Chapter 9

General discussion
In this final chapter, the main findings of this thesis are summarized and methodological considerations are discussed. Subsequently, the findings are placed in the context of three important future trends, i.e. the increase in older workers with chronic diseases, the increasing demand on older workers to provide informal care, and the increasing flexibility of the labor market. This chapter concludes with recommendations for future research and practice.

Main findings

The central aim of this thesis is to gain insight in determinants of, and mechanisms underlying early retirement and working beyond retirement. It takes a multidisciplinary perspective, meaning that factors frequently studied in different areas of research, i.e. health, job characteristics, skills and knowledge, social and financial factors, and the ability, motivation and opportunity to work are all addressed. In addition, this thesis zooms in on the role of health in the transition from work to early retirement.

Determinants of early retirement and working beyond retirement

This thesis shows that the transition from work to early retirement is influenced by various domains, e.g. health, job characteristics, skills and knowledge, and social and financial factors. Although specific factors differ between individuals, for most employees a combination of factors plays a role in the process towards early retirement.

More specifically, poor perceived health influenced early retirement. Further analyses conceptualizing health more narrowly, i.e. as having a chronic disease or not, showed that psychological and musculoskeletal health problems more often resulted in early retirement, whereas other chronic diseases did not. Several job characteristics influenced early retirement. Both quantitative and qualitative analyses revealed that the social climate at work influenced early retirement (e.g. appreciation, conflicts). Our qualitative study suggested that physically demanding work, high work pressure and organizational changes also influenced the transition from work to early retirement, although this was not supported or addressed in our quantitative studies. Furthermore, employees who were highly focused on development of their skills and knowledge were less likely to retire early. Regarding social factors, those with a partner who has a positive attitude about stopping to work retired early more often. The qualitative study added that the wish to do enjoyable things with a non-working or older spouse, to spend more time with
grandchildren, and to take care of family members or friends were reasons to retire early. Finally, the financial opportunity to stop working was a determinant of early retirement. At a population level, the financial opportunity to stop working before the age of 65 years contributed most to early retirement, followed by the attitude of the partner with respect to stopping to work, and appreciation at work.

In line with early retirement, working beyond retirement was more likely among employees with better perceived health, higher work engagement and a poor financial situation of the household. In addition, persons participating in voluntary work more often continued working. No evidence was found that job characteristics and skills influenced working beyond retirement.

**Underlying mechanisms**

Determinants in the domains health, job characteristics, skills and knowledge, and social and financial factors influenced the transition from work to early retirement via lower work ability, lower work motivation, and less opportunity to work. To illustrate, poor physical and mental health were related to a lower work ability, which in turn related to a higher likelihood of early retirement. A poor social climate at work influenced early retirement via a lower motivation to work. A lower focus on development of skills and knowledge resulted in early retirement via a lower opportunity to work as offered by the employer.

Zooming in on health revealed that poor physical and mental health influenced early retirement via four different pathways, i.e. (a) persons felt unable to work at all due to health problems, (b) poor health resulted in a self-perceived decline in the (future) ability to work, (c) employees were afraid of a further decline in health, and (d) employees with a poor health felt pushed out by their employer, although they themselves did not experience a decline in their ability to work. Besides poor health, also good health influenced early retirement. Persons wanted to enjoy life while their health still allowed them to do so. The awareness of being in ‘good health’ arose, when persons were confronted with the finiteness of life. Health could influence early retirement via several pathways at the same time.

To better understand underlying mechanisms, this thesis also zoomed in on the motivation to work, hereby addressing the notion of “mental retirement”, i.e. the idea that employees disconnect from work, before their actual retirement. Analyses showed that (early) retirement is likely to be preceded by steady low work motivation, as compared to steady high work motivation. Although previous research suggested that older workers may “mentally retire” from work due to the prospect of retirement, this thesis did not
find support for such a “clock out” process, i.e. (early) retirement was not likely to be preceded by declining work motivation.

Methodological considerations

When interpreting the findings of this thesis, several methodological considerations need to be taken into account that relate to the study sample, the data, and the qualitative analyses.

Study sample
In this thesis, data of the Study on Transitions in Employment, Ability and Motivation (STREAM) were used. STREAM is a prospective cohort study among 12,055 employees, 1,029 self-employed persons, and 2,034 non-working persons, all aged 45 to 64 years at baseline. Due to stratification by age, this large dataset included relatively many persons who were eligible for early retirement during follow-up.

Persons included in STREAM participate in an internet panel of GfK. An internet panel was chosen as STREAM primarily aimed to investigate longitudinal relations. In general, loss to follow-up in internet panels is lower than in random samples from population registries, which is especially important in longitudinal studies. However, using an internet panel may have introduced selection bias due to selective entry in the internet panel. Certain groups of persons may be overrepresented in an internet panel, e.g. persons who are used to work with computers, such as white-collar workers, whereas other groups of persons may be underrepresented, e.g. persons without access to internet, illiterate persons, and persons who do not master the Dutch language. Although the study population was representative of the Dutch population with respect to gender and educational level within different age groups, we do not know to what extent the use of an internet panel influenced the data and the findings of this thesis.

Although the response rate at follow-up in STREAM was high, i.e. ranging from 83% in a study with one year of follow-up to 66% in a study with three years of follow-up, selective loss to follow-up cannot be ruled out. Persons lost to follow-up were slightly younger, reported a slightly poorer mental health and a slightly higher focus on development on knowledge and skills, and more often had no partner and a worse financial situation of the household. However, the differences between those who participated at follow-up and those who did not were small, and were considered as not relevant.
Self-reported data
One dataset, i.e. STREAM, was used for all quantitative studies within this thesis. A drawback of STREAM is that it concerns questionnaire data, and hence both dependent and independent variables relied on self-report. Therefore, information bias may have played a role. To our knowledge, no previous study investigated the validity of self-reported employment status. It is possible that persons with several employment statuses (e.g. employee and retiree) report their status differently (employee, or retiree, or both). It is unclear whether and how this influenced our findings. In future studies registry data, e.g. source of income as registered by Statistics Netherlands, could be used as additional information to assess employment status. Self-report may also bias the results if there are systematic differences in answering questions on determinants by the outcome measure. For example, persons may rate their health more negatively to justify that they are going to retire early, and as a consequence the risk estimates of the influence of health on early retirement would be overestimated. We do not know to what extent differential misclassification influenced the data and the findings of this thesis.

Longitudinal data
The analyses within this thesis relied on longitudinal data, which allowed us to relate independent and dependent variables assessed at different moments in time, and to identify groups of employees that followed similar trajectories over time.

By using follow-up periods varying from one to three years, only a relatively small part of a person’s working life was captured. A study of Damman et al showed that the preretirement opportunity structure was more important to predict early retirement than life experiences earlier in life, i.e. in the educational, work, health and family domain [1]. However, factors earlier in life, such as low job satisfaction throughout the working career or continuous health problems over the life course might be of influence as well, which would require longer follow-up periods.

In addition, the strength of the association between predictors and early retirement may depend on the time window used. Whereas some factors may be of great importance one year before early retirement, for example sudden deterioration in health or a life event, other factors may be relevant earlier in working life, for example high physical workload. Besides, previous research showed that the prospect of retirement may result in a reduction of work activities [2]. Future research could give insight in the relevant time window of determinants, by studying within one dataset how the strength of the
association between different determinants and early retirement depends on the period of time between the assessment of these variables.

Qualitative research
In addition to the quantitative analyses, thirty early retirees who participated in STREAM were interviewed about their reasons for early retirement in a qualitative study. Combining quantitative with qualitative analyses allowed us to gain a better understanding of underlying mechanisms. For example, the quantitative studies showed that poor health influenced early retirement via lower work ability, and in the qualitative study also other pathways in which health influenced early retirement were mentioned. In addition, our finding from the qualitative study that persons with good health explicitly mentioned their good health as a reason for early retirement, may partially explain why some previous quantitative research did not find a significant relationship between health and early retirement [3].

In line with the aforementioned information bias in the quantitative analyses, qualitative studies have a risk of information bias as well. Persons looked back at their transition from work to early retirement. They may not have remembered their reasons for early retirement correctly, and they may have attributed reasons to this ‘event’. The ‘real’ story may be influenced by psychological processes, such as cognitive dissonance. In-depth follow-up questions were used to validate the stories of the interviewees.

Findings in the light of future trends
In the past years several policy reforms that discourage early exit from the workforce and stimulate prolonged working lives were introduced. Due to the increasing life expectancy, it is expected that state pension age will be beyond the age of 71.5 years in 2060 [4] and people will prolong their working lives further. At the same time, tomorrow’s older workers will have to cope with the following three trends in our society:

1. Older workers will more often suffer from chronic diseases
2. Older workers will combine paid work with informal care more often
3. Older workers will need to cope with a more flexible labor market

These trends may impact retirement and prolonged working lives in the future. In the following, these trends are described and linked to the findings of this thesis.
Trend 1: Older workers will more often suffer from chronic diseases

The prevalence of chronic diseases increases with age, i.e. 66.2% of the population aged 55 to 65 years reports at least one chronic disease, as opposed to 58.0% of the population aged 50 to 55 years [5]. Among persons older than 65 years the prevalence is even higher; 72.7% of the population aged 65-75 years is having at least one chronic disease. Since it is expected that the mean age of leaving employment will further increase within the coming years, the proportion of workers with a chronic disease is likely to increase as well. This raises questions on the consequences of prolonged working lives for persons with poor perceived health and/or chronic diseases.

The findings of the current thesis revealed that several chronic diseases increased the risk of early exit from the workforce (chapter 3). Employees with severe headache or migraines, diabetes mellitus, and musculoskeletal, respiratory, digestive and psychological health problems, had an increased risk of receiving disability benefits. Employees with psychological and circulatory health problems also had an increased risk of unemployment, and those with psychological and musculoskeletal health problems more often retired early. Although not all chronic diseases increased the risk of early retirement, poor perceived health was a determinant of early retirement in several studies (chapter 2 and 4) and good perceived health was a determinant of working beyond retirement (chapter 8). The finding that perceived health is a stronger predictor of early retirement than having a chronic disease is in line with a recent literature review [6]. Our findings are also in agreement with the conclusion of Baanders et al that common consequences of chronic diseases, i.e. perceived health, pain, fatigue, and functional limitations, are more important to predict participation in paid work than specific diagnoses [7].

Having a chronic disease is not always accompanied by poor perceived health. In STREAM 33% of the persons with a chronic disease reported poor perceived health, and hence 67% of the persons with a chronic disease had good perceived health. On the other hand, only 1% of the persons who reported poor perceived health had no chronic disease. Since perceived health is a stronger predictor of early retirement than having a chronic disease, persons with a chronic disease and good perceived health may not always be at risk for early retirement. Taking into account the trend that older workers will more often suffer from chronic diseases, this is good news. However, the question remains what the consequences of prolonged working lives are for persons with poor perceived health.
Exit routes act as communicating vessels

In future, persons with poor perceived health who can financially afford to stop working due to personal savings or other sources of income, may still ‘retire early’ irrespective of the statutory retirement age. However, those who cannot afford this, may leave the workforce via other exit routes, i.e. disability pension or unemployment. Previous research showed that different exit routes act as communicating vessels [8-10]. Schils showed that early retirement and social insurance, i.e. disability pension and unemployment, acted as communicating vessels in the Netherlands in the period 1990-2001 [9]. Lindeboom et al added that especially in the older age groups, i.e. as soon as workers become eligible for an early retirement scheme, early retirement can be considered a substitute of disability pension [10]. It might be that early retirement developed itself as an easier, less bureaucratic way of leaving the workforce for older workers with poor health than disability pension, both for employees and their employers.

Our qualitative study in chapter 6 also illustrated that early retirement can be an alternative route for disability pension. A 63-year old woman had suffered from psychological health problems (ADHD and burnout) for many years and quitted paid employment after being granted a work disability pension. During re-examination of her work disability pension, her insurance physician assessed her as being able to work 16 hours per week. This woman and her employer together concluded early retirement would be the best solution. The woman felt it was impossible for her to work, and experienced early retirement as the only possible escape from work. Hence, both macro-economic studies and qualitative studies at the level of the individual employee suggest that various exit routes from the workforce act as communicating vessels.

By limiting the financial possibility to retire early, persons with poor perceived health, or those with psychological or musculoskeletal health problems that would have retired early under the present financial conditions, may leave the workforce via other exit routes in the future. Since the accessibility of disability pension has strongly been decreased as well, they may start to receive unemployment benefits more often and afterwards the minimum basic financial support in the Netherlands.

Health-related consequences of prolonged working lives

Older workers may also continue working in spite of poor health. Although this may have a favorable effect on their post-retirement income level, it may also influence their health. Health relates to quality of life at the individual level, but also to health care costs
at the societal level. The qualitative study within this thesis showed that some employees with health problems were afraid of a further decline in health when they would have continued working. Therefore they chose to retire early (chapter 5). This is illustrated by the following quote: “Look, deciding to stop at 60... that was actually because I didn’t want to end up handicapped early. When I got that TIA and the oppression complaints, I said ‘60 is my limit’. I don’t want to think of being 62 or 63 and it going down hill from then on, and I get disabled. Then I’d have no one to blame but myself.” For now, it is largely unclear whether these worries about future health decline are justified.

In general, (re-)employment is good for health [11,12]. However, health-related consequences of prolonged working lives, especially among persons with poor health have not been described yet. Previous research that addressed the impact of retirement on health were done within the general population, and these findings are inconclusive. To illustrate, in a recent review it was concluded that retirement can have both beneficial as well as adverse health effects [13]. Health trajectory analyses showed that retirement was associated with a substantial improvement in self-rated health [14] and fatigue [15]. No decrease of the incidence of chronic diseases [15] and myocardial infarction [16] after retirement was found. A recent study of Schuring et al added that poor health preceded early retirement and becoming economically inactive, but these exit routes prevented further deterioration of health among low-educated workers [17]. Early retirement had an adverse effect on self-rated health among high educated workers. The previously mentioned study of Westerlund et al focused on the influence of retirement on the course of health among persons with a depression, musculoskeletal health problems, and physical illness. It was found that these health problems before retirement were associated with a steeper increase in the prevalence of poor health while still in work, and that persons with these health problems benefited more from retirement than those who did not have these health problems [14]. In addition, a poor work environment, that is characterized by a low occupational grade, high physical and psychological demands, and low job satisfaction, was associated with a steeper increase in the prevalence of poor health before retirement, and a greater retirement-related improvement.

Hence, early retirement may have favorable consequences on health among workers with health problems, a lower educational level, and a poor working environment. Future research is recommended to carefully monitor the effects of later retirement on health before, during and after retirement, especially among these vulnerable groups of workers. On a macro level, it seems important to monitor the trade-off between the societal gains of prolonged working lives and the potentially increasing societal costs due to health care.
A work environment that facilitates prolonged working despite poor health

The work environment offers opportunities to support prolonged working lives among employees with chronic diseases. A study of Boot et al suggested that older workers with chronic diseases have special needs as opposed to workers without chronic diseases; this study indicated that having more psychosocial resources is predictive for having paid work in workers with chronic disease and not in workers without chronic disease [18]. In this thesis we showed that especially high autonomy buffered the adverse influence of chronic disease on receiving disability benefits (chapter 3). Although not statistically significant, this study furthermore suggested that higher social support and lower psychological job demands buffered this relation as well. Another study confirmed the importance of a favorable work environment by showing that lower autonomy and higher job demands increased the association of several chronic diseases with sickness absence [19]. A qualitative study showed that the influence of health on productivity depends on the balance between demands and the resources [20]. The authors recommended to tune work adjustments to the unique imbalance. However, work-related interventions that stimulate prolonged working among persons with poor health are rare [21]. Hence, it is recommended to study whether work-related interventions could modify job characteristics, such as autonomy and job demands, and whether this indeed results in prolonged working lives.

Trend 2: Older workers will combine paid work with informal care more often

People are not only stimulated to participate longer in paid work, there is also an increasing appeal on people to take a more active role in unpaid work, e.g. voluntary work and informal care. As King Willem Alexander expressed in his first King’s speech, the Netherlands changes currently from a social welfare state towards a participation society [22]. This is reflected, among other things, in an increasing appeal on citizens to provide informal care for (older) family members and important others. Persons who need care are encouraged to stay in their own homes with the help of family or friends, next to the help of professionals [23]. Informal care should help health care costs to be maintained within certain limits. In 2012, 19.1\% of the population aged 55 to 65 years provided informal care in the Netherlands [24]. At the same time, workforce participation of the groups that traditionally provided informal care, i.e. women and older persons, has increased in previous years. Providing informal care is most common among persons aged 45 to 65 years, and, in general, women provide more informal care than men [25].
The growing demand for informal care combined with the need for prolonged working lives will result in more workers combining paid work with informal care in the near future [23]. This raises the question of whether this is a viable combination with regard to health and the prolongation of working life.

The qualitative study within this thesis showed that the social life, including taking care of family members or friends, contributed to early retirement (chapter 5). However, quantitative analyses within this thesis also showed that participation in informal care did not statistically significantly influence working beyond retirement (chapter 8). Hence, within this thesis, findings regarding the relation between informal care and workforce participation are inconclusive.

The Netherlands Institute for Social Research empirically addressed the question of whether the aims of prolonged working lives and providing informal care are compatible [23]. Findings showed that persons who worked more than 28 hours per week less often started to provide informal care than persons who worked less than 28 hours per week and non-working persons. Unless there was a combination of intensive informal care and a large job, starting to provide informal care did not result in structurally fewer contract hours. It was suggested that persons sacrifice their leisure time to combine paid work with informal care. Starting to provide intensive informal care resulted in lower perceived health and a higher risk of long term sickness absence. A recent study of Plaisier et al showed that a heavy care burden impeded the successful combination of paid work and informal care. However, caregivers who felt supported by colleagues and supervisors, and who worked in supportive organizations more often had a good perceived balance between work and care and less need for job adaptations, such as adjusting work schedules, reducing working hours, leaving the job or changing jobs [26].

Taking into account the increasing appeal on citizens to combine prolonged working lives with informal care it is worth to monitor health- and work-related consequences. In addition, future research should investigate how policy and work organizations could support the combination of paid work and informal care. An example may be to enhance opportunities of flexible working hours, that allow persons to provide care when it is needed (e.g. accompanying hospital visits). A dialogue between employee and employer and a tailored approach seem crucial.
Trend 3: Older workers will need to cope with a more flexible labor market

The careers of persons studied in this thesis were characterized, to a large extent, by lifetime employment for one single employer. The labor market is becoming increasingly flexible and workers will change jobs more often in the future. In the Netherlands, the proportion of people with a flexible employment contract, i.e. an employment contract of limited duration, or without a fixed amount of hours per time unit, has increased from 15% in 2004 to 22% in 2014. In addition, the proportion of freelancers has increased from 8% to 12% in the same period [27]. It should be noted that workers under flexible work arrangements have less opportunities for learning and development compared to those with fixed contracts [28]. Recent adjustments in the Work and Security Act aim to strengthen the position of workers under flexible arrangements. Under the new act persons qualify for a fixed contract after 2 years [29]. However, a flexible shell has several benefits for employers, e.g. to respond rapidly to changes, and hence, in the coming years it will become clear whether this new act indeed results in a larger proportion of fixed contracts. Next to the increasing flexibility of the labor market, the nature of work is changing rapidly due to technological and organizational changes.

Opportunities to work in a more flexible labor market

Naturally, in a more flexible labor market it is increasingly important for older persons that there are sufficient opportunities to work. The qualitative study within this thesis showed that when persons lose a job at older age they experience few opportunities to find a new job (chapter 5). The following quote illustrates that older workers experience lack of perspective on the labor market: “Well, there was no perspective anymore. As of July 1st the department I worked in was closed.” This was confirmed in the literature. This thesis furthermore showed that several determinants in the domains health, job characteristics, skills and knowledge, and social factors influenced early retirement via a lower support of colleagues and supervisor with regard to working until the age of 65 years. Previous research showed that in 2012, only 27% of employers in the Netherlands reported it is important for staffing that employees continue working until the statutory retirement age [30]. Compared to employers in, for example, Denmark, Germany, and Italy, Dutch employers do relatively little to recruit and keep older workers [31]. Hence, current opportunities in the labor market for older workers are limited, and it is unclear how this will develop in the future.
Up to date skills and knowledge

Next to the opportunity to work, skills and knowledge may also play a key role in a more flexible labor market. The nature of work is changing rapidly due to technological and organizational changes, which requires continuous updating of knowledge and skills. This is important for employers to be able to get along with the competition, and for employees to get and keep a job. This thesis pointed to the importance of skills and knowledge. Persons with a higher focus on development of skills and knowledge, had a higher work engagement and work ability, and their colleagues and supervisor more often had a positive attitude about working until the age of 65 years (chapter 4). Employees who report a higher focus on development of skills and knowledge (i.e. developmental proactivity) were less likely to retire early (chapter 2). Hence, developmental proactivity played a central role in the transition from work to early retirement, and may even be more important to remain employed in a more flexible labor market.

Recommendations for research

Throughout this general discussion several recommendations that specifically related to the trends within our society, i.e. the increase in older workers with chronic diseases, the increasing demand on older workers to provide informal care, and the increasing flexibility of the labor market, were made. In the following, three general recommendations for research within the field of work, health and retirement are described.

Broad perspective using a multi- and interdisciplinary approach and corresponding data

To study the prolongation of working lives, a broad perspective using a multi- and interdisciplinary perspective, incorporating insights as well as data from different disciplines is needed. Throughout this thesis a multidisciplinary perspective was used to gain insight in determinants of, and mechanisms underlying early retirement by incorporating factors that are frequently studied within different disciplines, such as health sciences, social sciences and economics (chapter 2, 4, 5 and 8). It was shown that the transition from work to early retirement is influenced by various domains, i.e. health, job characteristics, skills and knowledge, and social and financial factors. Although conclusions about single determinants were in agreement with conclusions drawn from monodisciplinary studies, gaining insight in the relative importance of the different domains is of added value. This
information is helpful to determine which interventions or regulations would potentially have the greatest impact on the prolongation of working life.

Next to a multidisciplinary perspective, an interdisciplinary perspective may be needed when the interaction between two or more domains is addressed. By taking into account interacting instead of parallel domains interdisciplinary research goes a step further than multidisciplinary research. An interdisciplinary perspective may for example be helpful to study the interplay between health and financial factors in the retirement process. To illustrate, it is of interest whether financial incentives to prolong working lives have a different influence on work participation in workers with and without health problems. An interdisciplinary perspective may be helpful to gain deeper understanding in why certain factors have a different role for different groups of workers.

When adopting a multi- or interdisciplinary perspective it is important to use corresponding data from the involved disciplines. Although this thesis took a broad perspective, one dataset that consisted of self-reported questionnaire data, was used to assess all domains that were considered to be relevant. Different experts were involved in the design of the questionnaires, but it was not possible to involve experts from all relevant disciplines. For example, economists were not involved, which may have resulted in suboptimal information on financial factors. As linking different data sources could strengthen a multidisciplinary perspective, it is worth to investigate whether already existing registry data could add relevant information to existing questionnaire data. For example, data on consumption of health care could be used in addition to self-reported questionnaire data about perceived health. Home ownership, assets and income could be used to gain insight in a person’s financial situation. Furthermore, data drawn from collective employment agreements may provide information on working conditions. Among others, Murdoch and Detsky (2013) pointed to the potential of ‘big data’, i.e. the vast and expanding amount of data being collected and stored, by proclaiming the inevitable application of big data to health care [32]. It is worth to explore opportunities of big data to support a multi- and interdisciplinary approach within the field of prolonged working lives.
The employer's perspective and influence of company policies

The employer's perspective and its company policies are recommended to be studied in relation to the employee.

The employer plays a key role in recruiting, hiring and keeping older workers. Throughout this thesis only employee data were used. All information on the employer was asked via the employee, e.g. ‘Does your supervisor think it is important that you continue working until the official retirement age?’. However, to fully understand what determines the prolongation of working lives, information from both the employee and the employer is needed.

More specifically, more insight is needed in the impact of company policies aiming at sustainable employability and prolonged working lives. In the Netherlands, 37% of the employers provide company policies aiming at prolonged working lives [30]. Especially policies aimed at sparing older workers are frequently provided, e.g. extra days off, working fewer hours per week and alleviation of strenuous working tasks. Stimulating policies, e.g. education and training, job enlargement and rotation, and workplace health promotion, are provided less often [30]. Studies that systematically evaluate the effectiveness of work-related interventions and human resource instruments on sustainable employability are rare. The randomized controlled trial may not be the most appropriate design to evaluate policies within organizations, but the stepped-wedge randomized trial, the propensity scores method, and the multiple baseline design seem promising alternatives [33]. Furthermore, it is recommended to investigate whether current company policies incorporate factors that this thesis found to be important, i.e. the social climate at work, developmental proactivity and perceived physical health. If not, it could be studied how these factors could best be included.

Evaluation of national reforms in the retirement system

The effects of the current pension reforms on health, exit from the workforce via other pathways than retirement, and determinants of workforce participation is recommended to be evaluated in natural experiments.

Currently the old-age pension age is being increased; from 65 years in 2012 to 67 years in 2021. Given the trend in previous years, it is expected that the mean age of actual leaving employment will further increase. Insight is needed in different side-effects of the pension reforms, for example on health, work productivity, work ability, and work motivation. In addition, it is of interest whether older workers will leave the workforce via different exit routes in the future, e.g. unemployment, or that new innovative ways to finance an early
exit will be found. Furthermore, it is of interest whether and how the relative importance of factors from the domains health, work, skills, and the social and financial situation will change as retirement policies change. Natural experiments may be a method to evaluate the effect of the current national reforms, as was previously shown in studies of De Grip et al [34] and Hernaes et al [35]. Also international comparisons may contribute to our understanding of the effects of different retirement systems on prolonged working next to the potential side-effects of reforms in the retirement systems on health and work productivity.

 Recommendations for practice

 Create favorable work environments

To prolong working lives, it is recommended to promote favorable work environments that are characterized by a positive social climate and that support health and work motivation.

This thesis showed that persons who feel appreciated at work were less likely to retire early (chapter 2), whereas conflict at work was one of the reasons to retire early (chapter 5). The social climate at work did not only directly influence early retirement, but it also influenced early retirement via the motivation to work (chapter 4). Moreover, a steady low work engagement preceded early retirement (chapter 7), and persons with high work motivation were more likely to prolong their working life, even beyond retirement (chapter 8). This thesis also pointed to the importance of health with regard to workforce participation (chapter 2-4, 6 and 8), as well as the potential of the work environment to modify the adverse relation between health and early exit from the workforce (chapter 3). Hence, a work environment in which older workers feel appreciated and that supports health and work motivation should be strived for.

Until now, it has not been studied whether the work environment is modifiable in such a way that it increases health and work motivation and in turn contributes to prolonged working lives. Previous reviews have shown that disease management programs as well as workplace health promotion may positively affect health and work-related outcomes, including absenteeism and presenteeism [36,37]. Work-related interventions addressing work engagement seemed not to have an effect in previous research [38-40], but it has been suggested that targeting work engagement via characteristics of the job, in addition to the individual, may be a fruitful approach [41].
Invest in skills and knowledge

It is important that both employees and employers invest in development of skills and knowledge through formal and informal learning. Taking into account the rapidly changing nature of work in combination with the increasing flexibility of the labor market, it becomes increasingly important to keep skills and knowledge up to date. This thesis showed that employees who were highly focused on development of skills and knowledge were less likely to retire early (chapter 2). Although this may be a trait to some extent, developmental proactivity may also be influenced by the learning climate at work.

No previous research investigated whether work-related interventions focusing on development of skills and knowledge contributes to prolonged working lives. However, the present thesis and a recent study of Montizaan et al [42] underline it is worth to investigate such interventions. The study by Montizaan et al showed that training policies were positively related to the expected retirement age of employees, irrespective of whether employees actually participate in training.

Traditionally, development of skills and knowledge was pursued through formal training, but recent studies pointed to the importance of informal learning, which could be defined as the acquisition of skills through learning by doing as well as by watching other workers, taking instructions, and receiving supervision or feedback from supervisors or co-workers [43]. A recent Dutch study showed that workers learn most from participating in new and challenging activities and from cooperating with more experienced colleagues [44]. This indicates that job rotation and working in teams have the potential to contribute to learning on the job [43].

Dialogue between employer and employee

Employers and employees are encouraged to conduct a continuous dialogue about sustainable employability resulting in individualized tailored interventions that support the prolongation of working lives.

As described above, a work environment characterized by a good social climate that supports health, lifelong learning, and work motivation may positively contribute to the continuation of working life. In addition to these general measures, individualized tailored interventions seem to be needed. Qualitative data within this thesis showed that specific factors that influence early retirement differ between individuals (chapter 5 and 6). Early retirement was often the result of an individual misfit between a person and the job.
For example, poor health influenced early retirement due to a misfit between the job demands and the ability to perform the working tasks. Another example is that taking care of family members or friends made people decide to retire early, partly because their job provided insufficient opportunities to provide this care. Hence, a ‘one-size-fits-all’ solution is unlikely to solve all possible misfits and tailored interventions seem a crucial part of the measures supporting prolonged working lives.

For interventions tailored to the individual worker and the job, a continuous dialogue between employer and employee from early in careers onwards may be useful. However, the qualitative studies in this thesis revealed that employers and employees barely discussed (future) person-job misfits (chapter 5 and 6). For now, it is not yet clear whether such a dialogue could indeed positively contribute to prolonged working lives, and which elements should be included in this dialogue. Research on idiosyncratic deals between employers and employees, so-called ‘i-deals’, suggests that especially ‘i-deals’ that related to flexibility positively affect the motivation to continue working beyond retirement [45]. Individualized solutions may for example involve more autonomy in where and when to work, workplace adjustments, a gradual reduction of work, participation in training, and changes in working tasks. A good relationship between employee and employer and a focus on human relations instead of human resources seems essential to conduct the dialogue. It is recommended to further explore how a good dialogue could be conducted, e.g. in terms of relevant topics and frequency.

Although findings of this thesis support the potential of an individualized approach in all older workers, vulnerable groups such as persons with poor health or chronic diseases and those who need to combine paid work and informal care, might benefit from tailored interventions even more.

Conclusion

The central aim of this thesis was to investigate determinants of, and mechanisms underlying early retirement and working beyond retirement. A multidisciplinary perspective was used. Early retirement and working beyond retirement were influenced by various domains, i.e. health, work, skills, and the social and financial situation. More specifically, poor perceived health, a poor social climate at work, a low focus on development of skills and knowledge, support of the partner and the financial opportunity to stop working
stimulated early retirement. Further analysis of health by conceptualizing it as having a chronic disease showed that persons with musculoskeletal and psychological health problems more often retired early, whereas other chronic diseases were not related to early retirement. Determinants influenced early retirement through lower work ability, lower work motivation and less opportunity to work. Working beyond retirement was more likely among employees with better perceived health and higher work engagement, who participated in voluntary work, and with a poor financial situation of the household.

Currently early retirement schemes are phasing out, and the old-age pension age will probably continue to increase in the next decades. At the same time, older workers will more often suffer from chronic diseases, they will more often need to combine paid work with informal care, and they will need to cope with a more flexible labor market. In the context of these trends, it is recommended to create favorable work environments that keep workers healthy, skilled and motivated from early in their career onwards, and to stimulate a dialogue on sustainable employability between employer and employee.
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