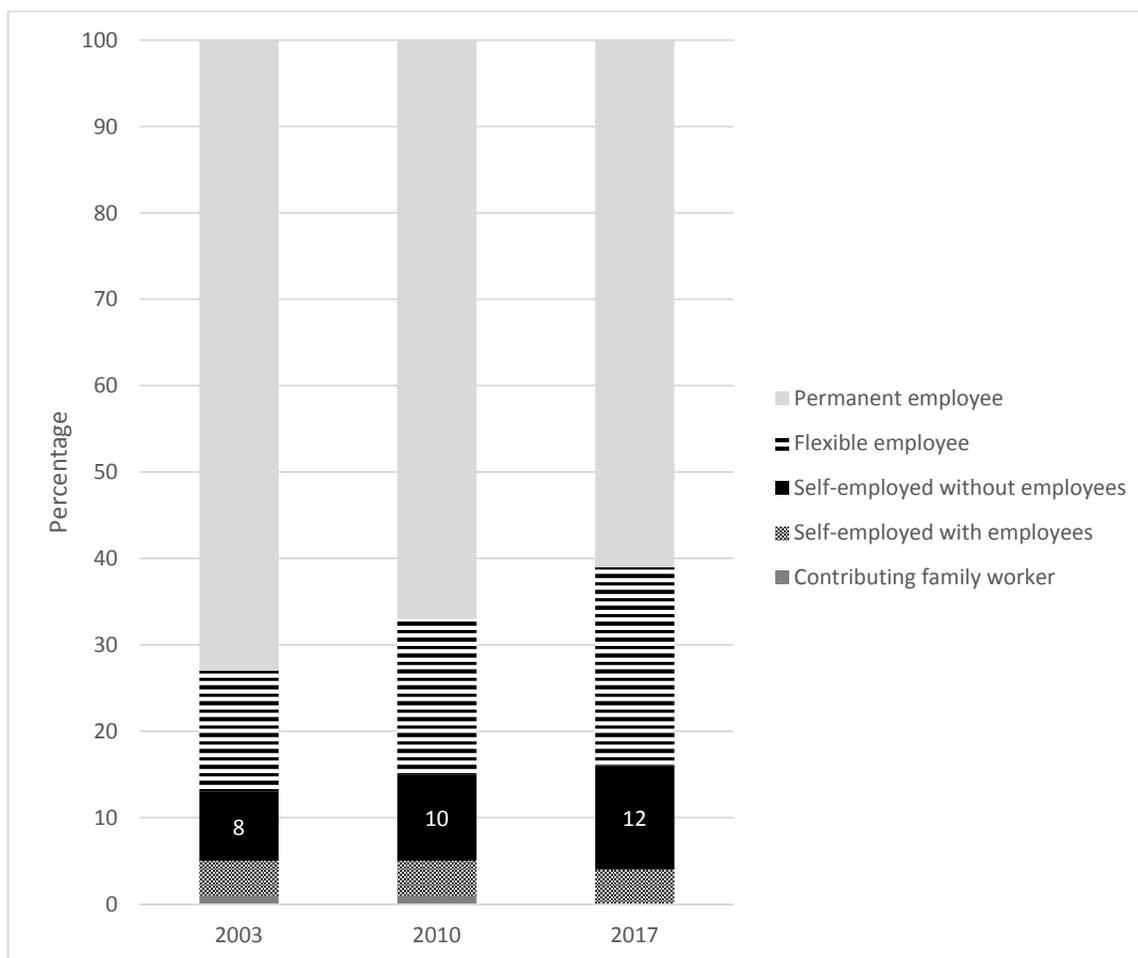
- Baucus, A.D., & Human, S., E. (1994). Second career entrepreneurs: A multiple case study analysis of entrepreneurial processes and antecedent variables. *Entrepreneurship Theory and Practice*, 19(2), 41-71.
- Been, J., & Knoef, M. (2015). The necessity of self-employment towards retirement: Evidence from labor market dynamics and search requirements for unemployment benefits (dp 04/2015-009). Tilburg: Netspar.
- Blanchflower, D.G. (2000). Self-employment in oecd countries. *Labour economics*, 7(5), 471-505.
- Block, J., & Wagner, M. (2010). Necessity and opportunity entrepreneurs in germany: Characteristics and earnings differentials. *Schmalenbach Business Review*, 62(2), 154-174.
- CBS. (2016). Pensioenleeftijd voor negende jaar omhoog. Retrieved from www.cbs.nl website: <https://www.cbs.nl/nl-nl/nieuws/2016/09/pensioenleeftijd-voor-negende-jaar-omhoog>
- Centraal Bureau voor de Statistiek. (2018). Zelfstandigen; inkomen, vermogen, kenmerken [self-employed; income, wealth, characteristics]. Retrieved March 19, 2018, from <https://opendata.cbs.nl/statline/>
- Conen, W., Schippers, J., & Schulze Buschoff, K. (2016). *Self-employed without personnel. Between freedom and insecurity*. Düsseldorf: WSI der Hans-Böckler-Stiftung.
- Dekker, F. (2010). Self-employed without employees: Managing risks in modern capitalism. *Politics & Policy*, 38(4), 765-788. doi: 10.1111/j.1747-1346.2010.00257.x
- Devaney, S.A., & Kim, H. (2003). Older self-employed workers and planning for the future. *Journal of Consumer Affairs*, 37(1), 123-142. doi: 10.1111/j.1745-6606.2003.tb00443.x
- Ekerdt, D.J., DeViney, S., & Koloski, K. (1996). Profiling plans for retirement. *Journal of Gerontology: Social Sciences*, 51B, S140-S149. doi: 10.1093/geronb/51B.3.S140
- Ekerdt, D.J., Hackney, J., Kosloski, K., & DeViney, S. (2001). Eddies in the stream: The prevalence of uncertain plans for retirement. *Journal of Gerontology: Social Sciences*, 56B(3), S162-S170. doi: 10.1093/geronb/56.3.S162
- Feldman, D.C., & Beehr, T.A. (2011). A three-phase model of retirement. *American Psychologist*, 66(3), 193-203. doi: 10.1037/a0022153
- Geijtenbeek, L., De Rijk, A., & Rienstra, M. (2012). Inkomen en vermogen op de oude dag. Voormalige werknemers en zelfstandigen vergeleken [income and wealth in old age. Comparison of former employees and self-employed people]. Den Haag/Heerlen: Statistics Netherlands.
- Government of the Netherlands. (2015). *Ibo zelfstandigen zonder personeel*. The Hague: Ministry of Finance.

- Government of the Netherlands. (2018). Hoe regel ik mijn pensioen als zzp'er? [how do i arrange my pension as a solo self-employed person?]. Retrieved March 22, 2018, from <https://www.rijksoverheid.nl/onderwerpen/zelfstandigen-zonder-personeel-zzp/vraag-en-antwoord/zzp-pensioen>
- Hatfield, I. (2015). Self-employment in europe. London: Institute for Public Policy Research.
- Henkens, K., & Tazelaar, F. (1997). Explaining retirement decisions of civil servants in the netherlands. *Research on Aging, 19*, 139-173. doi: 10.1177/0164027597192001
- Hershey, D.A., Van Dalen, H.P., Conen, W., & Henkens, K. (2017). Are 'voluntary' self-employed better prepared for retirement than 'forced' self-employed? *Work, Aging and Retirement 3*(3), 243–256. doi: 10.1093/workar/wax008
- Hochguertel, S. (2015). Self-employment around retirement age. In N. Sappleton & F. Lourenco (Eds.), *Entrepreneurship, self-employment and retirement* (pp. 209-258). New York: Palgrave Macmillan.
- Janssen, B.J.M., Van der Torre, W., De Vroome, E.M.M., Mol, M., Janssen, B., & Van den Bossche, S.N.J. (2015). *Zelfstandigen enquête arbeid 2015 [self-employed labour survey 2015]*. The Hague: Statistics Netherlands.
- Josten, E., Vlasblom, J.D., & Vrooman, C. (2014). Bevrijd of beklemd? Werk, inhuur, inkomen en welbevinden van zzp'ers [liberated or oppressed? Work, hiring, income and well-being of the solo self-employed]. The Hague: Netherlands Institute for Social Research (SCP).
- Kautonen, T., Palmroos, J., & Vainio, P. (2009). 'Involuntary self-employment' in finland: A bleak future? *International Journal of Public Policy, 4*(6), 533-548.
- Kösters, L. (2009). Sterke groei zelfstandigen zonder personeel [strong increase of solo self-employment]. *Sociaaleconomische Trends, 3e kwartaal*, 7-10.
- Kösters, L. (2017). Nederlandse wet- en regelgeving rondom zzp'ers in internationaal perspectief [dutch legislation and regulations concerning the solo self-employed in an international perspective]. *Tijdschrift voor Arbeidsvraagstukken, 33*(3), 303-319.
- Kösters, L., & Smits, W. (2017). Zelfstandig of toch niet? [self-employed or not?]. *Tijdschrift voor Arbeidsvraagstukken, 33*(3), 360-369.
- Kösters, L., & Souren, M. (2014). De toename van zzp'ers in europees perspectief [the increase of solo self-employment in a european perspective]. *Economisch-statistische berichten (ESB), 99*, 247-249.
- Mastrogiacomo, M. (2016). De pensioenpuzzel van zelfstandigen. Zelfstandigen maken pensioenambities niet waar [the retirement puzzle of the self-employed. Self-employed do not realize their retirement ambitions] (netspar brief 7). Tilburg: Netspar.

- Mastrogiacomo, M., & Alessie, R. (2014). Where are the retirement savings of self-employed? An analysis of 'unconventional' retirement accounts (dp 12/2014-058). Tilburg: Netspar.
- Mastrogiacomo, M., Dillingh, R., & Bangma, K. (2014). Een pensioenregeling voor zelfstandigen: De voor- en nadelen van een opt-in [a pension scheme for the self-employed: The advantages and disadvantages of an opt-in], nea paper 57. Tilburg: Netspar.
- Mastrogiacomo, M., Li, Y., & Dillingh, R. (2015). Entrepreneurs without wealth? An overview of their portfolio using different data sources for the netherlands (netspar design paper 37). Tilburg: Netspar
- OECD. (2015). *Pensions at a glance 2015. Oecd and g20 indicators*. Paris: Organisation of Economic Co-operation and Development.
- OECD. (2017). *Entrepreneurship at a glance 2017*. Paris: OECD Publishing.
- Parker, S.C., & Rougier, J.C. (2007). The retirement behaviour of the self-employed in britain. *Applied Economics*, 39(6), 697-713. doi: 10.1080/00036840500447807
- Singh, G., & DeNoble, A. (2003). Early retirees as the next generation of entrepreneurs. *Entrepreneurship Theory and Practice*, 27(3), 207-226.
- Statistics Netherlands. (2018). Arbeidsdeelname; kerncijfers [labor participation; key figures]. Retrieved March 15, 2018, from <https://opendata.cbs.nl/statline/>
- SZW. (2013). Pensioen van zelfstandigen. Onderzoek naar de oorzaken van beperkte pensioenopbouw van zelfstandigen en mogelijke oplossingsrichtingen hiervoor [pensions of the self-employed. Study on causes of the limited pension acquisition of the self-employed and potential solutions]. The Hague: Ministry of Social Affairs and Employment.
- Van Dalen, H.P., Henkens, K., Conen, W., & Schippers, J. (2015). Weinig behoefte aan collectieve pensioenregeling voor zzp'ers. *Economisch Statistische Berichten*, 100, 468-470.
- Van Solinge, H. (2014). Who opts for self-employment after retirement? A longitudinal study in the netherlands. *European Journal of Ageing*, 11(3), 261-272
- Van Solinge, H. (2015). Becoming an entrepreneur after retirement: Results from a longitudinal study in the netherlands. In N. Sappleton & F. Lourenco (Eds.), *Entrepreneurship, self-employment and retirement* (pp. 90-111). London: Palgrave Macmillan.
- Visser, M., Gesthuizen, M., Kraaykamp, G., & Wolbers, M.H.J. (2016). Inequality among older workers in the netherlands: A life course and social stratification perspective on early retirement. *European Sociological Review*, 32(3), 370-382. doi: 10.1093/esr/jcw013
- Von Bonsdorff, M., Zhan, Song, & Wang, M. (2017). Examining bridge employment from a self-employment perspective – evidence from the health and retirement study. *Work, Aging and Retirement*.

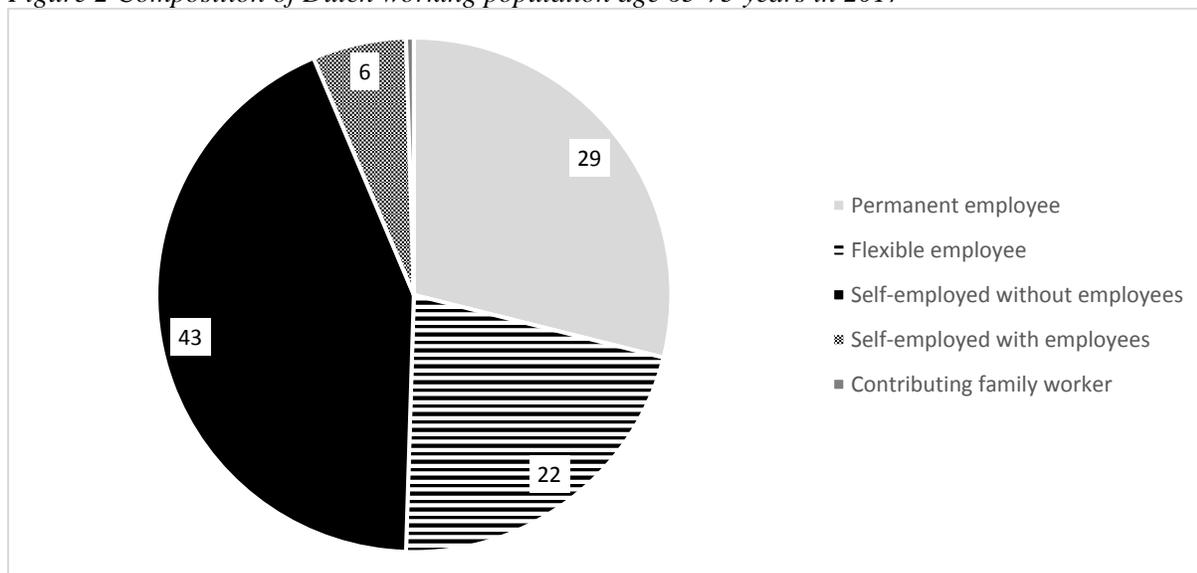
- Wang, M., Zhan, Y., Liu, S., & Shultz, K.S. (2008). Antecedents of bridge employment: A longitudinal investigation. *Journal of Applied Psychology*, *93*(4), 818-830. doi: 10.1037/0021-9010.93.4.818
- Zwinkels, W., Knoef, M., Been, J., Caminada, K., & Goudswaard, K. (2017a). Zicht op zzp-pensioen [insights in pensions of the solo self-employed] (netspar design paper 91). Tilburg: Netspar.
- Zwinkels, W., Knoef, M., Caminada, K., Goudswaard, K., & Been, J. (2017b). Zelfstandigen zonder pensioen? [self-employed without pensions?]. *ESB*, *102*, 254-256.

Figure 1 Composition of Dutch working population in percentages per labour market group



Source: Dutch Labour Force Survey (Statistics Netherlands, 2018)

Figure 2 Composition of Dutch working population age 65-75 years in 2017



Source: Dutch Labour Force Survey (Statistics Netherlands, 2018)

Table 1 Demographic composition of the solo self-employed, employees, and the total group (i.e., employed and non-employed individuals), age 65-75 years, 2017, in percentages

	Solo self-employed	Employees	Total
Gender: Male	74%	72%	49%
Gender: Female	26%	28%	51%
Education: Low	21%	37%	46%
Education: Middle	31%	36%	33%
Education: High	48%	26%	21%
Partner Status: Single	22%	13%	23%
Partner Status: Partner	76%	85%	75%
Partner Status: Other	2%	2%	2%
Background: Non-migrant	91%	88%	88%
Background: Migrant	9%	12%	12%

Source: Dutch Labour Force Survey (Statistics Netherlands, 2018)

Table 2 Top-three sectors in which solo self-employed individuals were working in 2016

Main income as solo self-employed		Any income as solo self-employed	
65plus	All ages	65plus	All ages
1. Agriculture, forestry and fishing (19%)	1. Specialized business services (19%)	1. Specialized business services (19%)	1. Specialized business services (19%)
2. Wholesale and retail trade (17%)	2. Construction (14%)	2. Health and social work activities (14%)	2. Health and social work activities (13%)
3. Specialized business services (15%)	3. Wholesale and retail trade (11%)	3. Wholesale and retail trade (11%)	3. Construction (11%)

Source: Registrations from the Dutch tax authorities (Centraal Bureau voor de Statistiek, 2018)

Table 3 Plans for post-retirement work among wage-employed older adults aged 60-65 (2015)

	%	
Plans for post-retirement work in general	33	
- Vague plans		26
- Clear plans		7
Plans for post-retirement self-employment	16	
- Vague plans		12
- Clear plans		4

Source: NIDI Pension Panel 2015

Table 4 Descriptive statistics (percentages unless otherwise stated) NIDI Pension Panel 2015

	Self- employment plans	Wage- employment plans	No plans	All
Demographic characteristics				
<i>Gender</i>				
% Male	62	61	52	55
<i>Age at t1 (60–65) – Mean (SD)</i>	62.1 (1.7)	62.2 (1.6)	62.0 (1.6)	62.1 (1.6)
Resources				
<i>Educational attainment</i>				
Low	6	23	22	20
Medium	24	35	35	33
High	70	42	43	47
<i>Perceived health</i>				
Excellent / Very good	34	31	29	30
Good	52	55	53	53
Not very good / Poor	14	14	18	17
<i>Accumulated wealth</i>				
Low (<25 thousand euros)	24	27	21	22
Medium (25-250 thousand euros)	40	55	59	57
High (>250 thousand euros)	26	18	20	21
<i>Perceived pension shortage</i>				
% yes (replacement rate <68%)	24	17	17	18
<i>Worry staying employed (1–5) – Mean (SD)</i>	2.1 (1.3)	2.1 (1.3)	2.1 (1.2)	2.1 (1.2)
Psychological variables				
<i>Work centrality (1–5) – Mean (SD)</i>	3.3 (0.9)	3.3 (0.9)	3.1 (1.0)	3.2 (1.0)
<i>Retirement self-efficacy (0–10) – Mean (SD) ^a</i>	7.2 (0.6)	6.6 (0.6)	6.9 (0.6)	6.9 (0.6)
N	1,015	1,167	4,611	6,793

^a The scale for Retirement Self-Efficacy (alpha 0.52) is based on three Likert-type items, such as “I can handle whatever comes my way in retirement.”

Box 1 Growth of solo self-employment in the Netherlands

The share of solo self-employed individuals in the working population has grown strongly in the Netherlands during the last decade. In fact, the growth in the share of solo self-employment in the Netherlands is the highest of all EU-countries in the period 2006-2016 (Hatfield, 2015; Kösters, 2017). Macro-economic trends such as technological developments and changing sectoral structures (i.e., less industry-oriented, more business services oriented) seem to play a role to explain this increase. Also demographic developments, such as population aging, and international labor migration are likely to be of importance, as well as social-cultural trends, such as a positive entrepreneurial climate in an era in which individuals value their autonomy a lot. However, these developments also apply to other European countries and cannot explain the outstanding increase of solo self-employment in the Netherlands. Most likely the steep increase relates to institutional factors. In the Netherlands there is a relatively big difference in tax and labor law treatment between the self-employed and employees (Government of the Netherlands, 2015). For instance, from a labor supply perspective (i.e., workers), it appears to be relatively easy to start a business in the Netherlands, and the self-employed receive a lot of tax benefits as compared to employees. From a demand perspective (i.e., firms/ employers), the relatively strict employment protection legislation for permanent employees in the Netherlands, and the relatively long period during which employers need to continue payment of salary in case of illness – among other things – have been suggested to make it relatively attractive for employers to hire solo self-employed individuals instead of employing employees (Kösters, 2017).

Box 2 The Dutch pension system from a self-employment perspective

The Dutch pension system is based on three main tiers. The first tier is the public basic old age pension (Old Age Pensions Act, AOW), which was introduced in 1957. All residents – regardless of employment status – are eligible for this benefit. The benefit amount is dependent upon on the number of years a person has lived in the Netherlands (a full benefit is acquired when a person has 50 years of residence) and the individual’s living situation (i.e., with or without a partner). In 2018 a 100% benefit for retirees living alone is about 1170 euros (gross). The basic old age pension is based on a pay-as-you-go system: the working population pays the costs of the basic old age pensions of current retirees (supplemented by tax proceeds). The second tier are earnings-related occupational pension plans. These pension plans are collectively arranged and based on capital funding. More than 90 percent of Dutch employers offer their employees an occupational pension plan, in which participation is obligatory. Both employer and employee pay a share of the contributions for the second pillar pension. The third tier covers individual pension savings that workers need to arrange themselves via the private market.

The self-employed will receive the basic old age pension after they have reached the state pension age (i.e., age 66 in 2018). The self-employed, however, are not enrolled in the employer-sponsored second pillar pensions (with a few exceptions; e.g., self-employed doctors and painters do have mandatory pension schemes (SZW, 2013). In general, therefore, the self-employed need to arrange their own third pillar pension savings and have to pay the full contributions themselves (Hershey, Van Dalen, Conen, & Henkens, 2017). Pension acquisition can, for instance, be arranged by specific tax-facilitated options for pension reservations of the self-employed, or by annuities via an insurance company or a bank. Recently, initiatives have been taken to develop pension schemes specifically aimed at the solo self-employed (e.g., see www.zzppensioen.nl), which solo self-employed persons can join voluntarily. For the solo self-employed who previously worked as an employee, another option is to continue their second pillar pension acquisition. This can be done for a maximum of 10 years, and only if the pension fund offers this possibility (Government of the Netherlands, 2018). Besides these three pension pillars, in studies on the self-employed also often a fourth pillar is mentioned: private wealth. This refers to general savings, investments, and home ownership (Zwinkels, Knoef, Caminada, Goudswaard, & Been, 2017b) and appears to be highly important for financial position of the solo self-employed in later life.