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**Explaining Transitions into Self-
Employment after (Early)
Retirement**

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Abstract

Governments that attempt to extend the working lives of their citizens may consider promoting bridge employment. Self-employment in particular, may be an instrument in postponing the age at which workers finally leave the labour market.

A NIDI panel study among older workers in the Netherlands revealed that one in every three retirees re-entered the labor market after (early) retirement. Post-career transitions into self-employment are increasingly common. In this paper we explore the various trajectories older adults may choose in their pathway into full retirement. How common is the transition into self-employment after (early) retirement? What motives drives this transition? To what extent is the decision to become self-employed determined by the lack of opportunities for paid employment offered by employers. The results of this study do not support this ‘necessity hypothesis’. Instead, the results point in the direction of the ‘opportunity hypothesis’. At least in the period under study, the self-employment option was primarily chosen by retirees with relatively high social capital (wealth & educational attainment) as well as entrepreneurial attitudes (high scores on self-efficacy). The fact that their retirements were overall quite early, but not considered involuntary, suggests that the timing of the decision to retire may be driven by the emergence of new (business) opportunities.

Key words: bridge employment, self-employment, older workers, senior entrepreneurship, The Netherlands, longitudinal study

1 Introduction

Extending working lives was one of the key objectives of the so-called Lisbon strategy in 2000 and still is an integral part of the European Employment Strategy. It is also seen by successive Dutch cabinets as part of the answer to the ageing of the labor market and the challenge of keeping the social welfare state affordable. The prolongation of working life after (early) retirement is one example of how this policy objective can be realized. For society at large, the willingness of experienced older adults to work beyond (early) retirement age provides a valuable resource. The key to capitalizing on this resource is to understand older worker's work-retirement decisions. Therefore, the following research question will be central in this paper: What factors determine engagement in paid work after (early) retirement among older adults in the Netherlands? The focus is on one particular type of post-retirement work arrangement: *self-employment* (defined as: any person who owns a business or works for him/herself, who may or may not hire employees).

Traditionally, retirement has been thought of as an abrupt and complete discontinuation of paid employment in later life. Retirement today, however, can be characterized as a process which can take multiple forms (Beehr & Bennett, 2007). Many older adults engage in some form of transitional employment between their career employment and complete labor force withdrawal. Cahill et al. (2006) found that about 60 percent of older workers in the US first moved to some form of 'bridge employment' instead of directly out of the workforce. A study among older workers in the Netherlands (Henkens, Van Dalen, & Van Solinge, 2009) revealed that one in every three retirees re-entered the labor market after (early) retirement. This bridge employment can be part-time or seasonal, it can entail a change in occupation or industry, and it can even involve a switch in job type, such as from wage- to self-employment (Giandrea, Cahill, & Quinn, 2008). Post-career transitions into self-employment are increasingly common (Wang, Zhan, Liu, & Shultz, 2008). Dutch national statistics indicate that the propensity to be self-employed increases with age (CBS Statline, 2010). This higher prevalence in older age groups is partly the result of self-selection, since self-employed workers tend to stay longer in the labor force than wage-and-salary workers (Hochguertel, 2010). Incidence measures, representing new start-ups as an entrepreneur (Dutch Chamber of Commerce, various years), however, underscore the attractiveness of self-employment as a work arrangement in older age groups (Van Solinge & Henkens, 2010).

We define bridge employment as working for pay (either as an employee or self-employed) after retirement from the main career job. There are similarities with part-time or phased retirement in that bridge employment is often part-time. The main difference is that bridge employment is generally in new jobs with a new employer or in a new occupation or industry (Cahill et al., 2006). As a rule, bridge employees are eligible to any form of regular retirement income.

Bridge employment is a relatively new area of study with most of the empirical studies emerging after 1990 (for an overview: Wang & Shultz, 2010). Most of these studies consider bridge employment in the context of retirement transitions more general (e.g., Giandrea, Cahill, & Quinn, 2009; Pleau, 2010; Weckerle & Shultz, 1999). Research studying the

antecedents of bridge employment decisions have largely relied on general retirement decision making models. Two main theoretical explanations of why older individuals want to continue working in retirement emerge from this literature. The first explanation stems from the economic literature. The general assumption is that working in retirement is primarily driven by financial incentives. In other words, retirees with fewer financial resources, or those who experienced substantial changes in their financial resources upon retirement will be more likely to take up bridge employment (Hurd, 1990; Leonesio, 1996). The second - socio-psychological- explanation is inspired by role theory and assumes that individuals occupy a range of roles in their lives, which are critical to their self-concept and personal identity (Moen, Erickson, & Dempster-McClain, 2000; Petters & Asuquo, 2008). Retirement from work can lead to a significant rupture of personal identity (Hopkins, Roster, & Wood, 2006; Wong & Earl, 2009). Such role loss has been associated in the research literature with difficulties in adjustment (Hedge, Borman, & Lammlein, 2006; Taylor, Goldberg, Shore, & Lipka, 2008), decreased life satisfaction (Fry, 1992) and poorer adjustment (Van Solinge & Henkens, 2005). Persons with strong work role identities appear to be more motivated to continue working or to return to work after (early) retirement (Taylor & Cook, 1995).

Most of the empirical research on post-retirement employment has focused on identifying personal factors that predict retirees' decisions to return to the labor force in general. An evaluation of this literature reveals both consistent and inconsistent results. A consistent finding is that those who work in retirement are more likely to be male, healthy, better educated and younger (e.g., Giandrea et al., 2009; Maestas, 2004; Singh & Verma, 2003; Von Bonsdorff, Shultz, Leskinen, & Tansky, 2009). There is, however, only limited research that points explicitly to financial need as a significant factor. Cahill et al. (2006) for example, found that both workers with low and workers with high post-retirement incomes were engaged in bridge employment. This u-shaped pattern implies that some may want to work in retirement, whereas others may need to. This variety in outcomes may relate to the fact that bridge employment is a 'catch-all'. Bridge employment can take different forms, and these forms may have different antecedents. Wang, Zhan et al. (2008) for example, made a distinction between career bridge employment (bridge employment in the same industry or field as the career job) and bridge employment in a different field, and found that retirees with better financial status were more likely to engage in career bridge employment instead of bridge employment in a different field. Further, individuals who were less satisfied with their prior career jobs, were more likely to accept bridge employment in a different field than to continue career employment. Gobeski and Beehr (2009), who studied the predictors of these different types of bridge employment on a different sample, found similar results. This suggests that results from prior studies examining bridge employment in general may mask the processes that are involved in choosing the type of bridge employment to engage in.

The purpose of the present study is to explore two other types of bridge employment, i.e., self-employment and wage-and-salary employment, that so far have received little attention in the scientific literature (among the few examples are: Kerr & Armstrong-Stassen, 2011; Zissimopoulos & Karoly, 2009). Given the rising numbers of older individuals starting up their own business after age 50 this is somewhat surprising.

This research seeks to advance the existing literature by examining the transition into post-career self-employment and its determinants within an integrated, multidisciplinary context. It builds upon the existing literature on this topic in two ways. In the first place, this study models the two major modes of bridge employment (self and wage employment) simultaneously. In the second place, our theoretical model combines insights from previous studies, that particularly focused on socio-demographic variables (age, gender, health, education) in combination with either economic (Zissimopoulos & Karoly, 2009) or psychosocial (Kerr & Armstrong-Stassen, 2011) predictors of post-career (self) employment. In addition we pay explicit attention to the social embeddedness of the retirement decision making process. In this study we adopt the central idea of the life course approach in assuming that individuals make choices and take actions within opportunities and constraints of history and social circumstances (Settersten, 1999). This study seeks to explain self-employment decisions of older individuals on the basis of the restrictions and/or opportunities they face: (1) in their own opportunity structure (resources), (2) in their social context, and (3) in their socio-psychological makeup.

The study is based on data from the NIDI Work and Retirement Panel, an ongoing longitudinal survey of older workers (50 years and over) in the Netherlands and their partners that started in 2001. We examined a subset of 1.221 individuals who were aged 52 years and over and in a career job at the time of the first interview and who retired from this career job in the period between 2001 and 2011.

2 Theoretical framework

In this paper the transition into self-employment is viewed as one of the trajectories older person may choose in their pathway into full retirement. Following Singh & De Noble (2003), we model this decision as a choice between full retirement and prolonged labor force participation (bridge employment), either in the form of wage-employment or in the form of self-employment. This paper is organized along two central themes. First, we will focus on the decision to return to work (bridge employment in general) or to retire fully. Second, we will concentrate on the decision to become self-employed or employed with an employer. This approach allows us to combine the general literature on retirement decision making with the literature on entrepreneurship and self-employment.

• *The decision to return to work after (early) retirement*

Why do people decide to take up bridge employment, defined as working for pay after retirement from their main career job? This question has been studied from a variety of scientific disciplines, such as economics, sociology and psychology. Common to all these approaches is that the bridge employment decision is viewed as a motivated choice. The underlying assumption is that workers evaluate work-retirement choices in the light of its utility in reaching valued personal goals and the restrictions they face in this respect. From the economic perspective, work is considered as a source of ‘disutility’. The implicit or explicit view is that individuals consider leisure – i.e., the absence of labor – other things being equal, as a more desirable condition than the expenditure of labor. *Sociological research* pays explicit attention to the position of jobs and workers in the social structure, and stresses that

work-retirement decisions do not take place in a social vacuum. The social context, i.e. attitudes and behavior of network members in and outside the workplace, are considered of relevance in the retirement process. *Psychological research* studies the psychological processes that precede or follow retirement. Older workers may or may not engage in proactive strategies for mastering (role) changes inherent in the retirement transition (e.g., Taylor et al., 2008). Bridge employment can be a strategy in this respect (Wang et al., 2008).

These theoretical perspectives focus on different aspects of the decision making process, and are complementary rather than contradictory. Our model integrates these insights and assumes that the decision to take up bridge employment after (early) retirement is dependent on the restrictions/opportunities they face: (1) in their opportunity structure (resources), (2) in their social context, and (3) in their socio-psychological makeup.

Opportunity structure - The individual's access to resources greatly 'defines' the conditions of retirement and influences the opportunities and quality of the retirement experience (Kim & Moen, 2002; Reitzes & Mutran, 2004). Resources shape what people can do (physically) and what they can afford (financially) in retirement. The key assumption underlying micro-economic research is that individual retirement decisions are governed by income-leisure considerations. Retirement is seen as a decision regarding the optimal age to stop working given the individual's environment and relative preference for income and leisure (Leonesio, 1996). Financial incentives, particularly retirement income and accumulated wealth, are deemed to influence retirement choices (Gruber & Wise, 2004). In the economic literature, bridge employment has been largely examined in terms of the financial benefits it yields for older workers who might be on the fence about the affordability of retirement (Quinn & Kozy, 1996; Ruhm, 1990). Older workers with lower projected income streams and fewer accumulated wealth are more likely to need the money from some form of bridge employment to be able to leave their career jobs. Financial constraints thus may work as a stimulus to take bridge work.

Hypothesis A1a: Older workers who have fewer accumulated wealth will be more likely to engage in bridge employment than to retire fully

Hypothesis A1b: Older workers who have a pension shortage will be more likely to engage in bridge employment than to retire fully

Health is another major factor for older workers to consider when they make retirement decisions (Wang & Shultz, 2010). Poor health is assumed to increase the preference for leisure (Gustman & Steinmeier, 2009). Health problems may lead to constraints on the older worker's ability to perform effectively, or to continued participation in the workforce. Previous studies have examined the predictive effect of health and have consistently found that healthy retirees were more likely to accept bridge employment (e.g., Kim & Feldman, 2000; Wang et al., 2008).

Hypothesis A2: Older workers who experience health problems are more likely to retire fully than to engage in bridge employment.

Human capital and training increases labor market options. Because of their professional knowledge and/or skills educated people may have more options to find post-retirement labor opportunities. Ruhm (1990) and Wang et al. (2008) found that well-educated individuals were more likely to engage in bridge employment.

Hypothesis A3: Older workers with higher levels of educational attainment will be more likely to engage in bridge employment than to retire fully.

The family is an important life sphere that interacts with employment (Szinovacz, 2003). In the literature, there is a growing recognition of the important role of the household, the partner in particular, in the retirement decision making process (e.g., Henkens & Van Solinge, 2002). Kim and Feldman (2000) have studied the role of the partner in the bridge employment decision. They argued that one of the main discontinuities associated with full retirement is the lack of social interaction with others. For married older workers, social interaction with the spouse can at least partially substitute for continued interaction with colleagues; for unmarried workers bridge employment is likely to be more critical in maintaining social contacts with others. Older workers without partner, may therefore be more likely to continue in bridge employment.

Hypothesis A4: Unmarried older workers/retirees are more likely to engage in bridge employment than married older workers.

Social context of retirement - The sociological retirement literature emphasizes the contextual embeddedness of the retirement decision-making process. This literature stresses that attitudes and decisions about retirement are not formed in a social vacuum but evolve from a variety of contextual influences at the micro (household), meso (workplace) and macro (e.g., labor market) levels (Beehr & Bennett, 2007; Moen, 1996; Szinovacz, 2003). In this study on bridge employment, we distinguish two dimensions of the social context of retirement: retirement transition characteristics and labor market constraints.

The particular circumstances in which retirement takes place have an important impact on retirement adjustment. People tend to adapt more easily to expected and or gradual changes than to unanticipated and abrupt events (Moen, 1996; Thoits, 1983). Many workers are 'forced' to leave the labor force long before the usual retirement age (Van Solinge & Henkens, 2007). When the retirement transition occurs unexpected or off-time (i.e., at younger ages), individuals may not have had the chance to go through anticipatory socialization or be financially unprepared, or the individual may lack peers with whom he or she shares transition experiences and who can provide social support. Off time retirement may thus induce difficult adjustment and reduced well-being as a result of changes in resource levels (e.g., support and income). Wang et al. (2008) have proposed that older adults who retired involuntary would be more likely to engage in bridge employment. In this paper, we test will this assumption empirically.

Hypothesis A5: Age at retirement will be negatively related to bridge employment, such that persons who retired at younger ages will be more likely to engage in bridge employment than those who retired at later ages.

Hypothesis 6: Involuntary retirement will be positively related to bridge employment, such that persons who retire involuntary will be more likely to engage in bridge employment than those who retired voluntary.

Given the older adult's preferences for post-retirement labor force participation, macro-economic conditions, labor market constraints in particular, determine whether or not these preferences can be accomplished. Differential employment opportunities thus may affect post-retirement labor force participation. We assume the following:

Hypothesis 7: Perceived labor market opportunities will be positively related to bridge employment, such that persons who were (at baseline) more optimistic about their chances to find new work will be more likely to engage in bridge employment .

Psychological resources - Personality or psychological dispositions are thought to influence life events, such as retirement, via their association with emotional appraisals and coping strategies (Löckenhoff, Terracciano, & Costa Jr, 2009). Psychological resources may thus influence the individual's responses to the change accompanied with retirement. Role theorists (e.g., Ashforth & Mael, 1989) argue that retirement is a process of role transition. Individuals may experience aversive psychological outcomes as they lose valued work- and occupation-specific identities. To avoid the latter, individuals may seek bridge employment in an effort to prevent abrupt role loss (Wang et al., 2008). The impact of retirement thus likely depends on the worker's work role identity (Shultz, Morton, & Weckerle, 1998; Wheaton, 1990). Supporting role theory, individuals who have a strong attachment to their work feel less positive about leaving their jobs (Taylor & Shore, 1995). This suggests that work attachment may also have an effect on the bridge employment decision. Indeed, there is some evidence that work commitment attitudes predict preferences for bridge employment (e.g., Davies & Cartwright, 2011; Jones & McIntosh, 2010). We assume that work attachment, that is the extent to which an individual views work as the main component of his or her life predicts engagement in bridge employment.

Hypothesis 8: Psychological work attachment will be positively related to bridge employment, such that persons for whom work is more central to their life will be more likely to engage in bridge employment than persons for whom work is a less central aspect.

● *Do older workers who opt for self-employment differ from those who opt wage employment?*

To what extent do older workers who choose for self-employment as a bridge employment option differ from those who opt for wage-and-salary employment? In other words, which factors predict the transition into self-employment after (early) retirement?

The self-employment literature reveals that in the general population gender, age, education, social capital, risk attitude, locus of control, entrepreneurial attitudes and self-efficacy predict preferences for and realization of self-employment (Blanchflower, 2000; Van Praag & Cramer, 2001; Zissimopoulos & Karoly, 2007). Individuals with greater access to capital, without liquidity constraints (wealth), and social capital (e.g., educational attainment) are more likely to pursue a self-employment option. Entrepreneurs¹ can also be distinguished from non-entrepreneurs based on personality and attitudes. Entrepreneurs tend to have a higher risk taking propensity, high internal locus of control, and high levels of self-efficacy (for an overview: Singh & DeNoble, 2003). On the basis of this literature, one would expect clear differences in the antecedents of the two types of bridge employment, particularly with regard to the older worker's opportunity structure (more favorable for self-employed), and their psychological resources (self-employed have a different psychological make-up). Several authors (e.g., Baucus & Human, 1994; Singh & DeNoble, 2003), however, have argued that the motives behind late career transitions into self-employment may be different, and that the predictors may differ as well. It has been suggested that the self-employment transition at older ages is often driven by the lack of employment opportunities in the primary labor market. Individuals who prefer employment with an employer but cannot find an employment opportunity and decide on self-employment, should be regarded as reluctant entrepreneurs. Entrepreneurship is often a last choice option, and thus frequently involuntary (Kautonen & Palmroos, 2009). This suggests that those who opt for self-employment are less privileged in terms of human capital and employment opportunities. All in all, two different sets of hypothesis emerge from the literature. Following Block and Sandner (2009), we refer to this as the opportunity based entrepreneurship hypothesis versus the necessity based entrepreneurship hypothesis.

The opportunity based entrepreneurship hypothesis- According to this hypothesis individuals choose for entrepreneurship or self-employment in their late careers or after retirement as a matter of personal accomplishment (Singh & DeNoble, 2003). The opportunity based entrepreneurship hypothesis supposes that older entrepreneurs are very similar to entrepreneurs in the general population. Older adults who opt for self-employment after early retirement will have greater access to capital and have less liquidity constraints (wealth), and more social capital (educational attainment). They can also be distinguished from non-entrepreneurs based on personality and attitudes (their psychological make-up). Entrepreneurial attitudes are reflected in higher scores on self-efficacy and sensation-seeking. Most likely their (early) retirement transition has been voluntary. On the basis of the above, the following hypotheses are formulated:

Hypothesis B1: Older workers who have more accumulated wealth will be more likely to engage in self-employment than in work in wage-and salary employment.

Hypothesis B2: Older workers who have higher levels of educational attainment will be more likely to engage in self-employment than in work in wage-and salary employment.

¹ In the remainder entrepreneurship and self-employment will be used interchangeably.

Hypothesis B3: Older workers with higher levels of self-efficacy are more likely to engage in self-employment than to work in wage-and salary employment.

Hypothesis B4: Older workers with higher levels of sensation seeking are more likely to engage in self-employment than to work in wage-and salary employment.

The necessity based entrepreneurship hypothesis - According to this hypothesis the choice for self-employment or entrepreneurship at older ages is merely a last choice option (Singh & DeNoble, 2003). Financial hardship, labor market constraints and discrimination may force an older adult into entrepreneurship. On the basis of the above, the following is hypothesized:

Hypothesis C1: Older workers who have less accumulated wealth will be more likely engage in self-employment than to work in wage-and salary employment.

Hypothesis C2: Older workers who have experienced involuntary or off-time (very early) retirement are more likely to engage in self-employment than to work in wage-and salary employment.

Hypothesis C3: Older workers with poor perceived labor market opportunities will be more likely to engage in self-employment than to work in wage-and salary employment.

2 Methods

Data

To answer the research questions this study will use data from the NIDI Work and Retirement Panel. 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. 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 HRM departments. The companies provided the random sample as well as financial background information (such as salary, replacement rate). The mailing was carried out by the companies, under supervision of the researchers. A random sample of employees aged 50 years and over working in the different operating companies of these multinationals (for the Civil service: different Ministries) received an envelope with the company's logo, including a questionnaire for themselves and a separate questionnaire for their married or unmarried partner, if present. The questionnaire included questions with respect to the older worker's financial, work, health and family situation, as well as their work-retirement plans. The data show a large variability with respect to different occupational settings and individual characteristics. Response rates in this first Wave were 63% for workers and 95% for their spouses (see for details: Henkens & Van Solinge, 2003).

In 2006-2007 a follow-up survey was conducted (Wave 2), in which all surviving Wave 1 participants were re-surveyed, once again by mail questionnaire. The Wave 2 survey asked respondents about changes in employment status, including retirement and retirement plans and behavior, since Wave 1. A total of 2,240 questionnaires were sent to surviving Wave 1 participants. 1,678 surveys were returned, providing complete or virtually complete data.

Wave 2 response rates, following two reminder notices, were 75% for older workers and 97% for partners.

In 2011, all surviving respondents have been re-interviewed, again by way of a mail questionnaire. A total of 1,636 questionnaires were sent to surviving Wave 2 participants; 1,276 surveys were returned, providing complete or virtually complete data (response 78%). The respondents and their partners were between the age of 60 and 75 at this third wave of data collection. The Wave 3 survey asked respondents about changes in employment status, including retirement since Wave 2. We collected detailed information on characteristics of bridge jobs (objective characteristics as well as perceived quality of the jobs in terms of perceived stress, autonomy, job challenge), and information on health and psychological wellbeing. Information regarding events and behavior between wave 1, 2 and 3 are collected using the anchored retrospective approach (Bumpass & Raley, 2006).

For this particular study, we examined a subset of 1,304 respondents who were in a career job at the time of the first interview and retired from this career job in the period between 2001 and 2011. In order to account for potential selectivity in the retirement transition (e.g, healthy or privileged workers remain longer in their career jobs) we introduced an additional restriction, in the sense that we removed the youngest cohort (born in 1950/51) from the analysis. More than half of this youngest cohort was still active in their career job at wave 3. The resulting sub-sample consisted of N= 1,221 individuals.

Measures

Measures of antecedents of bridge employment were obtained from Wave 1 data (i.e. when participants were not retired), and the measure for bridge employment engagement was obtained from matching Wave 1, Wave 2 and Wave 3 data. Means, standard deviations and correlations among the study variables are presented in Table 1.

[Table 1 about here]

Bridge employment engagement. In the second and third wave of the study, participants were asked whether they had retired between survey waves. Retired participants were asked whether or not they had returned to work after their initially (early) retirement. If this was the case, further information was asked about this bridge employment (e.g., type of work/ job description, number of working hours, wage or self-employment) and whether or not the person has been retired from this bridge employment. On the basis of this information, we composed a dummy variable indicating whether (=1) or not (=0) the participant has been engaged in bridge employment after taking (early) retirement. For those who have been engaged in bridge employment, two other dummies have been created for self-employment, and for wage employment.

Socio-demographic information. Gender is represented by a dummy variable (male = 1). Age is age in years at first interview. Partner status is a dummy variable indicating whether or not the older worker had a partner at baseline.

Educational attainment was rated from 1 (primary school) to 7 (university level).

Health. Health was measured by a single self-reported general health item ('How would you rate your health status?'). The categories ranged from 1 (excellent) to 5 (poor). They were recoded in the current study so that higher values indicate better health status.

Financial status. Accumulated wealth is a 7-category continuous variable that measures the total value of household property (including housing and nonhousing assets, savings and other financial wealth), net of debt. Categories range from 1 (<500 Euros) to 7 (>500 000 Euros). Perceived pension shortage is a dummy variable indicating whether or not older worker had a pension shortfall.

Retirement age. This is set of dummy variables indicating the age at retirement from the career job.

Involuntary retirement. Participants were asked whether their decision to retire was voluntary, or (partly) involuntary. This question has been recoded into a dummy variable (involuntary retirement =1).

Perceived labor market opportunities. 2-item scale. Items: 'I think it will be difficult for me to find another job'; 'If I wanted to, I would be able to find another employer right away'. Categories ranged from (1) completely agree to (5) completely disagree. Items have been recoded and summed up in the current study so that higher values indicate better perceives changes.

Psychological work attachment, 1 item scale. Item: 'My job is my passion'. Categories ranged from (1) completely agree to (5) completely disagree. Items have been recoded and summed up in the current study so that higher values indicate higher psychological work attachment.

Self-efficacy. 5-item scale. Shortened version of the General Self-efficacy Scale (Sherer et al., 1982). Items: 'If I make plans, I am convinced I will succeed in executing them'; 'If I absolutely want something, it usually goes wrong'; 'I lack self confidence'; 'If I get the impression that something is complicated, I don't start on it'; 'I have difficulty solving the problems I face in life' Categories ranged from (1) completely agree to (5) completely disagree. (Cronbach's alpha = 0,65).

Sensation seeking. 3-item scale derived from the responses to a set of Likert-type questions (cf. Zuckerman, 1971). The following items were included: 'New and unexpected experiences give me the excitement I need in life'; 'When I have to work according to fixed rules, I easily get fed up with them'; and 'People or things that always stay the same, bore me'. Categories ranged from (1) completely agree to (5) completely disagree. (Cronbach's alpha = 0,53).

Analytic Strategy

The analyses are organized along the lines that were put forward in section 2. First, we will model the general bridge employment decision. We use logistic regression to explore determinants of re-entry among individuals who made use of an (early) retirement arrangement. Second, we will concentrate on the decision to become self-employed or employed with an employer. We model this as a choice between three different trajectories: full retirement, bridge employment as a wage-and-salary worker, and self-employment. We use multinomial logistic regression analysis to examine the antecedents of the various bridge employment decisions. The contrasts of predictive effects on the dependent variable have been created across every two categories. Specifically, we tested antecedents for self-employment against full retirement and against bridge employment in a wage-and-salary job. We also tested antecedents of bridge employment in a wage-and-salary job against full retirement. Model fit (i.e. chi-square tests), Pseudo R^2 effect size estimates, logistic regression estimates and their significance, and corresponding odds ratios (ORs) and their confidence intervals are all reported in the Results section.

4 Results

Descriptive analysis

Among the respondents in the sample, 70 percent took full retirement after leaving their career job, whereas 30 percent has been engaged in some form of bridge employment; 19 percent engaged in wage-and-salary employment, 11 percent engaged in self-employment. The 30% figure is very close to results in other longitudinal studies on post-retirement employment (e.g., Wang et al., 2008). Respondents who re-entered the labor force differ significantly from those who remained fully retired along several characteristics (Table 2).

[Table 2 about here]

Multivariate analysis

In order to explore the factors that determine engagement in paid work after (early) retirement, self-employment in particular, we developed two models. The results of the first model explaining general bridge employment decisions are presented in Table 3. The results of the second model examining the determinants of the various types of bridge employment are presented in Table 4. We will start with the first issue.

● *The decision to return to work after (early) retirement*

Table 3 provides the results for the logistic regression model explaining general bridge employment decisions. We made a distinction between three groups of explanatory factors: the older worker's opportunity structure, the social context of retirement and psychological resources.

[Table 3 about here]

With regard to the *opportunity structure* we assumed that persons with fewer accumulated wealth (HA1), better health conditions (HA2), and higher levels of educational attainment (HA3), and unmarried (HA4) will be more likely to engage in bridge employment. Age and gender were included as controls. The results of the analysis reveal a strong association between gender and bridge employment engagement ($B= 1.03, p <.001$). The $OR=2.83$ indicating that men were 2.83 more likely to engage in bridge employment instead of full retirement. Further, educational attainment was significantly related to bridge employment engagement ($B= 0.21, p <.001, OR=1.23$). This result supports Hypothesis A3 and indicates that retirees who had 1 extra level of educational attainment were 1.23 times more likely to engage in bridge employment. Supporting hypothesis A2, health was associated with bridge employment as well ($B=0.21, p<.05, OR=1.23$). Inconsistent with hypothesis A1 we did not find evidence that the older worker's financial situation, in terms of accumulated wealth and perceived pension adequacy, is related to bridge employment. Further, we did not find empirical support for the hypothesis (HA4) that unmarried retirees will be more inclined to take up bridge employment.

With regard to the *social context of retirement* we assumed that persons who retire at younger ages (HA5) or whose retirement was perceived involuntary (HA6) will be more likely to engage in bridge employment. Further, we expected perceived labor market chances to be positively related to bridge employment engagement (HA7). The results of the analysis reveal a strong association between retirement age and bridge employment engagement. Those who retired at very young ages, i.e. age 55 or younger, were significantly more likely to take up bridge employment ($B= 0.61, p <.05$). The $OR=1.83$ indicates that these 'off time retirees' were almost two times more likely to engage in bridge employment instead of full retirement. Persons who retired at age 56-57 were also more likely to engage in bridge employment engagement ($B= 0.63, p <.05, OR=1.83$). On the other hand, persons who retired at age 62, the standard early retirement age for these cohorts, were significantly less inclined to engage in bridge employment ($B= -0.53, p <.05, OR=0.58$). Further, only perceived chances on the labor market was significantly related to bridge employment engagement ($B= 0.28, p <.001, OR=1.32$). This result supports Hypothesis A7 and indicates that retirees who, at baseline, were more positive about their chances to find a new job, were more likely to engage in bridge employment after their (early) retirement. Finally and contrary to our expectations, involuntariness of the retirement transition (HA5), did not significantly predict the probability of engaging in bridge employment. We did not find evidence that older workers who retired involuntary are more likely to take up bridge employment.

We argued that *psychological resources* would play a role in the bridge employment decision as well. In this regard, we assumed that psychological work attachment, that is the extent to which an individual views work as the main component of his/her life, would be positively related to bridge employment engagement (HA8). The results support this hypothesis ($B= 0.20, p <.001, OR=1.32$). Persons for whom work is a more central part of their life (i.e persons with higher levels of psychological work attachment) were more likely to engage in bridge employment than to retire fully.

● *The decision to become self-employed*

Table 4 provides the results for the multinomial logistic regression model explaining the antecedents of the various bridge employment decisions. We report the predictive effects for each paired comparison of bridge employment decisions separately. For our research question, however, the comparison between self-employment and wage employment is most relevant (columns 4).

[Table 4 about here]

In the second column persons who engage in *Self-employment* are compared with those in *Full Retirement*. The results reveal that self-employed persons are more likely to be male and better educated. They are more likely to have an early retirement age (retirement at age 57-58). Compared to those who retired fully, they had significantly better perceived labor market chances at wave 1. Further, they have higher levels of psychological work attachment, and higher scores on self-efficacy.

In the third column persons who engage in *Wage employment* are compared with those in *Full Retirement*. The results reveal that persons engaged in wage employment are more likely to be male and slightly younger, they do not differ significantly on educational attainment. They are more likely to have (very) early retirement age, and less likely to have retired at age 62 and over. Compared to those who retired fully, they had significantly better perceived labor market chances at wave 1. Further, they have higher levels of psychological work attachment. Scores on self-efficacy as well as sensation seeking, however, do not differ significantly.

In the fourth column persons who engage in *Self-employment* are compared with those in *Wage employment*. We formulated two different sets of hypotheses: 1) opportunity based entrepreneurship hypothesis and 2) the necessity based entrepreneurship hypothesis.

On the basis of the opportunity hypothesis, we would expect self-employed persons to have more accumulated wealth (HB1), higher levels of educational attainment (HB2), higher scores on self-efficacy (HB3) and higher scores on sensation seeking (HB4).

On the basis of the necessity hypothesis, we would expect self-employed persons to have less accumulated wealth (HC1), weaker perceived labor market positions (HC3), and higher levels of involuntary retirement (HC2).

Consistent with hypothesis B1 (and inconsistent with hypothesis C1), accumulated wealth was found to be a significantly predictor for self-employment against wage employment ($B=0.21$, $p<0.05$, $OR=1.23$). Further, educational attainment ($B=0.22$, $p<0.01$, $OR=1.24$) and self-efficacy ($B=0.17$, $p<0.05$, $OR=1.19$) significantly predicted self-employment against wage employment. These results support Hypotheses B2 and B3 and indicate that better educated retirees and those with higher scores on self-efficacy were more likely to engage in self-employment than in wage employment. Inconsistent with hypothesis C3 and hypothesis

C2 neither labor market position nor involuntary retirement did significantly predict the probability of engaging in self-employment compared to wage employment.

All in all, these findings point in the direction of the opportunity hypothesis, rather than the necessity hypothesis. The results suggest that the decision to engage in bridge employment, self-employment in particular is predominantly driven by intrinsic motivational factors. This notion is substantiated by the respondents answers to a more direct question about their motives for taking up bridge employment. The majority of persons who engaged in bridge employment stated that they did so because they loved to work: 55% of all bridge employees, 65% of self-employed. Financial motives were recorded by 18% of bridge employees (17% of self-employed). Another important motive had to do with maintaining social contacts. This motive was reported by 11% of the bridge employees. Maintaining social contacts was much more relevant for those who opted for wage-and-salary employment (13%), than for the self-employed (7%).

5 Conclusion

With the imminent retirement of the baby-boom generation, increasing attention is being paid by employers and policymakers to strategies that could encourage older workers to extend their working lives. Bridge employment may be a forceful instrument in postponing the age at which workers finally leave the labour market. The key to capitalizing on this resource is to understand older worker's work-retirement decisions. The purpose of the current paper was to determine what factors contribute to the propensity to engage in paid work after (early) retirement among older adults in the Netherlands. The focus was on one particular type of post-retirement work arrangement: self-employment. The study is based on data from the NIDI Work and Retirement Panel, an ongoing longitudinal survey of older workers in the Netherlands and their partners that started in 2001. We examined a subset of 1.217 respondents aged 52 and over at baseline who were in a career job at the time of the first interview and retired from this career job in the period between 2001 and 2011.

Working during retirement used to be considered to an oxymoron. Yet, as growing numbers of workers continue to work for pay during their so-called retirement, this is no longer the case (Cahill et al., 2009). Many older adults in the Netherlands who have had career jobs made a job transition prior to complete retirement. These transitions are often within wage-and-salary employment, but can also be from wage-and-salary employment to self-employment. It has been argued that older adults' decision to become self-employed are predominantly determined by the lack of opportunities for paid employment offered by employers. As such the self-employment transition may be largely necessity based or involuntary (Kautonen, Palmroos, & Vainio, 2009; Kautonen, Tornikoski, & Kibler, 2010). The results of this study do not support this 'necessity hypothesis'. Instead, the results point in the direction of the 'opportunity hypothesis'. At least in the period under study, the self-employment option was primarily chosen by retirees with relatively high social capital (wealth & educational attainment) as well as entrepreneurial attitudes (high scores on self-efficacy). The fact that their retirements were overall quite early, but not considered involuntary, suggests that the timing of the decision to retire may be driven by the emergence

of new (business) opportunities. The fact that the early retirement arrangements for these cohorts were very generative may have provided them with a strong financial basis that serves as a powerful springboard and incentive to pursue self-employment. This privileged retirement context may change in the near future. In the Netherlands, normal retirement age will increase to at least 67 years, and replacement rates will be lower than is currently the case. As a result future Dutch older adults are likely to age with more modest retirement incomes than the current cohorts. One way to adopt to these changes is by delaying retirement or taking up bridge employment after retirement. This, however, may not always be voluntary. As such, involuntary or necessity bridge employment may gain importance in the years ahead.

This study has several noteworthy strengths. The most obvious is its capacity to examine bridge employment decisions from a multidisciplinary perspective. This is an important advancement to the extant literature, which has focused mainly on either the role of individual factors such as economic resources or on psychological processes. Another asset is its capacity to simultaneously examine two major modes of bridge employment, post career wage-and salary *and* self-employment, enabling us to gain more insight into the processes that are involved in choosing the type of bridge employment to engage in.

The study also has limitations. First, although the sample does contain substantial variation in terms of important individual-level and variables, the data are not nationally representative and may not be entirely generalizable to the Dutch population as a whole. This holds in particular for persons that were employed in small business enterprises. Second, this study examined the impact of opportunities and constraints in the older worker's opportunity structure, their social context and their psychological make-up. Financial resources included were accumulated wealth as well as perceived pension shortage. The survey did not contain objective data on exact replacement rates and post-retirement income decline. This information may have deepened the insights in the financial forces in the bridge employment decision.

This paper explored a relatively novel trend in the labor force behavior of older adults in the Netherlands. Self-employment in retirement can be considered a form of social innovation. A better understanding of the role of self-employment in extending working lives is very relevant from a policy perspective. The findings suggest that the self-employment option has been chosen primarily by older workers who are more privileged in terms of social and financial capital and psychological resources. Given the unfavourable labour market situation for older persons, self-employment may be potentially of interest for a broader group of seniors who like to remain active in the labor force. Training programs providing prospective and newly practicing entrepreneurs with the skills and knowledge they need to validate their ideas and make opportunities happen may stimulate more older adults, in particular women and less skilled persons, to create their own post-retirement jobs.

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Table 1 Means, Standard Deviations, and Correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Gender (male=1)	0.75	0.4																	
2. Educational attainment (1-7)	4.2	1.8	0.31*																
3. Health (1-5)	4.1	0.8	0.05	0.03															
4. Total Wealth (1-7)	4.4	1.6	0.26*	0.40*	0.08*														
5. Pension shortage	0.31	0.5	-0.18*	0.02	-0.03	-0.01													
6. Partner status	0.88	0.3	0.15*	0.08*	0.03	0.17	-0.05*												
7. Involuntary retirement	0.29	0.4	0.04	0.07*	-0.09	-0.05	0.04	-0.06*											
8. Retirement age <55	0.09	0.3	0.05	0.05	-0.06	0.06	-0.04	0.01	0.02										
9. Retirement age 56-57	0.18	0.4	-0.01	-0.06*	-0.03	-0.01	-0.07*	0.03	0.10*	-0.15*									
10. Retirement age 58-59	0.21	0.4	-0.00	-0.04	-0.01	0.04	-0.00	-0.01	-0.02	-0.16*	-0.24*								
11. Retirement age 60-61	0.26	0.4	0.01	0.06*	-0.02	-0.01	-0.00	0.00	-0.06*	-0.19*	-0.28*	-0.30*							
12. Retirement age > 62	0.25	0.4	-0.03	0.01	0.11*	-0.07*	0.09*	-0.04	-0.02	-0.18*	-0.27*	-0.35*	-0.29*						
13. Labor market opportunity	2.4	0.9	0.14*	0.15*	0.13	0.14*	-0.02	0.06*	-0.02	0.15*	0.01	-0.03	-0.03	-0.04					
14. Work attachment	2.6	1.1	-0.05	-0.03	0.17	0.00	0.00	-0.02	0.05*	-0.06*	-0.06*	0.02	-0.03	0.09*	0.14*				
15. Sensation Seeking	5.3	1.6	0.11*	0.14*	0.03	0.12*	0.00	0.02	0.00	-0.01	0.01	0.01	-0.00	-0.01	0.08*	0.03			
16. Self-efficacy	6.8	1.5	0.09*	0.13*	0.15*	0.09*	-0.00	0.10*	-0.01	0.01	-0.03	0.01	0.00	0.01	0.16*	0.06*	0.09*		
17. Bridge employment	0.30	0.4	0.21*	0.21*	0.10*	0.14*	-0.03	0.08*	0.03	0.10*	0.07*	-0.01	0.01	-0.13*	0.09*	0.08*	0.11*	0.07*	
18. Self-employment	0.11	0.3	0.16*	0.22*	0.05*	0.17*	-0.02	0.09*	0.03	0.05	0.03	-0.01	0.01	-0.06*	0.16*	0.07*	0.14*	0.12*	0.74*

*p<0.05

Table 2 Descriptive Results

	Self-employment	Wage employment	Fully Retired	Total
Demographic information				
<i>Gender</i>				
% Male	5	14	30	24
<i>Age at baseline (2001)- avg.</i>	54.9	54.5	55.4	55.2
Opportunity Structure				
<i>Educational attainment (%)</i>				
Low	4	13	22	18
Medium	38	50	50	49
High	58	37	28	33
<i>Perceived Health (%)</i>				
(Very) Poor	3	3	6	6
Not good/not bad	6	14	16	14
(Very) good	91	83	78	80
<i>Accumulated Wealth (%)</i>				
Low (1-2)	8	15	20	18
Medium (3-5)	44	60	57	55
High (6-7)	48	25	23	27
<i>Perceived pension shortage</i>				
% yes	27	28	32	31
<i>Partnerstatus</i>				
% with partner	96	91	86	88
Context of Retirement				
<i>Age at retirement 9%</i>				
Younger than 55	14	14	7	9
56-57	23	23	16	18
58-59	20	23	20	21
60-61	26	24	27	27
62 and older	17	16	29	25
<i>Voluntariness of retirement</i>				
% involuntary	35	31	28	29
<i>Perceived chance on labor market (1-5) – avg.</i>				
	2.8	2.6	2.3	2.4
Psychological variables				
<i>Work centrality (1-5) – avg.</i>	2.8	2.7	2.6	2.6
<i>Self-efficacy (0-10) – avg.</i>	7.3	6.8	6.7	6.8
<i>Sensation Seeking (0-10) – avg.</i>	5.9	5.3	5.1	5.3
N	133	231	853	1,217
Sample: Participants aged 52 and over in 2001 that have taken early retirement between 2001 and 2011				

Table 3 Results of the Logit Regression explaining Bridge Employment Decisions among older workers in the Netherlands, (N=1.204)

	Bridge Employment vs Full Retirement			
	B	SE	OR	95% CI OR
Intercept	-5.25	0.53	0.00	0.00 – 0.01
Gender (male =1)	1.03***	0.21	2.82	1.87 – 4.26
Opportunity structure				
Educational attainment	0.21***	0.04	1.23	1.12 – 1.34
Health	0.21*	0.09	1.23	1.04 – 1.46
Total Wealth	-0.00	0.05	1.00	0.92 – 1.10
Pension shortage	-0.00	0.16	0.99	0.73 – 1.34
Partnerstatus (with partner = 1)	0.39	0.25	1.46	0.89 – 2.37
Social context of retirement				
Age at retirement				
Younger than 55	0.61*	0.26	1.83	1.11 – 3.03
56-57	0.63**	0.20	1.87	1.26 – 2.79
58-59	0.32	0.20	1.37	0.93 – 2.03
60-61- ref	---	--	--	
62 and older	-0.53**	0.20	0.58	0.39 – 0.88
Involuntary retirement	0.12	0.15	1.13	0.84 – 1.51
Perceived labor market opportunities	0.28***	0.07	1.32	1.14 – 1.52
Psychological resources				
Psychological work attachment	0.20**	0.08	1.22	1.07 – 1.39
Chi square			168.38	
Df			13	
Log Likelihood			-643.32	
Pseudo R2			11.6%	
Sample size			1.204	

Note. OR = odds ratio. CI – Confidence Interval

*p < 0.05, ** p < 0.01, *** p < 0.001

Table 4 Estimated Coefficients of Multinomial Regression of Antecedents of Bridge Employment decisions. Self-employment vs. Full Retirement

	Self-employment vs Full Retirement				Salary-and-Wage employment vs Full Retirement				Self-employment vs Salary-and-Wage employment			
	B	SE	OR	95% CI OR	B	SE	OR	95% CI OR	B	SE	OR	95% CI OR
Intercept	-10.27***	1.05	0.00	0.00-0.00	-4.68	0.67	0.00	0.00-0.03	-5.59***	1.13	0.00	0.00-0.03
Gender (male=1)	1.49***	0.44	4.46	1.86-10.73	0.92***	0.23	2.50	1.59-3.92	0.58	0.48	1.78	0.69-4.60
Opportunity structure												
Educational attainment	0.35***	0.07	1.42	1.22-1.63	0.13**	0.05	1.14	1.03-1.26	0.22**	0.08	1.24	1.06-1.45
Health	0.11	0.13	1.11	0.86-1.43	0.25	0.10	1.29	1.06-1.57	-0.15	0.14	0.86	0.64-1.15
Total Wealth	0.14	0.08	1.15	0.98-1.34	-0.07	0.05	0.94	0.84-1.04	0.21*	0.08	1.23	1.04-1.45
Pension shortage	-0.11	0.24	0.89	0.55-1.42	0.05	0.17	1.05	0.74-1.48	-0.16	0.26	0.85	0.50-1.43
Partner status (with partner=1)	0.75	0.49	2.12	0.81-5.55	0.27	0.27	1.31	0.77-2.22	0.48	0.52	1.61	0.57-4.56
Social context of retirement												
Age at retirement												
Younger than 55	0.46	0.38	1.58	1.19-3.67	0.74*	0.29	2.09	1.19-3.67	-0.28	0.42	0.75	0.33-1.70
56-57	0.68*	0.30	1.96	1.18-2.93	0.62**	0.23	1.86	1.18-2.93	0.06	0.33	1.05	0.55-2.02
58-59	0.28	0.30	1.32	0.92-2.24	0.36	0.22	1.43	0.92-2.24	-0.08	0.34	0.92	0.47-1.79
60-61- ref												
62 and older	-0.48	0.30	0.62	0.35-0.92	-0.55*	0.24	0.57	0.35-0.92	0.07	0.36	1.07	0.53-2.16
Involuntary retirement	0.24	0.22	1.27	0.75-1.49	0.06	0.17	1.05	0.75-1.49	0.18	0.25	1.19	0.73-1.95
Perceived labor market opportunities	0.35**	0.11	1.42	1.05-1.48	0.22**	0.08	1.25	1.05-1.48	0.13	0.12	1.13	0.89-1.44
Psychological resources												
Psychological work attachment	0.28**	0.10	1.32	1.00-1.36	0.15*	0.07	1.16	1.00-1.35	0.12	0.11	1.13	0.91-1.30
Self-efficacy	0.12*	0.06	1.19	0.95-1.16	-0.05	0.05	0.95	0.85-1.05	0.17*	0.08	1.19	1.01-1.41
Sensation seeking	0.17	0.08	1.13	0.85-1.05	0.05	0.05	1.05	0.95-1.16	0.12	0.07	1.13	0.98-1.30
Chi square							222.56					
Df							30					
Log Likelihood							-846.39					
Pseudo R2							11.6%					
Sample size							1.204					

Note. OR = odds ratio. CI – Confidence Interval

*p < 0.05, ** p < 0.01, ***p<0.001