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der Otto-Friedrich-Universität Bamberg

Who retires when and why?

A Comparative Analysis of Retirement Processes
on the Case Study Denmark

by Julia Schilling



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Introduction

The present dissertation traces how trends relating to globalization and demographic change impact on the labor market situation and retirement processes of older workers. The work focuses on Denmark, which is often cited as a role model for other OECD countries due to its specific institutional context and its traditionally high labor market participation of older people. In addition, the results from this Danish country study are compared to findings from Germany and the Netherlands, enabling an assessment of Denmark's performance from a cross-country comparative perspective. In that context, the empirical analyses will combine an examination of observed experiences in both the late career and the retirement process with how people themselves view their transition into the state of retirement.

Starting Point and Scientific Contribution

In recent decades, labor markets in industrialized countries have been challenged by two macro-economic processes: globalization and demographic change. Whereas the first development has led to a profound revision of employment relations, the second one is shifting the structure of work forces. But depending on the national institutional frameworks, certain countries and, within these countries, certain social groups are affected by these changes more than others (Blossfeld et al. 2005; Blossfeld et al. 2006a; Blossfeld et al. 2006b; Blossfeld and Hofmeister 2006). This dissertation will take a closer look at older workers as one of the groups that are affected particularly strongly.

I shall argue that increased global competition and the related employment flexibilization along with cutbacks of welfare transfers have changed older people's working lives and their labor market exit processes. In times of increasing market uncertainty and economic restructuring, many Western societies used to rely on the strategy of pushing older workers out of employment through early retirement (Börsch-Supan 2000; Gruber and Wise 1999, 2004). Whereas continental and southern European countries massively reduced the employment rates of their pre-retirement-age population, this trend was less pronounced in northern European and liberal welfare states. Nonetheless, we can observe a systematic pushing out of older workers in all Western countries starting in the 1970s (Blossfeld et al. 2006a; Börsch-Supan 2000; Ebbinghaus 2000, 2008; Gruber and Wise 1999, 2004; Hofäcker and Pollnerová 2006).

On the other side, European and Northern American societies are subject to severe demographic aging. With declining fertility and rising life expectancy, the imbalance between those claiming pensions and those contributing to the pension system is growing. The increasing share of older people is putting social

security systems under substantial pressure while the labor forces of most modern nations are progressively shrinking and aging, resulting in massive labor shortages. These developments have encouraged companies as well as the governments of modern societies to change their strategy from sending older people into early retirement toward maintaining them in the labor market. Indeed, various efforts to increase the labor market attachment of older employees can be observed (see, e.g., the EU Lisbon Agenda). In the meantime, most countries have shifted their policies toward “active aging” in the sense of prolonged working life.

However, reforming social systems by postponing retirement ages is not popular. Nonetheless, it has worked for most countries that have made efforts to keep older workers in the labor market, that is, to turn beneficiaries of transfers into productive forces and contributors to the social systems. On the macro-level, the labor market participation rates of older workers have risen in numerous countries. In many cases, however, these reforms have led to an increase in the risks facing the individual because they have reduced the buffering function of the welfare state against market risks and set new requirements that not everyone has been able to fulfill. In that context, Breen (1997) hypothesized that with market mechanisms gaining in importance, inequality patterns in a society will intensify. Also, old age poverty is expected to increase because of the maintenance or even deepening of labor market inequalities at the transition to retirement. In order to avoid these developments, older workers must be enabled to achieve an adequate pension level through, for example, improved opportunities to continue or regain employment in their late careers or options to update their qualifications to meet current labor market demands.

The country of Denmark is often cited as a role model in this respect, and that is why it has been chosen as a case study for this dissertation. The combination of certain, historically built up institutions and other, targeted policy reactions has brought this small country top positions among the EU and OECD states for the labor market participation of older workers and the social adequacy of its pension system. Consequently, it is said to be comparatively well prepared for the challenges of global economic restructuring and demographic aging. Nonetheless, it is questionable whether Denmark could guide other countries in this respect, because it has also enjoyed a beneficial economic situation since the mid-1990s that has facilitated performance on the macrolevel and supported its role as a precursor in the successful reversal of the early retirement trend. Furthermore, many countries have caught up in the meantime and thus challenge Denmark’s role model status. Also, little is known about relevant developments on the microlevel, in particular about the potential changes in inequality pat-

terns, that is, about the situation of population groups that might have been left behind despite the overall success story.

Consequently, the scientific contribution of this dissertation lies, *first*, in an analysis of the development of individual late careers and retirement processes in Denmark within the last decades and the respective influence of macrolevel changes such as economic restructuring and fluctuations along with the political reform of pension pathways. *Second*, in this context, it will observe social inequality patterns and potential changes over time regarding the situation of certain population groups in the late career and beyond the transition to retirement.

Obviously, a comparative view is needed at this point. Many cross-country comparative studies, particularly those in the field of economics, include a wide range of countries in their models and use standardized measures for institutional variations (e.g., Blöndal and Scarpetta 1999; Ebbinghaus 2006; Gruber and Wise 2004; Hofäcker and Unt 2013). I argue, however, that this design fails to account for country-specific idiosyncrasies and has therefore only limited explanatory power. As a result, I compare the results of the Danish case study with the respective results from only two further Western countries that I have chosen deliberately: Germany and the Netherlands. Their institutional contexts and their reform pathways in respect of the labor market integration of older workers deviate to various degrees from the Danish case: The German context is different in most respects, whereas the Dutch case takes an intermediate position sharing some Danish and some German characteristics. Contrasting these countries should help to identify the role of the institutional context in shaping late careers and retirement transitions. Accordingly, the scientific contribution of this dissertation includes, *third*, a cross-country comparative analysis of determinants of retirement processes on the micro-level, with the aim of putting Denmark's reputation as a showcase to the test.

The drivers of (early) retirement in a cross-country comparative way have already been examined in several studies, mostly by focusing on the role of national social security systems (e.g., Blöndal and Scarpetta 1999; Blossfeld et al. 2006; Blossfeld et al. 2011; Ebbinghaus 2006; Gruber and Wise 2004). Nevertheless, the underlying decision process has remained mostly unclear because these and other studies have concentrated on objectively measurable determinants and observed behavior. I argue, however, that the individual's view is equally essential for understanding the mechanisms that lead from the institutional background to the observable outcome. It is only when we understand why older workers decide to leave the labor market that we shall be able to create an environment enabling older workers to opt for longer labor market participa-

tion. Hence, I do not just describe the evolution of the observable outcome of late career transitions (i.e., the respective points in time when they take place), but also include the people's view on their individual retirement transitions. Whereas taking both perspectives makes it possible to assess the power of diverse influence factors, their combination aims to reveal the underlying mechanisms; that is, to cast light on the "black box" within which institutional contexts shape retirement behavior. Finally and *fourth*, this dissertation thus aims to contribute to gaining a more comprehensive understanding of retirement processes and related patterns of inequality by integrating two views on retirement: the objective observation of the respective point in time as well as the subjective assessment of the individual transition.

In summary, this dissertation seeks answers to the following questions:

- (1) Is Denmark's older population comprehensively prepared to meet the challenges of globalized labor markets and changed policy frameworks?
- (2) Does Denmark perform better in this respect than Germany and the Netherlands; and if yes, why?
- (3) How are retirement decisions made within different national contexts, and what additional knowledge can be gained by combining both objective and subjective perspectives on the transition to retirement?

Structure of the Dissertation

In chapter I, I develop the *conceptual background* for this dissertation by explaining *the impact of globalization and demographic aging on inequalities in late working life and retirement*. I shall start from a global point of view and describe *the implications of macrolevel changes for late careers and social inequalities*, beginning with an explanation of *the impact of globalization and accelerated economic change* on older worker's labor market situation and continuing with an illustration of *the phenomenon of demographic aging*. Both trends resulted in *reforms of pension systems as a response to an increasing strain on welfare state budgets* and, eventually, in *consequences for social inequalities* among the elderly population.

Because the degrees to which older workers are affected by these developments depend on a set of different factors, I proceed by explaining the *determinants of labor market exit processes* on the macro-, meso- and microlevel. Among the factors on the macrolevel, I distinguish between *pull factors* (pension systems and incentives for early retirement), *push factors* (economic cycles and the demand for older workers' labor) and *stay factors* (promotion of the employability of older workers). Mesolevel determinants refer to *workplace characteristics* and microlevel factors refer to *individual characteristics*. Both have proven to be influential for retirement decisions alongside institutional incentives and disincentives for

staying in or leaving the labor market. Afterwards, I present a theoretical model that links the three levels and summarizes how the various factors shape retirement processes.

The third subsection of chapter I includes the descriptions of selected *national contexts as frameworks for late career employment and retirement*. First, I present the reasons for the *selection of countries* studied in this dissertation, that is, why Denmark was picked as a case study and why Germany and the Netherlands are adequate to serve as comparative cases. Afterwards, I illustrate *push, pull, and stay factors* as well as *further country-specific characteristics of the respective institutional context* for all three countries.

Based on the discussion so far, I then develop *research questions* regarding the *historical development, social inequality, and cross-country differences in retirement transitions* that I shall answer with help of the empirical analyses. Here I shall also clarify why two perspectives on retirement transitions are needed and define the objectives under study.

Chapter I concludes with *hypotheses on the development and determinants of late career patterns and retirement decisions since 1980* derived from previously discussed theoretical concepts, the empirical literature, and country-specific institutional backgrounds. The hypotheses are divided into, first, those referring to the showcase *Denmark* before, second, those that are expanded to cover *country-comparative expectations*.

Chapter II presents the *data and methods* used for *studying retirement processes in Denmark, Germany, and the Netherlands from two perspectives* in order to answer the research questions presented above. Setting the *focus on transitions*, first, *observed labor market experiences and retirement behavior* will be analyzed with help of longitudinal administrative data (in the Danish case) or panel survey data (in the German and Dutch cases). The *focus on perceptions*, in contrast, will be implemented by using survey data from the SHARE project and is targeted toward *subjective views on retirement transitions*.

Chapter III reports the *empirical results* on the *objective and subjective views on retirement transitions and contrasts the Danish showcase with results from Germany and the Netherlands*. Corresponding to the dyadic research design, this chapter is split into two parts: First, it analyzes observed *pathways into retirement*, disclosing the respective *development of inequality patterns in the late career and beyond retirement since the 1980s* in the three countries under study. After presenting detailed results on *the late career and labor market exit trends in Denmark including a closer look at the “pioneer in active aging,”* it briefly summarizes related analyses of *labor market exit processes in Germany and the Netherlands* by presenting

comparative views on these “early exit neighbors.” The first empirical part ends with a short *preliminary conclusion on the development of social inequalities among older Danes, Germans, and Dutch.*

The second part of chapter III returns to the topic of labor market exit and focuses on individual *perceptions of retirement*, that is, on *the impact of changing frameworks on people’s view on retirement*. Again, I begin by exploring the statements of *Danes on their own transitions to retirement* followed by rather similar analyses for Germany and the Netherlands based on data from the Survey of Health, Aging and Retirement in Europe (SHARE). This section also ends with a *preliminary conclusion on the patterns of retirement perceptions in Denmark, Germany, and the Netherlands.*

Chapter IV represents a *synthesis* of the results of chapter III; that is, summarizes the empirical findings and then answers the three main questions listed above by *integrating objective and subjective perspectives on retirement*. In other words, I shall address (1) the performance of Denmark for sustainable and comprehensive “active aging,” (2) a comparison between the three countries in this respect, and (3) the additional knowledge regarding the decision-making process generated by the dual perspective on retirement transitions.

The dissertation ends with a closing chapter V that not only recapitulates the theoretical arguments from chapter I and the most important findings of the two empirical studies presented in chapter III, but also gives recommendations for policymakers and discusses the limitations of this research.

I Conceptual Background: The Impact of Globalization and Demographic Aging on Inequalities in Late Working Life and Retirement

In recent decades, older workers have found themselves in a specific dilemma: On the one hand, they have often been perceived as an unattractive workforce in restructured, flexibilized, and service-oriented labor markets. Accordingly, many older workers were either sent into early retirement or confronted with a destabilization of their late careers. On the other hand, with demographic aging progressively striking all Western countries, older workers were needed to fill places in shrinking national workforces and to contribute to the social systems. As a result, many nation states shifted their strategies from offering generous early exit pathways toward making efforts to prolong working lives. However, countries differed not only in the design of these reforms but also in the extent of their success and how far the new conditions actually changed the situation of older workers (Blossfeld et al. 2011).

In the first chapter, I shall develop the conceptual framework for this dissertation by explaining what needs to be taken into account when studying late careers and retirement transitions. In this context, older workers are conceptualized as rational actors trying to maximize their benefit in line with *rational choice theory*. As Coleman (1990) describes, individual behavior is influenced by macrolevel structures; and individual decisions, in turn, shape macrolevel phenomena. In the context of retirement processes, macrolevel trends such as globalization and demographic aging impact on individual retirement decisions through the filter of national institutional settings (Buchholz et al. 2011). Changes on the macrolevel and respective adaptations of the institutional settings are thus able to change individual retirement behavior; and this, in turn, has the power to generate the early retirement trend as well as its reversal. However, not only macrolevel conditions but also meso- and microlevel determinants play a role in individual retirement decisions. Moreover, analyses need to supplement objectively measurable factors with subjective assessments in order to gain a comprehensive understanding of individual decision making.

In the following sections of chapter I shall report on what is already known about retirement processes in Western countries in the last decades. I shall begin by clarifying my understanding of “globalization” and expanding on the meaning of “demographic aging.” Furthermore, I shall describe why both processes increasingly burdened welfare state budgets and how they led to the reform of pension systems. Also, I shall sketch related consequences for social inequalities among older workers and retirees (section 1).

Afterwards, I shall explain the role of the several forms that the determinants of labor market exit processes can take on all three levels (macro, meso, and micro) while simultaneously emphasizing the institutional settings divided into *pull*, *push*, and *stay* factors. Subsequently, I shall explain my theoretical model that links together the three levels and describes how the various determinants shape retirement behavior (section 2). Up to this point, I shall use a diversity of countries to exemplify national impacts and implications because either the trends described are global or the classifications applied are theoretical.

From these overall tendencies, I shall then explain why Denmark is particularly suitable as showcase for a study on retirement processes and give reasons for my further selection of Germany and the Netherlands as reference countries. Subsequently, I shall illustrate the respective country-specific frameworks in these three countries using the previously introduced categorizations (section 3).

Then I shall derive my research questions from these descriptions of theoretical concepts combined with the detailed reports on the empirical findings on the field of retirement and on the institutional contexts in the three countries under study. I shall try to answer these questions with the help of the empirical analyses in chapter III. In this context, I shall also explain how both empirical studies are linked together while also expanding on the specific scientific contribution to be gained from combining the two perspectives (section 4).

Afterwards, I shall develop relevant hypotheses that will, in a first step, focus on the case study Denmark and refer to the development over time of both retirement processes and social inequality patterns in this country. In a second step, I shall address both aspects again when formulating my country-comparative expectations (section 5).

1 Implications of Macrolevel Changes for Late Careers and Social Inequalities¹

This work focuses on retirement processes and their development in a time-variant as well as cross-country perspective. Before addressing the determinants of labor market exit processes more specifically, I shall describe the historical and theoretical background from a global point of view and briefly review earlier research in this field.

a The Impact of Globalization and Accelerated Economic Change

In the last decades, various definitions of “globalization” have been proposed and rejected, with arguments relating to quite diverse phenomena and processes (Alasuutari 2000; Castells 2000; Fiss 2000; Guillén 2001; Ohmae 1990; Robertson 1992; Sutcliffe and Glyn 1999). Critics such as Alasuutari (2000), for example, do not accept globalization as a phenomenon exclusive to the 20th century, arguing that the more recent developments in politics, economics and technology summarized under this term are nothing new but have been effective for centuries. Along these lines, Sutcliffe and Glyn (1999) also consider the process of globalization to have been misinterpreted and its consequences to have been overrated. However, when used as a synonym for the expansion of capitalism, they also regard it as being responsible for a range of economic and social consequences such as the decline in agricultural production and the growth in female labor market participation.

Regardless of whether it is considered a new phenomenon or not, globalization has become the dominant catchword to label the processes involved in those rapid changes to the economic, social and political world that have led to growing worldwide interconnectedness (Robertson 1992). The intensity and scope of cross-border relationships has risen enormously since the 1980s. This applies not only to economic relations, but also to developments in information tech-

¹The processes and mechanisms described in this and the following section build on conceptual work conducted together with my colleagues in the *flexCAREER* project, namely Hans-Peter Blossfeld, Sandra Buchholz, Karin Kurz, Annika Rinklake and Paul Schmelzer. As a consequence, I partly follow the line of argument drawn in the introductory chapter of the volume *Aging Populations, Globalization and the Labor Market. Comparing Late Working Life and Retirement in Modern Societies*, edited by Hans-Peter Blossfeld, Sandra Buchholz and Karin Kurz in 2011. However, the conceptual framework has been expanded, substantiated and even modified in several aspects, for example regarding the influence of demographic aging and the consequences for social inequalities as well as regarding the determinants of labor market exit processes.

nology, cultural exchange and social ties (Alasuutari 2000; Castells 2000; Dreher 2006; Held et al. 2000; Raab et al. 2008; Robertson 1990; Sutcliffe and Glyn 1999). Thanks to innovations and rapid progress in information technology, the cross-border exchange of knowledge and goods has intensified and thereby opened up not only new markets for companies but also new opportunities for individuals.

Nowadays, most social scientists assume that the globalization process is characterized by the simultaneous co-action of four macro-structural trends that have become increasingly dominant, particularly since the 1980s. These are:

1. The increasing internationalization of markets and the associated growth in competition between countries with very different wage and productivity levels, as well as different social and environmental standards.
2. The intensification of competition between nation-states and resulting tendency for modern states to reduce business taxes and to engage in deregulation, privatization, and liberalization, while also strengthening the market as a coordinating mechanism.
3. The rapid, worldwide networking of persons, companies, and states through new information and communication technologies, and, as a result, the increasing global interdependence of actors, along with the increasing acceleration of social and economic interaction.
4. The fast growth in the importance of globally networked markets and the accompanying increase in the interdependence and volatility of local markets that are ever more vulnerable to unpredictable social, political, and economic “external shocks” and events throughout the world (e.g., wars, economic crises, subprime mortgage turbulences, oil price shocks, consumer fashions, technological innovations) (Blossfeld 2009:302).

Globalization has certainly increased productivity and improved the general standard of living in broad population strata of modern societies. Worldwide competition has now made a wide range of products and services available and affordable for a broad public. Nonetheless, the citizens of modern societies face several changes that impact deeply on their daily lives and life courses, with older workers being affected more strongly for the following reasons:

(1) The increased importance of knowledge, information, and their attendant technologies.

Older workers usually possess outdated technological knowledge that makes it harder for them to adapt to accelerated technological and structural change compared to younger employees who have just recently completed their educational careers and vocational training. In addition, re-qualifying the older workforce is often perceived as too costly in light of poor returns due to only few years left in employment. Moreover, “seniority wages” frequently lead to costs

for older employees that are disproportionately high compared to their productivity. In summary, on globalized labor markets, older employees are perceived to be not only inadequately qualified but also cost-intensive staff (Buchholz et al. 2006).

(2) The growth of the service sector and the accompanying expansion of structural unemployment.

The increasing international division of labor has led to a rapid reduction and transformation of older industries and the creation of new product and service sectors in Western countries (Castells 2000). This has included a strong pressure and need to relocate or even dismiss workers. In many cases, these were older workers who were overrepresented in declining industries. Moreover, due to their lack of adequate qualifications, they could not easily be transferred to service jobs and thus often ended up in long-term unemployment.

(3) The progressive demand for flexibility on the labor market.

As just said, older workers were often perceived to be disproportionately costly and inflexible because they could rarely be assigned to tasks related to new technologies and services. Many companies and policymakers in Western industrialized countries who were concerned with the attractiveness of their national business location have therefore responded to these problems by offering older employees incentives to leave the labor market early (Buchholz et al. 2006; Ebbinghaus 2000, 2008; Gruber and Wise 1999, 2004).

(4) Growing uncertainty regarding future developments.

Regarding this point, older workers were *not* faced with higher uncertainty, but even benefited from long-term financial security because the steady awarding of early retirement pensions (or any kind of welfare transfers fulfilling this function) guarantees early-retired financial security in an increasingly uncertain economic world. Labor market entrants, in contrast, are highly exposed to “non-standard” employment resulting in economic insecurity, and they therefore often delay or even forgo family formation (e.g., Blossfeld et al. 2005; Ebralidze 2012).

(5) Intensified competition between individuals, firms and nation states.

Governments also had an interest in implementing early retirement schemes, because they provided an effective and “socially peaceful” instrument with which national economies could keep the qualification structure of their workforce competitive and offer incentives for companies to keep their production within the country. Furthermore, early retirement schemes that encouraged older workers to leave the labor force early (and offered younger workers the

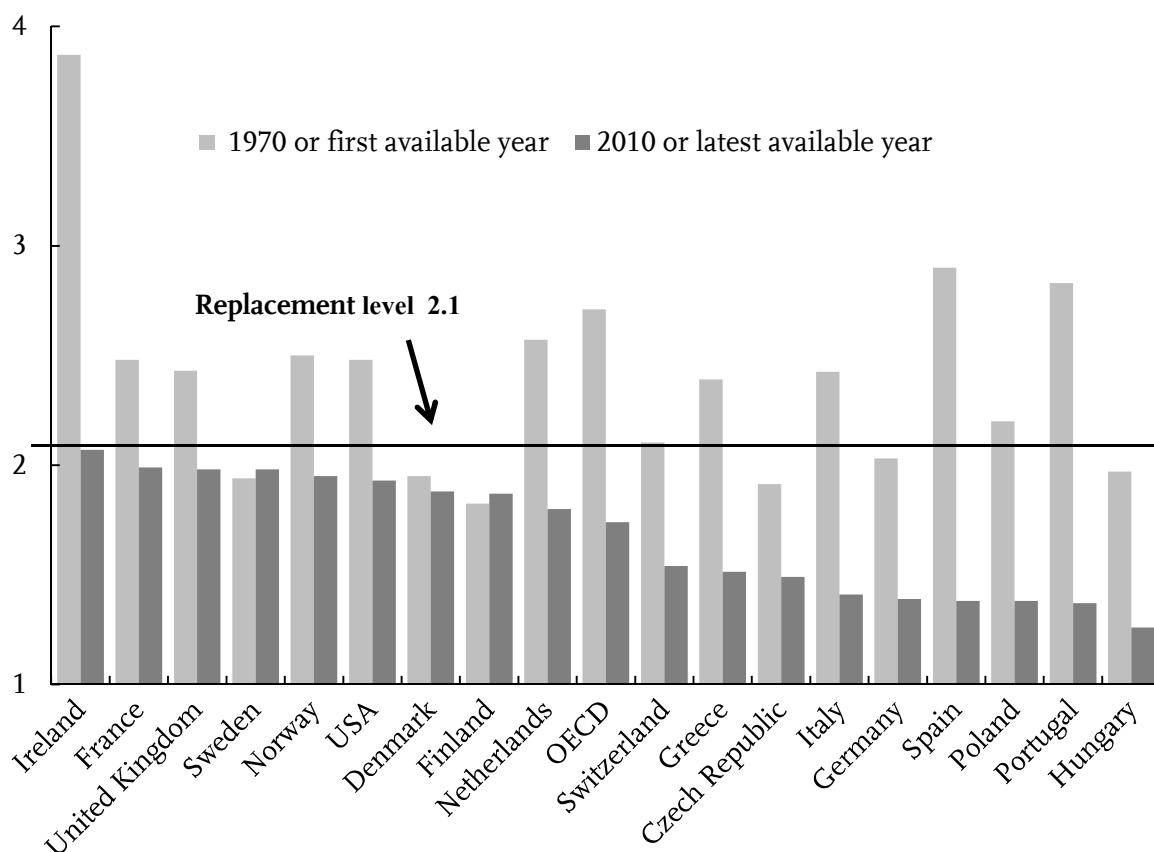
chance to find jobs in the labor market) provided an effective means of lowering the unemployment rate of a nation, particularly in those countries with a high level of structural unemployment (i.e., long-term unemployment). Consequently, although early retirement programs were quite expensive, they seemed to be advantageous for all relevant actors who faced the consequences of accelerated structural change and future uncertainty in the labor market—that is, employers, employees and governments.

It is thus not surprising that the globalization trends described above have contributed notably to a spread of early retirement pathways since the 1970s. However, although the massive use of early retirement seemed to be an appropriate and effective measure throughout the 1980s and 1990s, this has strongly changed in the more recent past. The reasons will be explained in more detail in the next sections.

b The Phenomenon of Demographic Aging

The early retirement trend has been accompanied by the spread of another international development in most Western countries: population aging. The pace and extent of this phenomenon varies greatly, largely depending on the path of *declining fertility*, with severe aging expected in Germany and in Southern and Eastern Europe (Mason and Lee 2011). Among several other reasons such as the general availability of effective contraceptives, globalization is said to be a driving force for declining fertility because—as just mentioned in the previous section—the uncertainty regarding future events has grown and resulted in unstable social relations and delayed family formation, often leading to the complete abandoning of reproduction (e.g., Blossfeld et al. 2005). As a result most EU and OECD countries are faced with shrinking populations and—the actual problem—shrinking workforces.

Figure 1.1: Fertility rates in selected OECD countries in 1970 and in 2010

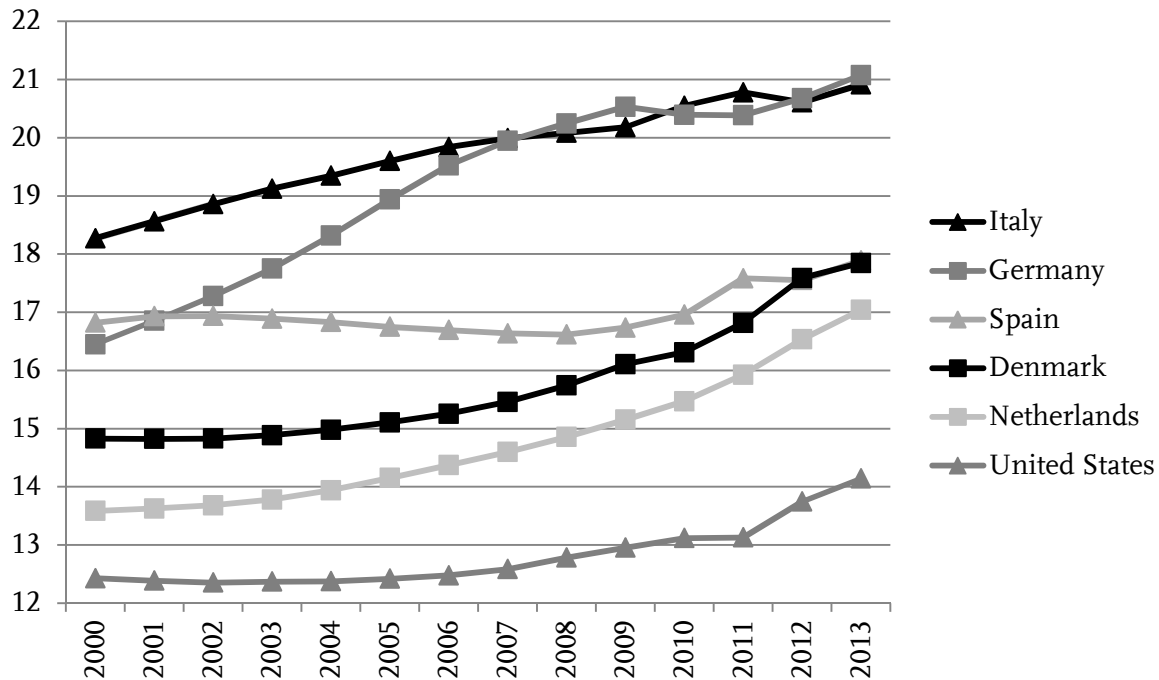


Source: OECD (2013d), own illustration.

Figure 1.1 presents differences between fertility rates in 1970 and in 2010 for several OECD countries. Whereas most countries easily surpassed the replacement level in 1970, only Ireland can still hold it in 2010. With the exception of Sweden and Finland (that both show a tiny growth), all countries experienced what has been, in most cases, a massive shrinkage in fertility within these 40

years. Together with Sweden and Finland, however, Denmark's values are rather exceptional in this context: being among the few countries that did not reach replacement level in 1970, their rates in 2010 were comparatively close to the levels back then. As a result, fertility rates of around 1.9 place all three of them in the upper half of the country range in the latter year and make them clearly above the contemporary OECD average (1.7). Nonetheless it is vital to consider that Figure 1.1 depicts two cross-sectional measurement points and does not deliver any information on how the rate developed between them. Knudsen (1999) has pointed out, for example, that the Danish fertility rate had also declined after 1970 and reached a bottom value of 1.4 in 1983. Afterwards, fertility increased again, due to several reasons such as the economic recovery after the oil crisis and child bearing among women beyond age 30 who had previously postponed reproduction.

Figure 1.2: *Percentage of the aged population (aged 65 and over), 2000–2013, selected countries*



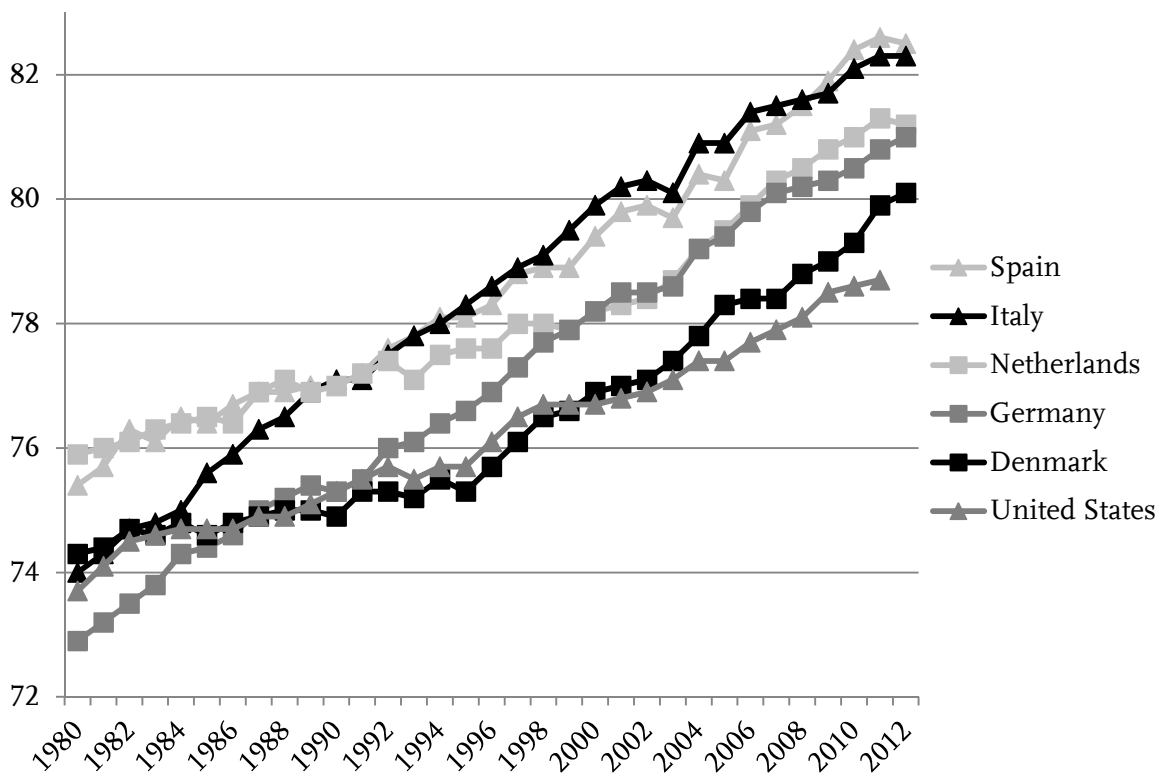
Source: OECD (2015), own illustration.

As a consequence of declining fertility, the proportion of the aged has grown steadily. Figure 1.2 shows the increase in the percentage of people aged 65 and over of the total national population since 2000 in selected OECD countries. Being one of the Western countries with a fertility rate rather close to replacement level, the United States shows the lowest values with comparatively moderate, but accelerating growth within the last years. The other extremes, the low-fertility countries Italy and, in particular, Germany, have experienced a steep increase. In these countries, every fifth citizen has passed the age of 65, with an expected further increase in this portion of the population. Denmark, Spain, and

the Netherlands have grown up to levels between 17 and 18 percent in 2013. All evolution lines indicate a further upwards trend as a long-term consequence of decades with low fertility rates.

The proportion of the aged is also growing because of the *increasing life expectancy* in all Western countries. Improvements in many areas of life such as health care, nutrition and working conditions are increasing the average length of life. This has extended the average period of retirement claims per person, deepening the imbalance between those claiming pensions and those contributing to the pension system. Figure 1.3 exemplifies the steady and steep growth in life expectancy since 1980 for the countries in Figure 1.2. The growth slope still varies to some extent. Bringing up the rear in 1980, Germany caught up in 2012 and is now at 81 years, along with the Netherlands. Denmark, in contrast, started from a middle position but is now at the bottom of the distribution and only undercut by the USA. At beyond 82 years, Italy and Spain hold the top positions.

Figure 1.3: Life expectancy at birth in years, total population, 1980–2012, selected countries



Source: OECD (2015), own illustration.

Note: US value for 2012 not available.

The three graphs illustrate that population aging is a function of decreasing fertility and growing life expectancy in Western countries.² In many of these countries, both immigration and increased female employment rates have helped to compensate for the lack of young employees and contributors to public pension funds. Yet, both developments have not been able to stop the general imbalance between contributors to the public pension budgets and pension claimants (Kaufmann 2005). An equalization of the consequences of population aging would require immigration on a scale that is both impractical and politically unacceptable. Further, given that population aging is a global phenomenon, immigration policy can only be a short-term solution (Mason and Lee 2011).

The progressively skewed age structure combined with low retirement ages and high life expectancy for large parts of the population is making the financing of public pensions increasingly difficult in many modern societies. This problem has been stressed in public and scientific debates particularly in countries that organize their pension system through a so-called “inter-generation contract”, in which those who are employed finance the current pensions of retirees through their social contributions. However, the higher the relative share of older people, the more difficult it is to sustain a public pension system no matter what the specific organization of the pension system is (Börsch-Supan 1992, 2003).

² Nonetheless, Mason and Lee (2011) highlight that low fertility is the major driver of population aging, whereas the role of increased life expectancy is widely overrated.

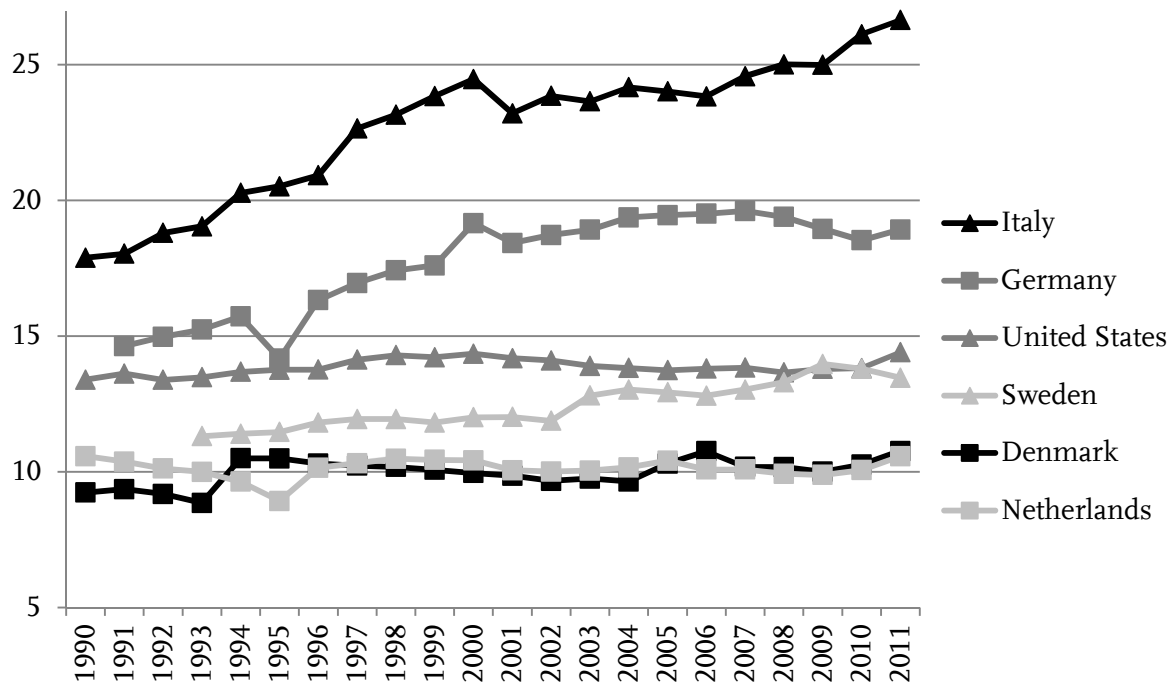
c Reforms of Pension Systems as a Response to an Increasing Strain on Welfare State Budgets

However, the financing problems of public pension systems and, more broadly, national social security systems, are not just caused by the aging of the population structure. The macro-structural trends described in the context of globalization have also impacted negatively on national budgets. Growing competition between firms and economic pressure to rationalize production has contributed to high unemployment rates in many countries, placing a further strain on public financial resources. Not only do expenditures for unemployment benefits increase, but also the unemployed do not contribute to the social security system. Moreover, tax burdens must be shouldered by a smaller workforce, often leading to higher labor costs. In many countries, the unemployment system provides (or long provided) early exit routes for older workers, and the massive use of these early retirement pathways in order to relieve the labor market in the 1980s and 1990s has severely burdened the public purse (Börsch-Supan 1992; Gruber and Wise 2005). Older workers became more and more costly; and, at the same time, their number increased. Hence, globalization and demographic aging should not be seen as separate, but as interlinked processes whose interplay has contributed to the financing difficulties of public social security systems and in particular, of pension systems.

Today, pension expenditures constitute a major share of public spending in several European countries, and in some countries of them, it is even growing further (Figure 1.4). Particularly Italy and Germany spend increasing shares of their public expenses on their “pay-as-you-go” pension systems.³ Whereas the share in Germany seems to have stabilized at around 19 percent since the millennium, Italy started at about 15 percent in the 1990s, but eventually ended up by spending more than one-quarter of all public funds on their retirees in 2011. Sweden’s expenditure also shows an upward trend throughout the last two decades, although it is less distinctive. Together with the United States, Denmark and the Netherlands display little variation over time on what is still a lower level.

³ In a balanced pay-as-you-go (PAYG) pension system, expenditure for each pension equals revenue; that is, the contributions of current employees pay immediately for the pensions of current retirees. For a detailed explanation of PAYG pension systems see, for example, Willmore (2004).

Figure 1.4: Public expenditure for old age retirees⁴ as a percentage of total government expenditure, selected countries



Source: OECD (2015), own illustration.

The fiscal implications of the strong decline in retirement age in the past decades, the aging population of European societies and rising unemployment rates have forced almost all governments to reevaluate their pension policies, especially when these were very generous (Buchholz et al. 2011). As a result, public debates and political decisions on pension schemes have altered dramatically since about the 1990s. Currently, the latest pension policies are attempting the opposite compared to the 1980s and 1990s: Their aim is to maintain employment and postpone the transition to retirement instead of to buffer the negative effects for older workers arising from changing labor market conditions.

According to Bonoli and Sarfati (2002), the core challenges to be tackled are (a) the future sustainability of pensions, (b) the high nonwage labor costs, and (c) the need to increase activity rates. Governmental responds to these issues can refer to (a) postponing statutory retirement, (b) reforming disability insurance, (c) closing special preretirement schemes, (d) “activating” older workers, and (e) fostering gradual retirement. For each of these measures, a general trend in policy reversal is observable, but cross-national differences remain in the problem pressure, the timing and the scope of reform efforts as well as in how successfully they have been implemented (Blossfeld et al. 2011; Ebbinghaus 2006).

⁴ Including old age pension, early retirement pension or other cash benefits in old age.

Overall, the reforms undertaken aim at retrenching early retirement, as well as reducing public pension benefits, while simultaneously strengthening the role of non-public pension provisions (Ebbinghaus 2008; OECD 2007). The rationale behind all these reforms is to encourage the older workforce to (a) delay the transition to retirement and (b) to invest in private and occupational pension schemes. The responsibility for sustaining the standard of living achieved during the employment career or—as a minimum—for preventing poverty in old age is being shifted more and more on to the individual. As a result, public pension schemes (i.e., the so-called “first pillar”⁵ of national pension systems) are progressively losing their relevance for the current situation of older workers and retirees. If people are unable to meet the new expectations regarding the strengthened need for private pension savings and still withdraw early from the labor market, recent reforms usually increase the pension losses they have to accept because of their individual “failure” to remain on the labor market. What all these changes to pension systems have in common is that they are increasingly privatizing and individualizing (labor) market risks, with a strong probability of implications for the structure of social inequalities among older workers and retirees (see next section).

However, it has to be kept in mind that with the strengthening of the private pension tier, new uncertainties and risks in old age are also likely to emerge. As the worldwide financial crisis from 2007 and 2008 has shown so impressively, private investments in the stock market are not necessarily a secure location for pension savings. In contrast to public pensions, private savings in certain forms depend strongly on general market developments, and retirees in a system with a strong private pension pillar and with money invested in volatile assets cannot rely on a fixed monthly income.⁶

⁵ When referring to the “pillars of pension systems” I use the division into (a) public pensions, (b) labor market/occupational pensions, and (c) personal/private pensions.

⁶ Indeed, in the United States, the typical showcase of a liberal welfare state with a strong private pension pillar, O’Rand and Hamil-Luker (2011) have shown that many retirees have to return to the labor market (so-called “unretirement”) in order to make ends meet.

d The Consequences for Social Inequalities

Theories on social stratification have pictured several frameworks for understanding inequality in later life. The *leveling hypothesis*, for example, argues that the welfare state reduces differences in socioeconomic positions through benefits and social security in old age (Ross and Wu 1996). As a consequence, status differences over the life course diminish as groups become more alike, due to, for example, redistribution inherent in the pension systems (Crystal and Shea 1990). In contrast, the *status maintenance hypothesis* or *continuity theory* (e.g., Atchley 1989) states that the patterns and determinants of inequality in later life remain constant from working life through to the post-retirement phase. The reasons can be not only external structures (e.g., pension systems) that transfer the individual's position from working age to the stage of retirement but also internal dispositions such as habits or learning behavior (Kohli 1990; O'Rand 1996). Finally, *cumulative (dis)advantage theory* assumes that inequality in later life even increases compared to the pre-retirement phase, because economic and other advantages accumulate over the life course (Crystal and Shea 1990).

The applicability of each of these theories as explanations for the nature of inequalities among older people vis-à-vis working age cohorts varies between societies and across historical time within the same society (Arber 2005). As outlined above, in the 1980s and 1990s, the pension systems of most European societies were very generous, also for those older people who “failed” to work until mandatory retirement age (Blossfeld et al. 2006a). These generous policies contributed to reducing inequalities in old age; in other words, the *leveling hypothesis* was applicable to many countries during that time period. In Denmark, for example, the public old age pension offered the same benefit level to everyone who had fulfilled the minimum requirement of a certain number of residence years in the country. Before the spread of coverage of occupational and private pensions, the Danish pension system thus was rather effective in compensating labor market inequalities at the transition to retirement. Even the German public pension system which is by design oriented strongly toward status maintenance, offered actuarially non-neutral early pensions to large portions of the older population with low lifetime incomes, enabling them a secure financial situation and thus balancing labor market inequalities.

In the meantime, however, most social policy reforms have abandoned the policy aims of generosity and the comprehensive integration of all population groups. As described in the previous section, public pension systems have strongly decreased their efforts to buffer and cushion employment risks in later life. Instead, individuals increasingly have to account for labor market risks by themselves due to shifts toward income-/employment-related components of

old age security systems. Accordingly, one's labor market position gains relevance for one's economic security and it is likely that the development of inequality patterns in old age since the 1980s follows either the *maintenance hypothesis* or the *cumulative (dis)advantage theory*.

Breen (1997) illustrates these developments with the help of the concepts of *hedging of risk*, *transfer of risk*, and *recommodification*—placing these within context of the changing nature of employment relationships. He agrees that the effectiveness of the welfare state, but also of family and employment relationships, in hedging market risks has declined due to rising uncertainty under globalization. As a consequence, individuals are “recommodified” and face increasing risk—although this depends on their resources in power relationships. For the employment relation, this means that the degrees to which employees are susceptible to having risks transferred to them (e.g., in the form of temporary employment contracts) depends on their skill level. Accordingly, risks will be distributed unequally across the workforce, with those workers who lack skills or are easily replaceable bearing the highest risk and being subject to the strongest degree of employment flexibility.

The impact of globalization and related processes on social inequality among older workers and retirees is therefore expected to be twofold: First, the unequal exposure to market risks in the late career leads to rising inequality among older workers. Second, the retracting of pension systems as a compensation for labor market disadvantages results in the preservation of inequalities beyond the point of retirement. Economic inequality and, consequently, old age poverty among retirees will therefore increase compared to earlier cohorts who benefited from balancing welfare policies. In a life-course perspective, the accumulation of individual (dis)advantage should result in a growing gap between persons with a high qualification level and/or high labor market attachment through continuous careers and their counterparts who are persons with low-level skills and/or fragmented employment careers.

Similarly, women should be disadvantaged more than men, because they are more likely to have interrupted careers and to work part-time due to childcare tasks. Thus women, on average, are less likely to benefit from seniority regulations or promotion prospects. Furthermore, considerable gender pay gaps still persist in all OECD countries, although they are slowly narrowing (OECD 2012a). In sum, shorter work histories, fewer working hours, and lower earnings contribute to relatively low pensions for women compared to men (OECD 2012b). Persisting labor market drawbacks are thus likely to impact heavily on women's economic situation in old age, increasing their risk of old age poverty.

Therefore I argue that inequality patterns among older workers and retirees develop according to the *cumulative (dis)advantage theory*. In other words, I assume that, during the course of globalization and economic restructuring, inequalities within cohorts will rise as they become older. This applies in particular to the gaps between persons with high versus low qualification levels as well as the gap between men and women. Nonetheless, the extent to which these inequalities rise should depend on the design of national institutions. Also, rising inequalities must not necessarily lead to growing old age poverty. However, successful “active aging policies” must be comprehensive to achieve sustainable results. Given the increasing proportions of the aged in Western societies, additional social costs would arise for the welfare state if high numbers of them were unable to live on their pension income—without even considering the negative effects for the social and political climate.⁷

Thus, the next section will describe the role and effectiveness of institutional settings from a theoretical point of view and illustrate these with aggregate data. However, retirement behavior is assumed to be associated with not only institutional frameworks but also organizational and individual characteristics. Accordingly, these factors influencing the late career and the transition to retirement will be illuminated as well.

⁷ Wilkinson and Pickett (2009), for example, thoroughly describe the harmful effects that inequality has on societies, thereby not only eroding trust and increasing anxiety and illness, but also worsening social problems such as drug abuse, imprisonment, obesity and violence.

2 Determinants of Labor Market Exit Processes

So far, I have argued from a rather broad, macrolevel perspective, and looked at how accelerated economic change and market uncertainty caused by globalization since the 1980s as well as the progressive demographic aging are impacting on the lives of older people in modern societies. However, the institutional settings of modern societies and the interplay between the various institutions function as intervening variables between the above-described macroforces and outcomes on the individual level (Blossfeld 2005; Mayer 2004; Regini 2000).

As Ebbinghaus and Hofäcker (2013) have argued, three different types of institutional determinants of individual retirement transitions can be distinguished. First, there are so-called protection-related *pull* factors, that is, institutional incentives through pension systems or other “welfare state subsystems” (Guillemard 1991) that provide incentives for employment exit before statutory retirement age. They literally “pull” older workers out of the labor force with attractive benefits that outweigh the gains from continued working. From an economic point of view, these schemes provide an implicit tax on continuing to work (Gruber and Wise 1999). Second, context factors such as high seniority wages or age discrimination may also exert pressures on older workers’ employment participation, and thus crowd out or “push” older workers out of the labor force. Third, most countries have recently implemented so-called “active ageing” policies with the purpose of reversing early exit trends and prolonging working lives (Jepsen et al. 2002). These policies may be regarded as “retention” or “stay” policies that foster older workers’ employability and thus facilitate their continued employment or reemployment in the late career.

However, previous research has pointed out that retirement behavior has been linked not only to institutional factors but also to organizational/workplace characteristics and to individual factors. Duval (2003), for example, found that past changes in implicit tax rates and standard retirement ages explain only one third of the trend toward a decline in older males’ labor force participation in OECD countries over the last three decades. Hence, he claims that future research should include other influences such as preferences for leisure. Therefore, I shall also briefly discuss these groups of determinants before, eventually, going on to present a theoretical sociological model that integrates the diverse factors and explains the (assumed) mechanism behind the making of retirement decisions.

a Macrolevel: Pull, Push, and Stay Factors

This section focuses on a general explanation of the *pull*, *push*, and *stay* factors that shape the retirement decision by defining country-specific frameworks. Similar to the previous section on the implications of macrolevel changes for late careers, I shall focus on global trends and theoretical classifications here that serve as a reference frame for the country-specific contexts of Denmark, Germany, and the Netherlands in later sections.

Pull Factors: Pension Systems and Incentives for Early Retirement

Pull factors refer to financial incentives that outweigh the individual benefits of remaining employed. Consequently, this is a rather economic set of explanations that focuses on the availability and generosity of benefits allowing withdrawal from the labor market before regular retirement age. During the 1970s and 1980s, many OECD countries generated such “pathways into early retirement”, defined as a combination of institutional arrangements to manage the transition process between exit from work and entry into the pension system (Kohli and Rein 1991).

Often, early exit in the sense of *permanent withdrawal from the labor market before statutory retirement age* is possible within the framework of the regular old age pension system, for example, for those with long contribution records (“seniority pensions”). The less actuarially neutral the reduction of pension benefits in case of early withdrawal, the higher the incentive to leave the labor force before reaching the age of full entitlements. Empirical studies (e.g., Blöndal and Scarpetta 1999; Gruber and Wise 1999, 2004) have demonstrated that countries with actuarial incentives for retirement before mandatory ages are frequently among those that also exhibit the lowest employment ratios among older workers (and vice versa).

Furthermore, other welfare state subsystems such as unemployment insurance or disability payments frequently represent opportunities to stop working before the statutory pension age and to “bridge” the time until eligibility for pension benefits (Guillemard 1991). Some countries even offered special routes for workers with specific labor market difficulties (e.g., those working in declining industries or the long-term unemployed). For all these “bridging systems”, replacement rates and benefit length play a crucial role for the strength of the “pull effect.” Also, the respective eligibility conditions vary significantly by country as well as by historical time period, and this makes it difficult to classify countries according to their pension systems and early exit incentives.

Both pension systems and other social policy schemes allowing early withdrawal from the labor market are designed to reflect the different goals and priorities of

a country's welfare orientation. Standard welfare classifications such as Esping-Andersen's (1990) *Three Worlds of Welfare Capitalism* comprise all public schemes allowing for early exit, but refer only to the first pillar of pension systems (Stöger 2011). In some countries, however, namely, Denmark, but also the Netherlands, or Great Britain and Ireland, the second pillar has already been highly relevant for maintaining the standard of living in old age for many years. Korpi and Palme (2003) therefore suggest classifying Denmark and the Netherlands as "liberal" rather than "social-democratic" or "conservative" due to the importance of labor market pensions. Similarly, the popular distinction between the "Bismarck" and "Beveridge"⁸ type focuses strongly on the first pillar and is therefore only of limited use in this context.

Bonoli (2003:400), as a final example, presents a distinction that "roughly corresponds to the distinction between Bismarck and Beveridge . . . but focuses not only on the sort of benefits that are distributed but also on the way in which pension schemes are financed. This focus also has important implications for pension reform trajectories". According to this, he distinguishes between

social insurance pension systems, financed predominantly on a pay-as-you-go basis (France, Germany, Italy, and Sweden), and . . . multipillar pension systems, in which the state provides only a modest benefit and the bulk of pension provision is left to the private sector (Denmark, the Netherlands, Switzerland, and the United Kingdom) (Bonoli 2003:400).

Summing up, the degree to which social security systems encourage older workers to leave the labor force before statutory retirement age depends largely on (1) the type of pension system, including its actuarial neutrality in accounting for early (or also delayed) retirement and (2) the availability and generosity of other welfare schemes that can be used to bridge the time until permanent pension entitlement is reached. Consequently, the retirement decisions based on these "pull effects" are regarded as largely "voluntary."

Push Factors: Economic Cycles and the Demand for Older Workers' Labor

Push factors reflect circumstances that make it hard for older workers to continue their careers. In other words, they are based mainly on the existence of labor market difficulties and the demand for their labor. Consequently, the occurrence of push factors depends for a large part on first, labor market charac-

⁸ Whereas the Beveridge style aims to prevent old age poverty through universal basic pensions, the Bismarck model incorporates income replacement and status maintenance. For a detailed description of both, see, for example, Kraft (2010).

teristics such as employment protection legislation (EPL) or the degree of coordination of the labor market (Soskice 1999); second, the economic cycle as the determinant of the overall demand for labor. The speed of restructuring and the growth of the service sector also play a role. Although the latter aspects are not part of the institutional context in a narrow sense, their country-specific developments exert an influence on the respective frameworks and can therefore be assigned to this category.

Labor markets in modern societies (still) differ strongly with regard to their production regimes and the level of EPL, which both determine individual employment conditions and chances. In contrast to the United States and Great Britain, the labor markets of Continental European countries tend to be rather regulated. Nonetheless, these countries also differ in several ways that have been captured by classifying them either as “coordinated” or “uncoordinated” market economies (Soskice 1991, 1999). Labor markets in coordinated economies are regulated by strong employment protection legislation, and unions tend to hold a powerful position. As a result, the possibilities of imposing employment flexibility on the established workforce are generally rather restricted. Therefore, employers systematically shift market risks to the less protected labor force, for example, labor market (re) entrants (such as young people, the unemployed, women after periods of maternity leave, see also Blossfeld et al. 2005; Blossfeld and Hofmeister 2006; Blossfeld et al. 2008). Older workers, in contrast, usually belong to the “insiders” of the emerging “insider/outsider” labor markets and are well protected by seniority rules. Hence, strong EPL combined with the competitive labor market disadvantages of older workers have fostered the introduction of attractive early retirement programs (Mills and Blossfeld 2005).

The situation of older people in uncoordinated or “liberal market economies” (Hall and Soskice 2001) is quite different, because they have no institutional support in the form of an insider/outsider-mechanism protecting them against labor market risks, and the level of employment protection is generally also low. In these economies, however, older workers’ career profiles do not put them at a comparative disadvantage compared to younger workers, because both groups acquire and update their qualifications mainly “on the job”. Consequently, older workers in these countries display comparatively high levels of labor market adaptability, reflected in high job mobility rates in their late careers and a pronounced tendency to retire late. In contrast to insider/outsider labor markets, employment risks are distributed more broadly across the entire workforce—although contingent on human capital (as also described by Breen 1997).

Nonetheless, irrespective of the type of labor market, the overall demand for labor is crucial for the employment chances of older workers. For example, the oil crisis in the 1970s represented a major driver for the early exit trend. Whereas high unemployment rates persisted in many Western countries throughout the 1980s and 1990s, most European economies experienced a period of economic recovery after 2000 (interrupted only by the financial crisis or the Euro crisis beginning in 2008). Table 1.1 provides an overview of yearly unemployment rates between 2000 and 2012, supplemented by the average rates in the years 1991–2000 as well as the average of the years 2001–2008 (which determines the ranking), that is, before the financial crisis broke out. During that period, most countries experienced rather stable or decreasing unemployment rates around or below 10 percent, supporting the maintenance or reemployment of older workers.

Table 1.1: Harmonized unemployment rate in selected countries

	Ø 1991 – 2000	2001	2002	2003	2004	2005	2006	2007	2008	Ø 2001 – 2008	2009	2010	2011	2012
Norway	4.6	3.4	3.7	4.2	4.3	4.5	3.4	2.5	2.6	3.6	3.2	3.6	3.3	3.2
Netherlands	5.1	2.6	3.1	4.2	5.1	5.3	4.3	3.6	3.1	3.9	3.7	4.5	4.5	5.3
Austria	4.1	3.6	4.2	4.3	5.0	5.2	4.8	4.4	3.8	4.4	4.8	4.4	4.1	4.4
New Zealand	8.0	5.5	5.3	4.8	4.1	3.8	3.9	3.7	4.2	4.4	6.1	6.5	6.5	6.9
Denmark	6.6	4.5	4.6	5.4	5.5	4.8	3.9	3.8	3.4	4.5	6.0	7.5	7.6	7.5
Ireland	11.1	3.9	4.5	4.6	4.5	4.4	4.5	4.7	6.4	4.7	12.0	13.9	14.7	14.7
United Kingdom	7.9	5.0	5.1	5.0	4.7	4.8	5.4	5.3	5.7	5.1	7.6	7.8	8.0	7.9
United States	5.6	4.7	5.8	6.0	5.5	5.1	4.6	4.6	5.8	5.3	9.3	9.6	9.0	8.1
Australia	8.8	6.8	6.4	5.9	5.4	5.0	4.8	4.4	4.2	5.4	5.6	5.2	5.1	5.2
Slovenia	7.1	6.2	6.3	6.7	6.3	6.5	6.0	4.9	4.4	5.9	5.9	7.3	8.2	8.9
Sweden	7.6	5.8	6.0	6.6	7.4	7.6	7.0	6.1	6.2	6.6	8.3	8.6	7.8	8.0
Hungary	8.2	5.6	5.6	5.7	6.1	7.2	7.5	7.4	7.8	6.6	10.0	11.2	11.0	10.9
Portugal	5.5	4.1	5.1	6.4	6.8	7.7	7.8	8.1	7.7	6.7	9.6	11.0	12.9	15.9
Canada	9.4	7.2	7.7	7.6	7.2	6.8	6.3	6.0	6.1	6.9	8.3	8.0	7.5	7.2
Czech Republic	8.0	8.1	7.3	7.8	8.3	7.9	7.1	5.3	4.4	7.0	6.7	7.3	6.7	7.0
Italy	10.4	9.0	8.5	8.4	8.0	7.7	6.8	6.1	6.7	7.7	7.8	8.4	8.4	10.7
Belgium	8.5	6.6	7.5	8.2	8.4	8.4	8.3	7.5	7.0	7.7	7.9	8.3	7.2	7.6
Finland	12.5	9.1	9.1	9.0	8.8	8.4	7.7	6.9	6.4	8.2	8.2	8.4	7.8	7.7
Estonia	11.0	12.6	10.4	10.1	9.7	7.9	5.9	4.6	5.6	8.4	13.8	16.9	12.6	10.1
France	10.2	8.2	8.3	8.9	9.3	9.3	9.2	8.4	7.8	8.7	9.5	9.7	9.6	10.2
Germany	8.1	7.9	8.7	9.8	10.5	11.3	10.3	8.7	7.5	9.3	7.8	7.1	6.0	5.5
Greece	11.6	10.7	10.3	9.7	10.5	9.9	8.9	8.3	7.7	9.5	9.5	12.6	17.7	24.3
Spain	17.0	10.5	11.4	11.4	10.9	9.2	8.5	8.3	11.3	10.2	18.0	20.1	21.6	25.1
Slovak Republic	16.0	19.5	18.8	17.7	18.4	16.4	13.5	11.2	9.6	15.6	12.1	14.5	13.7	14.0
Poland	12.7	18.3	20.0	19.8	19.1	17.9	14.0	9.6	7.0	15.7	8.1	9.7	9.7	10.1

Source: OECD (2015), own illustration.

In addition to the degree of coordination and the overall economic climate, the rapidity of labor market restructuring also impacts on the employment chances of older workers. As already explained, most Western countries have experienced a substantial shift from a production-based to a service economy during the course of globalization. The extent to which older workers' skills and experiences are depreciated therefore depends on the speed of restructuring and a country's performance in terms of maintaining older workers' employability (see next section).

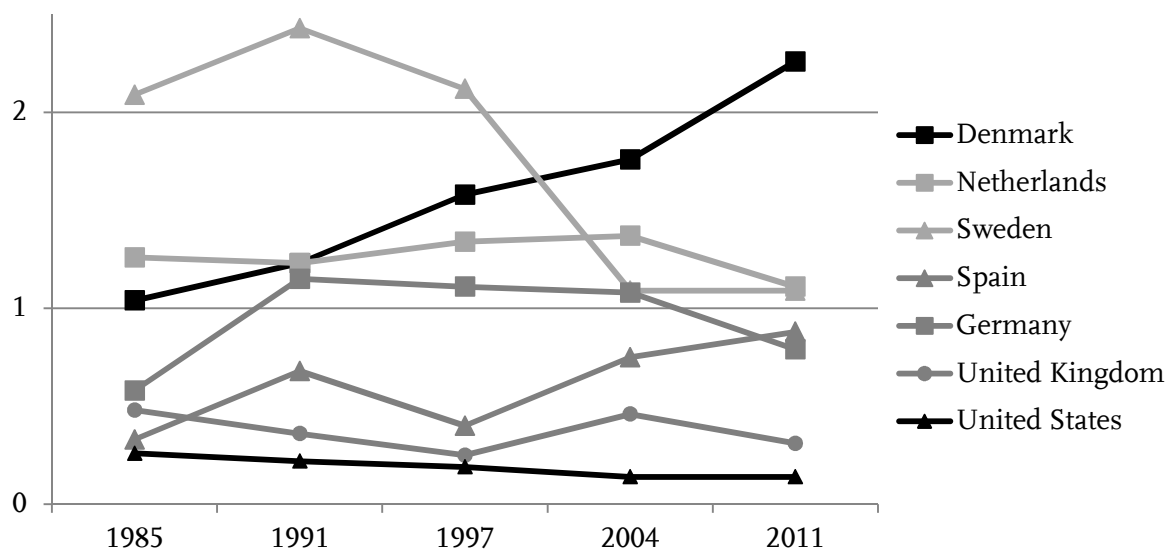
In sum, older workers can face several difficulties when trying to remain in safe employment during their late careers. The barriers are predominantly high on labor markets with a high degree of coordination and strong EPL. Even when they hold an "insider" position, they are often confronted with efforts to send them into early retirement. The "generational exchange" will be fostered particularly when unemployment is high and technological change requires up-to-date qualifications. In contrast to pull factors, (early) retirement due to push effects is therefore often regarded as "involuntary".

Stay Factors: Promotion of the Employability of Older Workers

Whereas both pull and push factors promote the employment withdrawal of older workers, stay factors aim at a better integration of older workers into employment, that is, a prolongation of existing employment or the reemployment of economically inactive older workers. First, these factors comprise employment-maintaining policies that are targeted and state-funded within the framework of *active labor market policies*. Second, a country's tradition and current efforts to implement concepts of *lifelong learning* impact on the degree to which older workers' skills are constantly updated, thus promoting their employability in their late careers. Third, national educational systems and their ability to set *occupational boundaries* are also decisive for older workers' employability on labor markets under change. However, all three aspects are related, because active labor market policies also include qualification measures. Furthermore, the importance of adult education is linked to the national support for reentering training at different points in an individual's life course instead of limiting vocational training and education to a short period in early adulthood.

Figure 1.5 illustrates the development of as well as the cross-country variance in public expenditure on ALMP as a percentage of GDP for selected countries. Since 1985, Denmark and Spain have more than doubled their public spending (Denmark on a much higher level though), whereas Sweden has halved it. The other countries have more or less remained on their level, with only Germany showing a temporary increase during the 1990s until the early years of the third millennium. The "liberal" countries UK and USA remain on a comparatively low level throughout the whole observation period.

Figure 1.5: Public expenditure on ALMP as percentage of GDP, selected countries



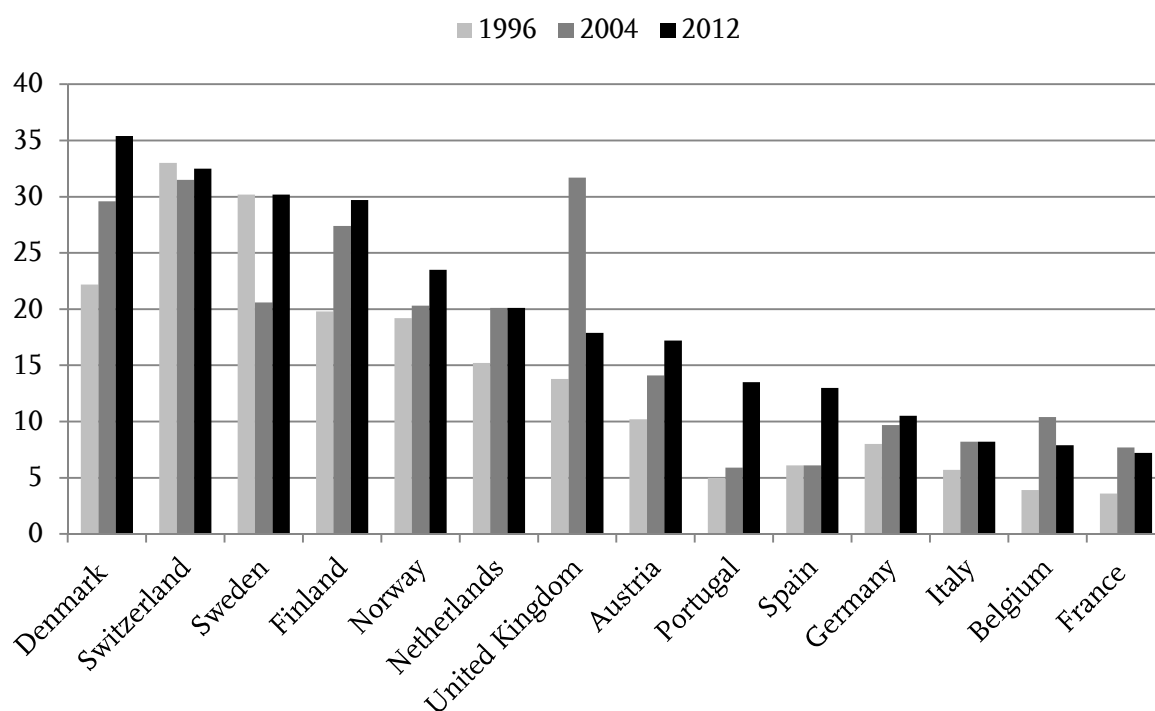
Source: OECD (2015), own illustration.

Note: 2011 values for Norway and UK are from 2007; 1985 value for Denmark is from 1986.

The degree of lifelong learning efforts can be measured through, for example, the participation of the adult population in either general or vocational education. Figure 1.6 shows that the Scandinavian countries, together with Switzerland, hold top positions within European countries in this respect. In most countries, the shares of persons between age 25 and 49 who have recently participated in adult education have increased since the mid-1990s. Nonetheless, considerable variations still persist.

The orientation toward lifelong learning is also linked to the design of the general educational system as well as the vocational training system in a given country. The latter define the organization of occupational labor markets and the rigidity of mobility structures on labor markets. Countries with a highly stratified and standardized educational system and well-developed vocational training systems create rigid boundaries between occupations and qualification levels, and thus reduce mobility between jobs and occupations, particularly when access to jobs is based on nationwide recognized training certificates (Allmendinger 1989; Blossfeld and Stockmann 1998/99; Müller and Shavit 1998). In these countries, it is very difficult to shift older employees who have lost their job in the process of accelerated structural change to other occupational positions. This contrasts sharply with countries such as the United Kingdom or the United States, in which people can acquire vocational skills relatively easily via on-the-job training.

Figure 1.6: Participation in general and vocational education, age group 25–49, selected countries



Source: Eurostat (2015), own illustration.

Note: UK value for 1996 is from 1994; Sweden value for 2004 is from 2005.

Whatever the case, the possibilities for an individual to adapt successfully to new labor market demands should be higher in countries that allow and support reentering education and training at different points of time in an individual's career, giving the worker the opportunity to overcome existing occupational barriers. However, English-speaking and Scandinavian countries apply different strategies of lifelong learning. Using the so-called market-induced employment maintenance approach, the USA and the UK give the individual the main responsibility for lifelong learning activities, whereas the Scandinavian countries, in contrast, follow a public-induced employment maintenance strategy. They offer (re) training measures either within a firm as a form of permanent on-the-job training or as state-sponsored programs—and for both unemployed and employed people (Buchholz et al. 2006).

In recent years along with the widespread national efforts to promote “active aging”, it has been recognized generally that education and training are crucial resources for the enhancement of the productive capacities of older workers. In some countries, however, budgetary constraints have limited public support for such initiatives that have ranged from legislation improving the provision of training courses to media campaigns to encourage older workers to take care of their skill updating themselves (European Commission 2012).

In this and the previous sections, I have explained how *pull*, *push*, and *stay* factors are conceptualized theoretically and/or measured in comparative statistics. In practice, however, the three factors are interlinked and work together in shaping individual retirement decisions. For example, early exit options were often made more attractive when the labor demand for older workers was low. In turn, efforts to make older workers stay were sometimes strengthened in economic booms with high labor demand or related to reforms in pension systems restricting early exit pathways. However, this does not necessarily mean that the respective measures were mutually supportive in all countries. Consequently, standardized measurements of institutional contexts can reflect country-specific mechanisms shaping retirement processes only roughly.

b Mesolevel: Workplace Characteristics

A mere explanation of retirement behavior based on institutional framework conditions, however, does not provide an adequate account of the complexity of the employment contexts of older workers. This is an area in which significant intranational variation can be observed, because sectors, branches, or firms might provide additional pull incentives (e.g., through lump sum payments) and push factors (e.g., age discrimination in hiring or retaining) as well as also firm-specific “stay” efforts (e.g., retraining offers and adaptation of work conditions to meet older workers’ needs). However, these effects on the firm level are difficult to capture, mostly because the employer’s perspective is often missing when analyzing individual retirement decisions. This also applies to the present study. Nonetheless, a few (objective) workplace characteristics that have proven to be influential are available (at least for some analyses), and these will be applied in this study as structural characteristics on the mesolevel.⁹

Thus, the workplace characteristics used for this study include, on the one hand, the *firm size*, measured in terms of number of employees. Large companies, particularly those within the production industry, are subject to structural changes on global markets to a higher extent than small firms and therefore often use specific early retirement offers to adapt their workforce. Consequently, individuals working in large firms retire earlier, on average, than workers in small enterprises (as shown by, e.g., Koenen et al. 2009 for Germany and Hofäcker and Leth-Sørensen 2006 for Denmark).

Furthermore, whether someone is employed in the *public or private sector* may be important, and, within the latter, in which *industry* (e.g., extraction, production, and service). Early exit should be most pronounced in industries such as manufacturing that have undergone a profound rationalization and restructuring in recent decades. In contrast, older workers’ employment within the growing service sector can be expected to be more protected. This also holds for the public sector in which individual careers are usually less exposed to economic fluctuations (Blossfeld et al. 2006a, 2011).

In the private sector, an individual can operate as entrepreneur, that is, the *type of employment* may vary. In many countries, the self-employed retire later than dependent employed, for example, because they are often not (fully) covered by public pension systems and therefore need to continue working for economic

⁹ It is important to note that these do not include workplace conditions that refer to specific settings at a given workplace such as shift work or the existence of a work council.

reasons. Further reasons include a higher work orientation and less exposure to push factors on the labor market compared to persons with employment contracts (Blossfeld et al. 2011; Engelhardt 2012). In this context, the differentiation between fixed-term and permanent employment might also play a role, depending on the country-specific labor market structure.

Finally, *work income* is decisive for the timing of retirement, because it defines the freedom of action for older workers. Also, pension levels are usually (and increasingly) dependent on labor market income, mostly through contributions to either a public pension system designed as a social insurance system or to an occupational pension plan. Nonetheless, the influence of income on retirement decisions can be ambiguous depending on the respective replacement rates and the economic needs or benefits of continuing to work.

c Microlevel: Individual Characteristics

Determinants on the individual level are often interrelated with national or firm characteristics (e.g., gender, health, and sector/industry). In the context of the retirement decision, earlier studies have pointed to either restraining or supporting effects of *gender*, *health status*, *educational attainment*, and *household context* (e.g., Blossfeld et al. 2006a, 2011; Drobnič 2002). Whereas the other characteristics are relevant for several life-course transitions, *health* should play a particularly decisive role for the transition into retirement because this is situated in later life when the physical demands of working life accumulate. Indeed, self-assessed poor health is a strong indicator for an individual preference to leave employment (e.g., Blanchet and Debrand 2008). As previously confirmed, self-rating of health is a valid and reliable measure of overall health (e.g., Lundberg and Manderbacka 1996).

As already mentioned earlier in this work, older workers with a high *qualification level* are expected to hold privileged positions on rapidly changing labor markets (Breen 1997). Older workers with low educational degrees and low-skill jobs, in contrast, run the risk of becoming redundant due to technological changes on product and labor markets.

Taking a household perspective, Drobnič (2002) demonstrated the phenomenon of “coupled retirement,” meaning that couples tend to retire jointly and thus try to coordinate their retirement transitions. Consequently, *partnership status* also impacts on individual retirement decisions, contributing to the frequently observed phenomenon of women retiring earlier than men. However, this *gender gap* can be traced back to several reasons. Particularly in male breadwinner countries, social systems have been designed with an orientation toward only one continuous full-time career within a couple (Lewis 1992). Consequently, many women do not accumulate enough pension rights and have to rely on their husband’s pension in any case, regardless of when they withdraw “officially” from the labor market.

In recent years, scientific research has turned more and more toward examining *grandparenthood*, also in the context of the timing of retirement (e.g., Hank and Buber 2009, Hochman and Lewin-Epstein 2013). Nonetheless, very few studies on retirement processes systematically take the presence of grandchildren into account.

Additionally, not only the family context, but also *social activities* in a broader sense may influence individual retirement plans because, as leisure activities, they compete with working time in an individual’s time allocation. Furthermore, participation in social activities may compensate for the loss of the work-

place as social environment. Under the label of “social activities”, I summarize, for example, actively participating in a religious or political organization, doing charity work or taking part in an adult education or sports course.

Besides these characteristics, which are rather independent from the labor market situation, it is also necessary to consider how individuals subjectively frame their working context. For example, the preference for leisure may vary significantly across individuals depending on the satisfaction they extract from working (Blöndal and Scarpetta 1999). Blanchet and Debrand (2008) found a strong negative effect of general *job satisfaction* on retirement preferences, and Engelhardt (2012) used pooled data containing information about 11 European countries to show that men who are satisfied with their job are indeed significantly less likely to exit employment.

Similarly, (perceived) *physical demand* at work and (perceived) *job security* potentially impact on the retirement decision. Because health status tends to decline with age, older workers are more likely to be concerned by physical challenges in the job, resulting in preferences to exit employment as soon as possible. Whereas this trend should be visible in most countries, the influence of perceived job security is expected to vary according to the country-specific institutional context. Ebralidze (2012) pointed to the fact that “unemployment” has a different meaning for young people in different institutional contexts, because it can represent either a trap or a temporary state. The same is true for older workers because the consequences of job loss depend strongly on the available safety net (or, in other words, on the country-specific meaning of unemployment as a pathway into early retirement) and the capacity of the labor market to reintegrate an older unemployed worker.

Regarding the various determinants of the retirement decision on the workplace level and on the individual level, I thus distinguish between job-related and non-job-related characteristics and between objective factors and subjective attitudes:

Table 1.2: Overview of workplace and individual characteristics influencing the transition to retirement

	Objective	Subjective
Non job-related	Sex Household context/Partnership status Grandparenthood Education level Social activities	Health
Job-related	Firm size Sector (public vs. private)/Industry Type of employment Income	Job satisfaction Physical demand Job security

Source: Own compilation.

d Summarizing the Sociological Perspective: A Theoretical Model Explaining Retirement Processes and Inequality Patterns as Collective Phenomena

The distinction between macro, meso, and microlevel determinants shows clearly that individual retirement decisions are complex processes. In this section I shall present a theoretical model integrating the approaches outlined so far and allowing for a systematic analysis of processes linked to retirement transitions.

As stated by Max Weber (1972), sociology as a science is interested in the understanding of individual actions. Consequently, sociological analyses aim to reconstruct the motives, the knowledge, and the reasons that individuals associate with their actions. Hence, taking the agent's perspective and finding out about the agent's intentions and beliefs is an essential part of sociological research (Esser 1999a). In that sense, the sociological question in this study addresses how individuals make their retirement decisions. The collective phenomena that need to be explained through the analysis of these individual actions are national patterns of retirement behavior and social inequality, along with the respective changes over time. Figure 1.7 summarizes and depicts how the three steps of the standard model of sociological explanations (as described by, e.g., Esser 1999a) are applied to the present study.

The *social situation* is represented by the national institutional background and the respective push, pull, and stay forces. In general, institutions provide rules for the (organized) solution of social problems and restrict the feasible set of alternatives (Esser 1990, 1999a). Accordingly, each institutional framework offers certain pathways into retirement and provides constraints and incentives to choose either one or the other (e.g., through laws and norms).

The *logic of the situation* connects the macrolevel to the microlevel by defining the scope of possible individual choices with respect to the concrete means and resources available to the individual actor. Also, at this stage, the individual's expectations and evaluations regarding the situation come into play. Consequently, older workers as *actors* construct individual "frames" for their retirement planning, combining characteristics of the structural context they live in and their individual perception of this context. The structural context includes not only national regulations and policies as explained in the section about pull, push, and stay factors, but also characteristics of the workplace such as firm size, self-employment, or employment in the public sector. Depending on individual characteristics—such as gender, education or health state—the individual view on the structural context may vary, and so will the respective frames for individual retirement decisions.

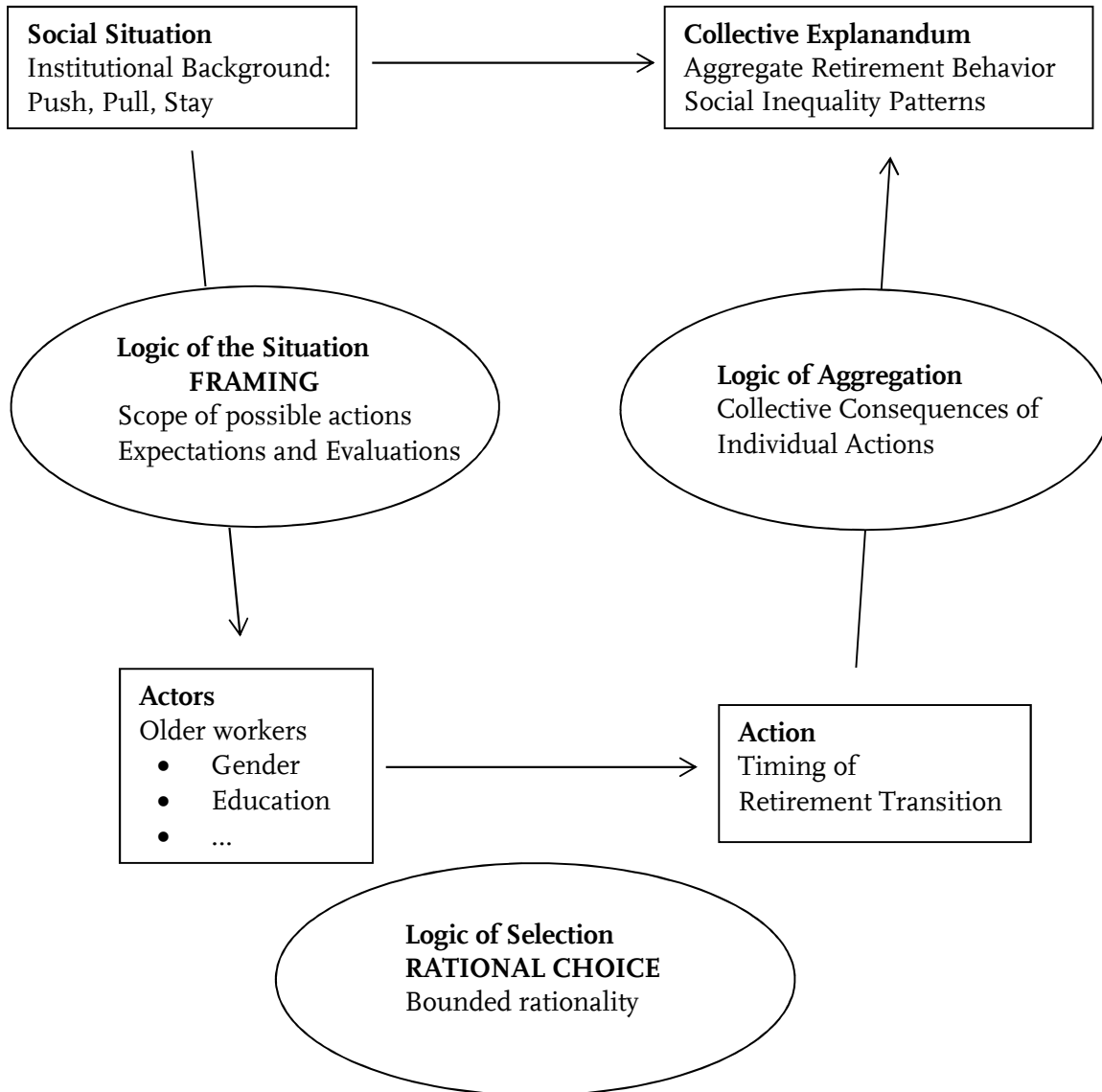
Both external objective situational conditions and internal subjective expectations and evaluations influence the individual's actual choice of a specific action (Esser 1999a). For the *logic of selection*, a theory of action is needed, and I have chosen to refer to the basic principles of rational choice theory. The key assumption of this theory—as formulated by Coleman (2000)—is that individuals will act intentionally and rationally based on the information they have about a specific social situation. Their aim is to maximize their own “subjective expected utility” by balancing the costs and benefits that will arise from a specific mode of action. These costs and benefits are determined by the degree to which individual preferences are met (e.g., financial security, but also social acceptance or leisure). Also, individuals will include an evaluation of the expected probability of actually attaining the desired outcome. In the end, individual actors will choose the alternative for which the product of the value of the outcome and the expected probability of its realization reaches its maximum (Esser 1999b). Consequently, individuals will act rationally insofar as they choose the alternative that “best fits” their personal preference structure—and this need not necessarily be “rational” from an objective point of view. For example, an older worker with a high preference for leisure may retire early despite considerable cuts in pension level. However, other than in economic theory, individual actors are mostly not able to access, collect, and evaluate all the information necessary to recognize an entire situational context and its consequences. As a result, their rationality is “bounded,” and I therefore assume that individuals orient their *action* of retirement transition toward expected outcomes that are included in their situational frames.

The *logic of aggregation*, finally, links individual retirement transitions to their collective consequences on the societal level: national retirement trends and social inequality patterns. This step is achieved with the help of “transformation rules” involving, for example, statistical procedures that produce a country-specific effective retirement age or subgroup-specific pension levels.

In the present study, however, the macrolevel components are not static, insofar as both the institutional background of retirement transitions and the collective explananda change over time. When incentive structures in national welfare systems shift, older workers have to adapt their individual situational frames on the basis of their perception of this change. In this context, I assume that it is not only present but also past framework conditions along with their expected future developments that matter. As a consequence of “reframing” the social situation, individual rankings of preferences among older workers are likely to change, leading to individual retirement transitions that, in sum, result in increased average retirement ages and—expectedly—in increased social inequality.

The schematic summary of the mechanism behind national trends in retirement behavior highlights the significance of determinants on the meso and microlevel and, in particular, the significance of the subjective components. In any case, however, the starting point is the institutional context and the respective (dis)incentives set by nation states. Thus, in the next section, I shall explain the specific conditions for the three countries serving as case studies in this dissertation.

Figure 1.7: Schematic Representation of the Theoretical Model



Source: Based on Esser (1990:98) (author's translations).

3 National Contexts as Frameworks for Late Career Employment and Retirement – Comparing Three European Countries

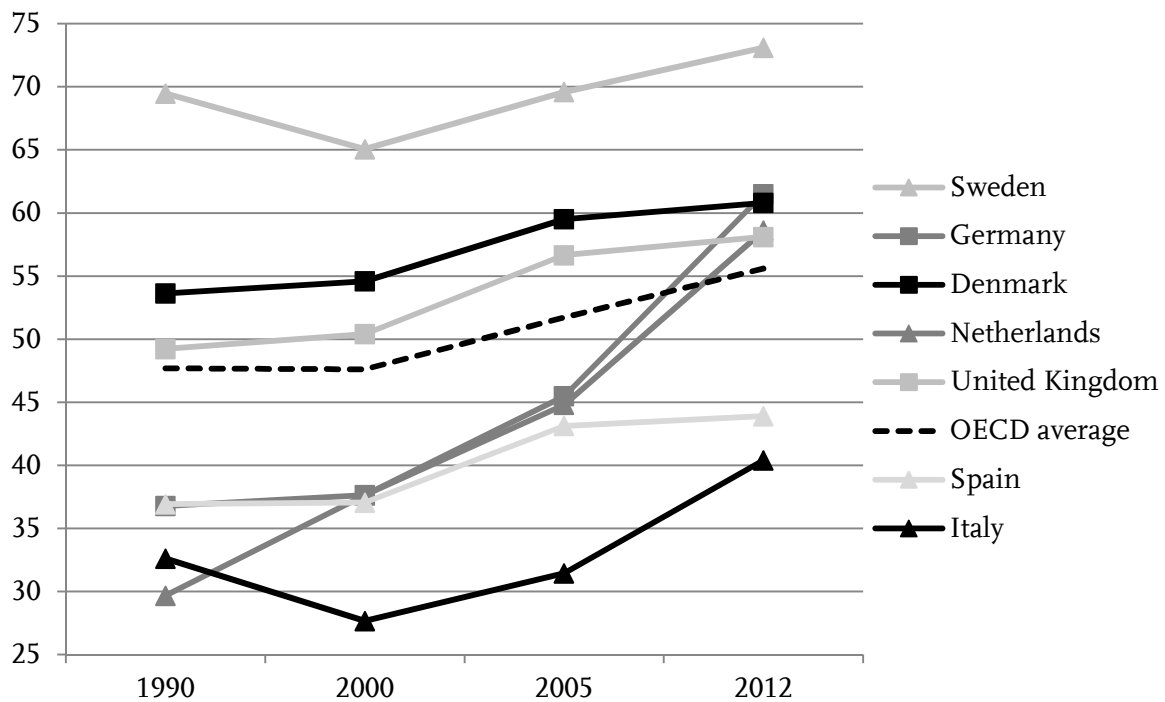
In the previous section, I elaborated on the determinants of labor market exit processes in a general manner, distinguishing between institutional, work-related, and individual characteristics, and I presented a theoretical model for the mechanism behind retirement processes. As described, institutional arrangements are particularly complex and difficult to standardize. Furthermore, interrelations with certain aspects on the meso- and microlevels are often country-specific. Therefore, in contrast to thematically similar works (e.g., Blöndal and Scarpetta 1999; Börsch-Supan 2006; Hofäcker and Unt 2013) that calculated and compared several indicators for a wide range of countries, I decided to use a case study design that would enable me to take a closer look at a small number of country examples. These examples will be analyzed closely with a special focus on distinct characteristics influencing retirement processes as well as on country-specific variations over time. Using this design should help to disclose and understand relevant aspects and their interrelations that would otherwise be at risk of being distorted or remaining undisclosed in any superficial examinations based on standardized measures.

Because Denmark is often called a role model in the context of “active aging”, I shall focus on developments in this country and compare it to two reference countries: Germany and the Netherlands. In the following, I shall first give my reasons for selecting these countries and then proceed to illustrate the respective institutional conditions as outlined in the previous section; that is, to explain the “push”, “pull” and “stay” factors for each country under study and to sketch further relevant country-specific idiosyncrasies.

a Selection of Countries

The focus of this dissertation will be a case study on the nation of Denmark because it is often said to be a positive example for the labor market integration of older workers and the sustainability of pension systems. As a result, it is considered to be comparatively well-prepared for the challenges of global economic restructuring and demographic aging. Indeed, for many years now, Denmark has held top positions among OECD countries regarding the labor market participation of older workers. It is important to note that this applies not only for men but also for women who have been integrated progressively into the labor market since the expansion of the welfare state in the 1960s. This makes Denmark particularly suitable for the study of gender differences in retirement behavior (Larsen and Pedersen 2013). Accordingly, in 1990, Denmark already surpassed the Stockholm Target aiming to bring 50 percent of older workers (i.e. age 55 to 64) into employment by 2010. In 2012, the Danish employment rate for this age group even surpassed 60 percent (Figure 1.8).

Figure 1.8: Persons aged 55–64 in employment as a percentage of the population in that age group, 1990–2012, selected countries

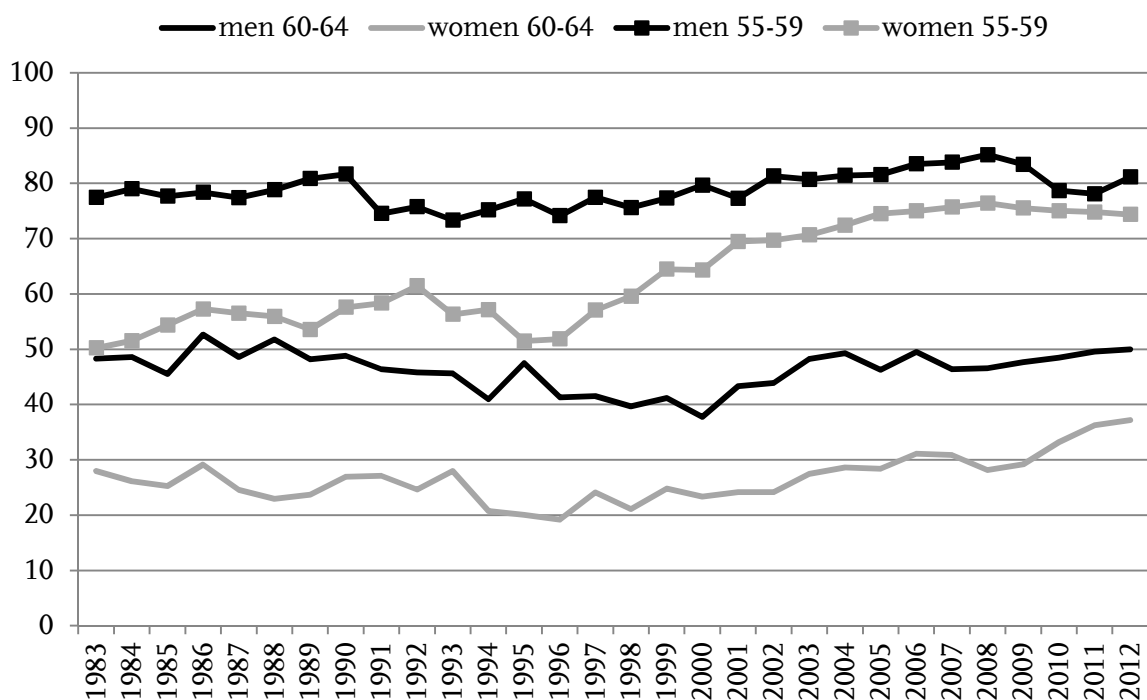


Source: OECD (2014); own illustration.

However, the time series from the early 1980s onward separated by men and women and by age groups (Figure 1.9) reveals considerable and persisting differences within the Danish population between those in their late 50s and those in their early 60s. Evidently, the growth in late career employment is based predominantly on the increased employment of older women, whereas there is rather little change since the early 1980s for men in both age groups. Accordingly,

Denmark's role model performance with respect to late career employment remains limited to individuals younger than 60. Beyond that age, early retirement seems to have been practiced on a massive scale as well, with moderate change since the late 1990s (and again, this change is more pronounced among women). At that time, an economic boom supported the efforts to promote prolonged careers, speeding up the reversal of early retirement. Nonetheless, the gap between the two age groups is still barely closing.

Figure 1.9: Employment rate by gender and age group in Denmark (in percent)



Source: OECD (2015); own illustration.

Hence, it is questionable whether Denmark might be able to serve as a guide for other countries in respect of sustainable active aging. On an aggregate level and at first sight, it was among the precursors of late career employment for quite a long while, and it succeeded in reversing the early retirement trend comparatively early. Also, the institutional framework contains several supportive components such as the traditionally high commitment to lifelong learning and the multi-pillar pension system. Furthermore, flexibility regarding employment contracts was said to support the competitiveness of the Danish economy in a globalized business world. However, a recent revision of OECD data has disclosed that employment protection was actually underrated (OECD 2013c).

Summing up, a closer look puts Denmark's role model status into perspective, not least because several countries have now caught up. Thus, it is an open question whether Denmark can indeed (still) serve as a showcase in the context of active aging. The Global Age Watch Index 2014, for example, ranked Den-

mark only in 12th place (HelpAge International 2014). Furthermore, little is known about the individual level, that is, the degree of comprehensiveness and sustainability of the Danish pension system. Despite already having a multi-pillar pension system close to World Bank recommendations when these were published in 1994, policy reforms included the shift towards further recommodification illustrated above, and this increases the likelihood of an impact on social inequalities.

An adequate evaluation of the consequences for older workers and retirees requires comparative results from additional country studies. For the present work, I selected Germany and the Netherlands as reference countries for the following two reasons:

- (1) Both countries vary with respect to their economic, social, and political structure. Regarding the design of their institutional contexts, Germany represents one rather different case compared to Denmark and the Netherlands more similar/intermediate case.

For example, together with Denmark (and other countries), the Netherlands dispose of a “multi-pillar pension system” (Bonoli 2003) that results in a rather “liberal” pension regime (Korpi and Palme 2003). Germany, in contrast, takes care of its older population with the help of a “social-insurance pension system” (Bonoli 2003) that is rather “conservative” (Korpi and Palme 2003). Also, women’s integration into the labor market has increased to varying degrees in the three countries. Furthermore, despite roughly similar economic cycles, the levels of unemployment as well as the speed of political reforms vary between all three.

- (2) Both countries have experienced early retirement in massive terms but managed to reverse this trend. In contrast to Denmark, they had quite a way to go to fulfill the Stockholm Target, but they reached it in time and have now caught up with Denmark (Figure 1.8).

Summing up, the showcase of Denmark will be used to examine how retirement processes on the microlevel have developed in an environment that is said to be comparatively favorable for older workers. Furthermore, results are contrasted with corresponding findings from two countries with different macrolevel conditions and reform pathways. In the end, this should reveal the role of various determinants of retirement behavior as well as the Danish potential to guide other countries into a (further) reversal of early retirement. For this purpose, I shall now report details of the respective institutional contexts during the observation period, beginning with Denmark and then going on to Germany and the Netherlands.

b Denmark

Denmark is usually assigned to the group of countries with a social-democratic welfare ideology whose main goals are decommodification (market independence) and a high welfare standard for everyone through full employment (Esping-Andersen 1990). Nonetheless, a popular early retirement scheme has represented a major obstacle to higher economic activity among Danes in their 60s since the late 1970s. It is therefore often called a “hybrid” in international comparisons (Bredgaard et al. 2005).

Pull Factors

Pension System

When Denmark was the second country in the world (after Germany) to introduce a public old age social security system in 1891, it deliberately chose a tax-financed scheme instead of a “Bismarckian” social insurance model (Andersen 2008). Since then, political debates and conflicts over the pension system have resulted in a system quite similar to the multipillar one advocated by the World Bank in 1994 (Green-Pedersen 2007).

The core of the *first pillar*,¹⁰ the public old age pension (OAP) called *Folkepension*, was installed in its current form in 1964 and provides all persons reaching the legal retirement age and having lived in Denmark for at least 40 years with the full OAP, irrespective of their previous income and employment situation.¹¹ In 2004, the age for access was lowered from 67 to 65, with low impact on labor supply but high savings for the public sector because two cohorts no longer collected the Voluntary Early Retirement Pension (VERP, see below) but instead became eligible for the significantly lower OAP benefits (Pedersen et al. 2012).¹² However, already in 2006, agreement was reached on a gradual increase back to 67 between 2024 and 2027.

¹⁰ In the case of Denmark, the division into (1) public pensions, (2) labor market/occupational pensions, and (3) personal/private pensions as used so far largely overlaps with the World Bank (1994) classification into (1) non-contributory pension (tax financed), (2) forced contributions and (3) voluntary contributions.

¹¹ For Danish citizens who have less than 40 but at least 3 residence years, benefits are reduced. Non-Danish citizens with less than 40 years must have lived in the country for 10 years including the final 5 years before retirement.

¹² Larsen and Pedersen (2013) have shown that this reform impacted particularly on the labor force participation of individuals aged 65–66 because OAP is financially less attractive: that is, it made continued work more attractive than retiring (if one is still in the labor market at age 65).

The payment consists of a flat-rate basic amount plus a pension supplement, and it is indexed annually in line with overall earnings growth. Since 1993, the flat-rate basic amount is means tested against income from work (other pensions and capital income are not taken into account), whereas the pension supplement is tested against all sources of personal income (including occupational pensions) apart from the *Folkepension*.

Whereas the dominant part of Danish social security is defined benefits and fully financed from tax revenues, there is also a defined-contribution program in the context of old age security. In addition to the basic old age pension, the Danish government introduced the Labor Market Supplementary Pension (ATP) as a compulsory scheme in 1963. It covers all employees with at least 9 working hours a week, with the amount of contributions and benefits depending on the number of weekly working hours and years before retirement and, therefore, not being connected to the income level. In periods of nonemployment such as parental leave or unemployment, the ATP contribution is continued with financial support of public authorities or unemployment funds. Occupational pensions, in contrast, are discontinued due to their employment-related nature, giving ATP an important social function. On average, a full ATP benefit after 40 years of employment grants a replacement rate of 7 percent. Even though the amount seems negligible, it is of crucial importance for low-income workers (Guardiancich 2010a).

Further fully funded supplementary schemes within the Danish first pillar are, for example, the Special Pension Savings Scheme (SP) or the Supplementary Labor Market Pension Scheme for Disability Pensioners (SUPP). Until 2004, SP existed for employees, the self-employed, and recipients of unemployment and sickness benefits with a contribution rate of 1 percent of earnings. Simultaneously with the suspension of SP, SUPP was introduced in 2003. It is a voluntarily funded scheme to top up disability pensions (Guardiancich 2010a).

The *second pillar* consists of quasimandatory, privately managed, fully funded occupational schemes. These are based on collective agreements stipulated by social partners. The Danish tradition of labor market pension programs already began in the 19th century with a defined-benefit system for some public employees. Between the 1950s and the 1980s, funded pension programs spread to all public employees and also to academics employed in private companies, reaching coverage of about one-third of the labor force in the late 1980s. Since then, occupational pensions have expanded further to blue-collar workers in several industries, typically requiring a contribution of 3 percent of earnings from the worker and 6 percent from the employer (Bingley et al. 2004). In 2010, collective agreements provided supplementary pensions to more than 90 percent of Dan-

ish wage earners between age 30 and 60, representing about 80 percent of the total labor force (Guardiancich 2010a).¹³ In most cases, labor market pension contracts include an early retirement option from age 60 onward, with an actuarially fair reduction of pension benefit (Bingley et al. 2004).

Finally, the *third pillar* consists of voluntary, supplementary pension schemes managed by banks or insurance companies. Investment is regulated; indexation is not mandatory. Contributions are tax deductible but interest and benefits are taxed. Enrolment is comparatively high with about 1 million people, that is, almost 20 percent of the total population (Guardiancich 2010a).

Over the years, OAP has developed into a minimum protection of pensioners. Since fully funded labor market pensions as well as individual pension savings plans have been added as another layer on top of the state pensions, wealthy pensioners no longer rely on the public pension, but can maintain the living standard gained during their employment career throughout old age. In other words, occupational pensions that are closely earnings-related are gradually changing from a supplement to the backbone of the system (Andersen and Hatland 2014).

Early Retirement Pathways in Denmark

Although the regular retirement age in Denmark was 67 until 2004, there were several pathways for withdrawing earlier from the labor market (see, e.g., Larsen and Pedersen 2008). In this context, a crucial welfare institution is unemployment insurance (UI), which is a voluntary scheme in Denmark. Nonetheless, about 80 percent of Danish workers are members of UI funds, and the replacement ratio for unemployment benefits is, at 90 percent (for low-wage earners), one of the highest in the world (Aagaard et al. 2004). In the last half of the 1990s, the maximum benefit period was gradually reduced from 7 years to 4 years, but special rules for older workers continued to exist until the beginning of 2007.¹⁴ Unemployed persons who are not members of UI funds can receive means-tested and temporally unlimited social assistance if they have no other

¹³The groups not covered are either young labor market entrants who will eventually end up in a stable career or high-level managerial professionals who are covered by other arrangements (Guardiancich 2010a).

¹⁴ As part of the 2006 Welfare Reform, the previous right to prolonged unemployment benefits for people aged 55 and over was abolished for those born in 1953 or later. In addition, since 2011, the unemployment benefit for all unemployed people has been limited to a period of 2 years instead of the previous 4 irrespective of age (OECD 2012d).

income sources or savings. The same goes for individuals who did not manage to find a new job within the respective maximum period of UI receipt.

The most common scheme used for early retirement is the Voluntary Early Retirement Program (VERP), in Danish called *Efterløn*¹⁵. Established in 1979, VERP offers full-time retirement starting at age 60 on condition of a minimum number of 25 years of membership in an UI fund within the last 30 years.¹⁶ Therefore, the program is not considered as part of the pension system, but is linked to the unemployment insurance system. Accordingly, the benefit amount corresponds to the rate of unemployment benefits, subject to a limit of 91 percent of the maximum rate of unemployment benefit. Once they reach normal retirement age, beneficiaries revert to the standard old age pension (Guardiancich 2010a). At the time of its introduction, VERP was supposed to reduce especially youth unemployment after the oil crises in the late 1970s. However, over the years, the program has gained an increasingly broad popularity.

Since the 1990s, VERP has been regarded as a major obstacle to higher economic activity among Danes in their 60s. In order to raise incentives to delay early retirement, the government launched reforms of VERP in 1992 and 1999. The success of the first reform was relatively weak (Larsen 2005). Regarding the 1999 reform, Jørgensen (2009) concludes that VERP has become less attractive, and the number of VERP recipients is expected to decrease in the future. Larsen and Pedersen (2013) as well point to the result of declining take up of the program starting in the early 2000s. The 1999 VERP reform included, among others, the introduction of means testing of the benefit against other sources of income (including other pensions), removing the possibility of taking advantage of VERP and an early exit option of an occupational pension at the same time. Work income implies an hour by hour reduction of VERP benefits, resulting in an amount of zero in the case of more than 29 working hours (Larsen and Pedersen 2013). In 2006 and 2011, further major welfare reforms included, among others, a prolongation of the minimum UI contribution period for VERP eligibility to 30 years as well as a raising of the entry age to 62.

During the recession with rapidly rising unemployment in the early 1990s, the government introduced another program targeted at older workers: the so-called Transitional Benefit Program (TBP). This was designed as a program to bridge the time until VERP eligibility in case of unemployment in 12 out of 15 months. Starting in 1992 with a minimum age of 55, the entry age was lowered further to

¹⁵ Directly translated, this means “post-(employment) wage.”

¹⁶ These requirements have been tightened up several times in the period under study.

50 in 1994. Benefits were set at 82 percent of maximum unemployment insurance benefits, and the maximum duration was until transition to VERP at the age of 60 (Larsen and Pedersen 2008). Because extensive usage put pressure on the state budget, and the starting economic boom relieved the labor market soon thereafter, the program was closed to new entrants in 1996, implying, however, that the last person left the program in 2006.

As in many OECD countries, disability pensions can also be used to exit the labor market (Casey et al. 2003). Denmark has a scheme called social disability pension (SDP, *Førtidspension*) that allows for withdrawal based on medical or social criteria. In 1984, the scheme was reformed to also allow disability grants for older workers between 50 and 60 years for other than medical reasons (Jensen 2004). Until 2003, the SDP system was quite complex, because the rules differed regarding tax treatment and regarding the means testing or not of the different components and amounts that made up the program. Since 2003, there have been only two levels of SDP benefits for new entrants to the program with the level depending on marital status (Larsen and Pedersen 2008). For individuals younger than 60 (and among those in particular for women), disability benefit remains a major early exit pathway, particularly for those who do not take advantage of VERP (van Oorschot and Jensen 2009).

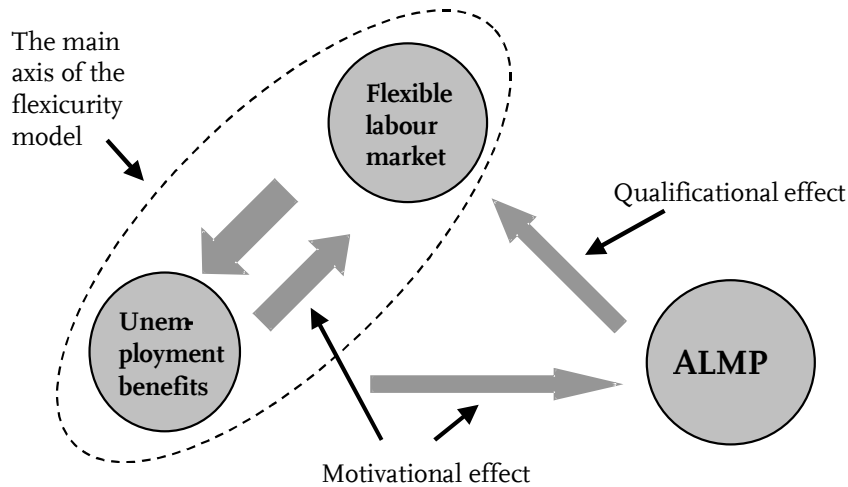
Overall, financial incentives to retire early are particularly strong for people with fairly low wages, because net compensation rates for not working beyond age 60 are 70 percent for persons with low wages and only 40 percent for persons with high wages (Bingley et al. 2004).

Push Factors

Labor Market Characteristics

Until very recently, the Danish labor market model was praised for its unique combination of flexibility and security that was often called “the golden triangle of flexicurity” (Figure 1.10). The main axis of the model shows the interplay of low employment protection and a generous social welfare system supported by an elaborated active labor market (see also section on active labor market policy). As a result, companies were assumed to be able to adjust comparatively easily to structural changes on global markets. Connected to this, job mobility has been high in all age groups: In a comparison of 16 OECD countries with regard to the average tenure with the same employer in 1992 and 2000, Denmark ranked right behind the United States and the United Kingdom—both well-known for their “hire-and-fire” labor markets—and its average tenure even decreased between the two observation points (Auer and Cazes 2003).

Figure 1.10: The Danish “flexicurity” model



Source: Madsen (2005).

A recent revision of OECD data, however, has revealed that Danish employment protection has been underrated for years, because job protection arrangements resulting from, for example, collective bargaining practices were not considered (OECD 2013c). As Ronald Janssen (2013:last paragraph) states, the latter offers Danish workers robust levels of job protection and positions the country exactly at OECD average with regard to overall EPL in 2013. He therefore concludes that

The whole policy of flexicurity, as it has been promoted all these years by the European Commission, has been based on a statistical illusion. The argument according to which the success of labour market performance in Denmark can be put down to the fact that workers and not their jobs are being protected is simply not correct. [...] The true peculiarity and advantage of the Danish system lies in the fact that Denmark invests heavily in both passive and active labour market policies (Janssen 2013: last paragraph).

Consequently, the main component of the flexicurity model is not the possibility of easy firing (as shown in Figure 1.10) but the public investments in ALMP.

Further idiosyncrasies of the Danish labor market are the large public sector and the overall low wage dispersion within the workforce. Since the early 1980s, there has been a tendency to decentralize wage bargaining and wage setting in the private sector, and, since the late 1990s, in the public sector as well (Aagaard et al. 2004). Nonetheless, unions still exert a major influence on labor conditions and extended benefits, particularly leave schemes or occupational pension funds. Most regulatory issues are settled between trade unions and the employers' federation, whereas the role of the government is “to pay the bill.” The gov-

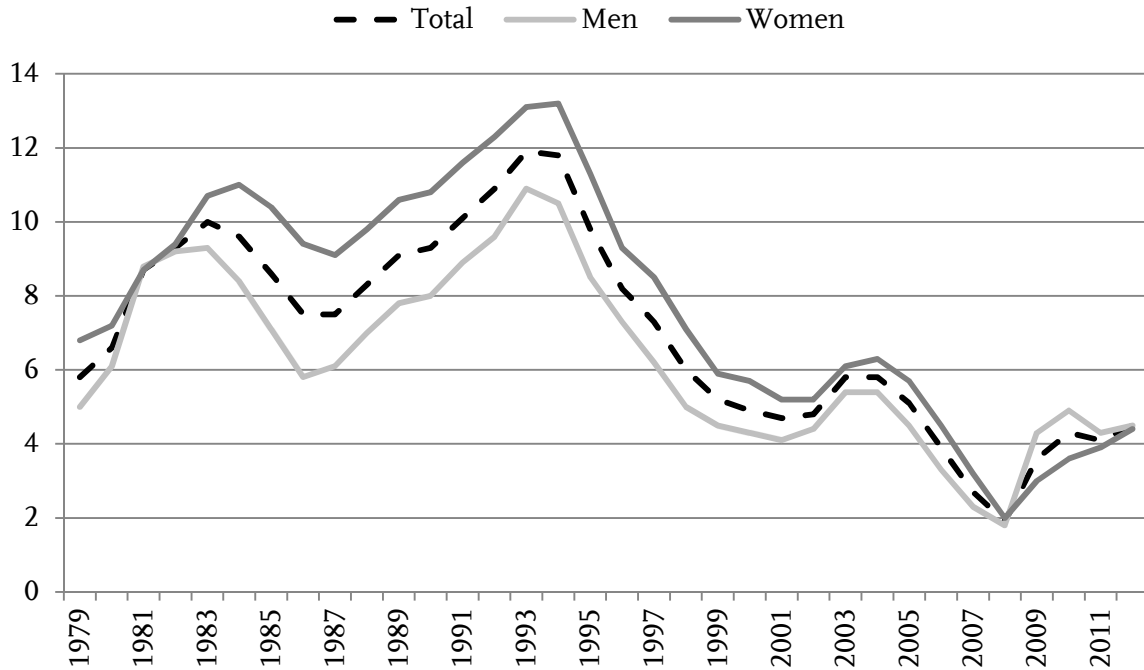
ernment also takes responsibility for the provision of unemployment benefits and the retraining of dismissed workers, which is the core idea in the “Nordic Labor Market Model” (Aagaard et al. 2004).

Being a small country with few natural resources, Denmark’s economy consists mainly of small and medium-sized enterprises, and it relies strongly on imports and economic relations with other countries. Since the 1950s, the Danish economy has experienced a transition from a mainly agriculture-based economy to a strongly service-sector-based society. Simultaneously, the industrial sector has shown only moderate growth, but the most remarkable development regarding the employment structure was massive job creation in the service sector during the 1980s. By the mid-1990s, more than two-thirds of all employment was in the service sector, partly due to the considerable expansion of public services such as education, health, and child care (Ganßmann and Haas 2001; Madsen 1999).

Economic Cycle

When the Danish economy was hit hard by the oil crises in the 1970s, unemployment rose, growing to more than 10 percent in the early 1980s (Figure 1.11). After a temporary decline, the rate mounted again to over 12 percent in the early 1990s. In both of these crises, the Danish government introduced measures intending to reduce unemployment and offering, among other things, early retirement options for older workers (see section on early retirement pathways). However, in the mid-1990s, the Danish strategy changed to a more activating labor market policy, and in the following years, the economy recovered and experienced an “employment miracle.” After a slight relapse in the first years of the new millennium, aggregate unemployment has fallen further to reach rates equivalent to full employment in 2008. It remains a matter of debate whether this development is mainly due to the enhanced activation measures, to their side effect of “hiding” unemployment, or to the economic upswing. During the subsequent financial crisis, Danish unemployment has increased again slightly but rapidly.

Figure 1.11: Unemployment rates in Denmark, 1979–2012 (in percent of the labor force)



Source: Statistics Denmark (2015).

Stay Factors

Active Labor Market Policies

Typically for a Scandinavian country, Denmark has strongly invested in the employability of older workers with the help of active labor market policies. Since the mid-1980s, expenditures for this purpose have risen continuously, and in 2011, they comprised more than 2 percent of GDP (Figure 1.5). As already explained earlier, state-financed requalification courses provide dismissed workers with assistance in job search as well as skill upgrading or retraining programs and hence represent the main labor market instrument fostering older workers' labor market participation (Janssen 2013).

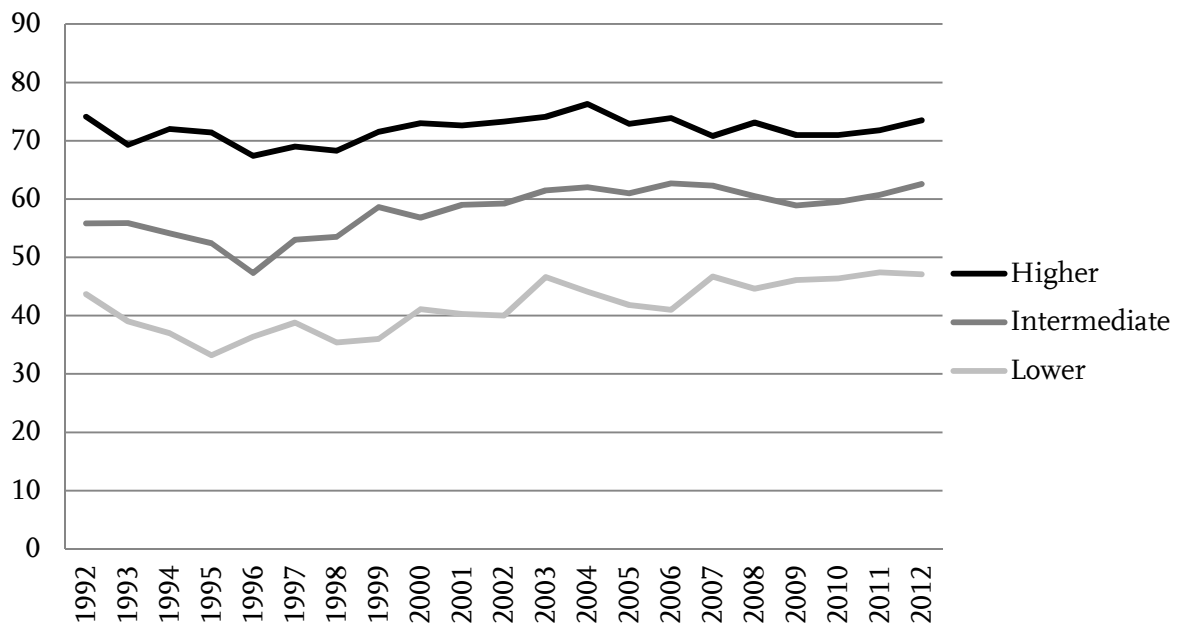
Up to 2007, unemployed Danes aged 58 and 59 could be exempted from general activation measures. According to the welfare reform in 2006, this exemption was abolished in order to increase the labor market participation of older people and to increase the effective age of retirement. Furthermore, two new activation measures for unemployed persons older than 55 were implemented in 2008: First, "senior jobs" were implemented for unemployed older workers whose unemployment benefit period was exhausted but who would be eligible for VERP at age 60 should they continue their UI membership. These jobs were state-subsidized and offered by the municipality in which the person lived. Second, private companies that hired an unemployed individual aged 55 or above were also granted a subsidy for the first 6 months of the employment contract. How-

ever, the unemployed persons had to find these jobs themselves, encouraging job search activities among this age group (OECD 2012d).

Lifelong Learning

Similar to Germany, the Danish vocational training system is organized as a “dual system” combining theoretical training in schools and practical work in firms. Tertiary education shows three levels (short, medium, long) and has become increasingly common in recent decades. Since several years, more than 50 percent of an age group moves on to higher education (CIRIUS 2006). Among older workers, the share of individuals with higher education is comparatively low, because a large proportion of them have a vocational training certificate as their highest qualification level. Moreover, a significant number possess only basic general education, making them a less attractive workforce. However, the shares of women and men in the 60- to 64-year-old age group without any formal post-school education have declined strongly since the early 1990s (Larsen and Pedersen 2013). At the same time, the percentage of the older population (55–64 years) with tertiary education has rapidly increased, reaching 28 percent in 2011. In comparison to the EU21 countries, this rate is exceeded only by Estonia, Finland, and the UK (OECD 2013b). In this context, it is important to note that, in Denmark, the level of education has shown a strong positive relation to the employment rate throughout the last two decades (Figure 1.12).

Figure 1.12: Employment rate of workers aged 55–64 by education in Denmark (in percent)



Source: Eurostat (2015); own illustration.

However, the concept of continuous, lifetime education has a long tradition in Danish society.¹⁷ Today, there is a wide range of publicly sponsored (re-) qualification opportunities targeted at both the unemployed and employed. Although participation rates correlate with previously achieved qualification levels and decrease with age, they still greatly exceed EU averages. With an increase from 22 percent in 1996 to 35 percent in 2012, Denmark has now outperformed all other Nordic countries and Switzerland (Eurostat 2015). Through the constant updating of skills, a worker is given the opportunity to overcome the occupational boundaries set by the high importance of certificates on the Danish labor market.

Further Country-Specific Characteristics of the Danish Institutional Context: High Female Employment, but Concentrated in the Public Sector

Denmark is one of the countries with the highest employment rates of women. Since the mid-1980s, a relatively stable share of 70 percent of all working-age female Danes are employed compared to about 80 percent of males (Statistics Denmark 2009). In 2008, an all-time high of 76 percent was reached, and only Switzerland and the other Nordic countries Finland, Iceland, Norway, and Sweden could boast comparable values (Eurostat 2015). It is important to note in this context that part-time work plays only a subordinate role, resulting in an average of about 32 weekly working hours among Danish women in 2007 (Marold 2008).

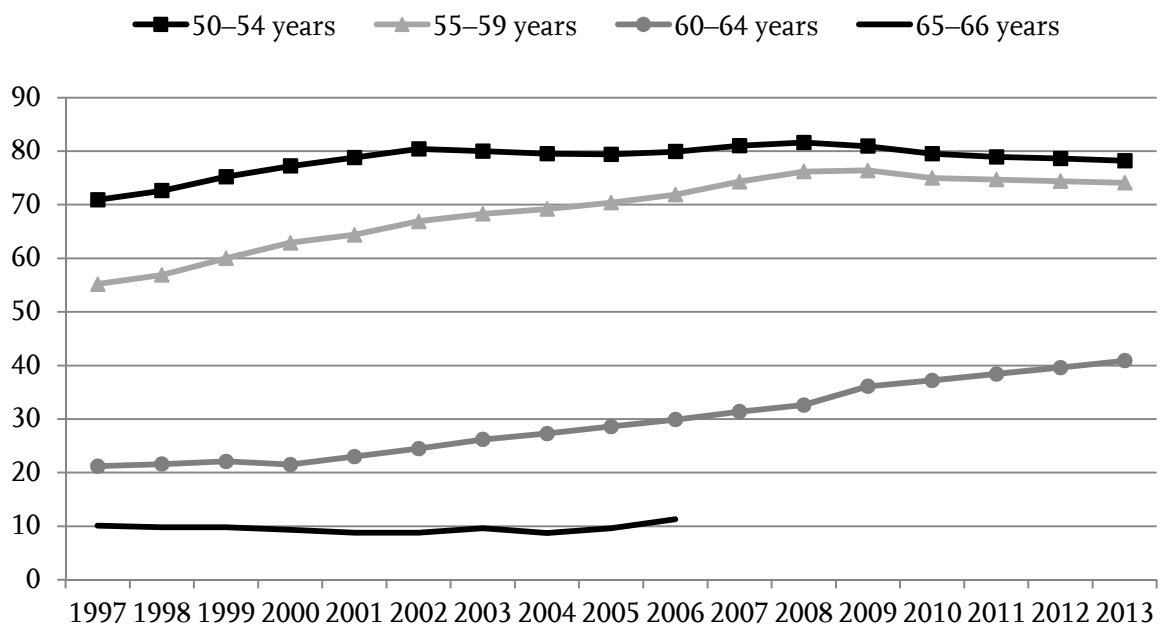
Figure 1.13 provides information specifically on older women since the mid-1990s: Whereas the employment rate of women aged 50 to 54 is similar to the population average and even increased by 10 percentage points from 1997 to 2002, women in their late 50s were employed to a lesser extent. However, they have almost caught up with their younger colleagues during the observed period. Employment of women aged 60–64, in contrast, has increased steadily even during the crisis, though on a significantly lower level. Figure 1.9 provides a comparison with the respective rates for men. This reveals strong differences between the genders within the 55–64 age group. For the VERP-eligible 60- to 64-year-old age group, the turning point after the VERP reform in 1999 is clearly

¹⁷ Much of the idea of lifelong learning came from Nikolai Grundtvig (1783–1872), one of the most influential Danish humanists of the 19th century. Therefore, the EU’s Lifelong Learning Programme (LLP) which ran from 2007 to 2013 involved a sub-programme called “Grundtvig” focusing on the teaching and study needs of adult learners, as well as developing the adult learning sector in general. For more information see http://ec.europa.eu/education/tools/llp_en.htm.

visible, but the gap between men and women in this age group persists, illustrating earlier withdrawal from the labor force among women compared to men.

As astonishing as the high level of female employment in Denmark may be, the country still shows a strong labor market segregation: About one-half of all Danish women work in the public sector compared to only one-fifth of Danish men (Statistics Denmark 2015). When the Danish welfare state expanded in the 1960s, many women were given the opportunity to take up paid work; and since then, female Danes have been firmly integrated into the labor market (Borchorst 1994; Grunow 2006).¹⁸ However, the strong segregation within the Danish labor market contributes to a persisting gender wage gap (Deding and Larsen 2008). In 2010, the relative difference between earnings of women and men was almost 16 percent. This is very close to the EU-27 averages, but varies between industries (Larsen and Houlberg 2013).

Figure 1.13: Employment rates for women aged 50–66 in Denmark, 1997–2013 (in percent)



Source: Statistics Denmark (2015); own illustration.

Note: No data available for 65- to 66-year-olds after 2006.

Danish aggregate unemployment has varied considerably over the course of the last decades, but from the late 1970s until very recent years, the women’s rate was always above that of the men (Figure 1.11). The gender gap in unemployment rates still persisted all through the economic ups and downs since the ear-

¹⁸ As an illustrative result, the category “housewife” was eliminated from official statistics in 1984 (Kvist 2001).

ly 1980s, and it decreased comparatively late after the “employment miracle” beginning in the mid-1990s. However, the crisis arising in 2008 changed the picture and led the men’s rate to increase significantly more than the women’s rate. This was due to the fact that the sectors with the highest unemployment increases—industry, construction, and service sector—typically employ men (Statistics Denmark 2013).

c Germany

According to standard welfare state classifications, the German welfare state belongs to the welfare state regime known as “conservative-corporatist,” and is accordingly characterized by a strong ideology of status maintenance and transfer orientation (Esping-Andersen 1990). However, recent policy reforms have shifted the social policy strategy towards more “liberal” elements (e.g., the so-called “Hartz Reforms” implemented between 2003 and 2005).

Germany is a special case because of its strong regional discrepancies, historically explained by the separation of the country after the World War 2. Consequently, West Germany developed into the Federal Republic of Germany with the help of the US, France, and the UK, whereas East Germany was administered by the Soviet Union, leading to very different social and political structures in both parts. In 1990, both parts were reunified, meaning that the Eastern part (the former German Democratic Republic, GDR) joined the Federal Republic of Germany and was integrated into its institutional structure. As a result, East Germans were faced with an abrupt transformation from a planned to a market economy, with women, disabled people, and older workers being among the groups most affected by the accompanying reduction of the workforce (Ernst 1996). Even after more than two decades, considerable differences in employment conditions and pension levels still persist between the two German regions. Therefore—and also because of the varying employment patterns of women—research on retirement processes should account for these within-country variations.

Pull Factors

Pension System

Knownable by the name, Germany’s public pension system is organized as a “Bismarckian” system, that is, as social insurance securing the living status that a person has achieved during his or her employment career. Unlike the Danish tax-financed “Beveridge” system with residence being the crucial criteria, labor market earnings throughout the life course are the decisive factor determining the level of old age pensions from the *first pillar* for Germans. The pay-as-you-go system is financed through a “generation contract,” with current employees being obliged to pay for the current retirees.¹⁹ The benefit level of the latter is cal-

¹⁹ The pension insurance budget is nonetheless subsidized by the state budget: 70 percent is financed by contributions and 30 percent by indirect taxes and government subsidies (Börsch-Supan and Wilke 2006).

culated by the number of “earning points” collected during their career. In other words, there is a strong link between contributions and benefits. The minimum qualifying period is 5 years of membership in the federal pension insurance system, and the level of contributions is set by the government according to the dependency ratio within the system and the national wage development.

In regular employment contracts, total contributions are split between the employer and the employee, resulting in each paying about 10 percent of gross earnings to the system in 2009 (Guardiancich 2010b). In case of unemployment, contributions are paid by unemployment insurance, but only on a minimum level for the long-term unemployed. Persons going through periods in atypical employment such as part-time employment with a very low number of working hours (*geringfügige Beschäftigung*) and self-employed persons can opt in under certain conditions, but civil servants (*Beamte*) are always exempt (their pension is paid from taxes).

Throughout the observation period of this study, the legal retirement age for men was 65. Until 2001, women could already receive their full pension at age 60, depending on the fulfillment of certain conditions. In 2007, a key reform of the public pension scheme was decided and came into force in January 2012, as a result of which the statutory retirement age will be gradually increased for both genders from the age of 65 to 67 years until 2029.²⁰ Earlier withdrawal from the labor market remains possible for specific groups (e.g., workers with extremely long memberships in the public pension system) and under certain conditions, but mostly connected with reductions in benefit level. Nonetheless, these exceptions and the respective pension reductions are strongly contested in political debates.

Nowadays, the public pension system covers about 90 percent of the German workforce (Richter and Himmelreicher 2008). Persons who have reached the legal retirement age but have not collected enough pension entitlements to make a living can receive a tax-financed basic payment (*Grundsicherung im Alter*), with the amount being comparable to social assistance benefits.

By international standards, the average replacement rate of 70 percent can be regarded as rather generous, although it will be reduced gradually to about 67 percent until 2030. In combination with a changed formula to calculate the pension level, public pensions are consequently reduced by about 10 percent. The

²⁰ Consequently, those born in 1964 will be the first cohort for whom the statutory pension age of 67 will apply fully (Duell and Vogler Ludwig 2012).

compensation of this share by private pension plans is subsidized by the government, but only those who are better off can afford it (Börsch-Supan and Wilke 2006; Kerschbaumer 2013; Leitner and Lessenich 2003).

Regarding the *second pillar*, occupational pensions were highly regulated until 2001, resulting in a rather low popularity. After the *Riester* reform, they spread mostly in sectors with strong collective agreements and in the public sector, leading to a 10-percent increase in coverage from 2001 to 2004. In the latter year, about 60 percent of all employees were covered by an occupational pension plan, most of them working in large firms with over 1,000 employees. Finally, the *third pillar* provision was encouraged for dependents as well as for self-employed, but take-up rates have remained comparatively low (Guardiancich 2010b). In recent years, policymakers have stressed the need for additional old age provisions, in particular, for private pension plans such as the *Riesterrente*, but public pensions still constitute the major source of income for the elderly in Germany (Ebbinghaus 2006).

Early Retirement Pathways in Germany

In Germany, unemployment insurance plays an important role in the opportunities for an early exit from the labor market. Other than in Denmark, membership of the public unemployment insurance scheme is obligatory for German employees. As in the public pension system, the self-employed and civil servants are not part of the system.

Beginning in the 1970s, unemployment benefits (UB) were used as a “bridge” between dismissal at age 57 or 58 and eligibility for an early retirement scheme designed particularly for the long-term unemployed. Since the early 1980s, policymakers, unions, and employers joined together in fostering early retirement, and they introduced additional incentives to withdraw early that were used mainly by low qualified workers. Between 1990 and 1992, East Germans even benefited from a special early retirement pathway that was already available for the unemployed at age 55 (*Altersübergangsgeld*; Bönke et al. 2009) because reunification had a massive impact on the East German labor market in terms of rising unemployment.

Starting in the early 1990s, pension reforms have gradually closed some of the early retirement pathways and the generosity of the scheme has been reduced stepwise, particularly since the millennium. For example, in the course of the *Hartz* reforms from 2005 onwards, the maximum benefit period for unemployment benefit was cut to 18 months. Also, after 2007, unemployed individuals aged 58 and above were no longer exempt from job-search requirements as a precondition for receiving unemployment benefits. Instead, subsidies were giv-

en to employers for hiring older workers. Moreover, a gradual retirement scheme involving public subsidies (*Altersteilzeit*) that had been effective since 1996 was removed in 2009 (European Commission 2012).

In Germany, disability pensions are administered under the public (old age) pension system. In case of permanent incapacity to work, the pension level is calculated according to (1) the current value of the “points” collected for the old age pension and (2) the degree to which someone is still able to work. Consequently, the individual disability pension benefit is, in most cases, lower than the regular old age pension. Nonetheless it is still a pathway into early retirement for older workers with health issues.

Push Factors

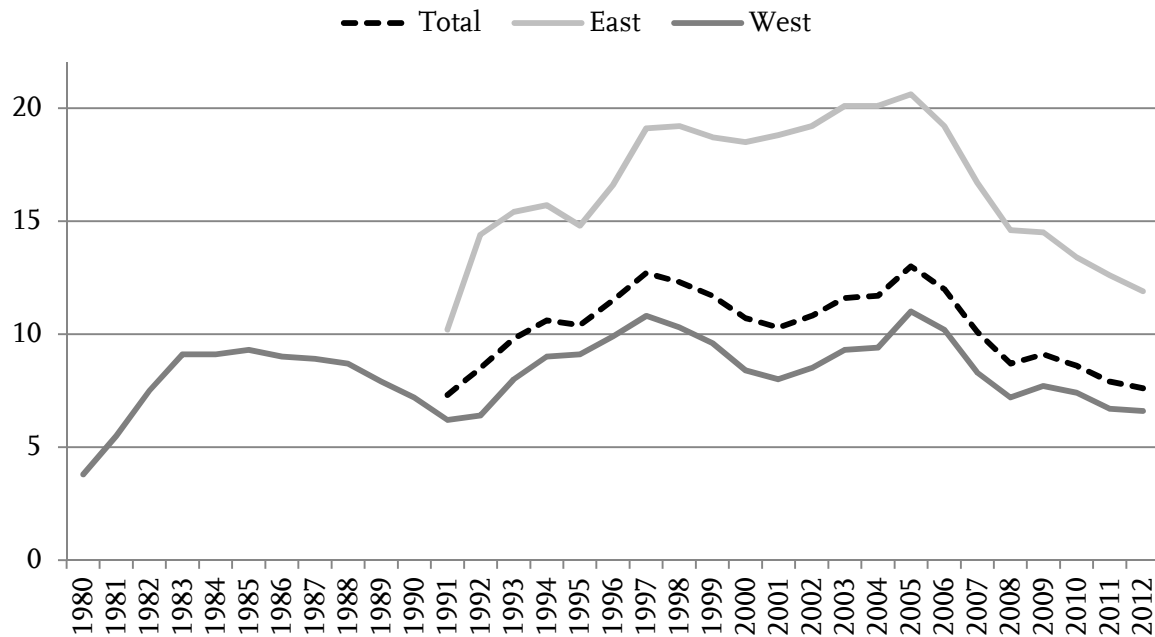
Labor Market Characteristics

The German economy is classified as being coordinated. In other words, it has a rather rigid labor market with low employment flexibility and low adaptation to structural change (Mayer 1997; Soskice 1999). Furthermore, it is a typical showcase for a labor market with strong insider/outsider segmentation (Mills and Blossfeld 2005). Consequently, especially “labor market insiders” such as mid-career males and older employees have a high level of employment protection and are rather difficult to dismiss. However, due to the major changes in the employment structure and high shares of older employees in the declining industries and occupations, older workers in Germany have been strongly exposed to rationalization. As in many Western countries, the tertiary sector has grown considerably at the cost of shrinking agricultural and classical production industries, putting blue-collar workers in particular under pressure. Demand for their labor has decreased continuously and considerably, leading to a worsening of their labor market situation during the last decades (Rinklake and Buchholz 2011; Flynn et al. 2013). Despite several reforms toward more flexible work forms, employment protection of German workers is the highest among OECD countries (OECD 2013c).

Economic Cycle

Similar to the Danish case, the German economy experienced a crisis in the early 1980s with unemployment rates reaching about 10 percent around 1985. When unification was accomplished in 1990, the Western part had just recovered, but afterwards experienced rising unemployment again, although on a clearly lower level than the Eastern part.

Figure 1.14: Unemployment rates in Germany, 1980–2012 (in percent)



Source: Federal Employment Agency of Germany (2015).

The approaching millennium brought a short-term boom that lasted until 2001 when the “dot-com bubble” collapsed. In 2005, unemployment in both parts even exceeded the levels from the mid-1990s, being the major driver for comprehensive labor market and social security reforms (labeled as *Hartz reforms*). Since then, the rate has shrunk almost continuously, with only a slight halt in the global economic crisis of 2008.

Stay Factors

Active Labor Market Policies

In Germany, active labor market policies for older workers were introduced mainly after the millennium. Due to the federal structure of the country, some measures were nation-wide whereas others were implemented only by specific federal states. One example is wage subsidies for workers aged 50 and above with an integration wage subsidy voucher that supports recruitment of older workers for a maximum period of 36 months with a maximum subsidy of 50 percent of their wage (Brussig et al. 2011). Also, workers over the age of 50 could be granted a wage subsidy if they accepted a low wage instead of becoming or remaining unemployed (*Entgeltsicherung für Arbeitnehmer*). Furthermore, the government launched a national program “Perspectives 50plus – employment pacts for older workers in the regions” in 2005 in order to activate older long-term unemployed people and to place them in the regular labor market. The various measures implemented range from internships, over training in communication skills and job application training, to wage subsidies. Overall,

the program was evaluated positively by participants as well as employers, but failed to reach target persons over 60 years and to raise awareness (Büttner et al. 2008).

Regarding the firm level, qualitative research based on company case studies has revealed that improvements in the implementation of age-management strategies have been made in Germany, following their quasi-nonexistence in the 1990s (European Commission 2012).

Lifelong Learning

Since its expansion in the 1950s, the German educational system has become highly standardized and stratified, producing strict boundaries along different occupations on the labor market (Allmendinger 1989). As a result, changing occupations is possible only with the appropriate certificate. With certain qualifications becoming redundant in the economic transformation process, the respective certificate also loses relevance. Consequently, many older workers have been exposed to severe employment and reemployment difficulties because reentering vocational qualification is rather unconventional and structural adaptation in firms was realized rather through generational replacement than through a skill updating of the existing labor force (Blossfeld and Stockmann 1998/1999).

In contrast to Denmark, in which general and vocational education is standardized in a similar manner, lifelong learning structures are still underdeveloped in Germany. According to Figure 1.5, the share of adults participating in general or vocational education has grown only marginally since the mid-1990s (from about 8 to about 11 percent) putting Germany on a lower rank in European comparison. Duell and Vogler-Ludwig (2012) also point to the fact that Germany still lacks adequate measures in the life-long learning system.

Further Country-Specific Characteristics of the German Institutional Context: Women's Rising Labor Market Participation, but Only Up to a "1.5-Earner" Model

After the World War 2, German families were shaped strongly by the male breadwinner model. As a hangover from back then, married couples are still favored by German tax law when only one spouse is employed (*Ehegattensplitting*). It is only since the late 1970s that married women have been allowed to take up paid employment without having to obtain the permission of their husbands (Holst and Maier 1998). At that time, however, it was common for mothers to give up employment with the birth of their first child and return several years later. In the meantime, the "baby break" has shortened and mothers return to work comparatively soon, but the vast majority of them part-time, which is also supported by the tax system. Consequently, the male breadwinner model

has evolved into a “1.5-earner” model, particularly when small children live in the household (Marold 2008). During that period, mothers are not only economically dependent on their partners (who usually work full-time) but also contribute less to their “pension account,” resulting in lower pension claims once they retire. Accordingly, the average pension payment to women averages about one-half of what is paid to men in Germany and this “pension gap” is still the largest in the OECD (OECD 2013a). However, due to the different institutional backgrounds before reunification, remarkable differences in labor market participation patterns persist between East and West Germans, because East German women traditionally worked full time (Marold 2008).

d The Netherlands

Before the Netherlands experienced the “Dutch Miracle,” Visser and Hemerijck (1997:179) described the state of the country rather pessimistically:

The Dutch welfare state is a specimen of the Bismarckian, continental, corporatist, breadwinner, hence antiquated and compensatory welfare state regimes—the hardest to change of them all.

Nevertheless, the Netherlands managed to overcome the labor market and welfare state crisis of the 1980s and to achieve immense growth in employment until the mid-1990s, among others with help of substantial social policy reforms. Thanks to the implementation of most of OECD’s recommendations, the Dutch employment rate for the 50- to 64-year-old population grew by almost 9 percentage points from 2005 to 2011 and, at almost 65 percent, it now exceeds the OECD average (OECD 2012f).

Pull Factors

Pension System

Similar to the Danish case, the *first pillar* of the Dutch public old age pension (*Algemene Ouderdomswet*, AOW) is based on residence only, with full entitlements given at age 65 on the condition of 50 years of legal residence in the Netherlands. Each missing year results in a deduction of 2 percent, and there is a difference in benefit level between singles and retirees living with a partner (70 percent vs. 50 percent of net minimum wage; Euwals et al. 2011). With the new pension agreement, the statutory retirement age will rise from age 65 to age 66 until 2020 and further to 67 by 2025. Although AOW is a kind of insurance against old age poverty for most Dutch residents, the growing number of immigrants in particular will not be able to make a living without a supplementary second pillar pension (Guardiancich 2010c).

These *second pillar* pensions are quasimandatory, just as in Denmark, with the contributions being set in collective wage agreements and the pensions being capital funded and mostly defined-benefit schemes (Euwals et al. 2011). Drawing these pensions is often already possible between age 60 and 62, that is, before the legal retirement age of 65 (Gesthuizen and Wolbers 2011). From the 1980s to the late 1990s, occupational pension coverage increased from around 80 percent of employees to more than 90 percent (Bonoli 2003). Those who are not covered either work in the few firms without pension funds or in industries without collective agreements; or the respective pension fund rules exclude some groups of workers (e.g., those below a certain entry age or those with temporary contracts). Also, the self-employed are usually not covered, and contracts

are suspended during periods of nonemployment due to, for example, parental leave or unemployment (Bonoli 2003; Guardiancich 2010c).

Individual pension plans in the *third pillar* are used mostly by the self-employed or other individuals not covered by occupational pensions. In case the final replacement rate of AOW combined with a potential occupational pension does not guarantee a wage replacement of 70 percent, high tax subsidies are granted (Guardiancich 2010c). Similar to several other European countries, the general importance of these voluntary, private schemes is gradually increasing (Münderlein and Koster 2013).

In sum, characteristics of the labor market career such as duration, fragmentation, and income level as well as occupational position strongly influence the old age income and lead to income inequalities among Dutch retirees (Gesthuizen and Wolbers 2011). Despite the high suitability of the Dutch multipillar pension system to guarantee social adequacy, incomplete residency as well as irregular work histories, job mobility, and insufficient coverage of the self-employed remain the major challenges for the future (Guardiancich 2010c).

Early Retirement Pathways in the Netherlands

Similar to the Danish VERP, the Netherlands introduced early retirement schemes called “VUT” (*Vervroegd uittreden*) in the 1970s in order to combat high unemployment through generational exchange on the labor market. The detailed early retirement rules were negotiated between unions and employer organizations at the industry level and fixed in collective agreements leading to mandatory participation in the scheme for the employees concerned and to a PAYG design. Eligibility ages varied between 58 and 61 years. The VUT schemes typically offered an individual replacement rate of about 80 percent of previous wage that did not increase further with additional years of work, that is, was actuarially unfair. Consequently, the negative impact on the labor market participation of older Dutch was strong (Euwals et al. 2010, 2011).

In the mid-1990s, additional “pre-pension plans” (*Prepensioenregelingen*, PP) were introduced to limit the public costs of early retirement, to decrease generosity and actuarial unfairness, and thus to remove an implicit tax on work. Although they aimed to gradually replace the VUT schemes, due to transitional arrangements, the restructuring took several years in certain industries (Euwals et al. 2011). Early withdrawal under these schemes is possible between age 55 and 65, with the replacement rate being set at about 70 percent for retirement at age 62 but also decreasing/increasing according to earlier/later withdrawal (van Oorschot and Jensen 2009). Also, a minimum contribution period to PP is re-

quired for full benefits (Euwals et al. 2010). In 2006, VUT was abolished completely, but PP continue to exist (European Commission 2012).

In the same year, the life-course savings scheme (*Levensloopverlofregeling*) became effective, giving all employees in the Netherlands the opportunity to save part of their gross salary tax-free in order to finance a period of unpaid leave in the future (protracted leave to care for others, parental leave, adoption leave, educational leave, sabbatical, part-time leave, leave directly preceding retirement). However, the scheme already closed at the end of 2011, after a change of government in the Netherlands.

Unemployment benefit also used to be a route to early retirement, but requirements for receiving unemployment benefit and its duration have been tightened up. Duration and level of benefit used to depend on the previous employment career, with a maximum replacement rate of 70 percent and a maximum duration period of 8.5 years for individuals aged 57.5 years or older (van Oorschot and Jensen 2009). Consequently, job loss after that age could lead directly into permanent withdrawal from the labor force. In 2005, however, this bridging function was abolished when the obligation to apply for jobs was reintroduced for the unemployed in this age group (Gesthuizen and Wolbers 2011).

As in Denmark and Germany, disability benefits also play a considerable role as an early exit route. In the Netherlands, institutional arrangements regarding disability benefits for all age groups have been generous for a long time and cover all Dutch employees regardless of their work history (Euwals et al. 2011). Indeed, the term “Dutch disease” was used to describe the phenomenon of an extremely large number of benefit recipients for sickness benefits (short-term) as well as disability benefits (long-term) in the 1980s and early 1990s. Several reforms were implemented between 1996 and 2006 to solve this problem,²¹ with special attention being given to the transition from short-term to long-term disability, thereby closing disability as an early exit route (Bockting 2007; Gesthuizen and Wolbers 2011). However, with the inflow decreasing from the early 2000s onwards, unemployment rates among 55- to 64-year-olds increased (Vrooman et al. 2007). Nonetheless, for Dutch older workers, disability benefit was, for a long time, a more significant retirement pathway than unemployment (van Oorschot and Jensen 2009).

²¹ First reform efforts started already in 1987, but had a comparatively weak impact on the number of recipients and the overall costs of the scheme. Further reforms up to the mid-1990s regarding cuts in benefits or restrictions to eligibility criteria were often compensated by collective labor agreements (Euwals et al. 2011).

Push Factors

Labor Market Characteristics

Like Denmark and Germany, the Netherlands display a coordinated economy, also known as the “Polder Model.” In this corporatist economy, union federations, employer federations, and the government engage in constant consultation, coordination, and bargaining over all important issues of socioeconomic policy (Hartog 1999; van Waarden 2002).²² Regarding employment protection legislation, the Netherlands rank in the upper field among OECD countries and are close behind Germany (OECD 2013c).

The Dutch economy relies heavily on foreign trade and the economy is dominated by a few multinational companies. This exposes the Netherlands strongly to the consequences of changing conditions on globalized markets. Drastic de-industrialization paralleled by the increasing importance of trading and service activities led to a massive shift in the sectors of employment (Gesthuizen and Wolbers 2011). Even within the traditional sectors, international specialization resulted in an increased demand for skilled labor (Wood and Krueger 1994).

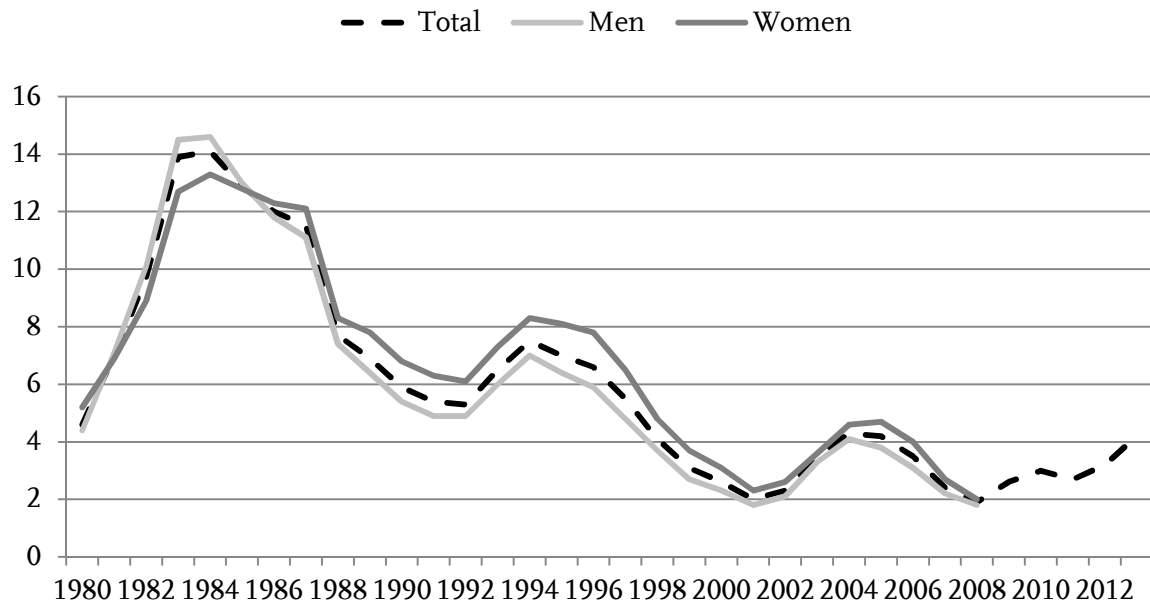
Flexibility on the Dutch labor market was realized mainly through fixed-term contracts and the use of temporary work agencies. Although conditions for these nonpermanent employment forms have been liberalized progressively, equal treatment with permanent contracts has been enforced. This is particularly important for the inclusion of temporary workers in the public pension scheme (Gesthuizen and Wolbers 2011). For a long time, these workers were not covered by occupational pensions and their proportions among the total employed population were especially high among young people (aged 19–24) and among older workers beyond 60 (OECD 2005).

Economic Cycle

Just like Denmark and Germany, the Netherlands suffered from an economic crisis in the early 1980s, and unemployment rose to significantly higher levels during that time (Figure 1.15). In contrast to its neighbors, however, these levels have not been reached again since then, and only a slight reversal trend was visible during the early 1990s in the Netherlands.

²² For a detailed discussion on the Polder Model, see, for example, Woldendorp (2005) or Woldendorp and Keman (2007).

Figure 1.15: Unemployment rates in the Netherlands 1980–2013 (in percent)



Source: 1980–2008: ILO (2015)²³; 2009–2013: Statistics Netherlands (2015).

Also, the dot-com crisis in the early years of the third millennium is visible in the historical trend for Dutch unemployment, but again, the Netherlands enjoyed the lowest level of unemployment among the three countries under study during these years. Due to the global financial crisis beginning in 2008, unemployment is on the rise again, but still on a comparatively low level.

Stay Factors

The Netherlands are one of the countries whose efforts to promote “active aging” are embedded in a general approach of viewing working life as a continuum. In this context, an important aspect is the concept of sustainable employability, including knowledge, vitality, working conditions, diversity, and individual choices. The worker should be given positive incentives to invest in skill development and, consequently, to work longer (European Commission 2012).

Active Labor Market Policies

State-financed measures to enhance the employment of older workers were introduced in the context of the new pension agreement in the form of the vitality arrangement (*Vitaliteitsregeling*). It became effective in 2013 and is aimed towards continued work, mobility, and facilities throughout the career. First, bonuses are given not only to employees aged between 61 and 65 in order to en-

²³ Registered unemployment from the Dutch Center for Work and Income.

courage them to work until the official retirement age but also to employers for all employees between 62 and 65.²⁴ Second, hiring an older worker (age 50 onward) is rewarded, and a double bonus is paid if that person was previously receiving social transfer benefits. Finally, training during unemployment is facilitated (European Commission 2012).

Before this, employability-enhancing measures were left largely to the organizations and continue to exist alongside the vitality arrangement. Firms' measures to increase the productivity of their older workforce and to induce them to delay retirement are often subsumed under the term "age-aware human resource management" and incorporate, for example, ergonomic enhancement of workplaces or part-time retirement as well as working in mixed-teams (Münderlein and Koster 2013).

Lifelong Learning

The Dutch educational system is highly stratified and highly standardized (van der Velden and Wolbers 2007). Consequently, and similar to the German case, older workers are often trained for specific positions within the occupational structure that have now disappeared as a result of technological change and labor market restructuring. Furthermore, they have not benefited from the educational expansion after World War 2 to the same degree as following generations (Gesthuizen and Wolbers 2011). Also, the gap between older and younger workers regarding participation in continuing education and training was among the largest within the EU during the 1990s, although the concept of lifelong learning has attracted political attention since then (OECD 2005; Wolbers 2005). However, the Netherlands rank between Germany and Denmark with respect to participation rates in adult education, with about 20 percent of adults taking part in continuing education since 2000 starting from about 15 percent in 1996 (Figure 1.5).

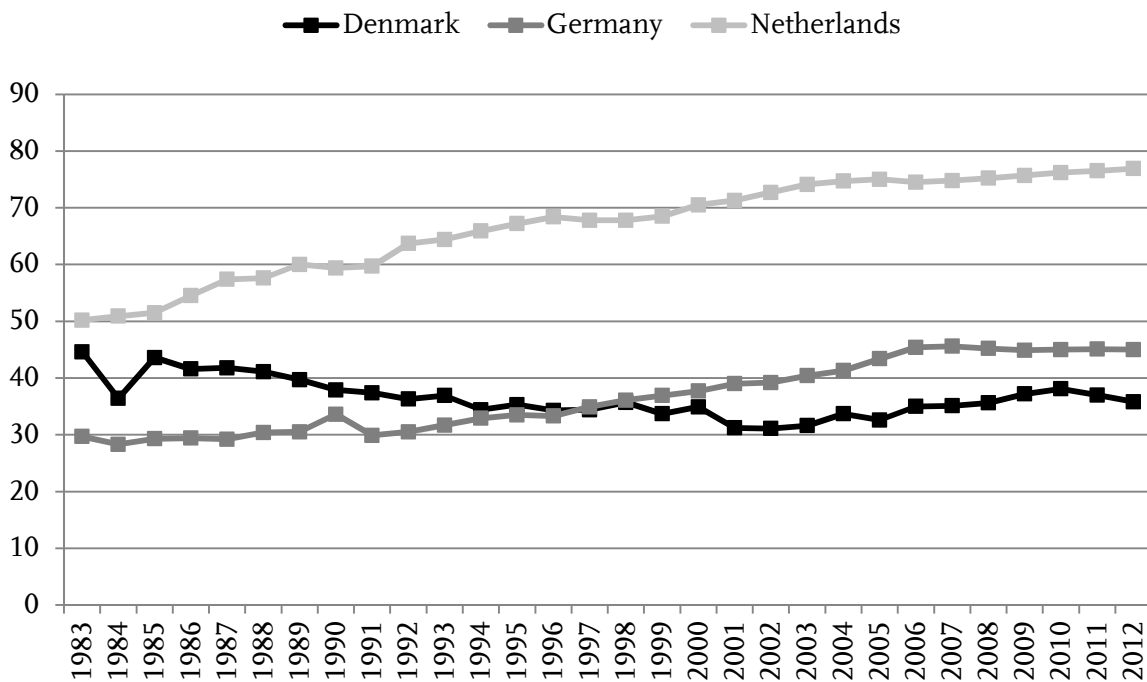
In this context, Münderlein and Koster (2013) point to the fact that Dutch organizations show a bias toward measures that relieve older workers (e.g., additional leave days or the exemption from overtime) in contrast to instruments that help to improve their employability such as training and skills updates (see, e.g., the studies from van Dalen et al. 2006 and Ybema et al. 2009).

²⁴ Each bonus amounts to roughly 2,000 Euro a year.

Further Country-Specific Characteristics of the Dutch Institutional Context: The Significance of Part-Time Employment, for Women in Particular

In many countries, part-time employment is considered to be a precarious job situation. In the Netherlands, however, part-time jobs are culturally accepted and often characterized by permanent contracts as well as by being fully integrated in labor law. Furthermore, they are a common means for Dutch women (and increasingly also for men) to combine work with family responsibilities (Gesthuizen and Wolbers 2011). They usually comprise more than 50 percent of the weekly working hours of a full-time job; that is, they can be defined as “long” part-time (Marold 2008). Figure 1.16 depicts the rising importance of part-time work for Dutch women in comparison to German and Danish women since the early 1980s. In the meantime, the Dutch government has even eliminated the breadwinner bias in the pension system and expanded the coverage of occupational pensions to part-time workers (Guardiancich 2010c).

Figure 1.16: Share of part-time work among total employment, only women



Source: Federal Statistical Office of Germany (2015), own illustration.

Note: Only West Germany before 1990.

Nowadays, three-quarters of Dutch women work part-time, whereas this applies to less than one-half of all female employees in Germany and to only slightly more than one-third of female workers in Denmark. Also, much of the increase in employment rates for 55- to 64-year olds since 1992 can be attributed to rising part-time employment among older workers (Gesthuizen and Wolbers 2011).

Up to now I have described what earlier research has to say about retirement processes and pointed out what has to be taken into account when doing further research on this subject. In this context, I explained historical developments and introduced conceptual classifications that I applied to the three countries that are the focus of this dissertation: Denmark, Germany, and the Netherlands. I also described their specific institutional contexts in detail, particularly regarding late-career employment and retirement. After reporting what is already known, in the next section, I shall specify what additional knowledge will be generated by this work. In other words, I shall now formulate research questions and their related hypotheses.

4 Research Questions: Historical Development, Social Inequality, and Cross-Country Differences in Retirement Transitions

The scientific literature in the field of retirement processes reveals that the lives of older workers and retirees in Western nations have been subject to various changes over the last decades: On the one hand, the circumstances for late career employment have altered during the course of globalization and economic restructuring. On the other hand, the elderly are a social group that is continuously growing in numbers and, consequently, in relevance for Western populations. As a result, the regulations regarding (permanent) exit from the labor market, which had fostered early retirement for several decades, are in need of reform in order to secure both the labor supply and the sustainability of national social systems. One overall trend to be seen in the various national reform efforts has been to shift responsibility for economic security before and after the transition to retirement more toward the individual, thereby increasing the individual's market dependence and decreasing the buffering effect of national social systems. Hence, social inequalities are likely to rise, presumably with negative effects for some population groups on their ability to maintain an adequate standard of living in old age.

Previous work further suggests that the gaps between men and women and between persons on different qualification levels tend to be particularly pronounced in this respect. Thus, one focus of my study will be on potential differences between these population groups. Because the institutional context is understood as one of the main factors influencing the transition to retirement, the degree to which older workers are affected by these developments is likely to depend on national policy frameworks. Macrolevel conditions can be varied by considering several country-specific frameworks. I decided to follow this approach and focus on one showcase and two reference countries. However, meso- and microlevel determinants have also been found to play a role in shaping labor market exits. Unfortunately, firm characteristics in terms of the employers' perspective are rather difficult to capture—particularly on a country-comparative basis. Therefore, mesolevel determinants must remain limited to structural characteristics of the workplace, and my study will focus on individual features. Within this context, I shall account for not only observable characteristics of individuals (such as gender and education) but also their subjective outlook on their personal conditions for continuing to work (such as self-rated health or job satisfaction). In summary, I shall conduct microlevel analyses in this dissertation with the aim of contributing to existing research by examining:

- (1) the scope of consequences for older workers and retirees during the course of the ongoing economic restructuring and reform of pension systems (development over time),
- (2) potential differences between social groups, in particular, between men and women and between persons on different qualification levels (social inequality), and
- (3) cross-country differences and the reasons for them (cross-country comparison).

As described in Figure 1.7., I assume that there is a macro–micro–macro–link behind the explanation of retirement processes. Therefore, the main focus of my work is on how the *mechanism* works and how this mechanism has changed over the last decades.

I chose Denmark as the case study, because it is often regarded as a role model for late career employment and sustainable pension systems. However, there is some evidence that this status might be overrated or outdated. Therefore, it will be put to the test by using Germany and the Netherlands as reference countries.

Hence, this dissertation aims to deliver answers to the following questions:

- (1) Is Denmark's older population comprehensively prepared to meet the challenges of globalized labor markets and changed policy frameworks?
- (2) Does Denmark perform better in this respect than Germany and the Netherlands; and if yes, why?
- (3) How are retirement decisions made within different national contexts, and what additional knowledge can be gained by combining both objective and subjective perspectives on the transition to retirement?

Therefore, in my first step, I shall seek answers to the following research questions:

- *How have late careers and retirement transitions developed in Denmark since the 1980s?*
- *Have inequalities increased, particularly with regard to gender and qualification levels?*
- *Compared to Germany and the Netherlands, do these trends show a distinctive pattern in Denmark that results in better protection of older workers and retirees against market risks?*

In recent years, all three countries in this study have stopped and even reversed the early retirement trend. Nonetheless, the labor market integration of older workers seems to have been limited in the sense that certain groups have failed to delay their labor market exit. In this context, the link between institutional

(dis)incentives and individual behavior is still rather unclear. We scarcely know how individual, job-related, and institutional characteristics interact in the “black box” in which the retirement decision is made. I therefore argue that including the individual’s view can help to cast light on the mechanisms involved and to gain a more comprehensive understanding of the several factors influencing retirement transitions (see Figure 1.7). Consequently, the transition into retirement should not be studied from an objective perspective alone, but must also take account of the subjective perspective of the persons concerned. Therefore, I additionally ask the following questions:

- *How have the individuals themselves assessed their reasons for retirement in light of the changing institutional framework since the 1980s?*
- *What is the relational pattern between individual and workplace characteristics, personal reasons for retirement, and institutional conditions?*
- *Which characteristics influence the wish to retire among current older workers?*
- *Do these characteristics vary between Denmark, Germany, and the Netherlands, that is, between countries with different institutional contexts?*

To answer all these questions, I shall have to split up the empirical part of this dissertation. First, I shall focus on transitions and analyze observed experiences and behavior, particularly with a view to the evolution of inequality patterns. Afterwards, I shall switch to the subjective perspective and examine how the transition to retirement is perceived by the individuals themselves (retrospectively and prospectively) and what are the relevant determinants in each case. Combining both views is an innovative approach to analyze retirement transitions and the attendant decision making within the last decades. Table 1.3 summarizes the objectives of the respective empirical studies.

Table 1.3: Research objectives studied in chapter III

	Objective behavior	Subjective view
Development over time	Development of late careers and retirement transitions	Individual perception of own transition to retirement (retrospective and prospective)
Social inequalities (in particular, regarding gender and qualification)	Observable inequalities in labor market risks, retirement behavior and pension level	Individual and workplace characteristics influencing the reason for retirement and the wish to retire
Cross-country comparison	Relative exposure to market risks and consequences for inequality patterns	Relative influence of the diverse determinants on the subjective view on retirement

Source: Own compilation.

5 Hypotheses: Development and Determinants of Late Career Patterns and Retirement Decisions since 1980

In the previous section, I have derived research questions from the scientific literature on retirement processes and specified research objectives for both parts of my empirical analyses. At the end of this conceptual chapter I, I shall now formulate the related hypotheses. In accordance with the research questions, I shall first focus on country-specific assumptions regarding Denmark and then move on to comparative expectations. In each section, the interesting aspects are, first, the development of the situation of older workers and retirees over time and, second, the evolution of inequality patterns, namely, the differences between men and women and between persons with different qualification levels. At the end of this section, Table 1.4 gives a summary of the hypotheses.

As described earlier, institutional settings represent a framework of opportunities and restrictions for older workers in a given country. Within a country, the structural conditions and situational evaluations and, consequently, the framing of the individual retirement transition differ according to each agent's personal characteristics (see Figure 1.7). Therefore, retirement pathways vary between population groups, and my study focuses on the differences based on gender and qualification.

a Denmark

When hypothesizing about the impact of globalization and economic restructuring on the late career of Danish workers, one has to bear in mind that job mobility on the Danish labor market has always been high even for persons aged 50 and over. In such a context, requalification represents an important means of adapting older workers' qualifications to the changing demands of the labor market and hence of securing their employability—particularly since the mid-1990s. Before this, in the early 1990s, the economic crisis had led politicians to introduce the transitional benefit program (TBP) offering permanent labor market exit for unemployed workers from their early fifties. Although this program closed many years ago, the early exit pathway VERP is still available, offering retirement as soon as age 60 is reached. In recent years, however, its popularity has decreased due to financial disincentives and the rise of the entry age. At the same time, the economic situation remained rather favorable from the late 1990s up to the global crisis in 2008, supporting the labor market integration of older Danes.

Development Over Time

With these structures and developments in the Danish context in mind, my hypotheses for the development over time in the period 1980–2011 are as follows:

(1) *Thanks to the positive economic development and public efforts toward “active aging,” the labor market situation of older workers will have improved since the mid-1990s resulting in an increase in the average retirement age.*

In that context, I expect unemployment among older workers to be connected closely to the ups and downs in overall economic development within my observation period (Figure 1.11). Particularly in the early and mid-1990s, the introduction of TBP should have induced a rise in unemployment for the age group 50 to 59 because of reactions on both the supply and demand sides in the respective part of the workforce and among employers.

(2) *Growth in late career employment will be supported by widespread acceptance of active aging within society.*

According to my theoretical model described in Figure 1.7, the success of the Danish active aging strategy is not due only to favorable conditions on the macro-level, but also to positive assessments of a long labor market participation among the Danish population. As an indicator, the wish to retire among Danish older workers should decrease.

(3) *The public pension system (including the statutory retirement age and the OAP payment) will lose relevance for Danish retirement decisions.*

a. *Instead, occupational pensions or VERP will represent major pull factors for Danish older workers.*

Although affected by major reforms and cutbacks in recent years, VERP continues to offer an attractive early retirement pathway. Moreover, occupational pensions also mostly include a retirement option before the statutory retirement age. Therefore, pull effects should be reported by a significant share of Danish retirees—however to a decreasing extent.

b. *Reasons for retirement based on the family situation or individual preferences for leisure will also increase in their relevance for the individual retirement decision.*

I argue that along with the improving economic climate and growing coverage of occupational pensions, many Danes feel economically secure both inside and outside the labor market. Therefore, they choose the point in time of withdrawal increasingly according to personal preferences or to factors that are not labor-market-related (e.g., the family situation).

Social Inequalities

However, the shift toward more earnings-related components of the three-pillar pension system is likely to result in an increasing translation of labor market inequalities into old age income inequalities.

(4) Older workers with no or low qualifications will be disadvantaged to a high degree when it comes to late career employment.

Both their risk of unemployment—combined with low chances of reemployment—and their tendency to withdraw early from the labor market should be high. This is also because replacement levels for low wage earners are comparatively high in most Danish early retirement pathways. Because unemployment spells and low income in the late career potentially affect old age income, these persons are likely to suffer from precarious financial situations, thereby resulting in a widening gap to higher qualified peers.

(5) Subjective assessments of the individual retirement transition will also vary by qualification, thereby contributing to the explanation of inequality patterns.

For example, retirees with low qualifications should indicate having been “pushed out” to a higher degree than highly qualified retirees. These, in contrast, might be more likely to react to “pull” factors or to take personal considerations into account, because they are more probably in secure labor market positions and eligible for early retirement options (e.g., incorporated in an occupational pension), giving them more freedom of choice between employment and retirement. On the other hand, the benefit levels of early retirement pathways such as VERP or TBP offer a higher replacement rate for low wage earners than for high wage earners, leading to ambivalent expectations of who is more susceptible to financial incentives. However, with decreasing push factors over the course of the economic boom, successful age management strategies, and the reduction of pull incentives, the differences in reasons for retirement between persons with low and high qualifications should diminish.

(6) Older women’s labor market situation will be comparatively secure, mainly because of their affinity for public sector employment.

In general, workers in the large public sector—containing a large proportion of women—should be comparatively well shielded against economic reorganization and fluctuations. Therefore, in the specific Danish case, economic downturns should have a stronger impact on the employment situation and retirement behavior of men. On the flipside, however, men should also benefit more from economic upturns.

(7) Men and women will differ in their subjective assessments of their retirement situation, thereby explaining the persistent gender gap in retirement timing.

This should be visible in terms of variations in the relevance of reasons for retirement and in terms of a different framing of the individual retirement transition. For many years, Danish women have had similar labor market attachments to their male counterparts but gaps in employment rates in the late career remain, particularly for those beyond age 60. This puzzle might be solved by women's stronger wish to retire, for example, due to a higher inclination toward leisure or family time. Therefore, I expect women to state more often that they have left the labor market either for "pull" reasons (i.e., "voluntarily") or private reasons.

b Country-Comparative Expectations

Both Germany and the Netherlands experienced strong trends toward early retirement in the 1980s and 1990s and thus started from comparatively bad conditions for late career employment. Nonetheless, they have managed to comprehensively reform their policy framework and to get many of their older workers to delay their withdrawal from the labor market. In the Netherlands, this trend was supported by favorable economic conditions already starting in the 1990s whereas Germany only recovered from its economic crisis after reunification during the 2000s.

Development Over Time

(8) Both Germany and the Netherlands will reveal a worsening labor market situation for older workers and, consequently, a deteriorating financial situation for retirees.

In Germany, late careers are expected to have remained rather stable but comparatively short for a long time. Due to the persisting recession, the longest push effects are expected to be visible there. In the Netherlands, late careers should have become more destabilized because of labor market flexibilization and pronounced labor market restructuring, but the increasing demand for labor from the late 1990s might have alleviated this trend.

(9) In all three countries, however, as the closure of early retirement pathways continues, withdrawals from the labor market will be delayed.

The main reason is that early exit is punished increasingly by pension cuts, and I assume that financial security ranks high on the list of preferences among older workers. Hence, I expect “pull” reasons to lose relevance after the second half of the 1990s in all countries.

(10) Germany and the Netherlands will enjoy less support in their populations for their active aging strategies than Denmark does.

Many German and also Dutch workers are exposed to financial disincentives to retire but are inadequately prepared for continuing to work. Furthermore, both Germany and the Netherlands had experienced a long period of early retirement as a matter of course, and therefore, individuals refer to these previous opportunities when framing their own situation. Hence, I expect the wish to retire to be generally higher in the two reference countries than among the Danish population, but there will be an overall decreasing trend in seeking retirement in all countries.

- (11) *In all countries and periods, individual assessments of the work context will contribute significantly to the explanation of retirement behavior.*

Some aspects such as job satisfaction are expected to exert a comparatively stable influence on retirement decisions. In combination with other factors such as available retirement pathways and individual preferences, subjective views on the institutional context and individual employment situation shape the individual framing and, therefore, the decision-making process on the transition to retirement. In the context of Denmark, I already mentioned the assumed link between subjective economic security and the significance of private reasons for retirement. However, the trend toward recommodification increases the dependence of an individual on the market, and this might potentially roll back other reasons than financial ones. The latter argument might be particularly applicable to Germany, because the public pension system has been reformed in a way that requires long working lives in order to reach adequate pension levels, and this calls explicitly for private provision.

Social Inequalities

- (12) *Low qualified individuals will be disadvantaged to the highest degree in all countries, resulting in comparatively low chances of gaining late career employment and postponing their retirement.*

In line with Breen's (1997) expectations, the respective group should be exposed the most to "push factors" and, as a consequence, to the risk of unemployment and financial constraints. However, according to the theoretical foundation of this study, not only macro-level determinants, but also their subjective perception matter.

- (13) *Low qualified individuals will frame their retirement transition differently from high qualified ones in all countries.*

Depending on available early exit opportunities and related replacement levels, pull factors are expected to be stated either by persons "who can afford it" or by those who benefit from high replacement levels. The respective effects are thus likely to vary by country. Similarly, in all countries, high qualified individuals are assumed to be more inclined to relate their retirement transition to non-labor-market-related reasons because they enjoy comparatively high financial security in employment as well as in retirement. In turn, low-qualified workers should tend to retire more for health reasons, often leading to very early withdrawal from the labor market.

The same applies for women and the gender differences in late career employment and retirement timing:

- (14) *Women's retirement behavior will differ from that of men in terms of a combination of structural disadvantages and a different framing of their situation.*

In all countries, women are expected to retire earlier than men. In Germany, the main reason is the lower statutory retirement age for women that was effective until the turn of the millennium. Consequently, the gap in retirement timing might close in the future. However, due to gender wage gaps in all three countries, this should not apply to the gap in pension levels, and the situation is likely to be worse in Germany and in the Netherlands because of women's high incidence of part-time work. Connected to that, the private situation should matter more for women than for men, particularly in Germany and in the Netherlands where care arrangements are rather traditional and family-based (Lewis and Ostner 1994).

In sum, I expect subjective attitudes to play a major role for the retirement decision in all countries and also for the shape of respective inequality patterns. In that sense, individual assessments of early exit opportunities and working conditions are expected to be the link between macrolevel opportunities, personal characteristics, and the observable retirement behavior (see Figure 1.7).

- (15) *Unequal chances and risks in late career employment, wage gaps and gaps in retirement timing will lead to increasing inequality in old age between women and men and between the low qualified and high qualified, confirming the theory of cumulative (dis-)advantage for all countries.*

In other words, objective social inequalities should have grown in all three countries due to the increasing translation of labor market risks into pension levels during the course of the shift in significance from the first pillar to the second and third pillar of pension systems. Much of this trend, however, can be explained only by looking at the subjective perception of the individuals—that is, the framing of the individual retirement context.

Table 1.4: Summary of hypotheses

	Objective behavior	Subjective view
Development over time (Denmark)	H1: Employment rates of older workers have increased since the mid-1990s	H2: Growth in late career employment is supported by widespread acceptance of active aging within society
		H3: The public pension system loses relevance for Danish retirement decisions, whereas other retirement pathways and private reasons gain in importance
Social inequalities (Denmark)	H4: Older workers with no or low qualifications are disadvantaged to a high degree	H5: Subjective assessments of the individual retirement transition also vary by qualification
	H6: Older women's labor market situation is comparatively secure because of their affinity for public sector employment	H7: Men and women differ in subjective assessments of their retirement situation.
Cross-country comparison	Development over time	H8: In Germany and the Netherlands, both the labor market situation for older workers and the financial situation of retirees have worsened
		H9: In all three countries, withdrawals from the labor market are delayed
Social Inequality	H10: Germany and the Netherlands enjoy less support for their active aging strategies in their populations compared to Denmark	H11: Individual assessments of the work context contribute significantly to the explanation of retirement behavior
	H12: Low qualified individuals are disadvantaged to the highest degree in all countries	H13: Low qualified individuals frame their retirement transition differently from high qualified ones in all countries
	H14: Women's retirement behavior differs from that of men in terms of a combination of structural disadvantages and different framing of their situation	
H15: The theory of cumulative (dis-) advantage is confirmed for all three countries		

Source: Own compilation.

Up to this point, I have elaborated on the historic and scientific background, the research design, and the relevant national contexts of the countries under study. Furthermore, I have formulated research questions and hypotheses. Chapter II will now give a detailed description of the data and methods used to answer these questions and test the hypotheses.

II Data and Methods: Studying Retirement Processes in Denmark, Germany, and the Netherlands from Two Perspectives

In my first chapter, I developed the conceptual framework of this dissertation by elaborating on the macrolevel changes and policy reforms that have impacted on the employment situation of older workers and, accordingly, on the timing of retirement transitions in most developed countries over the last decades. I also explained the various determinants of retirement decisions and concretized the institutional backgrounds of the three countries to be analyzed in detail within this dissertation: Denmark, Germany and the Netherlands. Focusing on the first country and using the latter as comparative cases, I then derived research questions as well as related hypotheses. In this chapter, I shall describe the respective databases and the methods that I selected to answer these questions.

Due to the dual perspective on retirement processes, different data and methods are used in the two empirical parts. In both cases, the observation window opens in 1980, because this was the time when globalization and flexibilization processes accelerated and policy reactions in the form of pension reforms impacted progressively on the lives of older workers. Furthermore, age 50 is defined as the entry point into the late career, and, therefore, both employees and retirees from this age onward represent the target group in both parts of the study.

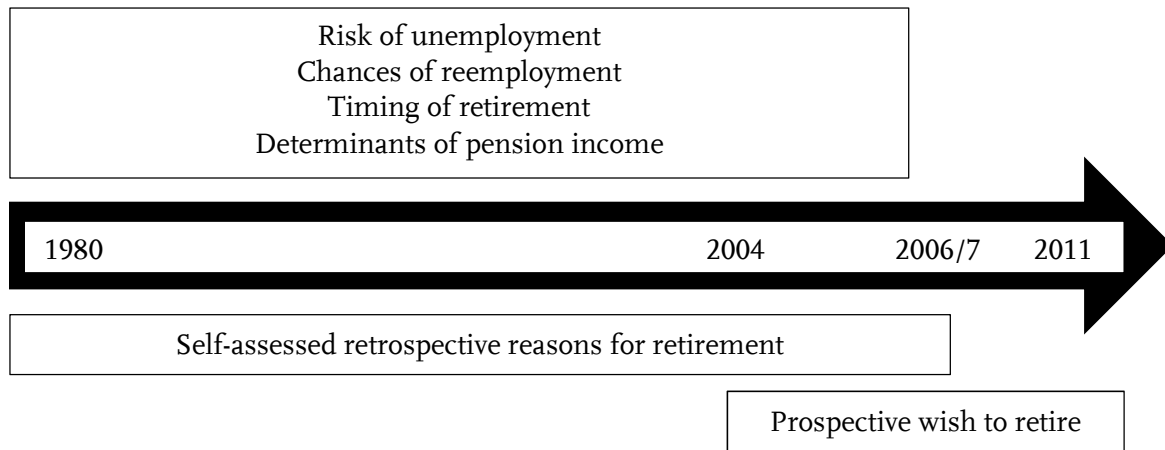
In *Section 1: Pathways into Retirement*, the target population is then followed through their late career that may extend until 2006. During this stage, my interest focuses on the risk of unemployment and the chances of reemployment. I shall then analyze the timing of withdrawal from the labor market and the determinants of pension income. Throughout this study, developments over time are captured by observing consecutive birth cohorts. *Section 2: Perceptions of Retirement* resumes the research on the process of retirement by exploring the self-assessed reasons for retirement until 2007. That is, the dependent variable is no longer the observed point in time when an individual retires, but the personal perception of the reasons for this transition. Furthermore, the wish to retire is analyzed for older workers who were surveyed between 2004 and 2011. In contrast to the longitudinal design of the first study in section I, this study is based on cross-sectional analyses. Figure 2.1 depicts the respective observation windows and target populations in order to illustrate how the two substudies are comparable and referable.

The analyses in both studies further differ with regard to the operationalization of the point of the transition to retirement. In the longitudinal study on Den-

mark, for example, the respective definition equals receiving a transfer from a policy scheme declared as pension benefit,²⁵ whereas the end of the last job is used as the point of retirement in the analyses based on SHARE. This discrepancy is due to the differences in origin and design of the datasets.

Figure 2.1: Target populations and observation windows in the two empirical sections

Section 1: Pathways into Retirement



Section 2: Perceptions of Retirement

Source: Own illustration.

Chapter II is now divided into two sections describing the respective databases, sampling criteria, case numbers, analytical methods as well as dependent and independent variables used in each empirical part. This will be followed by an overview table summarizing and contrasting the main information from each study.

²⁵ This includes state retirement pension, occupational pension, and private pension along with transitional benefit (TBP), disability pension and the voluntary early retirement program (VERP).

1 Focus on Transitions: Observed Labor Market Experiences and Retirement Behavior

First, I shall present the empirical study on “*Pathways into retirement: The development of inequality patterns in the late career and beyond retirement since the 1980s.*” It is based on the country study on Denmark conducted for the *flexCA-REER* project in cooperation with Mona Larsen from the SFI Copenhagen.²⁶ The comparative country studies, among them the studies on Germany and the Netherlands, were undertaken by other scientists, but oriented toward a common research framework. Nonetheless, country-specific idiosyncrasies were still considered in the country studies that are all based on longitudinal microdata on individual life courses over an extended period of historical time, starting between 1980 and the 1990s (Kurz et al. 2011). In the following, I shall focus on the approach in the Danish study. I shall describe German or Dutch specifics in the respective sections containing the country summaries in chapter III.

The data used for the Danish case study are administrative records providing a wide range of register-based variables and including information from the Integrated Database for Labor Market Research (IDA). These permit, for example, the linkage of individual and company information. The information is collected on a yearly basis with a due date in November. In addition, I had access to income information from the Income and Tax Register and to some variables on social transfers from the Social Statistics Database. The observation window for the longitudinal analyses is 1980 to 2006. The samples used come from a 5 percent sample of 50- to 70-year-olds in the dataset and contain up to 680,000 observations of about 78,000 persons (Table 2.1).

Table 2.1: Overview on case numbers available for the longitudinal analyses on Denmark

	Risk of unemployment	Chances of reemployment	Transition to retirement	Determinants of Pension income
N (observations)	572,353	28,122	679,832	-
N (persons)	72,917	13,661	78,020	19,738
N (events)	13,616	7,271	34,334	-

Source: Own calculations based on administrative data (1980–2006).

Individuals enter my sample in the year in which they turn 50 under the condition that they have a job or—depending on the process being studied (see be-

²⁶ The aim of this project was to investigate whether, how, and to what extent the employment and income situation of late-career employees and retirees in different modern societies was affected in times of globalization and demographic aging (Blossfeld et al. 2011).

low)—are in the labor force at that time. They leave the sample when they turn 70, or earlier if they die or leave the country for more than one year. To enable trends to be observed over time, individuals are classified into five birth cohorts according to the labor market situation of the period in which they turn 50 as well as the occurrence of relevant policy reforms.

The analyses of the transitions to unemployment, to reemployment, and to retirement employed event history methods using discrete time logistic regression models (Blossfeld and Rohwer 2002). The determinants of the level of pension income are analyzed by conducting OLS regression estimations.

The Late Career

Descriptive analyses of the late career include a sequence analysis illustrating the most frequent sequences of labor market states for Danes who were employed or self-employed at age 50 and reached age 68 within our observation period. The states comprise (self-) employment, unemployment, VERP, social disability pension (SDP), transitional benefit (TBP), and old age pension (OAP). Due to the precondition of reaching age 68 in 2006 or earlier, only the pathways of persons born between 1930 and 1938 are depicted.

Multivariate analyses of the late career address the *risk of unemployment* and the *chances of reemployment*. For this purpose, all persons who were employed at age 50 were selected. The event of unemployment occurred when a person was registered as unemployed or participated in an activation measure at the yearly measurement point. Admittedly, this definition can only serve as a proxy because short periods of unemployment during other months of the year were not captured. Furthermore, only first spells of unemployment after age 50 were considered.²⁷

In the following, all persons who had an unemployment spell represent the basis of the analyses of the chances of reemployment. Compared to the full sample of everyone employed at age 50, the subsample of unemployed persons I use here is characterized by a shift of educational levels to the bottom categories; that is, almost one-half of the people “at risk” of reemployment have no or only basic education. In line with the event of unemployment, the event of reemployment occurred as soon as a previously unemployed person was employed at the yearly measurement point.

²⁷ The majority (76 percent) of all Danes in my sample who become unemployed after 50 had only one unemployment spell.

The Timing of Retirement

For the analysis of transition to retirement, I used all persons who were in the labor force at age 50. Consequently, not only employed at age 50 are included but also those who were unemployed, on activation, on leave, or in rehabilitation at that age. I observed these individuals until they entered any state of retirement, that is, social disability pension (SDP), transitional benefit (TBP), voluntary early retirement (VERP), or old age pension (OAP).

Determinants of Pension Income

In the Danish case, pension income differs according to the kind of benefit drawn, and this can change several times. For example, one could start at age 60 with only VERP, then add an occupational pension from age 62, and change from VERP to OAP at age 65 (before 2004: age 67). Nonetheless, after starting to receive OAP, income is expected to remain rather stable. Therefore, for this analysis, I select everyone who entered OAP within the observation window (no matter the pathway she or he had used to leave the labor market before), and look at the total yearly income for the first year in which the person was fully retired.²⁸ This procedure generates a sample of individuals from three of the cohorts observed in the previous analyses with the youngest person being born in 1941. By this definition, virtually full coverage of Danish retirees is reached because almost 100 percent of all retirees receive OAP (see also Table 3.1). The dependent income variable is logarithmized, adjusted for inflation, and reflects total gross yearly income including not only public transfers (OAP) but also occupational and private pensions as well as, if applicable, work income in Danish crowns.

In addition to birth cohorts, I account for individual characteristics such as gender, qualification level, ethnic background, age, and retirement age. I also consider characteristics of the working context such as industrial sector and firm size and some features of the late career, depending on the process studied. Table 2.2 summarizes the core explanatory variables and the measures and categories used.

²⁸ For most of the persons in my sample, this was the year in which they turned 68, with the exception of people working longer or retiring after 2004 when the legal retirement age was lowered to 65.

Table 2.2: Explanatory variables used for the longitudinal analyses on Denmark in section 1

Birth cohorts	Five cohorts constructed on the basis of the political and economic situation in the year they turned 50: <ul style="list-style-type: none"> • 1930–1933 • 1934–1937 • 1938–1943 (ref.) • 1944–1948 • 1949–1956
Age	<ul style="list-style-type: none"> • 50–53 (ref.) • 54–58 • 59–60 • 61–62 • 63–65 • 66–69
Retirement age	<ul style="list-style-type: none"> • 50–54 (ref.) • 55–56 • 57–58 • 59–60 • 61–62 • 63–66 • 67–70
Period of becoming unemployed	<ul style="list-style-type: none"> • 1980–1989 • 1990–1994 (ref.) • 1995–1999 • 2000–2005
Sex	<ul style="list-style-type: none"> • Male (0) • Female (1)
Qualification	5-point scale, combining information on general education and occupational training <ul style="list-style-type: none"> • Compulsory education or unknown, no vocational training • General upper secondary education, no vocational training • Compulsory general education and vocational training (ref.) • Short/medium academic degree • Long academic degree or Ph.D.
Firm size²⁹	<ul style="list-style-type: none"> • 1–10 employees (ref.) • 11–50 employees • 51–500 employees • >500 employees

²⁹ In fact, this variable measures “workplace size”, that is, the number of employees at the respective plant or agency and not the overall staff size of a company.

Table 2.2 (continued)

Sector/Industry	Public sector and six industries of the private sector <ul style="list-style-type: none"> • Public sector (ref.) • Private sector <ul style="list-style-type: none"> ○ Extractive industry ○ Production ○ Construction ○ Retail ○ Private services ○ Transport
Ethnicity	<ul style="list-style-type: none"> • Danish (0) • Non-Danish (comprising immigrants and their descendants) (1)
Unemployment experience	Years in unemployment after age 50 (metric)
Job changes	Number of job changes after age 50 (metric)
Unemployment rate	National aggregate unemployment rate in the respective year (metric)
Employment status	<ul style="list-style-type: none"> • Dependent employed (ref.) • Self-employed • Unemployed
Retiring from unemployment	<ul style="list-style-type: none"> • Yes (1) • No (0)

Source: Own compilation.

2 Focus on Perceptions: Subjective Views on Retirement Transitions

The data used in the second empirical part of the dissertation come from the first, second, and fourth wave of the *Survey of Health, Aging and Retirement in Europe (SHARE)* and were collected between 2004 and 2011.³⁰ The third wave (also known as SHARELIFE) consists of a retrospective survey focusing on the longitudinal collection of life histories and is not used in this project. In the following, I shall stick to the official numeration of the SHARE waves and therefore refer to the first three cross-sectional waves as Wave 1, Wave 2, and Wave 4.³¹

All data are collected in face-to-face, computer-aided personal interviews (CAPI) supplemented by a self-completed paper-and-pencil questionnaire. The target population of Wave 1 is defined as all individuals born in 1954 or earlier, speaking the official language of the country, and not living abroad or in an institution such as a prison during the duration of the field work along with their spouses/partners independent of age (SHARE 2011). The longitudinal interviews in Waves 2 and 4 were targeted at all original sample members who were interviewed in any previous wave of SHARE and their current partners or spouses (independent of age and independent of their participation in previous waves). If respondents had died since their last interview, the interviewers try to find a close relative or other proxy informant to conduct an end-of-life interview. Respondents who moved within the country or moved into a nursing home, hospital, or other old age institution were traced and reinterviewed, whereas respondents who were incarcerated or had moved abroad were not followed. From Wave 2 onward, refreshment samples were drawn in most countries in order to compensate for panel mortality, but not necessarily in each country in each wave (SHARE 2013).

Due to nature of survey data, SHARE is not only subject to panel mortality and temporary nonresponse, but the available information is also expected to be biased because of issues of reliability, social desirability, and retrospective recall. However, the advantage of using survey data to gain information on people's subjective views, which are the focus in this part of the study, outweighs these drawbacks.

³⁰ For more detailed information on the SHARE Project, see www.share-project.org.

³¹ Because fieldwork for Wave 5 started only in spring 2013, the respective data could not be included in this study.

a Reasons for Retirement

The analyses of retrospective reasons for retirement are based on the assumption that an individual's own view on her or his retirement transition contributes to explaining how individual retirement decisions are made. In that sense, considering the self-assessed reasons for retirement should help us to understand both the specific role of the various determinants in shaping labor market exit processes and how these determinants might interact. For example, institutional (dis)incentives might work only for specific population groups or during specific periods of time. Thus, a core aim of the analyses is to distinguish between employment exits driven by pull factors and those induced by push factors along with their potential variations in their importance over the course of macrolevel changes. In addition, individual health and family- or leisure-oriented activities as individual determinants will be considered as factors that are not labor-market-related and thus potentially independent from national contexts.

Sample Definition and Comparability to the Longitudinal Analyses on the Transition to Retirement

The dependent variable here is the question: "For which reasons did you retire?" (multiple answers allowed), with the following response categories offered in the generic English questionnaire:³²

1. Became eligible for public pension
2. Became eligible for private occupational pension
3. Became eligible for a private pension
4. Was offered an early retirement option/window (with special incentives or bonus)
5. Made redundant (for example pre-retirement)
6. Own ill health
7. Ill health of relative or friend
8. To retire at same time as spouse or partner
9. To spend more time with family
10. To enjoy life

Target persons in the sample have to be retired and to answer this question for the first time within SHARE. As a consequence, all waves are treated as cross-sectional data collections with participants being assigned to the wave in which they were retired for the first time. Due to the basic eligibility criteria of being alive and mentally capable of reflecting on the bygone retirement, the respective subgroup of retirees is likely to be biased toward persons with good health and,

³² For country-specific versions in Danish, German, and Dutch see Appendix, Table A1.

consequently, with comparatively late retirement. Furthermore, because the point of retirement might have been more than two decades ago, the capacity to remember as well as a posteriori rationalizations may potentially influence responses.

Furthermore, persons in the sample need to have a valid answer to the question above, that is, they have to select at least one reason.³³ Similarly, I need valid information for birth year and for the end of the last job in order to define the year of retirement. In addition, I cut the observation window in 2007 in order to avoid distortion of the results through the few cases retiring between 2008 and 2011, i.e. in the global economic crisis.³⁴ As a result, because several reforms aiming toward “active aging” became effective only in the early years of the new millennium, the repercussions of these policy changes can be observed only in rudimentary ways.

Table 2.3: Overview on case numbers available for the analyses on retrospective reasons for retirement

	Wave 1 (2004)	Wave 2 (2006/2007)	Wave 4 (2011) ³⁵	N (persons)	N (answers)
Denmark	690	489	5	1,184	1,404
Germany	1,208	364	0 ³⁶	1,572	1,940
Netherlands	740	184	166	1,090	1,207

Source: SHARE Waves 1, 2, 4; own calculations.

The resulting subsample consists of persons who retired between 1980 and 2007 and were at least 50 years old at the time of this transition.³⁷ These criteria should ensure maximum comparability with the target group of the longitudinal study on the transition to retirement in *Section 1: Pathways into Retirement*. Table 2.3 gives an overview of the resulting case numbers per country and per wave. Because multiple answers were allowed, it was possible for a person to

³³ However, refusal or “don’t know” was very rare: 4 cases in Germany, 12 cases in Denmark, and 0 cases in the Netherlands.

³⁴ The number of cases was not sufficient to substantively analyze the effect of the crisis, because there were only 48 cases in the Dutch sample, 5 cases in the Danish sample, and 0 cases in the German sample.

³⁵ Fieldwork in Denmark and in the Netherlands ended in 2011; only some German interviews were conducted in 2012. Because none of them are used for the following analyses, Wave 4 will be assigned to the year 2011.

³⁶ Nine German respondents in Wave 4 fulfilled the sample criteria but had missing information for the region variable and therefore had to be excluded from the analysis. The lack of eligible participants in Wave 4 can also be explained by the fact that, unlike Denmark and the Netherlands, Germany did not draw a refreshment sample in this wave (SHARE 2013).

³⁷ East Germans retiring before 1990 (89 cases) were excluded because they retired under the economic and political conditions of the German Democratic Republic (GDR).

state more than one reason. In these cases, all answers were treated equally. However, the vast majority of interviewees stated one reason only, with very few persons mentioning more than three reasons (Table A2 in Appendix). Hence, the low case numbers did not allow any analyses of combinations of certain answers.

In order to illustrate the comparability of the two samples, Table 2.4 shows the respective distribution of gender and qualification levels used for the longitudinal analyses on the transition to retirement and the cross-sectional analyses of retrospective reasons for retirement. In the Danish data sources, the distribution of men and women is very similar, with equal shares for both genders. In Germany, women are clearly underrepresented in both studies. This can be explained by the sample criteria of being part of the labor force at age 50 (GSOEP) or the last job ending after the 50th birthday (SHARE), leading to an exclusion of many German housewives who left employment/the labor force before this age. Whereas the German samples are therefore biased in the same direction and to a similar degree, the Dutch samples deviate strongly from each other in terms of gender composition: Women are slightly overrepresented in the DSOEP, but constitute only one-quarter of the SHARE sample.

Table 2.4: Comparison of the two samples used in the context of the transition to retirement

	DENMARK		GERMANY		NETHERLANDS	
	Administrative data	SHARE	German Socio-Economic Panel (GSOEP)*	SHARE	Dutch Socio-Economic Panel (DSOEP)**	SHARE
Women	50%	52%	42%	40%	54%	25%
Men	50%	48%	58%	60%	46%	75%
ISCED 1/2³⁸	40%	31%	-	16%	-	55%
ISCED 3/4	39%	43%	-	60%	-	24%
ISCED 5/6	21%	26%	-	25%	-	22%
N	78,020	1,184	3,415	1,572	3,329	1,090

Source: SHARE Waves 1, 2, 4; own calculations; Danish administrative database, own calculations; *Rinklake and Buchholz (2011); **Gesthuizen and Wolbers (2011).

For the comparative longitudinal studies on Germany and the Netherlands, the educational composition of the subsamples is unknown. But for Denmark, the classification reflecting the qualification levels can be made comparable. It shows that the participants in the survey display a shift toward higher qualifications compared to the administrative data. This can be explained by the well-

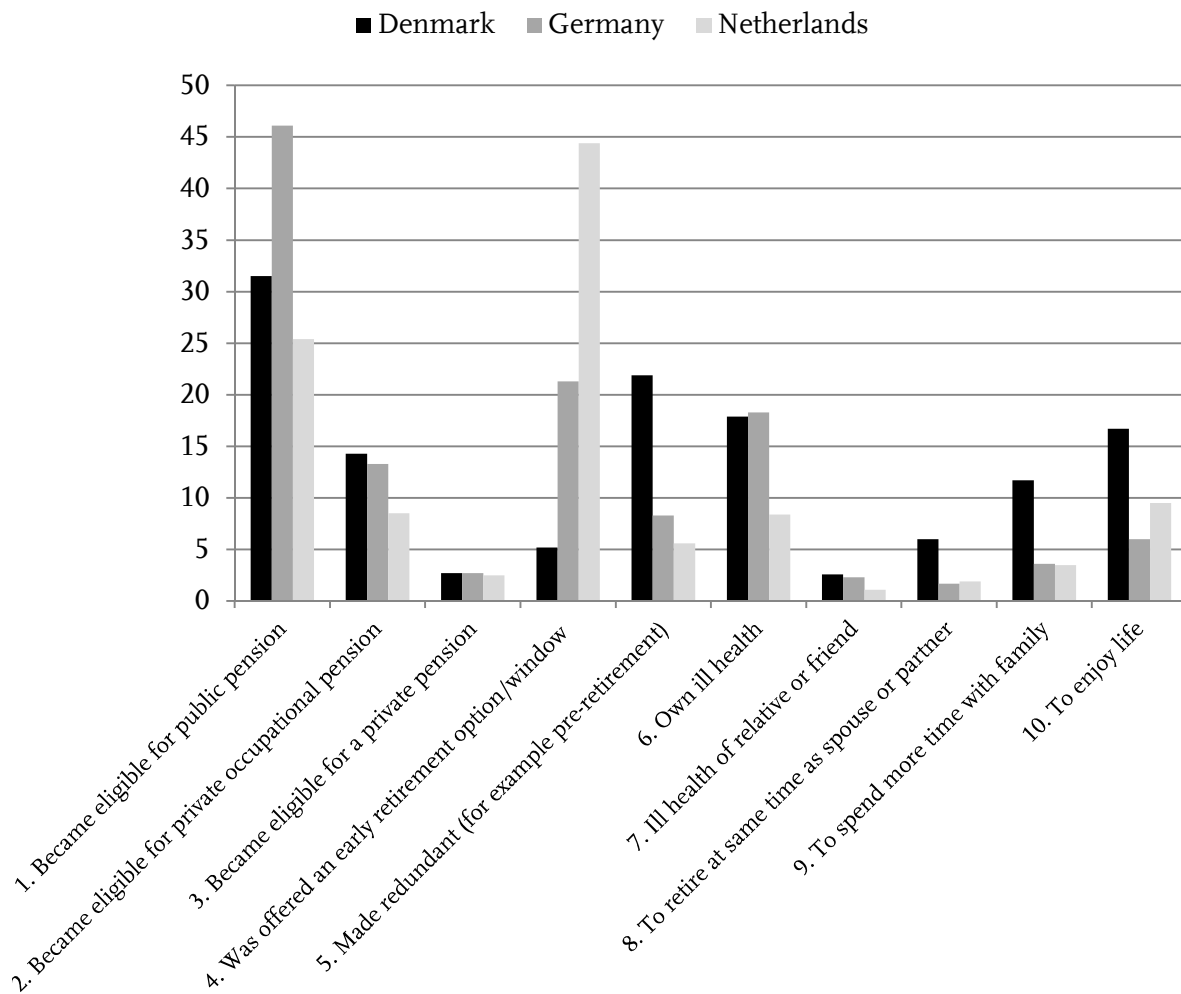
³⁸ “None” and “other” are classified as “1” (very few cases).

known positive correlation of educational level and the propensity to participate in scientific surveys.

Categorization of Reasons for Retirement

Figure 2.2 shows that there is considerable cross-country variation in the distribution of answers on the various reasons for retirement. It becomes clear that all three countries show specific profiles in the distribution of listings, that is, the relative relevance of certain reasons for retirement. To some extent, however, this might be due to country-specific formulations in the respective language versions. Therefore, these also have to be considered in the analyses.

Figure 2.2: *Distribution of reasons for retirement among the Danish, German, and Dutch subsamples as a percentage of all respondents³⁹*



Source: SHARE Waves 1, 2, 4; own calculations.

³⁹ Because a few respondents gave two or more answers, some individuals are included in more than one category and thus the columns add up to more than 100 percent within a country.

For further analyses, however, I shall not use the 10 single answers but a categorization into “push,” “pull,” “health,” and “private” reasons. This is illustrated in Table 2.5 that reports the respective distributions. This categorization is constructed on the basis of the following argumentation: In all countries, the first answer concerns the public old age pension. Retirees who indicated this reason (and almost 100 percent of them indicated only this reason in all three countries) followed the politically given framework and left the labor market because they had fulfilled the legal requirements for “regular” retirement. The differences in the shares of persons in this category reflect the varying importance of the respective first pillar pensions in the three countries.

Table 2.5: Frequency of classified answers in Denmark, Germany and the Netherlands, as a percentage of respondents

	1. Became eligible for public pension	2. Became eligible for private occupational pension	3. Became eligible for a private pension	4. Was offered an early retirement option/window (with special incentives or bonus)	5. Made redundant (for ample pre-retirement)	6. Own ill health	7. Ill health of relative or friend	8. To retire at same time as spouse or partner	9. To spend more time with family	10. To enjoy life
	<i>Regular</i>	<i>Push / Pull</i>				<i>Health</i>	<i>Private</i>			
Denmark	31.4	25.2 / 17.0				17.9	27.3			
Germany	47.4	29.2 / 9.5				18.3	10.5			
Netherlands*	25.4	35.9 / 18.8				8.4	13.5			

Source: SHARE Waves 1, 2, 4; own calculations.

* In Wave 1, both Category 1 and Category 2 were assigned to the “regular” category.

In all questionnaires except the Dutch version of Wave 1,⁴⁰ Categories 2 to 5 represent employment-related as well as social-policy-related circumstances enabling withdrawal from the labor market before regular retirement age. The mere statement of one of these reasons, however, does not reveal whether these persons were “pushed” or “pulled” out of the labor market. Not even Category 5 (dismissal) can be interpreted as a pure “push effect” because the Danish language version explicitly includes the popular early retirement schemes *Efterløn* (VERP) and *Overgangsydelse* (TBP), and in Germany and the Netherlands, unemployment has been an institutionalized pathway into early retirement.

⁴⁰ In the Netherlands, the wording of Categories 1, 2 and 3 was different in Wave 1, with both 1 and 2 referring to the first pillar pension and 3 denoting an occupational pension (Table A2). This is incorporated in further analyses.

Therefore, I combine the listing of one of these reasons with the information whether the last job offered opportunities to work after the official retirement age in order to assign a statement to the “push” or “pull” category (Table 2.6). If continuing employment would have been possible, the incentive to leave the labor market was effective. In other words, I regard the retiree as being subject to a “pull” effect. In sum, the majority of retirees taking advantage of a special financial offer or bridging scheme were subject to push effects, ranging from 60 percent in Denmark over 65 percent in the Netherlands to 75 percent in Germany.

Table 2.6: Opportunity to work after official retirement age within Categories 2 to 5 (in percent)

		Category 2	Category 3	Category 4	Category 5	N (persons)*
Denmark	Yes (pull)	47.9	46.9	31.1	39.4	40.6
	No (push)	52.1	53.1	68.9	60.6	59.4
	Total N	169	32	61	259	497
Germany	Yes (pull)	35.0	28.6	19.5	18.5	24.6
	No (push)	65.0	71.4	80.5	81.5	75.4
	Total N	217	42	339	130	647
Netherlands	Yes (pull)	29.0	55.6	35.5	18.0	34.3
	No (push)	71.0	44.4	64.5	82.0	65.7
	Total N	93	27	484	61	641

Source: SHARE Waves 1, 2, 4; own calculations.

*Everyone who stated at least one out of reasons in Categories 2 to 5.

Category 6 refers to bad health as a reason for leaving the labor market. In the context of retirement processes, health status should be considered because it tends to worsen with age—and, in particular, in the ages when issues of retirement arise—and is thus a necessary precondition for continuing employment in the late career. Bad health status might be related to characteristics of the work career or of the current job that, in turn, are linked to individual characteristics such as gender or qualification. Examining the group of persons who indicated bad health as a reason might not be able to tell us whether an individual has left the labor market voluntarily or involuntarily, but can help to reveal the mechanisms underlying why certain population groups retire earlier than others and thus to close an analytical gap in the empirical part focusing on transitions (in which health status was not considered).

Finally, the Categories 7 to 10 refer to reasons that are independent of both the labor market situation and public policy and will thus be labeled “private.” Nonetheless, these reasons still represent kinds of “private pull” effects in that they make being retired more attractive than being employed. In that sense,

they reflect personal preferences toward more time with family or leisure or any kind of unpaid activity outside the labor market.

Method and Variables

The aim of the multivariate analyses is to examine the influence of variables that determine whether someone states a retrospective reason for retirement defined as belonging to the following categories: pull, push, private, health, and regular. I shall therefore use a logit model with the dependent variable being “having stated a pull/push/private/health/regular reason” taking a 0/1 coding and the respective tables showing coefficients.⁴¹ As recommended by Winship and Radbill (1994), calibration weights are not used for the regression models because some of the calibration variables in SHARE (sex, birth year and NUTS1 code) are independent variables in the models.

Table 2.7 contains the independent and control variables that were introduced stepwise. The event of retirement is defined as the end of the last job, that is, assigned to the year in which last employment was quit. For the classification into the historical time in which retirement took place, country-specific periods were constructed on the basis of major economic and political developments.⁴² In order to find out whether an effect is due rather to the contemporary economic situation or to an overall historical development, I shall also test the influence of the unemployment rate in the year of retirement as well as a binary variable dividing the observation window into the period before and after 1994, with the latter reflecting roughly the potential difference between the historical time period before the pension reform wave and afterwards. Also, I shall test the potential effect of having been employed in the public sector before retirement as the only usable workplace characteristic for the last job. In Germany, I additionally use a variable “region” identifying East and West Germans. This variable is based on the *Bundesland* of residence of the first SHARE interview. This is a proxy variable because I do not know whether the respondent lived in the same *Bundesland* at the time of retiring.⁴³

⁴¹ Due to the possibility of giving more than one answer, multinomial logit models using the five categories as competing risks are not applicable here.

⁴² Details on the construction of the historical time periods can be found in the respective country chapters (chapter III, sections 2 a, b, c).

⁴³ However, I do know where the respondent lived on 1 November, 1989. Moreover, 95 percent of the former residents of the German Democratic Republic (GDR) still lived in the Eastern part of Germany at the time of the interview and 98 percent of the respondents who lived in the Federal Republic of Germany in 1989 still lived in the Western part of Germany.

Table 2.7: Independent variables used for the multivariate analyses on reasons for retirement

Sex	<ul style="list-style-type: none"> • Male (0) • Female (1)
Qualification level	ISCED codes in 3 categories: ⁴⁴ <ul style="list-style-type: none"> • Codes 1/2 • Codes 3/4 (ref.) • Code 5
Region (only Germany)	Place of residence at the time of the interview <ul style="list-style-type: none"> • East Germany (1) • West Germany (0)
Retirement age	<ul style="list-style-type: none"> • 50–54 • 55–59 • 60–64 (ref.) • 65plus
Retirement period (1) (Denmark)	<ul style="list-style-type: none"> • 1980–1987 • 1988–1993 (ref.) • 1994–2001 • 2002–2007
Retirement period (1) (Germany)	<ul style="list-style-type: none"> • 1980–1989 • 1990–1997 (ref.) • 1998–2001 • 2002–2007
Retirement period (1) (Netherlands)	<ul style="list-style-type: none"> • 1980–1987 • 1988–1995 (ref.) • 1996–2001 • 2002–2007
Retirement period (2)	Binary coding: <ul style="list-style-type: none"> • Before and including 1994 (1) • 1995 or later (0)
Unemployment rate	Total national rate in the year of retirement (metric)
Sector of last job	<ul style="list-style-type: none"> • Public sector (1) • Private sector (0)

Source: Own compilation.

⁴⁴ ISCED code 6 was not assigned in the three countries and code 4 was only assigned in Germany.

b Prospective Retirement

As well as assessing the retrospective reasons for retirement, I shall analyze determinants of the prospective wish to retire for persons still employed, continuing the assumption that the individual's own view is essential to understand how retirement decisions are made. In the first years of the new millennium, all three countries under study had started to rethink their pension policies and to implement "active aging" measures aimed at prolonging working lives. Therefore, the older workers' wish to leave employment can be interpreted as an indicator for the success of these measures. Furthermore, differences in the desire to retire based on job or individual characteristics can point to weaknesses in these policies.

Sample Definition

The dependent variable here is "Thinking about your present job, would you like to retire as early as you can from this job?" Persons eligible for the subsample must be in employment and give a valid answer to this question. Their age must range between 50 and 70 years in order to catch the population "at risk" of retirement.⁴⁵ If a person was employed in more than one wave, the information is taken from the earliest wave. Also, individuals with missing information on education were dropped.

Table 2.8: Overview on case numbers used for the analyses on the wish to retire

	Wave 1 (2004)	Wave 2 (2006/2007)	Wave 4 (2011)	N
Denmark	580	629	361	1,570
Germany	847	360	0 ⁴⁶	1,207
The Netherlands	832	386	347	1,565

Source: SHARE Waves 1, 2, 4; own calculations.

Method and Variables

The aim of the multivariate analyses is to examine the influence of variables that determine whether someone wants to retire from her or his current job with the dependent variable being "having stated yes" with a 0/1 coding. As in the analyses on the retrospective reasons for retirement, logit models will be used to identify variables that influence the desire to retire, with the respective models

⁴⁵ Persons working beyond age 70 are excluded as "extreme" cases.

⁴⁶ Four German cases fulfilled the sample criteria but were excluded because this number is too small to draw substantial conclusions about older workers in 2011.

presenting coefficients. Table 2.9 shows the variables that were introduced stepwise.

Table 2.9: Independent variables used for the multivariate analyses on the wish to retire

Individual characteristics	Sex	<ul style="list-style-type: none"> • Male (0) • Female (1)
	Age	<ul style="list-style-type: none"> • 50–54 • 55–59 • 60–64 (ref.) • 65–70
	Qualification level	ISCED codes in 3 categories: <ul style="list-style-type: none"> • Codes 1/2 • Codes 3/4 (ref.) • Code 5
	Region (only Germany)	Place of residence at the time of the interview <ul style="list-style-type: none"> • East Germany (1) • West Germany (0)
	Single	<ul style="list-style-type: none"> • Single (1) • With partner (0)
	Partner active	<ul style="list-style-type: none"> • Partner in employment (1) • Partner not in employment (0)
	Grandchildren	<ul style="list-style-type: none"> • Individual has grandchildren (1) • Individual has no grandchildren (0)
	Socially inactive (only Waves 1 & 2)	<ul style="list-style-type: none"> • No social activities last month (1) • At least one social activity last month (0)
	Bad health⁴⁷	Based on self-rated health as a 5-point scale: <ul style="list-style-type: none"> • 1 (excellent), 2 (very good), 3 (good) (0) • 4 (fair) or 5 (poor) (1)
	No job security	<ul style="list-style-type: none"> • Job perceived as insecure (1) • Job not perceived as insecure (0)
	Dissatisfied with job	Based on job satisfaction as a 4-point scale: <ul style="list-style-type: none"> • 1 (strongly agree) or 2 (agree) (0) • 3 (disagree) or 4 (strongly disagree) (1)
	Physically demanding job	<ul style="list-style-type: none"> • Job is physically demanding (1) • Job is not physically demanding (0)

⁴⁷ In Wave 1, self-rated health was tested in a split design with two different scales and only one of the scales was used for the following waves. Therefore, a part of the Wave-1 respondents reveal no compatible information regarding this variable and consequently are excluded from all models containing self-rated health as independent variable.

Table 2.9 (continued)

Work characteristics⁴⁸	Real working time	Metric (weekly working hours)
	Public sector	<ul style="list-style-type: none"> • Employed in the public sector (1) • Employed in the private sector (0)
	Self-employed	<ul style="list-style-type: none"> • Self-employed (1) • Dependent employed (0)
	Income	Position in the country-specific income distribution: <ul style="list-style-type: none"> • Lowest third (1) • Middle third (2) • Highest third (3)
Development over time	Wave	Wave in which interview was conducted: <ul style="list-style-type: none"> • Wave 1 (ref.) • Wave 2 • Wave 4

Source: Own compilation.

Overview on the Two Empirical Studies

Table 2.10 summarizes the respective research questions, relevant aspects under study, and study designs of the two empirical sections. It also gives a brief description of and contrasts the databases and methods. Analogous to chapter II, chapter III will then present the empirical results of the respective views on retirement transitions in two separate sections. Afterwards, the findings from both parts will be combined and discussed in chapter IV that integrates both perspectives and thus gives answers to the overall research questions on Denmark's status as a role model and the decision-making process in the context of retirement transitions.

⁴⁸ Firm size as observable workplace characteristic was only available in Wave 1 and could therefore not be included in the models.

Table 2.10: Comparison of the research designs in the two empirical studies

Section 1: Pathways into Retirement: The development of inequality patterns in the late career and beyond retirement since the 1980s	Section 2: Perceptions of Retirement: The impact of changing frameworks on people's view on retirement
Objective conceptualization of late career conditions and pathways into retirement	Subjective conceptualization of the transition to retirement
<p>Main research questions:</p> <ul style="list-style-type: none"> • How have late careers and retirement transitions developed in Denmark since the 1980s? • Have inequalities increased, particularly with regard to gender and qualification levels? • Compared to Germany and the Netherlands, do these trends show a distinctive pattern in Denmark that results in better protection of older workers and retirees against market risks? 	<p>Main research questions:</p> <ul style="list-style-type: none"> • How did the individuals themselves assess their reasons for retirement in light of the changing institutional framework since the 1980s? • What is the relational pattern between individual and workplace characteristics, personal reasons for retirement and institutional conditions? • Which characteristics influence the wish to retire in current older workers? • Do these characteristics vary between Denmark, Germany and the Netherlands, that is, between countries with different institutional contexts?
<p>Relevant processes and aspects under study:</p> <ul style="list-style-type: none"> • Late career: <ul style="list-style-type: none"> - Risk of unemployment - Chances of reemployment • Timing of transition to retirement • Determinants of pension income 	<p>Relevant aspects under study:</p> <ul style="list-style-type: none"> • Retrospective assessment of the reason for retirement • Prospective look for retirement
<p>Comparative case study design:</p> <p>Focusing on a case study on Denmark and comparing the results with evidence from two further country studies conducted for the same research project (<i>flexCAREER</i>)</p>	<p>Comparative case study design:</p> <p>Focusing on Denmark and comparing the results with evidence from two further countries</p>

Table 2.10 (continued)

<p>Data:</p> <ul style="list-style-type: none"> • Danish study: <ul style="list-style-type: none"> - Subsample of an administrative dataset - Observation window: 1980 – 2006 - Subsample definition: People who reach age 50 in 1980 or later • Comparative studies: Subsample of different national datasets including information about employment careers for people aged 50 and over 	<p>Data:</p> <ul style="list-style-type: none"> • A subsample of late career employees and retirees extracted from pooled international survey data collected between 2004 and 2011 in the context of the “Survey of Health, Aging and Retirement in Europe” (SHARE). • Subsample definition (all countries): People who reached age 50 in 1980 or later; whether they should be employed or retired depends on the question under study.
<p>Longitudinal, birth cohort design:</p> <ul style="list-style-type: none"> • Different birth cohorts are followed from age 50 until they retire • Allows the study of changes in labor market risks and exit processes during the course of rising employment flexibility and pension reforms fostering the shift from the early retirement trend toward “active aging” 	<p>Cross-sectional design:</p> <ul style="list-style-type: none"> • Older workers and retirees are surveyed regarding their own retirement (passed by or upcoming) • Allows the study of changes in perceptions of the transition to retirement over the course of major pension reforms fostering the shift from the early retirement trend toward “active aging”

Source: Own compilation.

III Empirical Results:

Objective and Subjective Views on Retirement Transitions: The Danish Showcase Contrasted with Results from Germany and the Netherlands

In chapters I and II, I described the conceptual framework, the research questions and the hypotheses as well as the data and methods used in this dissertation. In sum, I argued that macrolevel changes have influenced retirement processes in most Western countries within the last decades, and that this has contributed to growing inequality, particularly between men and women and between low- and high-qualified older workers. In order to understand the respective retirement processes and to counteract developments that jeopardize the living standards of large parts of the elderly population, it is vital to combine an examination of observed retirement behavior with analyses of the subjective perspectives on this transition of the older workers and retirees themselves. Hence, chapter III presents two ways of looking at retirement transitions empirically.

Because Denmark serves as a showcase throughout this work, the relevant processes and aspects in this country as well as the results are illustrated in great detail. The comparative country studies on Germany and the Netherlands are then described more briefly and within the context of the Danish results.

The first section of chapter III reports findings on the *objective view on retirement transitions*. It focuses on the development of inequality patterns in the late career and beyond retirement since the 1980s. After taking a close look at the risk of unemployment, the chances of reemployment, the timing of retirement transitions, and the determinants of pension income among the older Danish population, I shall briefly summarize respective findings on Germany and the Netherlands before drawing some preliminary conclusions on country-specific as well as cross-country developments.

In the second section, I shall present my own data analyses of the *subjective view on the individual retirement* in all three countries, analyzing the impact of changing frameworks on people's view on retirement. This is operationalized by (1) retrospective assessments of the reasons why retirees retired and (2) how often older workers express the prospective wish to retire soon. With the exception of some country-specific deviations due to data restrictions in the respective national subsamples, the analyses are highly similar and the respective findings are summarized in a preliminary conclusion.

1 Pathways into Retirement: The Development of Inequality Patterns in the Late Career and Beyond Retirement since the 1980s

In this section, I present my empirical study on the development of the late careers and transitions into retirement in Denmark. Afterwards I briefly summarize results from the country studies on Germany and the Netherlands in order to delineate potential differences in older workers' labor market experiences and retirement pathways that can be traced back to different institutional backgrounds. All three country studies used the same conceptual framework of the *flexCAREER* project, making results comparable despite country-specific databases and their respective limitations. In line with the conceptual idea of confronting objective and subjective views on the retirement process, this study embodies the first perspective and observes mere "outcomes" of the interplay between institutional, job-related, and individual characteristics in relation to retirement behavior.

a The Late Career and Labor Market Exit Trends in Denmark: A Closer Look at the "Pioneer in Active Aging"⁴⁹

The Late Career in Denmark – Descriptive Overview

To give a first overview of the five Danish birth cohorts under study, I shall present some descriptive indicators for their late career and retirement trends along with conditions in Denmark (Table 3.1). Within all cohorts, about 85 percent of men are in employment at age 50, but the share of the self-employed among them has decreased significantly. At the same age, less than 70 percent of women were employed in the oldest cohort, growing to 81 percent for the youngest cohort. Here as well, self-employment is shrinking, but is always on a lower level among women than among men. Whereas the proportion of unemployed persons is about the same for both genders and all cohorts, the level of labor market inactivity (comprising, e.g., drawing disability benefit) is clearly higher

⁴⁹ This section builds on the Danish country study conducted in cooperation with Mona Larsen (SFI, Copenhagen) for the *flexCAREER* project. Therefore, some results have been published already in chapter 8 "How "flexicure" are older Danes? The late career and labor market exit trends between 1980 and 2006" of the book volume *Aging Populations, Globalization and the Labor Market. Comparing Late Working Life and Retirement in Modern Societies* edited by Hans-Peter Blossfeld, Sandra Buchholz, and Karin Kurz in 2011. Mona Larsen not only kindly granted on-site access to the rich data base, but also contributed significantly with her expertise in the field of Danish social policy and retirement schemes. At this point, I also want to thank Peder J. Pedersen who helpfully commented on earlier versions of this work.

among women than among men. Presumably, the latest “housewives” are also found in this category for the oldest cohorts.

After age 50, considerable shares of older workers experience unemployment. The values fluctuate between 18 and 25 percent for men and between 21 and 32 percent for women, depending on the birth cohort. With the exception of women born between 1934 and 1943, more than one-half of unemployment episodes are terminated by reemployment, with men being more successful in regaining a new job than women throughout all cohorts. Finally, at least 99 percent of the retirees in the dataset receive the public old age pension, reflecting the universal design of this scheme.

Table 3.1: Descriptive indicators for late career transitions and retirement in different birth cohorts in Denmark, 1980–2006 (in percent)⁵⁰

Birth cohort	Men					Women				
	1930 –33	1934 –37	1938 –43	1944 –48	1949 –56	1930 –33	1934 –37	1938 –43	1944 –48	1949 –56
<i>Employment status at age 50</i>										
Dependent employed	66	69	70	73	76	57	64	67	71	77
Self-employed	19	18	15	12	9	12	10	9	7	4
Unemployed ^a	6	5	7	6	6	4	5	7	7	6
Inactive ^b	8	8	9	10	9	27	20	17	15	13
<i>Late career characteristics^c</i>										
Unemployed after age 50 ^d	22	25	24	18	(7)	26	32	31	21	(8)
Reemployed after the first unemployment episode	59	54	55	60	(61)	55	44	42	56	(56)
Share of retirees receiving OAP ^e	99	100	99	–	–	100	100	99	–	–

Source: Own calculation based on administrative data (1980–2006).

Notes: ^a Includes persons on activation or social assistance.

^b Comprises people in education, on immigration pay, disability benefit, or out of the labor force for unspecified reasons.

^c Based on those employed at the age of 50 years.

^d Unemployed at least once.

^e Based on those employed or unemployed at the age of 50 years; no information for occupational or private pensions in the data.

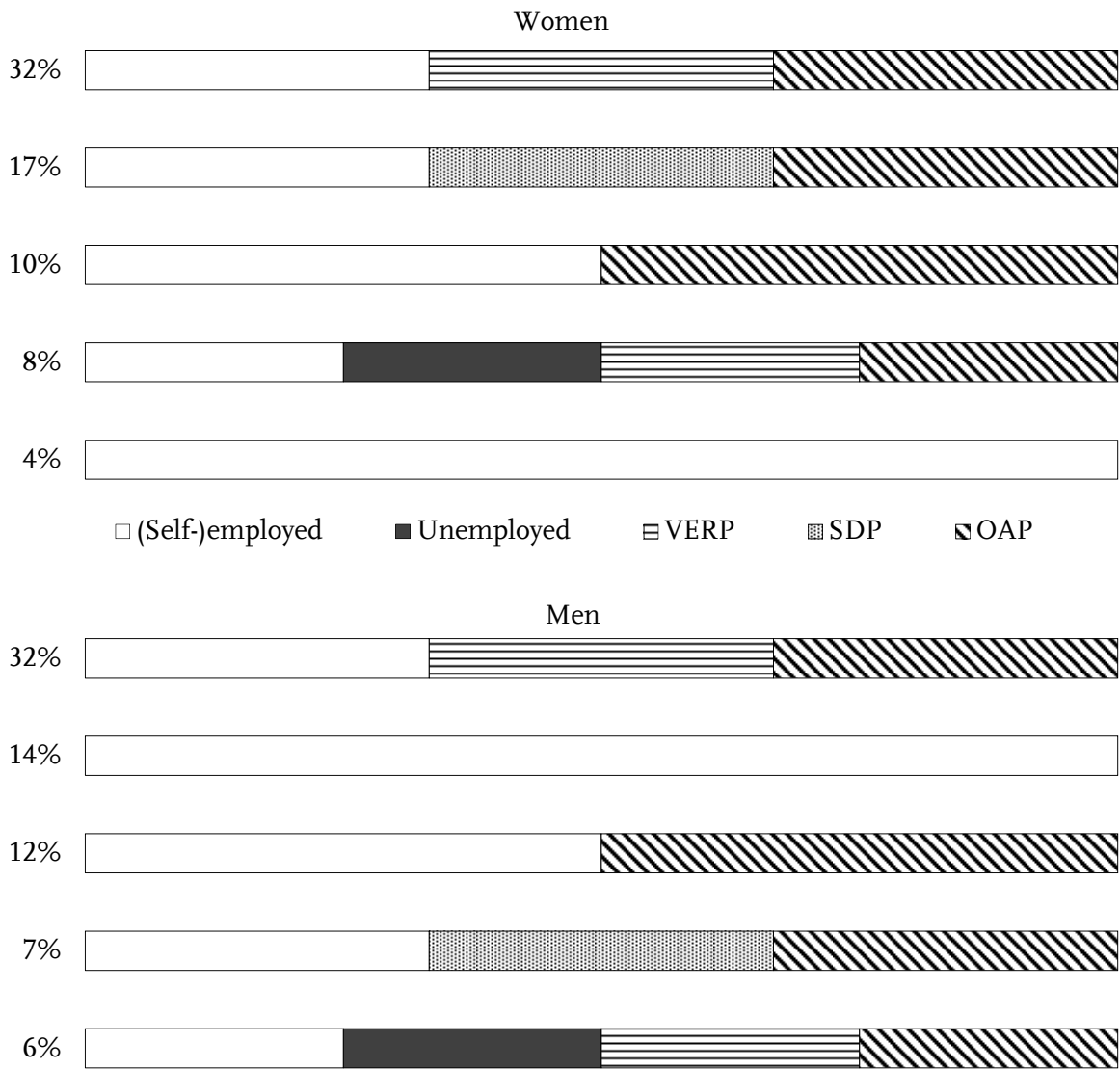
⁵⁰ When numbers are given in brackets, this means that although the values can be calculated from the data, they cannot be interpreted due to the short observation period for persons born after 1949 (right-censoring).

In order to depict the most common pathways from the late career into retirement, I conducted separate sequence analyses for men and women. Figure 3.1 illustrates that almost one-third (32 percent) of both groups use VERP as a bridge between employment and the regular old age pension, with additional 6 and 8 percent respectively entering VERP from unemployment. Only 12 percent of males and 10 percent of females in my sample actually worked until the official retirement age. Among women, an even higher proportion (17 percent) was on social disability pension (SDP) between their last employment and OAP receipt. For men, in contrast, SDP as part of their retirement pathway is less relevant (7 percent).⁵¹ A relatively high share of these (14 percent) had not even retired at all at age 68, whereas this is the case for only 4 percent of women. Because only the five most frequent pathways are shown, it cannot be seen that a period of TBP was included in the late career pathway of 3 percent of women. In this context, it is important to note that due to the restriction of reaching age 68 within the observation period, the sequence analysis refers only to persons born between 1930 and 1938, that is, the cohorts that were the main target of TBP are not included because I cannot observe their entire pathways into retirement.

Obviously, VERP is the major pathway into retirement among the Danish population, whereas only small proportions used (regular) unemployment benefit or SDP for periods between their last labor market activity and VERP or OAP, that is, they exit even before age 60. However, differences between men and women can already be seen in the use of these “bridges.”

⁵¹ The higher take-up rates of disability benefit among women in the period 1984–2006 were also found by Bingley et al. (2011), particularly for individuals aged 60–64.

Figure 3.1: Late career pathways for Danes employed at age 50 and reaching age 68 in 1998–2006 by gender (sequence analysis)



Source: Own calculation based on administrative data (1980–2006; 8,403 men, 7,705 women).

Note: Only five most frequent pathways shown.

The Risk of Unemployment in the Late Career

The Danish labor market is characterized by high job mobility and short average tenures—also in the age group 50 and over. In the administrative sample used for the following analyses, almost one-half have at least two jobs, and about one-quarter have at least three jobs between their 50th birthday and the point of retirement. However, these job changes are not necessarily connected to (long) unemployment spells: The share of men and women experiencing unemployment at least once in their late career varies between 22 and 32 percent for cohorts completely reaching their 60s within the observation period (Table 3.1).

First of all, my results reveal that people born between 1934 and 1943 had the highest risk of becoming unemployed (Table 3.2). These individuals entered their late careers between the mid-1980s and the mid-1990s, a period of increasing and/or high unemployment. Furthermore, these cohorts were the target group of TBP when it was launched in the early 1990s to let unemployed people in their 50s leave the labor market. As a result, employers might have been inclined to dismiss workers of these ages rather than younger ones because the employers knew that these workers could bridge the remaining time until VERP eligibility with TBP. Consequently, younger cohorts show a lower risk of unemployment, most likely because of the economic boom since the mid-1990s and—related to that—the termination of TBP. Hence, overall, my hypothesis on the development over time is confirmed: The risk of unemployment for older workers depends highly on the economic cycle and related labor market policies.

However, the general risk of unemployment varied not only by cohorts but also by age groups. Individuals who have reached age 60 have a clearly lower risk than their younger colleagues, presumably because these persons opt for VERP if they are eligible rather than becoming unemployed. For younger Danes, the difference between those in their early 50s and those in their late 50s is visible only when removing cohorts and instead accounting for unemployment rate in the respective year of the transition into unemployment (Model 4). Then, becoming unemployed is more likely for workers approaching their 60th birthday. This can be explained by the unemployment insurance regulations that, for a long time, allowed exceptionally long periods of benefit receipt for individuals in the second half of their 50s. Also, TBP was first introduced for unemployed workers older than 55 and only later lowered to an entry age of 50.

Table 3.2: Transition to first unemployment after age 50 in Denmark (logistic regression model)

	1	2	3	4	5	6
<i>Constant</i>	-3.53**	-3.48**	-3.73**	-4.75**	-3.71**	-3.80**
<i>Cohort</i>						
1930–33	-0.17**	-0.24**	-0.20**		-0.19**	-0.10**
1934–37	0.04	0.00	0.02		0.09*	0.08*
1938–43 (ref.)	–	–	–		–	–
1944–48	-0.35**	-0.30**	-0.31**		-0.40**	-0.21**
1949–56	-0.60**	-0.51**	-0.53**		-0.67**	-0.46**
<i>Age (ref.: 50–53)</i>						
54–58	0.00	0.02	0.03	0.12**	0.03	0.03
59–60	-0.64**	-0.61**	-0.59**	-0.43**	-0.59**	-0.59**
61–62	-1.11**	-1.05**	-1.05**	-0.84**	-1.05**	-1.04**
63–65	-1.39**	-1.30**	-1.31**	-1.03**	-1.30**	-1.30**
<i>Sex: Female (ref.: Male)</i>	0.26**	0.24**	0.43**	0.43**	0.43**	0.54**
<i>Qualification</i>						
Compulsory education or unknown, no vocational training		0.17**	0.18**	0.18**	0.14**	0.18**
General upper secondary education, no vocational training		-0.03	0.08	0.05	0.25+	-0.05
Compulsory general education and vocational training (ref.)		–	–	–	–	–
Short/medium academic degree		-0.72**	-0.50**	-0.52**	-0.60**	-0.52**
Long academic degree or Ph.D.		-1.06**	-0.79**	-0.82**	-0.90**	-0.82**
<i>Firm size (ref.: 1–10 employees)</i>						
11–50 employees			-0.21**	-0.20**	-0.21**	-0.21**
51–500 employees			-0.40**	-0.39**	-0.40**	-0.40**
>501 employees			-0.54**	-0.55**	-0.55**	-0.55**
<i>Sector/industry (ref.: Public sector)</i>						
Private sector:						
Extractive industry			0.35**	0.34**	0.34**	0.35**
Production			0.83**	0.82**	0.82**	0.83**
Construction			0.85**	0.86**	0.85**	0.85**
Retail			0.60**	0.60**	0.60**	0.60**
Private services			0.58**	0.58**	0.58**	0.58**
Transport			0.29**	0.28**	0.28**	0.28**
<i>Ethnic minority</i>				0.56**	0.56**	0.56**
<i>Unemployment rate</i>				0.09**		
<i>Qualification × Cohort 1930–33</i>						
Compulsory education or unknown, no vocational training					-0.01	
General upper secondary education, no vocational training					0.29	
Short/medium academic degree					0.00	
Long academic degree or Ph.D.					-0.13	
<i>Qualification × Cohort 1934–37</i>						
Compulsory education or unknown, no vocational training					-0.12*	
General upper secondary education, no vocational training					0.36	
Short/medium academic degree					-0.01	
Long academic degree or Ph.D.					-0.27	
<i>Qualification × Cohort 1944–48</i>						
Compulsory education or unknown, no vocational training					0.16**	
General upper secondary education, no vocational training					0.51**	
Short/medium academic degree					0.11	
Long academic degree or Ph.D.					0.32*	

Table 3.2 (continued)

	1	2	3	4	5	6
<i>Qualification × Cohort 1949–56</i>						
Compulsory education or unknown, no vocational training					0.23**	
General upper secondary education, no vocational training					0.37+	
Short/medium academic degree					0.33**	
Long academic degree or Ph.D.					0.16	
<i>Sex × Cohort</i>						
1930–33						–0.17**
1934–37						–0.11**
1944–48						–0.20**
1949–56						–0.14**
Chi ²	1,770.02	3,132.40	4,772.68	5,109.18	4,976.50	4,939.68
N (observations)	572,353	572,353	572,353	572,353	572,353	572,353
N (persons)	72,917	72,917	72,917	72,917	72,917	72,917
N (events)	13,616	13,616	13,616	13,616	13,616	13,616

Source: Own calculations based on administrative data (1980–2006).

Notes: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

I shall now look at the evolution of social inequality patterns connected to these trends. Throughout the different models, women experience unemployment in the late career more often than men—matching their higher unemployment rate shown in Figure 1.11. Moreover, the gender difference actually increases when sector and industries are taken into account. This may be because of a strong occupational segregation not only between but also within the public and the private sector. Moreover, the gender gap is most pronounced in the cohort with the highest overall unemployment risk (1938–1943) (Model 6). Therefore, Hypothesis 6 on men and women is not confirmed by the data. Women are no more secure, but have a higher risk of becoming unemployed in all cohorts, and even more in the one struck most by the economic recession in the early 1990s.

At the same time, however, the significant differences in late career unemployment risk between workers in the public and the private sector remain. This difference might actually be due to the higher involvement of the private sector in economic ups and downs (as expected), but it does not translate into the expected relatively higher job security of women. This suggests that the higher unemployment risk for women is driven by those employed in the private sector.

In contrast to the gender hypothesis, there is support for the assumption that the risk of unemployment varies by level of qualification. Compared to people with vocational training (who represent the largest share in my sample), individuals with no or only basic education are exposed to late career unemployment to the highest degree, whereas Danes with academic degrees seem to be best protected. The disadvantage of the lowest qualification group even grows

over time; that is, the later these persons are born, the more they are exposed to late career unemployment compared to the reference group of medium qualified (Model 5). In part, this may be explained by higher take-up rates of TBP among low qualification groups, but the trend also continues for the youngest cohort that is no longer eligible for this program. Consequently, the inequality between older workers with different qualification levels in the risk of unemployment in the late career has increased over time, because the low qualified did not benefit from the boom in the late 1990s to the same extent as the high qualified.

Furthermore, I controlled for the size of a firm as an additional structural characteristic, with the expected result that workers in large firms have a lower risk of unemployment in their late career than workers in small firms that are not able to shift redundant workers within their internal labor markets.⁵²

Chances of Reemployment

After examining the risk of becoming unemployed after 50, I shall now look at the chance of finding new employment out of these first spells. Overall, slightly more than one-half of these spells are terminated by new employment, mounting up to 60 percent depending on gender and cohort (Table 3.1). In most cases (85 percent), reemployment is found within 2 years.

In the preceding section, I showed that individuals born between 1934 and 1943 have the highest risk of unemployment. Table 3.3 shows that they also have the lowest chance of reemployment, confirming the hypotheses based on the influence of the economic cycle and TBP. Thus, the lack of pressure to enter paid work has probably contributed to the comparatively lower levels of reemployment for people born before the early 1940s, whereas Danes born afterwards experienced increased public commitment to active labor market policy and benefited from the economic upswing after the mid-1990s. This periodical dependence is also visible in Model 6, in which I introduced the period in which one became unemployed instead of cohorts.

⁵² Remember that “firm” means “workplace” and therefore, the upper firm size categories also include large public institutions. Small workplaces, in contrast, are more likely to be private. Thus, the effects for both categories might not be independent from each other.

Table 3.3: Transition to reemployment from first unemployment after 50 in Denmark (logistic regression model)

	1	2	3	4	5	6
<i>Constant</i>	-0.46**	-0.46	-0.40**	-0.34**	-0.25**	-0.47**
<i>Cohort</i>						
1930–33	0.32**	0.33**	0.33**	0.32**	0.15*	
1934–37	0.06	0.07	0.07	0.06	-0.05	
1938–43 (ref.)	–	–	–	–	–	
1944–48	0.32**	0.32**	0.30**	0.32**	0.12*	
1949–56	0.24**	0.23**	0.22**	0.24**	-0.01	
<i>Age</i> (ref.: 50–53)						
54–58	-0.53**	-0.53**	-0.52**	-0.53**	-0.53**	-0.53**
59–60	-1.93**	-1.93**	-1.92**	-1.93**	-1.93**	-1.95**
61–62	-1.78**	-1.79**	-1.78**	-1.78**	-1.81**	-1.80**
63–65	-1.72**	-1.73**	-1.75**	-1.72**	-1.76**	-1.69**
<i>Sex:</i> Female (ref.: Male)	-0.33**	-0.32**	-0.27**	-0.28**	-0.53**	-0.29**
<i>Qualification</i>						
Compulsory education or unknown, no vocational training		-0.01	-0.01	-0.13*	0.00	0.03
General upper secondary education, no vocational training		-0.02	0.02	-0.08	0.05	0.02
Compulsory general education and vocational training (ref.)		–	–	–	–	–
Short/medium academic degree		0.10*	0.12*	0.31**	0.12*	0.09+
Long academic degree or Ph.D.		0.03	0.06	0.22	0.11	0.06
<i>Firm size</i> (ref.: 1–10 employees)						
11–50 employees			-0.12**	-0.13**	-0.13**	-0.13**
51–500 employees			-0.15**	-0.15**	-0.15**	-0.15**
>501 employees			-0.38**	-0.38**	-0.37**	-0.33**
<i>Sector/industry</i> (ref.: Public sector)						
Private sector:						
Extractive industry			-0.19*	-0.20*	-0.19*	-0.12
Construction			0.50**	0.49**	0.49**	0.50**
Retail			-0.04	-0.05	-0.04	-0.02
Private services			-0.01	-0.01	-0.02*	-0.12*
Transport			-0.01	-0.02	0.00	-0.05
<i>Ethnic minority</i>				-0.35**	-0.36**	-0.37**
<i>Qualification × Cohort 1930–33</i>						
Compulsory education or unknown, no vocational training				0.31**		
General upper secondary education, no vocational training				0.11		
Short/medium academic degree				-0.01		
Long academic degree or Ph.D.				0.23		
<i>Qualification × Cohort 1934–37</i>						
Compulsory education or unknown, no vocational training				0.23**		
General upper secondary education, no vocational training				0.69+		
Short/medium academic degree				-0.19		
Long academic degree or Ph.D.				0.14		
<i>Qualification × Cohort 1944–48</i>						
Compulsory education or unknown, no vocational training				0.15+		
General upper secondary education, no vocational training				0.13		
Short/medium academic degree				-0.33*		
Long academic degree or Ph.D.				-0.23		

Table 3.3 (continued)

	1	2	3	4	5	6
<i>Qualification × Cohort 1949–56</i>						
Compulsory education or unknown, no vocational training				0.02		
General upper secondary education, no vocational training				-0.09		
Short/medium academic degree				-0.31*		
Long academic degree or Ph.D.				-0.43		
<i>Sex × Cohort</i>						
1930–33					0.36**	
1934–37					0.22*	
1944–48					0.36**	
1949–56					0.46**	
<i>Period of becoming unemployed</i>						
1980–1989						0.11*
1990–1994 (ref.)						—
1995–1999						0.30**
2000–2005						0.51**
Chi ²	2,148.32	2,153.60	2,294.14	2,356.44	2,359.52	2,436.90
N (observations)	28,122	28,122	28,122	28,122	28,122	28,122
N (persons)	13,661	13,661	13,661	13,661	13,661	13,661
N (events)	7,271	7,271	7,271	7,271	7,271	7,271

Source: Own calculations based on administrative data (1980–2006).

Notes: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Older people also show a lower tendency to reenter the labor market from unemployment. In particular after age 60, reemployment is much more unlikely than for the reference group, because eligible people opt for VERP rather than returning to the labor market. But there is a significantly lower reemployment probability even for people in their late 50s compared to people in their early 50s. These findings suggest that not only TBP (which was not available for all cohorts) but also VERP in general have a negative effect on reemployment probabilities for workers in their late 50s. Thus, the existence of this scheme combined with several years of unemployment insurance (UI) entitlements for older workers might imply less search effort on their part (supply side). On the demand side, employers might be less inclined to hire older workers in this age group because economic restructuring has eliminated adequate positions or because of issues of statistical age discrimination. Consequently, unemployed Danes in their late 50s show a higher tendency to remain unemployed compared to their younger counterparts in all cohorts—a frequently observed phenomenon for individuals in many countries in the years before reaching a certain age that allows for attractive early retirement. However, this kind of analysis does not tell us about the strength of both mechanisms and how the two forces—push and pull—have potentially changed in power and in effectiveness for certain population groups over the course of the changing macrolevel framework. This analytical gap will be addressed by the analyses in the second section of chapter III.

Turning to the development of inequality patterns, our results show that females have a significantly lower probability of reemployment than males. Hence, overall, there is a double gender imbalance in Danish late careers. Women are more likely to become unemployed and less likely to be reemployed after age 50. However, similar to the age variation described above, the gender difference may also be due to more “voluntary” unemployment among older women than older men. Moreover, the interaction terms in Model 5 reveal that women born in 1938–43 have the lowest reemployment probability of all—most probably because more women than men took advantage of TBP (Bingley et al. 2011).

Furthermore, the hypothesized disadvantage of low qualification groups does not appear so clearly for the chances of reemployment. Compared to persons with vocational training, only those with short academic degrees enjoy a slightly better chance of reemployment.⁵³ Apparently, the level of qualification does not play a major role in determining a person’s chance of reentering the labor market after being unemployed in the late career. One potential explanation is that these people are already a selective group with specific characteristics, and within this group, factors other than qualification matter more for the opportunities to regain employment. However, Model 4 shows that once interaction terms for cohort and qualification level are introduced, a significant negative effect for the lowest qualification category appears for persons born 1938–43 that also persists for the later born. Hence, low qualification is not only particularly “harmful” for the chances of reemployment when the overall labor market situation is tight, but this group also fails to catch up in the economic boom. In turn, the advantage of a high qualification level seems to be applicable only for those born before 1943 and then to decrease as well. This might be related to the general upward shift of educational level within the older workforce.

Whereas workers in large firms have the lowest risk of becoming unemployed in their late career, those among them who nonetheless lost their job have the worst chances of finding new employment compared to those previously working in small firms. This could indicate that older workers who are laid off by large firms have some particular features that make them less attractive on the labor market. Alternatively, they may have been laid off with the specific purpose of bridging the remaining time until (early) retirement with the help of UI benefits (or TBP or any other specific arrangement offered by a large public in-

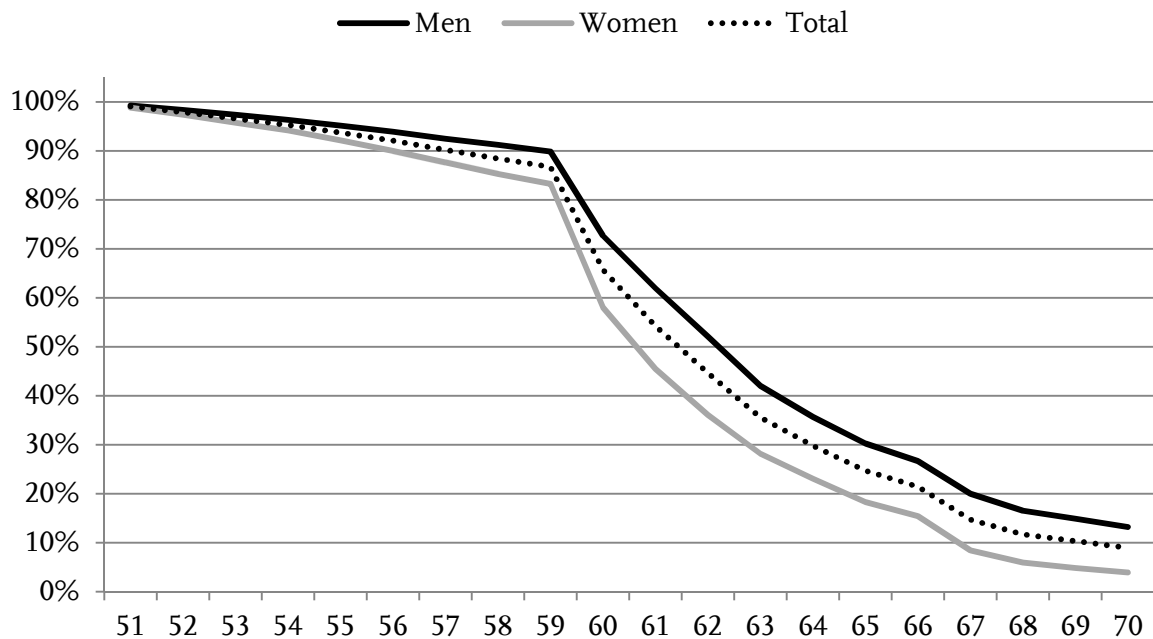
⁵³ However, the lack of significance for the highest qualification group may be due to the low case numbers (281 persons, i.e. only about 2 percent of the sample have a long academic degree or Ph.D.).

stitution). Another structural feature, the distinction between public sector and private industries, shows a significant positive effect for former construction workers—an occupation in which frequent job changes and unemployment spells are common. In general, my hypotheses on developments over time are confirmed, whereas the results for inequality patterns are not as straightforward as anticipated.

Transition to Retirement

As mentioned above, the most common path to retirement in Denmark is from employment to VERP and then to OAP (Figure 3.1). The survivor curves in Figure 3.2 show that at age 59, 10 percent of men and 17 percent of women have entered a state of retirement. At age 62, however, more than one-half (54 percent) of the Danes in my sample have retired—a little less than one-half of all men (48 percent) but almost two-thirds of all women (64 percent). However, there are some variations in retirement behavior over time and between different social groups. These will be shown with help of multivariate analyses.

Figure 3.2: *Survivor curves for the transition to retirement for Danes reaching age 50 between 1980 and 2006, by sex*



Source: Own calculations based on administrative data (1980–2006); Kaplan Meier Survival Estimates based on 41,028 men and 36,992 women.

My analyses so far have revealed that Danes born between 1934 and 1943 have the worst employment situation in their late career. Table 3.4 shows that these persons also retire earlier than persons born before or after. In particular, the two youngest cohorts show a clear development toward delayed withdrawal from the labor market compared to older cohorts, thus confirming Hypothesis 1.

Naturally, the tendency to retire increases with age, but coefficients noticeably increase after the critical age of 60, reflecting the kink in Figure 3.2. Also, the gender gap in retirement timing is illustrated by stable and highly significant coefficients. Model 6 shows that the difference between men and women is, once again, strongest within the 1934–43 cohorts, but has remarkably decreased for the youngest cohort.

Furthermore, a person's highest qualification level has a considerable impact in the expected direction on the timing of withdrawal from the labor market. People with only compulsory education and without vocational qualification are the first to exit, whereas those with upper secondary education or even academic degrees work longest. Over time, the gap between lowest and medium/high qualification groups becomes even larger, supporting my assumption of growing inequality regarding qualification levels (Model 5).

As expected, structural characteristics influence the retirement behavior of Danes as well. Employees of large firms retire significantly earlier than employees of small firms, confirming the assumption of large firms being more subject to rationalization pressure and thus more prone to foster early retirement. Furthermore, public employees withdraw earlier than most private industry workers. Notably, this effect occurs despite controlling for gender at the same time, suggesting that the gender differences are not the explanation for public/private sector differences. Finally and not surprisingly, the self-employed are found to retire significantly later than dependent employed, and in turn, individuals who are unemployed are even more prone to withdraw permanently than the latter (Model 7).

The inclusion of household dynamics is also informative in the context of retirement behavior. However, the only information available for partners is age. Using this data, I found a trend toward "coupled retirement" in earlier work, with persons with younger partners delaying retirement and persons with older partners retiring earlier compared to singles (Marold and Larsen 2009). Larsen (2008) and Larsen and Pedersen (2013), however, found that these patterns differ for men and women, with only women's retirement behavior being influenced by civil status. I shall return to this issue later in the context of subjective views on retirement.

Table 3.4: Transition to retirement in Denmark (logistic regression model)

	1	2	3	4	5	6	7
<i>Constant</i>	-4.32**	-4.29**	-4.43**	-4.43**	-4.54**	-4.58**	-4.71**
<i>Cohort</i>							
1930–33	-0.12**	-0.18**	-0.16**	-0.15**	-0.20**	-0.17**	-0.17**
1934–37	0.01	-0.03+	0.00	0.00	-0.04	-0.03	-0.05
1938–43 (ref.)	–	–	–	–	–	–	–
1944–48	-0.66**	-0.62**	-0.66**	-0.66**	-0.72**	-0.61**	-0.67**
1949–56	-1.03**	-0.96**	-1.01**	-1.01**	-1.14**	-0.81**	-0.99**
<i>Age (ref.: 50–53)</i>							
54–58	0.36**	0.36**	0.55**	0.55**	0.40**	0.40**	0.38**
59–60	2.97**	3.00**	3.22**	3.22**	3.07**	3.07**	3.11**
61–62	2.75**	2.81**	3.05**	3.05**	2.95**	2.95**	3.05**
63–65	2.48**	2.56**	2.82**	2.82**	2.73**	2.74**	2.85**
<i>Sex: Female (ref.: Male)</i>	0.51**	0.48**	0.42**	0.42**	0.41**	0.45**	0.38**
<i>Qualification</i>							
Compulsory education or unknown, no vocational training		0.18**	0.19**	0.19**	0.15**	0.18**	0.20**
General upper secondary education, no vocational training		-0.57**	-0.62**	-0.62**	-0.66**	-0.67**	-0.62**
Compulsory general education and vocational training (ref.)		–	–	–	–	–	–
Short/medium academic degree		-0.36**	-0.42**	-0.42**	-0.34**	-0.34**	-0.30**
Long academic degree or Ph.D.		-0.98**	-1.05**	-1.06**	-1.05**	-0.97**	-0.92**
<i>Firm size (ref.: 1–10 employees)</i>							
11–50 employees			0.08**	0.08**	0.11**	0.12**	0.13**
51–500 employees			0.14**	0.14**	0.21**	0.21**	0.24**
>501 employees			0.15**	0.15**	0.23**	0.24**	0.26**
<i>Sector/industry (ref.: Public sector)</i>							
Private sector:							
Extractive industry			-0.15**	-0.14**	-0.10*	-0.10*	
Construction			-0.23**	-0.23**	-0.11**	-0.11**	
Retail			-0.06+	-0.06+	-0.08*	-0.07*	
Private services			-0.15**	-0.15**	-0.10**	-0.10**	
Transport			-0.25**	-0.25**	-0.21**	-0.20**	
<i>Ethnic minority</i>				0.17**	0.03	0.03	0.01
<i>Unemployment experience</i>					0.29**	0.29**	0.29**
<i>Qualification × Cohort 1930–33</i>							
Compulsory education or unknown, no vocational training					0.00		
General upper secondary education, no vocational training					-0.03		
Short/medium academic degree					-0.03		
Long academic degree or Ph.D.					0.18+		
<i>Qualification × Cohort 1934–37</i>							
Compulsory education or unknown, no vocational training					-0.03		
General upper secondary education, no vocational training					-0.08		
Short/medium academic degree					0.04		
Long academic degree or Ph.D.					0.20*		
<i>Qualification × Cohort 1944–48</i>							
Compulsory education or unknown, no vocational training					0.18**		
General upper secondary education, no vocational training					-0.05		
Short/medium academic degree					0.04		
Long academic degree or Ph.D.					-0.11		

Table 3.4 (continued)

	1	2	3	4	5	6	7
<i>Qualification × Cohort 1949–56</i>							
Compulsory education or unknown, no vocational training					0.43**		
General upper secondary education, no vocational training					0.59*		
Short/medium academic degree					-0.07		
Long academic degree or Ph.D.					0.07		
<i>Sex × Cohort</i>							
1930–33						-0.06+	
1934–37						-0.04	
1944–48						-0.07+	
1949–56						-0.30**	
<i>Employment status</i>							
Dependent employed (ref.)							–
Self-employed							-0.97**
Unemployed							1.50**
Chi ²	59,908.58	61,917.64	64,482.82	64,504.50	69,592.60	69,536.14	73,750.97
N (observations)	679,832	679,832	679,832	679,832	679,832	679,832	679,832
N (persons)	78,020	78,020	78,020	78,020	78,020	78,020	78,020
N (events)	34,334	34,334	34,334	34,334	34,334	34,334	34,334

Source: Own calculations based on administrative data (1980–2006).

Notes: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

In sum, the results of the analyses on the timing of retirement in Denmark provide a clear picture, and confirm my expectations as well as the patterns known from other studies. Women, those with low qualifications, and those formerly working in large firms and in the public sector retire relatively early, whereas the overall development is closely connected to the economic and political situation, demonstrating a reversal of the early retirement trend observed during the recession in the early 1990s.

Pension Income

The final question in this first part of my study is: What determines the level of pension income? First of all, results show that the pension income of Danish retirees has grown steadily over cohorts (Table 3.5). However, the successive shift toward higher qualification levels is not the reason for this, because taking this into account leads to hardly any change in the effects. Neither can rising income levels in general be made responsible, because introducing last work income does not adjust the effect sizes or the significance levels of the cohort coefficients (model not shown). Consequently, I argue that the growing coverage of occupational pensions and increasing popularity of private pension plans is responsible for the continuous increase in pension income. Remarkably, the cohort born 1938–41 who had the worst labor market situation and withdrew relatively early from the labor market, still benefit from a pension level growth compared to Danes who were born earlier.

The higher the age at which one exits the labor market, the higher was the pension income—particularly for retirement after age 60. As a consequence, groups identified as retiring comparatively late (e.g., men, better qualified) also benefit from comparatively high incomes after retirement. In other words, just as expected, labor market inequalities translate more strongly into old age inequalities. Regarding the gender gap, the difference has even increased over time, confirming the *theory of cumulative disadvantage* stating that inequalities broaden over the course of the shift toward more earnings-related components of old age income. Women are affected by this trend not only because of their earlier retirement but also because of the persisting wage gap.

In addition, the incomes of Danish retirees show a clear gradient as a function of their qualifications, although with a decreasing impact on the youngest cohort. In other words, higher qualified individuals born 1938–1941 have fewer advantages compared to higher qualified persons born earlier, potentially because occupational pensions are no longer exclusive to high qualified employees. However, because this is the cohort that has suffered most from late career instability, this effect may also be a specific characteristic for these individuals alone and does not indicate a trend over time that will continue.

Furthermore, this youngest cohort is particularly affected by the negative effect of having retired from unemployment. Similarly to the point before, I cannot say whether this is the start of a trend or simply due to the fact that these people retired comparatively early (e.g., by entering VERP from unemployment) and were also the target group of TBP. With mostly low earners taking advantage of these offers to withdraw permanently in case of unemployment in the late career, this could explain why the negative effect on pension income is particularly large here. Consequently, the unfavorable labor market situation during their late career also affects their income situation in old age.

Over all cohorts, however, the number of years in unemployment after 50 and the number of job changes in the late career have the expected significantly negative effects on pension income. Hence, as expected, interrupted late careers generally result, as expected, in less pension income.

Table 3.5: Determinants of pension income in Denmark (OLS regression)

	1	2	3	4	5	6
<i>Constant</i>	11.64**	11.66**	11.64**	11.61**	11.64**	11.59**
<i>Cohort (ref.: 1930–33)</i>						
1934–37	0.18**	0.17**	0.17**	0.19**	0.18**	0.21**
1938–41 (ref.)	0.29**	0.26**	0.27**	0.30**	0.27**	0.31**
<i>Retirement age</i>						
50–54	–0.05**	–0.02	–0.04*	–0.04*	–0.04+	–0.03+
55–56	–0.08**	–0.06**	–0.04*	–0.06**	–0.06**	–0.05**
57–58	–0.05**	–0.03*	–0.01	–0.03+	–0.03+	–0.03+
59–60 (ref.)	–	–	–	–	–	–
61–62	0.10**	0.07**	0.06**	0.07**	0.07**	0.07**
63–66	0.24**	0.16**	0.14**	0.17**	0.17**	0.17**
67–70	0.40**	0.29**	0.29**	0.34**	0.34**	0.35**
<i>Sex: Female (ref.: Male)</i>	–0.17**	–0.15**	–0.17**	–0.17**	–0.17**	–0.12**
<i>Qualification</i>						
Compulsory education or unknown, no vocational training		–0.10**	–0.10**	–0.09**	–0.10**	–0.10**
General upper secondary education, no vocational training		0.25**	0.27**	0.27**	0.26**	0.26**
Compulsory general education and vocational training (ref.)		–	–	–	–	–
Short/medium academic degree		0.35**	0.33**	0.37**	0.34**	0.34**
Long academic degree or Ph.D.		0.73**	0.71**	0.77**	0.71**	0.71**
<i>Firm size (ref.: 1–10 employees)</i>						
11–50 employees			0.03**	0.03**	0.03**	0.03**
51–500 employees			0.07**	0.08**	0.08**	0.08**
>501 employees			0.12**	0.13**	0.13**	0.13**
<i>Sector (ref.: Private sector)</i>						
Public sector			0.05**	0.04**	0.04**	0.04**
<i>Late career characteristics</i>						
Retiring from unemployment				–0.21**	–0.11**	–0.21**
Unemployment experience			–0.03**			
Job changes				–0.02**	–0.02**	–0.02**
<i>Qualification × Cohort 1934–37</i>						
Compulsory education or unknown, no vocational training				–0.02		
General upper secondary education, no vocational training				0.11		
Short/medium academic degree				0.00		
Long academic degree or Ph.D.				–0.03		
<i>Qualification × Cohort 1938–41</i>						
Compulsory education or unknown, no vocational training				–0.02		
General upper secondary education, no vocational training				–0.15+		
Short/medium academic degree				–0.09**		
Long academic degree or Ph.D.				–0.15**		
<i>Retiring from Unemployment × Cohort</i>						
1934–37					–0.13	
1938–41					–0.20*	
<i>Sex × Cohort</i>						
1934–37						–0.07**
1938–41						–0.08**
<i>Chi²</i>	3,470.66	6,833.02	6,581.40	6,441.56	6,411.48	6,434.78
<i>N (persons)</i>	19,738	19,738	19,738	19,738	19,738	19,738

Source: Own calculations based on administrative data (1980–2006).

Notes: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

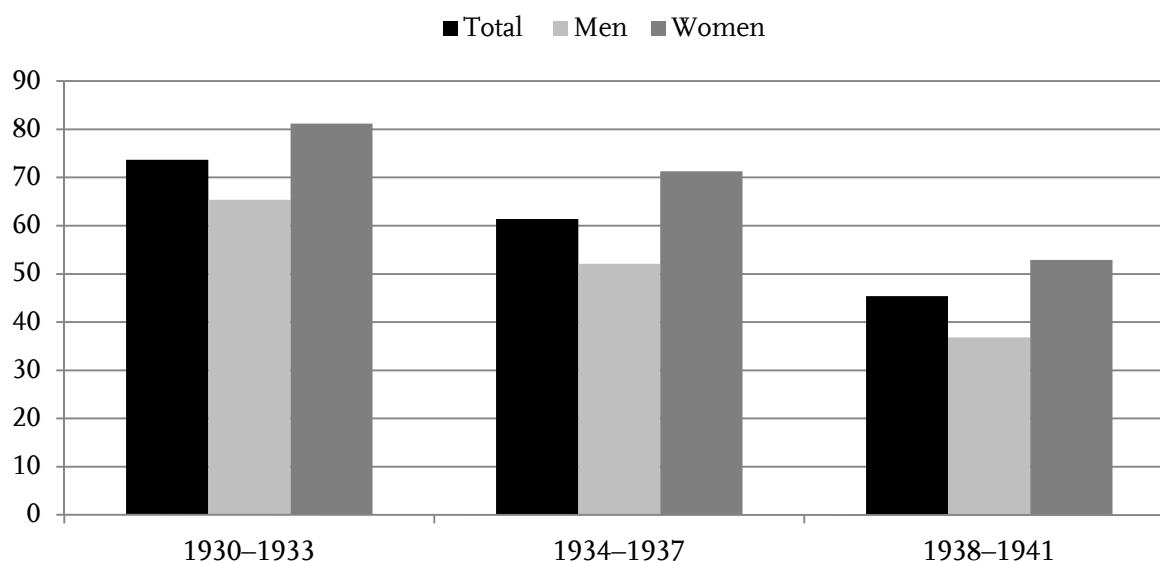
Nevertheless, the structural characteristics of the last job also matter for the level of old age income. Compared to private sector workers, public sector employees tend to have a higher pension level.⁵⁴ Moreover, Danes working in large firms before retirement enjoy a higher pension level than workers from small firms, perhaps because large firms often pay higher wages and, to a greater extent, provide elaborate occupational pension schemes. Also, large public institutions are included in the upper firm size categories, offering their employees attractive occupational pension plans. Notably, these workers from large firms have shown a tendency to retire relatively early, thus opposing my assumptions on the influence of retirement timing stated a few paragraphs earlier. Nonetheless it has to be borne in mind that the high level of job mobility in Denmark implies that the last employment is not necessarily representative for the late, let alone the whole employment career.

Most of these results strengthen the assumptions on the growth in inequality owing to the increasing coverage of pension plans other than the public scheme. In order to substantiate this argument, I determined the share of OAP among the total pension income by using information from Denmark's Social Statistics Database. Figure 3.3 shows how much of the individual pension income is represented by OAP payments. Overall, the average share relative to total income in retirement has decreased from about three-quarters for persons born in the early 1930s to less than one-half for people born in the late 1930s and early 1940s, with pronounced gender differences and remarkable range, thereby indicating a rapid development. Whereas the median share of public pension transfers is more than 80 percent for retired women in the oldest cohort, it is only slightly more than one-third for men in the youngest cohort. As a consequence, women rely on the flat-rate public pension to a higher extent than men—corresponding to the fact that their overall pension income is lower.

However, notably, these results also indicate that current retirees—and particularly male retirees—get, on average, more than one-half of their pension income from sources other than the basic public OAP scheme. These findings are in line with the successive development towards OAP as a targeted and basic old age security scheme for people with low labor market attachment on the one hand, and toward the strengthening of occupational pensions as new backbone of the Danish pension system, supported by growing popularity of private pension plans on the other hand.

⁵⁴ In earlier stages of my work, I also accounted for branch of industry, but effects were very small and mostly not significant.

Figure 3.3: Median proportion of OAP payments in total income for the first full year of retirement by sex and cohorts in Denmark (in percent)



Source: Own calculation based on administrative data.

Note: Based on everyone entering OAP between 1980 and 2006 excluding those with self-employment in the late career.

Conclusions on the Danish Country Study

The aim of this research is to understand how macrolevel changes and related policy reactions in recent decades have impacted on the late careers and the economic situation of older people in Denmark. Therefore, I analyzed the risk of unemployment and the chances of reemployment for individuals aged 50 and over as well as their retirement behavior and the determinants of their income level after retirement in order to find answers to the following research questions:

- *How have late careers and retirement transitions developed in Denmark since the 1980s?*
- *Have inequalities increased, particularly with regard to gender and qualification levels?*

The major finding is that the labor market risks and chances of older Danes between 1980 and 2006 strongly reflect the development of the business cycle and related labor market policy reactions. Also, retirement behavior correlates with this—largely due to TBP, a national program offering very early retirement during the recession in the early 1990s. In other words, individuals born between 1934 and 1943 had the misfortune to be going through their late careers during the worst labor market situation during the last 25 years. As a result, they suffered the most from unemployment and low chances of reemployment, often resulting in very early withdrawal from the workforce with the help of institu-

tionalized welfare schemes. Nonetheless, it is interesting to see that they benefited from higher pension income levels than Danes born earlier once they reached official retirement age. Following younger cohorts in the future should reveal whether the constant growth of pension levels will continue in line with the recommodification trend of the Danish pension system. My expectation is an ongoing overall growth due to the steady increase in coverage for occupational and also private pensions, but simultaneously with potentially widening inequalities. However, the global financial crisis beginning in 2008 might have put an end to this.

Moreover, my analyses showed that the diverse risks and trends are not distributed equally across the Danish population. Although Denmark has succeeded in integrating women into the labor market to a comparatively great extent, gender inequalities still persist for the women in my observation period. These manifest in higher transition rates to unemployment, worse chances of reemployment, and earlier withdrawal from the workforce as well as lower pension levels. Nonetheless, it has to be taken into account that it is not known how far women have opted “voluntarily” for nonemployment. I shall address this issue again in the second empirical part of this dissertation. Nonetheless it is clear that, to a large extent, working in the public sector does not secure women’s late career employment in general as expected, although most gender gaps mentioned above have diminished for the youngest cohorts. The gap has widened over time only for pension levels. However, the respective analyses include only individuals born up to 1941, and the relative improvement in the late career employment situation and the convergence in timing of retirement for the youngest cohorts could not be captured. Hence, it is quite possible that the gender income gap in old age will stabilize or even decline in the future.

As assumed, another strongly and negatively affected population group is the low qualified. The qualification gradient in the risk of late career unemployment continues throughout my observation period, with the situation of individuals with no or very low qualification becoming even more precarious over the course of globalization. This development does not occur because of the pure fact of belonging to a less attractive part of the workforce, but also because unemployment spells exert an increasingly negative influence on the further course of the employment career and the economic situation after retirement. This confirms the *theory of cumulative (dis)advantage*. The UI, TBP, and VERP schemes enabled these persons to withdraw early from the labor market, but at the cost of a relatively lower income after reaching regular retirement age. As a result, social inequalities in Denmark have broadened due to higher unemployment risks for both the disadvantaged groups in the focused on in this study—the low qualified and women.

It is important to note that the unequal distribution of risks and chances within the Danish labor market was particularly strong when the labor market was tense, that is, when few jobs but generous early exit routes were available. In such a period, namely, the recession in the first half of the 1990s, it was particularly disadvantageous to have specific personal characteristics, whereas in the subsequent boom when the labor demand steadily increased, some inequality patterns diminished.

Finally, some words on the impact of structural characteristics: Public sector employees are largely protected against economic restructuring and fluctuations. Also, those employed by the few large firms in Denmark clearly benefit from a comparatively secure labor market situation. For both groups, the possibility to switch positions easily in internal labor markets might be part of the explanation. Furthermore, these employees retire early, but at the same time do not have to accept loss in pension income. Consequently, the influence of structural workplace characteristics on late career patterns should not be neglected.

b Labor Market Exit Processes in Germany and the Netherlands: Comparative Views on the “Early Exit Neighbors”

In this section, I shall briefly summarize the main results from the country studies on Germany (Rinklake and Buchholz 2011) and the Netherlands (Gesthuizen and Wolbers 2011). Both country studies were conducted within the framework of the *flexCAREER* study and therefore use the same research design. Nonetheless, they do also take national idiosyncrasies into account. However, the national datasets do differ from the Danish database, particularly because they are survey studies.

*Germany*⁵⁵

For a long time, Germany was a typical early exit country. Employment rates of older workers have decreased since the 1970s and reached bottom in the 1990s after reunification. Faced with the challenge of strong demographic aging and massive pressure on the public budget, Germany was forced to change its policy. Consequently, early exit pathways were closed progressively, but this was not accompanied by sufficient efforts to increase and maintain the employability of older workers.⁵⁶

The data used for the German country study are taken from the German Socio-Economic Panel (GSOEP) and the observation period is 1984 to 2007. The GSOEP is a representative annual household panel study collecting information on education and employment trajectories as well as on family, household, and income situation. East Germans were included in 1990 and migrants are over-sampled. The sample definition corresponds largely to the descriptions in the Danish case study because the *flexCAREER* project aimed for maximum comparability between country studies. Nonetheless, case numbers are considerably lower due to the different origin of the data. Furthermore, the subsample is biased toward men because women are less likely to fulfill the criteria of being employed or at least being part of the labor force at age 50 (see also Table 2.4). As a consequence, only three birth cohorts are distinguished. These comprise:

- (1) Individuals entering the late career in the mid- and late 1980s and suffering highly from high unemployment in the early 1990s (i.e., born 1934–1939)

⁵⁵ This whole section is based on Rinklake and Buchholz (2011).

⁵⁶ For details on the institutional context see chapter I, section 3 c.

- (2) Individuals reaching age 50 between 1990s and 1995 (i.e., born 1940–1945) and potentially profiting from the economic upswing beginning in the late 1990s
- (3) Individuals born between 1946 and 1951 who have benefited fully from decreasing unemployment around and after the year 2000, but were also those most affected by recent pension reforms

Due to the survey character of GSOEP, the definition of unemployment is based on the self-reported position in the labor market (in contrast to the administrative record in the Danish case). The same applies for the information on the timing of retirement as a self-reported point in time when any form of pension was drawn.

Descriptive analyses show that only 5 percent of the German subsample actually worked until the legal retirement age, with many of the early retired displaying a period of unemployment between their last job and the beginning of a pension claim. The event history analysis on the risk of unemployment after age 50 highlights that most transitions take place among individuals between age 55 and 59, confirming the significance of unemployment as an institutionalized pathway into retirement for older workers in Germany, and particularly in the Eastern part of the country. Due to stricter eligibility rules and the improvement of the economic situation, younger cohorts are less affected by late career unemployment than older cohorts, but still almost every fifth worker in the youngest cohort became unemployed before age 58. As expected, service class employees enjoy higher protection than manual workers, with the gap between lowest and higher qualification levels deepening across cohorts. Also in line with the assumptions, unemployment is less likely in the public sector than in the transformative industries and less likely in large firms compared to small firms. In addition, unemployment spells prior to the 50th birthday increase the risk of becoming unemployed again in the late career.

The descriptive as well as the multivariate analyses on the chances of reemployment out of the first unemployment spell show that unemployment beyond age 50 frequently leads to a final exclusion from the labor market, without human capital improving the chances in any mentionable way or the risk of long-term unemployment decreasing over cohorts. Consequently, social inequalities increase in unemployment because privileged groups manage to avoid unemployment and to prolong their working life as required by the pension reforms, whereas disadvantaged groups are still subject to a high risk of unemployment with few chances of finding a new job after dismissal. Women (and migrants) are particularly trapped, whereas there is no significant effect for the East–West divide.

Regarding the timing of the transition to retirement, a slight reversal of the early exit trend is visible for the German cohorts under study. Still even in the youngest cohort, a majority of 60 percent retires before age 63. In general, in line with expectations, women retire earlier than men, East Germans retire earlier than West Germans and the self-employed work longer than the dependent employed. Furthermore, as hypothesized, firm size correlates positively with early withdrawal from the labor market as well as unemployment experience prior to the “final” exit. Occupational class and educational level exert only a significant retarding effect on retirement for the respective highest groups, reflecting the pervasiveness of early retirement among the German workforce. The most decisive power is given to the distinction whether someone enters retirement directly from employment or indirectly through a period of unemployment.

Due to the contribution-based public pension system accounting for life-time income, pension levels increased over cohorts because the younger cohorts benefited from the economic boom in the 1960s and 1970s. The effect disappears, however, when last income is taken into account. Because status maintenance is a basic principle of the German welfare state, groups who were privileged on the labor market (i.e., high qualified and high-class employees) can transfer their advantageous position beyond the transition to retirement and enjoy comparatively higher pensions.

Simultaneously, women and East Germans are faced with the negative consequences that low labor market incomes and career interruptions have for their transfers in old age. In particular, the pathway through unemployment results in significant losses of pension income compared to the direct entry into retirement, but also previous unemployment, part-time employment, or self-employment have a strong negative effect on the pension level in Germany.

It is an open question how the reforms of the German pension system will impact on future generations of older workers and pensioners. The government has restricted early exit pathways, but invested only marginally in measures to improve the employability of older workers, that is, enabled these to actually remain employed until they reach eligibility for the public pension.

*The Netherlands*⁵⁷

Together with Denmark, Germany, and many other Western countries, the Netherlands were struck by the economic crisis at the end of the 1970s, resulting in increasing unemployment during the early and mid-1980s. Older workers were especially affected because political measures to enable flexible reactions to the changing economic conditions included weakening of employment protection legislation.⁵⁸

Similar to the German study, the data used for the Dutch analyses comes from a panel survey, the Dutch Socio-Economic Panel (DSOEP) conducted by Statistics Netherlands from 1984 to 2001 and containing information on about 5,000 representative households. Because detailed records on (pension) income are available only from 1990 onward, the observation window is restricted to the years 1990–2001. With slightly more than 3,300 cases, the Dutch sample is about equal in size to the German one, but with an opposite bias toward more women. Also, men and women are analyzed separately. The birth cohorts compared in order to examine changes over time are the same as in the German case: born before 1939, born 1940–1945, and born 1946 or later. However, in the Dutch context, they were chosen arbitrarily without any underlying institutional or macroeconomic considerations. Due to the significance of disability as an early exit route, the state of “inactivity” is included in the analyses on the transition to unemployment. In contrast to the German and Danish case studies, there are no analyses of the chances of re-employment. Being retired is defined as receiving income from a state retirement pension, occupational pension, or private pension and being not or only marginally employed (i.e., less than 12 hours a week). Pension level includes all three types of pension mentioned above and is measured as gross monthly income in Dutch Guilder.

Unexpectedly, younger cohorts are not more likely to exit employment in the late career compared to older cohorts. In other words, no trend toward more late career instability can be found. However, the industry sector in which an older worker is employed seems to play a role for the respective risk of leaving employment, along with the firm size and whether the work contract is temporary or permanent. Consequently, older workers in small firms or with temporary work contracts face a higher risk of leaving employment than workers in larger firms and with permanent contracts. Interestingly, the overall economic climate

⁵⁷ This whole section is based on Gesthuizen and Wolbers (2011).

⁵⁸ For details on the institutional context, see chapter I, section 3 d.

(measured in aggregate unemployment in a certain year) affects only men negatively. Moreover, only men are affected negatively by working part-time.

A trend toward earlier retirement can be observed in women, but not in men. Again, the initial assumption of delayed entry into permanent retirement is not confirmed. Furthermore, a small educational gradient with regard to retirement timing can be found among women (meaning that high educated women retire later than lower educated ones), whereas firm size matters only for men (with employees of small firms retiring the latest). Similarly, nonemployed men (i.e., those in unemployment or on disability benefit) have a higher tendency to withdraw permanently from the labor market than employed men, whereas the opposite is observed for women. Overall, retiring between age 59 and 61 is more likely than at ages 62 or 63, but less likely than at age 64 or 65.

The pension level has decreased over cohorts only for Dutch women and among them particularly for those women who have previously worked in small firms. For both genders, significant differences between persons with different education levels and occupational classes are found, confirming the respective hypotheses. However, in contrast to the results for Denmark and Germany, it is not known whether the differences have grown over time. Nonetheless, periods of nonemployment during the late career still have a negative impact on pension levels. Those who have higher risks of exiting employment during the late career (e.g., those working in specific sectors) are likely to suffer from negative financial consequences all through their old age. Interestingly, however, there is no negative effect on pension level for having worked part-time in the late career, reflecting the long and comparatively positive tradition of part-time work in the Netherlands. Those who retired between age 59 and 61 receive the highest pensions, indicating that early exit pathways such as VUT and pre-pension plans were especially attractive when employees took advantage of them during these times.

Based on these empirical analyses, the Netherlands do not seem to show a trend toward increasing employment risks for older workers, because the three cohorts under study do not differ significantly in their risk of experiencing late career instability and unfavorable retirement circumstances. However, the limited range of years (1990–2001) could not cover the full scope of institutional change regarding retirement regulations. In fact, major reforms such as changed regulations of the unemployment insurance scheme or the abolition of VUT only became effective afterwards.

Nonetheless, differences between population groups can be found in, for example, pension level between persons on different educational and occupational levels or in the context of leaving employment (men only) and timing of retire-

ment (women only). Similarly, firm size impacts on late career risks and patterns, with workers in small firms being affected negatively in all respects. Other than the hypotheses on historical development, the expectations on the social inequality patterns can thus be largely confirmed, with those groups that are traditionally disadvantaged on the labor market also bearing the greatest risk of late career instability and unfavorable retirement circumstances. Unfortunately, the respective development of inequality patterns over time could not be analyzed due to lack of statistical power.

c Preliminary Conclusion on the Development of Social Inequalities among Older Danes, Germans, and Dutch

The first empirical part of this dissertation entitled “Pathways into Retirement: The Development of Inequality Patterns in the Late Career and beyond Retirement since the 1980s” analyzed observed labor market experiences of older workers and their retirement behavior as well as consequences of potential changes in the former on pension income. I opened the section with detailed analyses on the case study of Denmark regarding the risk of unemployment and the chances of reemployment in the late career as well as on the timing of retirement and on determinants of pension income. Afterwards, I sketched results from similar analyses on Germany and the Netherlands in order to be able to find answers to the last research question:

- *Compared to Germany and the Netherlands, do these trends show a distinctive pattern in Denmark that results in better protection of older workers and retirees against market risks?*

This preliminary summary will thus focus on the cross-country comparison and interpret the cross-country differences and the reasons for this. It will examine (1) the scope of consequences for older workers and retirees in the course of ongoing economic restructuring and reforming of pension systems (development over time) and (2) differences between social groups, in particular, between men and women and between persons on different qualification levels (social inequality). However, it has to be borne in mind that despite the common research framework, the country-specific observation windows and analytical procedures do not completely agree due to limitations imposed by the respective databases.

Development Over Time

As expected, late careers in Germany have remained rather stable due to strong EPL, with incidence of unemployment in the late career even decreasing over time. However, this is due largely to the decreasing significance of unemployment as an institutionalized early exit pathway and related policy restrictions. Once unemployed, reemployment chances for the older unemployed in Germany continue to remain low, indicating a clear difference to the Danish case. There, both risk of unemployment as well as chances of re-employment depend largely on the economic cycle that developed in a favorable way until the mid-1990s. Counter to the assumptions, however, late careers in the Netherlands have not destabilized remarkably as expected because of labor market flexibilization and labor market restructuring. Up to 2001, the observed cohorts do not differ extensively in risk of leaving employment (into unemployment or disabil-

ity), but this might have changed in later years when access rules for disability benefit were tightened progressively and VUT was abolished. Furthermore, it has to be borne in mind that the Dutch economy already started to flourish in the early 1990s. Hence, similar to the Danes in later cohorts, the Dutch older workers under study benefited from high labor demand. In sum, neither Dutch nor German late careers have destabilized within the respective observation windows, whereas Danish late careers have even stabilized thanks to the economic upswing.

All countries reveal the expected delayed withdrawal from the labor market. Only Dutch women display a tendency to retire earlier over time, but again, this might have changed since 2001. Accordingly, pension levels only decrease among female Dutch (and remained stable among male Dutch), whereas the younger cohorts in both Denmark and in Germany benefit from higher pensions compared to older cohorts.

Social Inequality

Even in Denmark where women have been highly integrated into the labor market for decades and concentrated in the public sector, they are disadvantaged in most respects, with those born 1938–1943 suffering most. However, most gender gaps diminish afterward. German women, in contrast, are not at a higher risk of losing their job in the late career compared to their male colleagues, but once unemployed, they have lower chances of reemployment, just like their Danish consexuals. Also, they retire earlier than men and here the gap is not closing for the cohorts under study. In the selective group of German women employed at age 50, pension income is still significantly lower than that of German men. This can be attributed to career breaks in earlier stages of their careers and the high incidence of part-time work. In the Netherlands, the separate models for men and women do not allow for direct comparisons, but the historical trends and inequality patterns within the genders differ in some respects. Furthermore, Dutch women are comparatively disadvantaged regarding old age income. In sum, women in all three countries are disadvantaged compared to men, but Danish women still seem to be best off regarding late career employment chances and also pension levels.

As hypothesized (H12), having a low skill or qualification level results in disadvantages in all three countries and in almost all respects. However, the pattern is less pronounced in the Netherlands. In Denmark and Germany, the gap in the risk of late career unemployment between low and higher qualified individuals is even increasing over time. German older workers who are currently unemployed or have been previously unemployed also retire comparatively early, contributing to significantly lower pension incomes for retirees with low qualifi-

cation levels or former job positions on a low-skilled level. A similar picture is seen in Denmark, that is, unemployment episodes shorten the time until permanent retirement. Also, the gap in retirement timing between low and high qualified is increasing over time, colluding in a pension level gradient based on the qualification level. Nonetheless, the gap between the pension incomes of low and high qualified retirees has closed. This might be attributed to the progressive expansion of occupational pensions from high-skilled to low-skilled job positions. Thus, the inequality between low and high qualified workers is likely to persist in all three countries, but it is assumed to have the strongest impact in Germany.

Alongside gender and skill/qualification level, the structural position within the labor market also proves to be influential, but often in country-specific ways. Public sector employees in Denmark, for example, enjoy a rather convenient situation with low risk of unemployment, high chance of reemployment, comparatively early retirement, but still high pensions. In Germany, only the models on risk of unemployment show significant differences regarding industry branches, with individuals working in the social services displaying the lowest and those in the transformative industry bearing the highest risk. The latter is also true for Dutch men, both supporting my related hypotheses.

Older workers in all three countries share a lower risk of losing their job if they work in a large firm because of, for example, opportunities of internal relocation in case of redundancy. However, they retire comparatively early as well, which is in line with my assumptions regarding the high pressure of rationalization. For Dutch females, the result is a comparatively low pension income, whereas all Danes who previously worked in a large firm tend to have a comparatively high pension income.⁵⁹ As a result, Danes who work in one of the few large companies in the country also possess a comparatively favorable labor market situation, whereas this advantage is less pronounced in the Dutch labor market. Nonetheless, because these structural characteristics were tested in country-specific ways, a comparison of respective impacts across all three countries is difficult.

I argued that the extent to which inequalities during the late career and in old age arise, remain, or widen depends largely on the country-specific labor market conditions and pension regulations. Indeed, the results in this section confirm many of the assumptions on discrimination of women and individuals with low qualification levels or low-skilled job positions in terms of late career experienc-

⁵⁹ Firm size was not included in the German models on pension income.

es and retirement transitions. In all countries, this results in comparatively lower pension levels for the respective disadvantaged groups in the cohorts under study. According to the theory of *cumulative (dis)advantage*, negative late career experiences thus have an increasingly harmful impact on the further development of the late career, on retirement timing, and on pension income.

However, Danish women seem to have the best chances of catching up with their male colleagues, and the same applies to low qualified workers in Denmark compared to the respective group in the Netherlands and, in particular, in Germany. In the latter country, the lower qualified members of recent cohorts are most likely to be unable to profit from the latest trend of decreasing unemployment and prolonged work careers, mostly due to the reformed pension system that increasingly penalizes periods of nonemployment and early exit. Unfortunately, the Dutch analyses are incomplete and scarcely comparable in several ways. Nonetheless, the results of this section still seem to indicate that Danish older workers and retirees are indeed better and more comprehensively protected against market risks than older workers in Germany or the Netherlands—at least since the mid-1990s. However, because of the favorable economic situation, these market risks are comparatively low in Denmark.

In all three countries, it can be assumed that the increased market dependence inherent in most pension reforms will impact on the employment situation of older workers and hence, on their economic standing both before and after the transition to retirement. Thus, it is particularly important to include all population groups equally and as early as possible in order to enhance their employability and to avoid systematic discrimination as well as the impoverishment of elderly women. However, as explained earlier, such efforts often seem to have been only moderately successful so far. Furthermore, retirement processes are not just influenced by institutional and structural workplace characteristics. The subjective interpretation of the personal circumstances is also assumed to play a considerable role in shaping retirement transitions. The next section will thus examine how individuals themselves perceive their own situation in order to gain deeper insights into how decisions for leaving employment are made.

2 Perceptions of Retirement: The Impact of Changing Frameworks on People's View on Retirement

Up to now, the empirical results have described the labor market experiences of older workers and how the timing of retirement transitions along with related inequality patterns have developed among older workers and retirees from the early 1980s until the early years of the third millennium. In line with the focus on Denmark and the comparative case study design, detailed results on Denmark were followed by brief summaries of similar research on Germany and the Netherlands. An interim conclusion indicates that inequality patterns in gender and qualification level persist or have even widened in all three countries with women and low-qualified older workers usually being subject to cumulative disadvantages over the course of economic restructuring and institutional reforms.

In this section, I shall resume research on the transition to retirement, but switch perspectives: Instead of focusing on the objectively measured labor market exit, I shall look at the subjective assessment of this transition. Consequently, the dependent variables are questions that explicitly capture individuals' opinions and thoughts about their personal withdrawal from the labor market independent from their actual behavior. My aim here is to examine how retirees perceive institutional constraints and opportunities in the context of their own retirement, that is, how they "frame" their retirement transition. Consequently, I would like to investigate how certain historical conditions have shaped retirement decisions. For this purpose I shall observe potential changes over time in the relevance of diverse reasons for retirement (e.g., push vs. pull effects) as well as differences between population groups. Again, my main interest is in the gaps between men and women as well as between low- and high-qualified individuals. However, I shall also take into account workplace characteristics along with further individual features such as the family situation. Using older workers' individual assessments of health and attitudes toward their workplace when analyzing their wish to retire should deliver an additional gain in explanatory power.

Adding the subjective perspective should thus contribute to understanding how retirement decisions are made and what role social policy instruments play by shaping social inequality patterns. Again, I shall start by describing the Danish case in detail, and then give slimmer reports on results for the reference countries Germany and the Netherlands. The database for all three studies is the international project SHARE. This makes the results highly comparable despite country-specific constraints and idiosyncrasies regarding the data sources. I shall summarize the main findings of the second empirical part in another in-

terim conclusion that will highlight the cross-country differences in subjective perceptions of retirement transitions and, potentially, in their determinants.

a Danes on Their Own Transitions to Retirement: More and More a Question of Personal Circumstances?

The major finding on the observed labor market exits of Danish older workers is that their retirement behavior between 1980 and 2006 correlates strongly with the business cycle and the corresponding reactions of labor market policy. As a consequence, early retirement was most widespread during the recession in the early and mid-1990s. Afterwards, permanent exit from the labor force was delayed successively, but gaps in retirement timing and also in pension levels remained between men and women as well as between individuals on low and high qualification levels. However, it is not known which mechanisms led from the institutional framework conditions to the observed output in retirement behavior and the resulting inequality patterns. To illuminate this “black box,” I shall analyze how Danes assess their individual retirement transitions both retrospectively and prospectively.

Retrospective Reasons for Retirement

First, I shall focus on retrospective statements of Danish retirees regarding the reason(s) for their individual employment exit. I shall begin by briefly explaining why the birth cohort design from *Section 1: Pathways into Retirement* is no longer adequate and then present a descriptive overview of Danish respondents and their answers. Finally, I shall present multivariate models of the diverse categories of reasons for retirement and briefly summarize the results in a concluding section for the Danish case study.

Comparison with Cohorts from Section 1

In my first step, I constructed birth cohorts based on the cohorts used in *Section 1: Pathways into Retirement*, but with three adaptations: Firstly, the oldest category includes not only persons born between 1930 and 1933 but all persons in the sample born 1933 or earlier. Secondly, I combined the two birth cohorts 1934–1937 and 1938–1943, because the findings from *Section 1: Pathways into Retirement* indicate that they do not differ in retirement behavior. Finally, the youngest cohort contains all persons born 1944 or later. This is by far the smallest group, because my sample is restricted to those already retired at the time of the interview.

For persons born up to 1933, the retirement age seems very high at over 63 years (Table 3.6). However, it has to be borne in mind that the nature of the data collection mode is likely to result in a bias toward long-living, healthy, and com-

paratively highly educated individuals—particularly among this oldest age group whose members were at least 71 years old at the time of the interviews. The members of the 1934–1943 birth cohort, in contrast, show a plausible mean retirement age of 60.5 years. In the longitudinal analyses, these people are the ones who retire the earliest, and it will become apparent later that 60.5 years is indeed a relatively low mean retirement age for Danes.⁶⁰ In the youngest birth cohort, the retirement age has shifted even more toward younger ages, because I selected only persons who were already retired at a given point in time.

Table 3.6: Retirement age of Danish retirees by birth cohort (in percent)

	up to 1933	1934–1943	1944 or later
50–54	2.2	8.6	22.2
55–59	9.7	16.7	17.8
60–64	50.3	62.6	60.0
65 and older	37.9	12.1	0
Mean retirement age	63.6	60.5	57.9
N	549	545	90

Source: SHARE Waves 1, 2, 4; own calculations.

The usage of birth cohorts further leads to a skewed picture when looking at the period in which the respective individuals retired (Table 3.7). The majority of the oldest cohort retired between 1988 and 1993, that is, during the time when early retirement was encouraged. In the middle cohort, however, the vast majority retired between 1994 and 2001, that is, when they were between 51 and 67 years old—which is more or less the full age range in which retirement is most likely to take place. Consequently, the high number of retirees among the 1934–1943 birth cohort in this period can be regarded as constructed artificially by the study design. Similarly, I cannot find a single retiree who withdrew from the labor market before 1994 among the group of persons who were born in 1944 or later, because the oldest members of this group fulfill the minimum requirement of being age 50 at the time of retirement exactly in the year 1994. Plausibly, almost three-quarters of the retirees in this cohort exhibit their retirement transition in 2002 or later when they are between 51 and 63 years old.

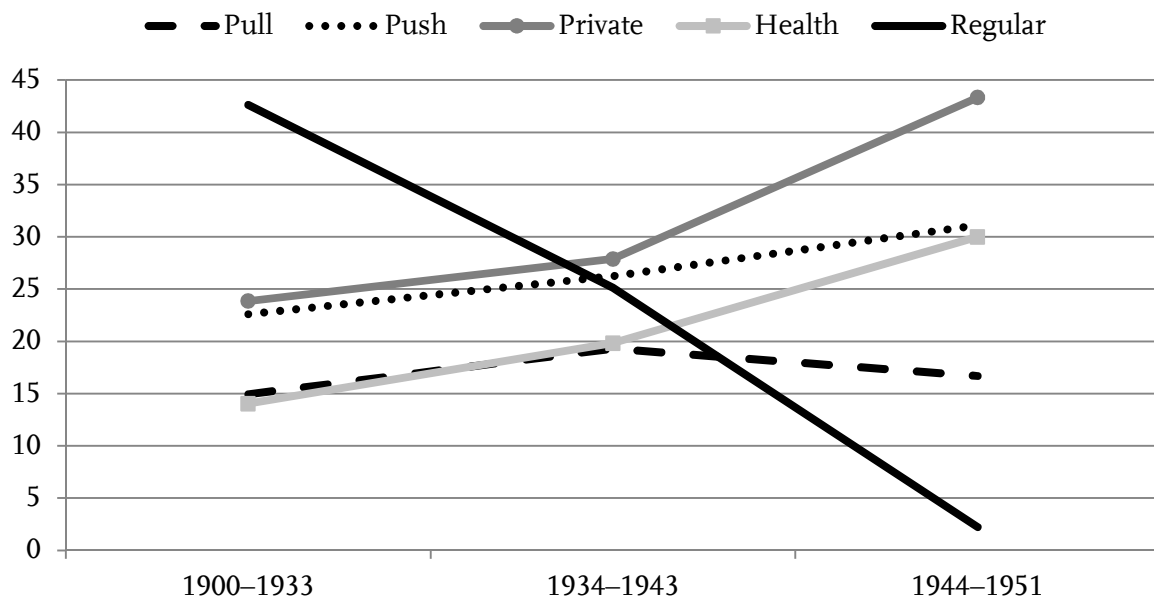
⁶⁰ At the time of the interviews, these individuals were aged 61–77 years. This means, in turn, that a substantial share of them was still in the labor market. In other words, the mean retirement age for the full cohort will be higher.

Table 3.7: Retirement period of Danish retirees by birth cohort (in percent)

	1900–1933	1934–1943	1944–1951
1980–1987	28.4	0.7	0
1988–1993	43.4	8.4	0
1994–2001	25.1	58.2	25.6
2002–2007	3.1	32.7	74.4
N	549	545	90

Source: SHARE Waves 1, 2, 4; own calculations.

Consequently, analyzing how members of the three cohorts assess their transition into retirement results in an artificial, misleading picture that confuses several effects (Figure 3.4). Strikingly, the relevance of retirement via the regular public old age pension loses relevance over time. There are two reasons for the steep decline: First, as I have shown above, individuals in the oldest cohort retire later, on average, than persons from younger cohorts. Consequently, they are more likely to retire through the public pension pathway (age effect). Second, the progressive spread in occupational pension plans has led to a decreasing significance of the public scheme for the retirement decision of Danish retirees (period effect).

Figure 3.4: Reasons for retirement among Danish retirees by birth cohort (in percent)

Source: SHARE Waves 1, 2, 4; own calculations.

This example shows that it is difficult to interpret Figure 3.4 without knowing at what time and at what age a member of one of the three birth cohorts actually did retire. Consequently, the cross-sectional perspective in this section does not use birth cohorts as a measure of development over time, as in the previous section. The longitudinal analysis predicted *probabilities of having a transition* during a certain period of time, with the birth cohort serving as the reference group

when detecting changes over time. The cross-sectional analyses on reasons for retirement, in contrast, need the date of retirement as a reference point in order to examine the influence of contemporary frameworks, that is, the focus lies on a *fixed and known point in time*. Therefore, I shall abandon the cohort classification from here onward and replace it by a classification of individuals according to the year in which they actually retired.

Descriptive Results for the Retrospectively Stated Reasons for Retirement

To adequately address the research question addressing the period when a person retired, I classified the years from 1980 to 2007 into four periods on the basis of major economic and political developments:

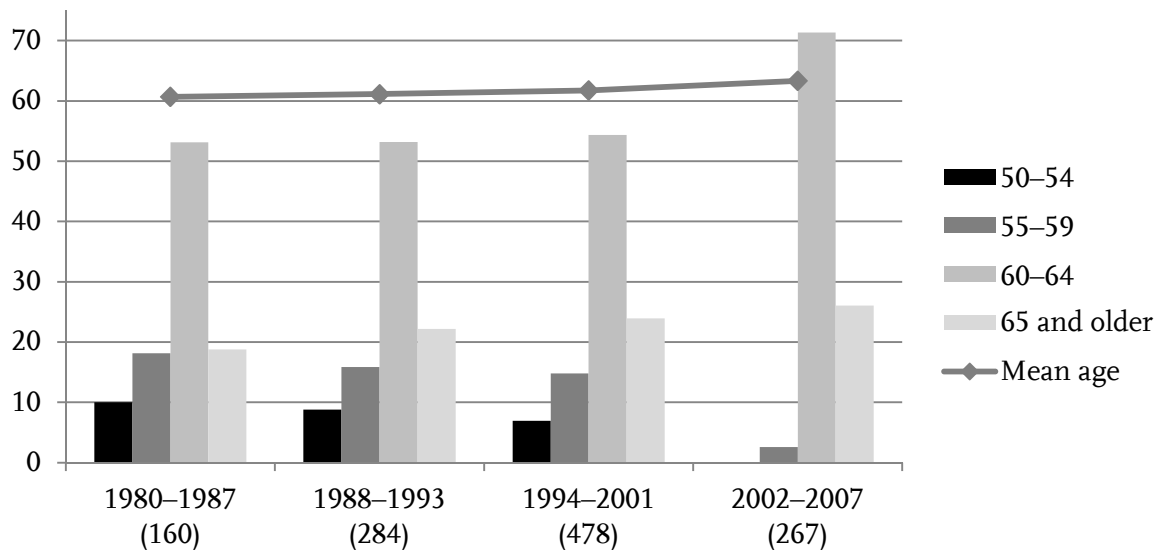
- 1980–1987: The Danish economy struggled with the consequences of the first oil shock and experienced unemployment rates growing up to 10 percent (Figure 1.11).
- 1988–1993: After a short easing of the labor market, unemployment increased again and rose to 12 percent in 1993—the worst economic crisis within the last decades. During this time, the government encouraged the early exit of older workers.
- 1994–2001: Public policy reforms as well as economic recovery resulted in a steep decline in unemployment that eventually reached its preliminary bottom in 2001 at about 4 percent.
- 2002–2007: After a small relapse in 2003/2004, unemployment reached an all-time low in 2008 at 2 percent.⁶¹ Furthermore, the 1999 VERP reform is expected to fully unfold its impact during this period.

The longitudinal analyses on the timing of retirement in *Section 1: Pathways into Retirement* suggested that there is a progressive tendency to retire later. This is confirmed by the descriptive analyses of retirement ages by period with SHARE data (Figure 3.5). Over time, the shares of workers retiring before age 60 are declining. More than one-half of the retirees in my sample retired between age 60 and 64—matching results showing a sudden and steep decline of “survivors in the labor market” as soon as the target persons turned 60 (Figure 3.2). Among those persons retiring after 2001, it is even more than two-thirds (71 percent) who use this window. Very few of these latest retirees left employment before

⁶¹ Unemployment rose again due to the global financial crisis, but this period is not analyzed here.

their 60th birthday, and one-quarter even worked beyond age 65. As a result, the mean retirement age grew continuously from 60.7 years to 63.3 years.

Figure 3.5: Denmark: Retirement ages of persons retiring in different historical periods (in percent) and mean age of retirement in the respective period (in years)



Source: SHARE Waves 1, 2, 4; own calculations.

Note: Numbers in brackets show absolute cases in the respective category.

Table 3.8 shows the timing of retirement depending on gender and qualification level in the Danish sample. As Figure 3.5 shows, retiring between the age of 60 and 64 is by far the most common practice in all subgroups. The multivariate analysis in the next section aims to explore the connection between gender, qualification, and retirement timing in the context of respective reasons for retirement and therefore to illuminate the interrelations in more detail and on an individual level.

Table 3.8: The sample of Danish retirees by retirement age, gender, and qualification level

Retirement age	Men			Women		
	ISCED 1/2	ISCED 3	ISCED 5	ISCED 1/2	ISCED 3	ISCED 5
50-54	2.7	6.6	3.6	10.3	7.2	6.4
55-59	10.7	12.1	7.8	17.4	17.9	11.4
60-64	55.4	62.3	56.9	51.4	53.8	60.0
65 and older	31.3	19.0	31.7	21.0	21.1	22.1
Mean retirement age	63.3	61.7	62.7	61.2	61.0	61.3
N	112	289	167	253	223	140
	568			616		

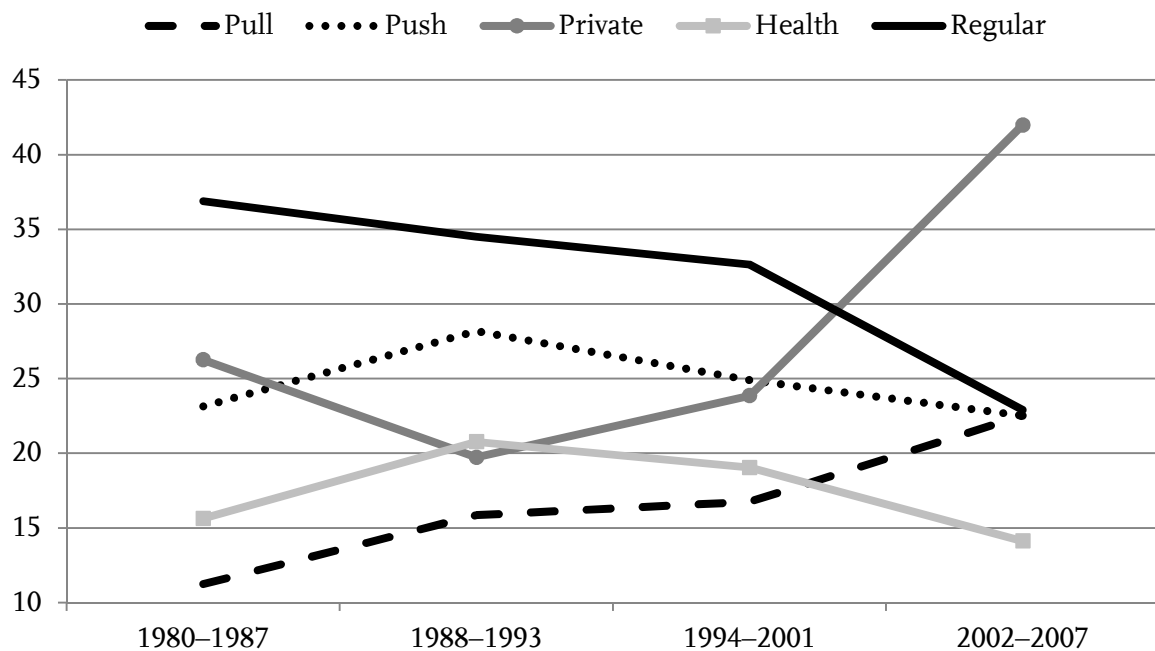
Source: SHARE Waves 1, 2, 4; own calculations.

Notes: ISCED Codes 4 and 6 are not assigned in the Danish case; “none” and “other” are classified as “1” (very few cases).

I shall now turn to the historical development of retrospectively stated reasons for retirement in order to find answers to the first research question for the case on Denmark: *How have the individuals themselves assessed their reasons for retirement in light of the changing institutional framework since the 1980s?*

First of all, Figure 3.6 shows that persons who retired in the early- and mid-1980s most frequently mentioned eligibility for the regular old age pension *Folkepension* as their reason for retirement. Throughout the following periods, however, the scheme loses relevance for individual retirement decisions. Notably, the share of retirees who retired at 65 or later increases over the periods, that is, the share of persons who were eligible for *Folkepension* at the time of their retirement grows (Figure 3.5).

Figure 3.6: Frequency of stated reasons by historical time periods in Denmark (in percent)



Source: SHARE Waves 1, 2, 4; own calculations.

As expected, “push” reasons together with health reasons peak in the economically tight period of 1988–1993. At the same time, private reasons temporarily drop, confirming Hypothesis 3b on the positive influence of the economic situation on the integration of private reasons into the individual retirement decision. Furthermore, the percentage of persons who felt pushed out during that period is almost twice as high as the share of retirees who report reacting to a pull effect, suggesting a crowding out of older workers. Also, every fifth retiree from this period stated bad health as their reason for labor market exit. Because it is unlikely that issues of invalidity rose particularly strongly during that period, I suppose that many of these health-related retirement transitions can be traced back to a kind of “push effects” as well, in the sense that older workers

with bad health represent an unattractive workforce that employers try to lay off in order to relieve the labor market. Additionally, retiring for health reasons might be perceived as more “socially acceptable” than having left employment involuntarily.

In the following years characterized by economic upturn, the picture changes clearly: Private reasons experience a renaissance and, statements of pull reasons also increase steadily (though only slightly) over time. Thus, despite cutbacks in public transfers in Denmark and the strengthening of disincentives for early retirement, still available schemes such as VERP or occupational pension plans with a lower eligibility age than the legal age seem to represent attractive (early) retirement options.

At the same time, the number of persons who experience a push effect after 1994 decreases. This is in line with my assumptions on decreasing unemployment and thus a high labor demand during the economic upturn (H1). Also, health reasons lose relevance from them mid-1990s onward, because, even for unattractive workers, staying employed is easier in an economic boom. The multivariate analysis is expected to reveal the potentially distinctive characteristics of these individuals.

In sum, the descriptive analyses of Danish retirees’ reasons for retirement suggest that they retrospectively assess their individual transition to retirement broadly in line with assumptions based on the institutional context. When “very early retirement” (i.e., withdrawal from the labor market even before reaching eligibility for “regular early retirement” through VERP) was fostered in the labor market crisis around 1990, many of the persons concerned also perceived their retirement as being based on a certain pressure to leave. Later on, during the economic upturn, this trend decreased, whereas at the same time, considerations based on the private situation came to the foreground for many people. The latter result could not be observed in the longitudinal study and therefore highlights how these analyses contribute to explaining the individual “framing” and, eventually, retirement behavior. The increased significance of retirement pathways other than the public pension scheme, in contrast, was already found in *Section 1: Pathways into Retirement* and is hence confirmed not only from an objective view based on income analyses but also from people’s statements.

However, how these trends are distributed across specific population groups is still an open question. Results from the longitudinal study suggest that the risks of unemployment in the late career and the tendency for early retirement were not distributed evenly. I would like to test whether this also applies to the subjective assessments of the retirement transition.

Multivariate Models

Descriptive bivariate analyses on the retrospective reasons for retirement have shown clear changes in the motives for labor market exit over time. In this section, multivariate analyses aim to examine in more detail the relations between historical circumstances for retirement, certain individual characteristics, and the (self-stated) motivation to withdraw from the labor market. Consequently, the following research question is addressed within the Danish framework: *What is the relational pattern between individual and workplace characteristics, personal reasons for retirement, and institutional conditions?* Hence I shall now look at the factors determining whether a person states a certain kind of reason. Personal characteristics include the age at retirement, gender, and qualification level. The only available feature of the last job is sector (public vs. private).⁶²

Pull Reasons

According to Figure 3.6, the share of persons who state that they let themselves be “pulled out of employment” has doubled from 11 percent in the early/mid 1980s to 23 percent after 2002. This development is illustrated by Model 1 in Table 3.9. However, Model 2 reveals that the increase in statements is due rather to the changing age composition. In other words, persons who retire between age 55 and 64 are most likely to indicate a pull reason, and therefore the respective statements increase with the growing share of retirees in this age group. Similarly, the lower tendency of women to retire due to a pull effect (Model 3) disappears when education is introduced (Model 4), because women in our sample are, on average, less educated (Table 3.8). In general, retirees with the lowest qualification level are least likely to list pull factors as their reason for retirement, presumably because they were less eligible for occupational pensions than retirees with a medium or high educational level.

This is supported by Table 3.10, showing that only 16 percent of all respondents retiring due to eligibility for an occupational pension, despite having the chance to continue work, have a low educational level. Among those who stated that unemployment, VERP, or TBP were relevant, this proportion is almost twice as

⁶² Additionally, the data include information on whether the last job was in dependent employment or self-employment. However, this variable is dropped in the final models due to low case numbers and the strong linkage to the public/private factor. Furthermore, only push factors disclose a significant (negative) effect. This can be explained by the definitions of these factors that refer predominantly to dependent employed workers.

high.⁶³ Consequently, the slightly significant higher inclination of highly educated Danes to state a pull effect can be traced back to their higher take up of occupational pensions as early retirement pathway. VERP and TBP, in turn, are more typical for low- and medium-qualified older workers.

Table 3.9: Determinants for stating a “pull reason” in Denmark (logit models)

	1	2	3	4	5	6	7
<i>Constant</i>	-1.67**	-1.39**	-1.25**	-2.09**	-1.99**	-2.48**	-2.38**
<i>Period of retirement</i>							
1980–1987	-0.40	-0.40	-0.40	-0.36	-0.20	0.45	-0.38
1988–1993 (ref.)	–	–	–	–	–	–	–
1994–2001	0.07	0.07	0.05	0.02	0.24	0.66+	0.58+
2002–2007	0.43*	0.33	0.31	0.28	0.68*	1.23**	1.15**
<i>Retirement age</i>							
50–54		-1.28**	-1.25**	-1.24**	-1.27**	-1.29**	-1.27**
55–59		-0.39	-0.36	-0.35	-0.36	-0.36	-0.36
60–64 (ref.)		–	–	–	–	–	–
65+		-0.70**	-0.71**	-0.69**	-0.67**	-0.66**	-0.67**
<i>Sex</i>							
Male (ref.)			–	–	–	–	–
Female			-0.27+	-0.20	-0.25	0.48	-0.26
<i>Qualification</i>							
ISCED 1/2				-0.37+	-0.38+	-0.41*	0.15
ISCED 3 (ref.)				–	–	–	–
ISCED 5				0.06	-0.00	0.01	0.38
<i>Unemployment rate</i>					0.08+	0.08+	0.08+
<i>Sector of last job</i>							
Private sector (ref.)					–	–	–
Public sector					0.28+	0.28+	0.27+
<i>Period of retirement × Sex</i>							
1980–1987						-1.26*	
1994–2002						-0.77+	
2003–2007						-1.07*	
<i>Qualification × 1980–1987</i>							
ISCED 1/2							0.05
ISCED 5							0.50
<i>Qualification × 1994–2001</i>							
ISCED 1/2							-0.78
ISCED 5							-0.43
<i>Qualification × 2002–2007</i>							
ISCED 1/2							-0.88
ISCED 5							-0.79
Chi ²	9.69	29.49	32.39	36.93	42.51	49.52	48.64
N	1,184	1,184	1,184	1,184	1,181	1,181	1,181

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

The educational effect reveals no (significant) change over time (Model 7), but the gender effect indicates a significant variation between periods (Model 6). Evidently, men are more likely to state a pull effect in all periods except the reference period 1988–1993 that represents the economic crisis and a strong early

⁶³ Reasons #3 “Became eligible for a private pension” and #4 “Was offered an early retirement option/window” were of only minor importance for Danish retirees (Figure 2.2).

exit tendency. During these years, women outweigh men in getting pulled out (insignificantly though), indicating that older women used the attractive offers to leave the labor force extremely early more than men did. Indeed, we know from other studies (e.g., Bingley et al. 2011) that the take up of TBP and disability benefit was higher among women than among men. Furthermore, public sector workers show a stronger tendency to withdraw from employment using attractive exit opportunities (that in some cases were exclusive to them). Finally, there is a slight positive influence of a high unemployment rate, that is, older workers seem to have left often “voluntarily” in face of pending unemployment.

Table 3.10: Denmark: Reasons for retirement #2 (occupational pensions) and #5 (VERP) by qualification level with continued work being possible (“pull”) (in percent)

	2. became eligible for occupational pension	5. made redundant (incl. VERP and TBP)
ISCED 1/2	16.1	29.4
ISCED 3	39.5	53.9
ISCED 5	44.4	16.7
N	81	102

Source: SHARE Waves 1, 2, 4; own calculations.

Push Reasons

Throughout the observation period, the share of older Danes who felt “pushed out” is rather stable at a mere one-quarter; it is only during the economically tight 1988–1993 period that the share increases slightly to 28 percent (Figure 3.6). Substituting the period dummies by unemployment rate in the logit model shows that the increased relevance for push reasons can indeed be traced back to the economic crisis (Table 3.11, Model 5).

In contrast to the models for “pull,” controlling for the changing age composition of the retirees over the periods reveals a significant drop in respective statements for the period 2002–2007 compared to the reference period 1988–1993 (Model 2); and in most models, this effect persists, supporting my expectation of diminishing push factors over time. Similar to the analyses on pull, women are also less inclined to state that they felt pushed out of employment (Model 3). However, the interaction effect in Model 6 shows that the gender gap is particularly high in the economically tight period 1988–1993, but decreases afterwards.

Table 3.11: Determinants for stating a “push reason” in Denmark (logit models)

	1	2	3	4	5	6	7
<i>Constant</i>	-0.94**	-0.63**	-0.36*	-0.44*	-1.04**	-0.34	-0.47
<i>Period of retirement</i>							
1980–1987	-0.27	-0.30	-0.28	-0.24		-0.42	-0.31
1988–1993 (ref.)	–	–	–	–		–	–
1994–2001	-0.17	-0.15	-0.20	-0.22		-0.52*	-0.37
2002–2007	-0.30	-0.37+	-0.41*	-0.44*		-0.77*	-0.43
<i>Retirement age</i>							
50–54		-0.38	-0.31	-0.29	-0.30	-0.28	-0.32
55–59		-0.32	-0.26	-0.23	-0.21	-0.23	-0.23
60–64 (ref.)		–	–	–	–	–	–
65+		-1.26**	-1.28**	-1.31**	-1.30**	-1.33**	-1.32**
<i>Sex</i>							
Male (ref.)			–	–	–	–	–
Female			-0.51**	-0.45**	-0.44**	-0.97**	-0.43**
<i>Qualification</i>							
ISCED 1/2				-0.23	-0.23	-0.19	-0.42
ISCED 3 (ref.)				–	–	–	–
ISCED 5				0.44**	0.43**	0.43**	0.30
<i>Unemployment rate</i>					0.05+	0.01	0.01
<i>Sector of last job</i>							
Private sector (ref.)					–	–	–
Public sector					0.02	0.01	0.01
<i>Period of retirement × Sex</i>							
1980–1987						0.43	
1994–2002						0.72*	
2003–2007						0.84*	
<i>Qualification × 1980–1987</i>							
ISCED 1/2							0.06
ISCED 5							0.37
<i>Qualification × 1994–2001</i>							
ISCED 1/2							0.44
ISCED 5							0.23
<i>Qualification × 2002–2007</i>							
ISCED 1/2							0.14
ISCED 5							0.02
Chi ²	2.66	46.77	59.97	73.07	70.94	78.18	74.47
N	1,184	1,184	1,184	1,184	1,181	1,181	1,181

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Controlling for qualification level does not change much of the gender effect here (Model 4); and again, there is no significant change in the qualification effect visible over time (Model 7). Obviously, the highest qualification group feels pushed out significantly more than the medium- and low-qualified, which runs counter to my expectations. However, as Table 3.12 shows, the schemes used after being pushed out of employment show varying relevance for persons of different educational levels.

Table 3.12: Denmark: Reasons for retirement #2 (occupational pensions) and #5 (VERP) by qualification level, with continued work being not possible ("push") (in percent)

	2. became eligible for occupational pension	5. made redundant (incl. VERP and TBP)
ISCED 1/2	13.6	29.3
ISCED 3	40.9	49.0
ISCED 5	45.5	21.7
N	88	157

Source: SHARE Waves 1, 2, 4; own calculations.

As a result, the overall higher likelihood of high qualified retirees feeling pushed out might be simply due to the fact that the early exit pathways taken differ between high- and low-qualified retirees with only the opportunities for the low-qualified being progressively restricted or even closed.

Private Reasons

As Figure 3.6 shows, private reasons considerably gain in relevance for the retirement decision of older Danes, particularly during the latest period. This is also illustrated in Model 1 (Table 3.13). Other than in the previous analyses, accounting for the change in age composition does not change much of the effect (Model 2). Clearly, retirees who exited between age 60 and 64 are most likely to state this kind of reason. This is plausible, because most opportunities for financially secure early exit pathways are available during that window.

Women are more likely than men to leave due to private circumstances (without changes over time in the gender gap, see Model 7), and the same applies to persons with medium- or high-level qualifications (Model 4). Both effects match my assumptions stated in Hypotheses 5 and 7. After 1994, the qualification gap even widens (Model 8), meaning that private reasons as determinants for the retirement decision spread particularly among high-qualified older workers (whose share among the respective retirees increases). The significant effect of the unemployment rate in contrast to the insignificant effect of the binary period variable (Model 5) demonstrates that the effect is due largely to low unemployment rates from the late 1990s onward and not to any other kind of social development over time such as changing norms and values in Danish society.

Table 3.13: Determinants for stating a “private reason” in Denmark (logit models)

	1	2	3	4	5	6	7	8
<i>Constant</i>	-1.40**	-1.09**	-1.26**	-1.25**	-0.01	-0.99*	-1.02*	-0.79+
<i>Period of retirement</i>								
1980–1987	0.37	0.39	0.38	0.43+		0.40	0.40	0.39
1988–1993 (ref.)	–	–	–	–		–	–	–
1994–2001	0.24	0.25	0.27	0.24		0.17	0.25	-0.11
2002–2007	1.08**	0.95**	0.97**	0.94**		0.82**	0.72*	0.46
<i>Retirement age</i>								
50–54		-1.66**	-1.70**	-1.69**	-1.70**	-1.68**	-1.67**	-1.68**
55–59		-0.61**	-0.65**	-0.63**	-0.70**	-0.63**	-0.63**	-0.63**
60–64 (ref.)		–	–	–		–	–	–
65+		-0.61**	-0.61**	-0.61**	-0.62**	-0.63**	-0.62**	-0.64**
<i>Sex</i>								
Male (ref.)			–	–		–	–	–
Female			0.31*	0.38**	0.38**	0.38**	0.38	0.39**
<i>Qualification</i>								
ISCED 1/2				-0.36*	-0.35*	-0.37*	-0.36*	-0.49
ISCED 3 (ref.)				–	–	–	–	–
ISCED 5				0.20	0.19	0.20	0.20	-0.54
<i>Period of retirement: binary</i>								
1980–1994					0.09			
1995–2007 (ref.)					–			
<i>Unemployment rate</i>					-0.12**	-0.02	-0.02	-0.02
<i>Sector of last job</i>								
Private sector (ref.)						–	–	–
Public sector						-0.00	0.00	0.00
<i>Period of retirement × Sex</i>								
1980–1987							-0.00	
1994–2002							-0.16	
2003–2007							0.20	
<i>Qualification × 1980–87</i>								
ISCED 1/2								-0.42
ISCED 5								0.74
<i>Qualification × 1994–01</i>								
ISCED 1/2								0.19
ISCED 5								0.88+
<i>Qualification × 2002–07</i>								
ISCED 1/2								0.42
ISCED 5								1.00*
Chi ²	37.93	71.65	76.70	86.01	73.97	87.68	88.79	94.85
N	1,184	1,184	1,184	1,184	1,184	1,181	1,181	1,181

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Health Reasons

Over time, retirement due to health reasons peaks in the period 1988–1993, but falls continuously afterwards to about 14 percent (Figure 3.6). As revealed in Model 2 of Table 3.14, this decline can be traced back to the changing age composition of retirees, because health reasons are stated particularly by persons who withdraw from the labor market before their 60th birthday, and the share of this group among retirees is decreasing over time.

Table 3.14: Determinants for stating the “health reason” in Denmark (logit models)

	1	2	3	4	5	6	7
<i>Constant</i>	-1.34**	-1.85**	-1.67**	-1.66**	-1.41**	-1.25*	-1.51**
<i>Period of retirement</i>							
1980–1987	-0.35	-0.51+	-0.48+	-0.49+	-0.55+	-1.00*	-1.05*
1988–1993 (ref.)	–	–	–	–	–	–	–
1994–2001	-0.11	-0.05	-0.08	-0.08	-0.19	-0.41	0.05
2002–2007	-0.47*	-0.02	-0.04	-0.04	-0.22	-0.27	-0.43
<i>Retirement age</i>							
50–54		2.21**	2.27**	2.26**	2.35**	2.33**	2.40**
55–59		1.53**	1.58**	1.58**	1.59**	1.58**	1.59**
60–64 (ref.)		–	–	–	–	–	–
65+		-0.62*	-0.62*	-0.62*	-0.57*	-0.60*	-0.56*
<i>Sex</i>							
Male (ref.)			–	–	–	–	–
Female			-0.36*	-0.36*	-0.42*	-0.69*	-0.44*
<i>Qualification</i>							
ISCED 1/2				0.03	0.05	0.04	0.06
ISCED 3 (ref.)				–	–	–	–
ISCED 5				-0.05	-0.11	-0.11	-0.12
<i>Unemployment rate</i>					-0.04	-0.04	-0.03
<i>Sector of last job</i>							
Private sector (ref.)					–	–	–
Public sector					0.34*	0.33+	0.34*
<i>Period of retirement × Sex</i>							
1980–1987						0.74	
1994–2002						0.43	
2003–2007						0.04	
<i>Qualification × 1980–1987</i>							
ISCED 1/2							0.94
ISCED 5							0.03
<i>Qualification × 1994–2001</i>							
ISCED 1/2							-0.48
ISCED 5							-0.36
<i>Qualification × 2002–2007</i>							
ISCED 1/2							0.22
ISCED 5							0.71
Chi ²	5.24	140.56	145.10	145.22	149.18	151.52	158.49
N	1,184	1,184	1,184	1,184	1,181	1,181	1,181

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Consequently, only the growth from the early and mid-1980s to the years of crisis seems slightly significant, whereas the tendency to retire due to bad health remains stable afterwards (for persons younger than 60). In sum, poor health status appears to have been less relevant for retirement before the crisis in the 1990s, but has remained on a stable level since then—particularly for Danes

who retire in their 50s irrespective of qualification level—but it is more relevant for males and public sector workers.

Eligibility for Folkepension

Having reached eligibility for the public old age scheme, the *Folkepension*, was the most stated reason for Danes who retired before the turn of the millennium (Figure 3.6, Table 3.15). Afterwards, however, despite the shift towards later entry ages into retirement, the frequency of listing *Folkepension* as the reason for retirement clearly drops, with the corresponding negative effect even increasing when the changing age composition is controlled (Model 2).

By definition, only persons with retirement age 65 or older can retire through the *Folkepension*. Nonetheless about one-half of the respective respondents were 64 or younger when they left employment, but more than 80 percent of these were 60–64 years old. Because the respective answer category in the questionnaire is very clear (Table A1), I assume the discrepancy can be explained by the difference between the definition of retirement age used in this study and the individual definition of the respondents. According to my definition, the point of retirement is the end of the last job, but this must not necessarily agree with the perception of the individual. I argue that many of these persons intended to work until they became eligible for *Folkepension*, but their last employment ended earlier due, for example, to unemployment and followed by an unsuccessful job search. Because they were in the labor force until age 65, they retrospectively define their reason for retirement as *Folkepension*, and probably also because this is their main income source in old age.⁶⁴

Evidently, this applies particularly for the low-qualified retirees (and among them many women) because—in contrast to results from the longitudinal analyses in *Section 1: Pathways into Retirement* as well as from the descriptive analyses of retirement ages (Table 3.8) that indicated comparatively early retirement of this group—they are more likely to state reaching eligibility age for *Folkepension* as their reason for retirement, without any change in the pattern over time. Furthermore, Model 4 shows that, similar to the models on push effects, the gender gap is due to women's lower educational levels.

⁶⁴ These assumptions are backed up by the fact that only 13 percent of these respondents dispose of an occupational pension.

Table 3.15: Determinants for stating Folkepension as reason for retirement in Denmark (logit models)

	1	2	3	4	5	6	7	8
Constant	-0.64**	-0.93**	-1.08**	-1.23**	-1.59**	-0.96*	-0.98*	-0.88*
Period of retirement								
1980–1987	0.10	0.22	0.21	0.14		0.08	0.27	0.17
1988–1993 (ref.)	–	–	–	–		–	–	–
1994–2001	-0.08	-0.19	-0.17	-0.12		-0.15	-0.18	-0.34
2002–2007	-0.57**	-0.79**	-0.77**	-0.71**		-0.81**	-0.69+	-0.98*
Retirement age								
50–54		-0.73*	-0.77*	-0.82*	-0.78*	-0.85*	-0.85*	-0.84*
55–59		-0.71**	-0.75**	-0.80**	-0.74**	-0.80**	-0.80**	-0.81**
60–64 (ref.)		–	–	–	–	–	–	–
65+		1.78**	1.79**	1.82**	1.84**	1.81**	1.80**	1.82**
Sex								
Male (ref.)			–	–		–	–	–
Female			0.28*	0.10	0.11	0.18	0.25	0.17
Qualification								
ISCED 1/2				0.76**	0.76**	0.77**	0.78**	0.62+
ISCED 3 (ref.)				–	–	–	–	–
ISCED 5				-0.19	-0.17	-0.10	-0.10	-0.33
Period of retirement: binary								
1980–1994					0.46*			
1995–2007 (ref.)					–			
Unemployment rate					-0.01	-0.02	-0.02	-0.01
Sector of last job								
Private sector (ref.)						–	–	–
Public sector						-0.42*	-0.43*	-0.41*
Period of retirement × Sex								
1980–1987							-0.32	
1994–2002							0.06	
2003–2007							-0.25	
Qualification × 1980–1987								
ISCED 1/2								0.02
ISCED 5								-0.52
Qualification × 1994–2001								
ISCED 1/2								0.22
ISCED 5								0.46
Qualification × 2002–2007								
ISCED 1/2								0.27
ISCED 5								0.36
Chi ²	13.06	201.29	205.32	236.37	229.63	246.88	248.04	250.15
N	1,184	1,184	1,184	1,184	1,184	1,181	1,181	1,181

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

In contrast to the historical trend toward more consideration of private reasons, the trend toward less importance of the public pension scheme for the retirement decision is decoupled from the economic climate. Instead, social changes such as the increasing coverage of occupational pensions seem to play a role. Connected to this, former employees in the public sector are less inclined to state *Folkepension* as their reason for retirement because they were among the first branches to be covered by an occupational pension scheme (*Tjenestemandspension*).

Summary on the Retrospective Reasons for Retirement in Denmark

After examining the distribution and respective development of self-stated reasons for retirement over time as well as relevant influences for stating certain reasons, I am now able to answer two of the research questions related to the subjective perspective:

- *How have the individuals themselves assessed their reasons for retirement in light of the changing institutional framework since the 1980s?*
- *What is the relational pattern between individual and workplace characteristics, personal reasons for retirement, and institutional conditions?*

Table 3.16 summarizes the findings from the multivariate analyses. Looking at the development over time, the patterns illustrated in Figure 3.6 are largely confirmed. However, accounting for the changing composition of retirees in terms of their retirement age and qualification level over time helps to substantiate or differentiate the descriptive findings. Furthermore, testing the influence of the unemployment rate and replacing periods through a binary variable reflecting whether retirement takes place before or after 1994 permits a separation between effects based on the economic situation and those based on social changes in Danish society or the institutional framework.

According to the definition explained earlier, retirees are assigned to the group reacting to a “**pull effect**” if they retire using a pathway offering a benefit other than the public old age pension, that is, because they either become eligible for an occupational or private pension, are offered a special early retirement option/window, or are made redundant (including entry into VERP). In addition, they stated that, in their last job, it would have been possible to continue work even beyond the official retirement age. Accordingly, the financial incentive to leave is evidently perceived as more attractive than staying employed. Hence, these persons can be considered to have retired rather “voluntarily” because they seemingly had a choice. They tend to be rather male, except in the crisis-shaken period 1988–1993 when most retirees who were pulled out are female. Particularly during this time, it is also possible that these older workers do not decide freely, but opt for retirement in order to avoid pending unemployment. Later on, occupational pensions gain in relevance, whereas explicit early exit schemes such as TBP or VERP become closed or restricted. This explains the slight predominance of medium- and high-qualified individuals among all respondents who are subject to “pull effects” that are, overall, rather stable in relevance throughout the observation period.

Table 3.16: Overview on the effects of independent variables on the propensity to list a specific group of reasons for retirement in Denmark

	Pull	Push	Private	Health	Regular
Development over time	Stable	Decreasing	Increasing	Stable	Decreasing
Particularly relevant during the period	<i>ns</i>	Until 2001	2002–2007	<i>ns</i>	Until 2001
Unemployment rate	High	High	Low	<i>ns</i>	<i>ns</i>
Retirement age	55–64	50–64	60–64	50–59	65+
Sex	<i>ns</i>	Male	Female	Male	<i>ns</i>
Qualification	Medium/High	High	High	<i>ns</i>	Low
Before vs. after 1995	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	Until 1994
Public vs. private sector	Public	<i>ns</i>	<i>ns</i>	Public	Private
Period × Sex (particularly relevant for...)	Women in 1988–1993, otherwise men	Gender gap decreasing after 1993	<i>ns</i>	<i>ns</i>	<i>ns</i>
Period × Qualification (particularly relevant for...)	<i>ns</i>	<i>ns</i>	Qualification gap increasing after 1993	<i>ns</i>	<i>ns</i>
Overall share of individuals stating this reason	17.1%	24.9%	27.2%	17.9%	31.5%
Absolute number of persons stating this reason	202	295	322	212	373

Source: SHARE Waves 1, 2, 4; own calculations.

Note: *ns* = nonsignificant.

Retirees stating the same reasons, but indicating that continuing to work was not possible, are allocated to the group of older workers who were “**pushed out**” out of employment, that is, retired rather “involuntarily.” As expected, this group is shrinking and also consists mainly of men, no matter what sector they were employed in. Also, being pushed out was equally likely for all workers between 50 and 64, whereas those reacting to a pull effect were mostly at least 55 years old.

Overall, the findings on push and pull mainly confirm my hypotheses. Danish men were employed predominantly in private companies that had to face a strong economic pressure to lay off workers during the crisis beginning in the late 1980s. Women, in turn, seem to have left more “voluntarily” during that time; that is, they used financially attractive early exit routes to fulfill their desire to stop working. Consequently, the same exit pathways were perceived differently by men and women during the crisis.

At first sight, it is counterintuitive that both pull and push effects are more likely to be stated by high-qualified individuals. However, a closer look at the distribution of answers #2 (occupational pensions) and #5 (made redundant, in the Danish version including VERP and TBP) shown in Tables 3.10 and 3.12 reveals that the relevance of the diverse early exit pathways differs between qualification groups regardless of whether or not these are “chosen”; that is, as a result of a pull or a push effect. The high-qualified show strong tendencies to use occupational pensions as an early exit pathway, whereas the low-qualified rely more on TBP and VERP that have been either closed or restricted since the 1990s. Consequently, early withdrawal from the labor market—whether “voluntary” or not—seems to be reserved more and more for those who have access to the few remaining opportunities to withdraw early, and these are evidently the medium- and/or high-qualified.⁶⁵

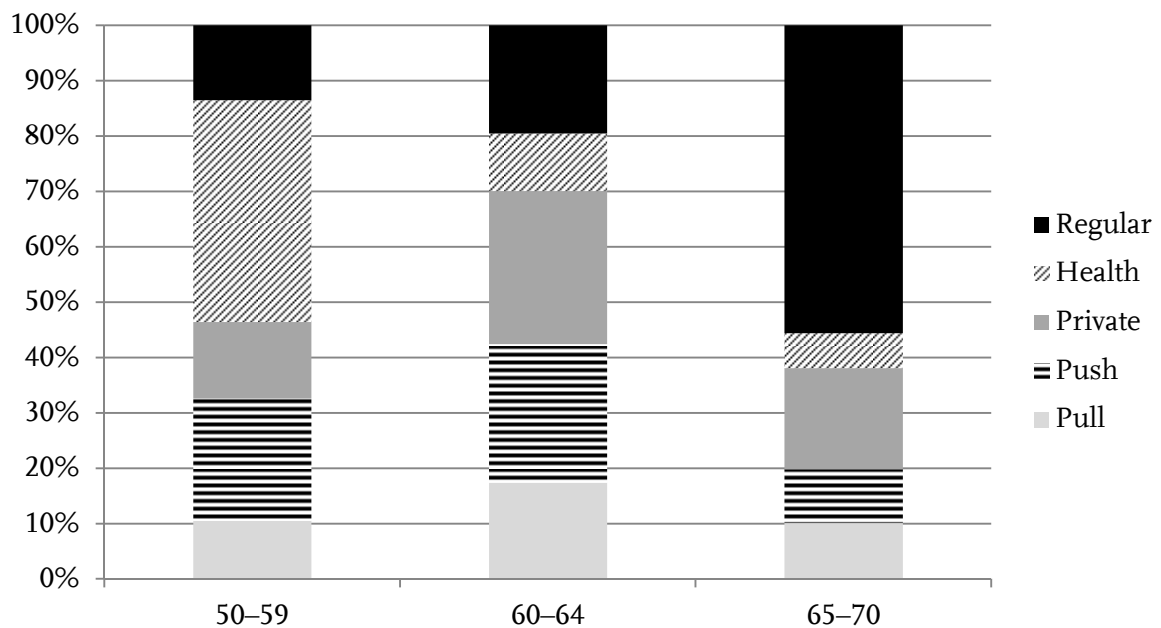
“**Private reasons**” is the label for all reasons unrelated to financial sources of income after withdrawal from employment but based rather on personal circumstances and preferences such as taking care of an ill relative or friend, retiring at the same time as spouse or partner, spending more time with family in general, or just simply wanting to enjoy life after retirement. These reasons gain relevance over time for Danish older workers particularly after 2002. The multivariate analysis confirms the connection to the economic cycle, with a low unemployment rate favoring the decisive role of private reasons for individual retirement. This group consists mainly of women and persons with medium or high qualifications, and the respective retirees wait mainly until their 60th birthday before they withdraw, indicating that they were eligible for VERP or an occupational or private pension scheme with early exit option that gave them the financial security to decide in favor of their private preferences.

Retirees who stated that they retired due to “**health reasons**” left the labor market first, on average, at an age of less than 59 years. Among all retirees who withdrew before their 60th birthday, almost one-half (45 percent) mention bad health as (one) reason (Figure 3.7). These are mainly men, but they come from all qualification levels including employees from both the public sector and private sector. Over time, health is listed less as the reason for retirement. This is largely because the share of persons retiring before their 60th birthday is shrinking. Persons retiring afterwards, in contrast, might also be affected by health issues, but tend to state another reason.

⁶⁵ However, this development cannot be confirmed over time with the available data due to low case numbers and consequently a lack of statistical power.

In line with the increasing popularity of “pull reasons” for retirement, working until **eligibility for *Folkepension*** loses relevance over time for Danish retirement decisions. This “residual” group is distinctive in several respects: First, it is the only group with a significantly high share of low-educated retirees and a significant tendency to contain former employees in the private sector (who were the last to be covered by occupational pensions). Second, it is the only reason for retirement with a continuous development, that is, unaffected by the crisis in the early 1990s. I therefore conclude that, in Denmark, the regular retirement pathway (i.e., working until the access age for the public pension that was 67 in the years before 2004 and 65 years afterwards) was relevant predominantly for the retirement decision of low-educated workers in the private sector. However, it remains unclear whether they actually were neither pushed nor pulled out and thus really worked until statutory retirement age or whether they only personally defined turning 67 or 65 respectively as the point of entry into permanent retirement, although they had actually been inactive and drawing some kind of social benefit for some time before this.

Figure 3.7: Reason for retirement by retirement age in Denmark



Source: SHARE Waves 1, 2, 4; own calculations.

For the sake of completeness, I would like to point out that the development of self-stated reasons for retirement over time could also be influenced by changes in the cultural perception of retirement and respective changes in answering behavior. For example, in line with the social trend of individualization, it might become fashionable or socially desirable to retire for private reasons, highlighting the voluntariness of one’s decision and, consequently, leading to an overrating of private reasons when analyzing the survey information.

Prospective Wish for Retirement

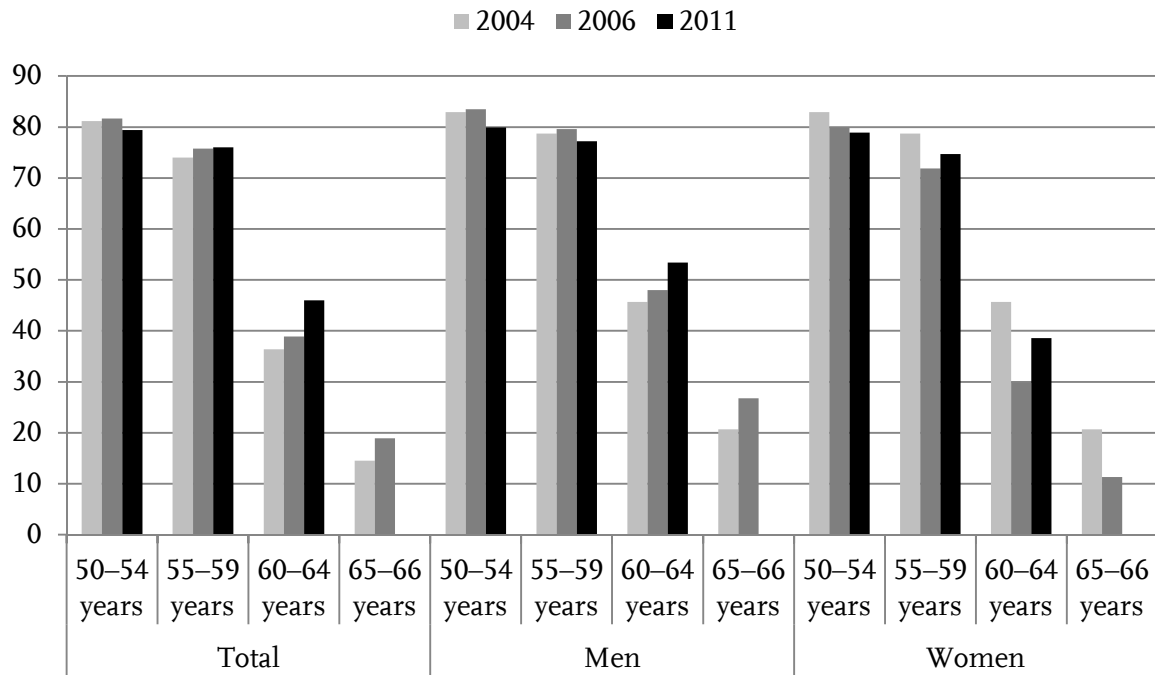
In the previous section, I showed that specific population groups differed regarding their retrospectively stated reasons for retirement within the period from 1980 to 2007. During that time, institutional and economic conditions changed, leading to an overall trend toward postponing retirement. Now I shall look at older workers in Denmark between 2004 and 2011 and examine potential determinants of their wish to retire; that is, I shall identify factors that might foster early retirement for a population group that is expected to stay employed until age 65 or even longer. Hence, the following section aims to answer the last country-specific research question: *Which characteristics influence the wish to retire among current older workers?*

Employment Rates for the Years of Measurement

To analyze this question, I shall take information collected from Danes between age 50 and 70 who were employed at the time of the interview. The interviews took place within the first three cross-sectional SHARE waves: in 2004, in 2006/2007, and in 2011. Because the economic cycle has proven to be influential for retirement decisions (particularly in Denmark), the respective labor market situations should be considered for these analyses (Figure 1.11). During the first wave, Denmark experienced the peak of a small economic crisis, resulting in an unemployment rate of about 6 percent. When Wave 2 was conducted, the crisis was over and unemployment had fallen to around 3 percent. Shortly afterwards, however, the global financial crisis interfered and reversed the trend again.

Figure 3.8 shows the respective employment rates for these 3 years for four age groups separated for men and women. It illustrates the remarkable drop in employment beyond age 60. However, the height of this drop is decreasing over time, particularly due to the constant growth in employment of men aged 60 to 64.

Figure 3.8: Danish employment rates for different age groups in the years 2004, 2006⁶⁶ and 2011 (in percent)



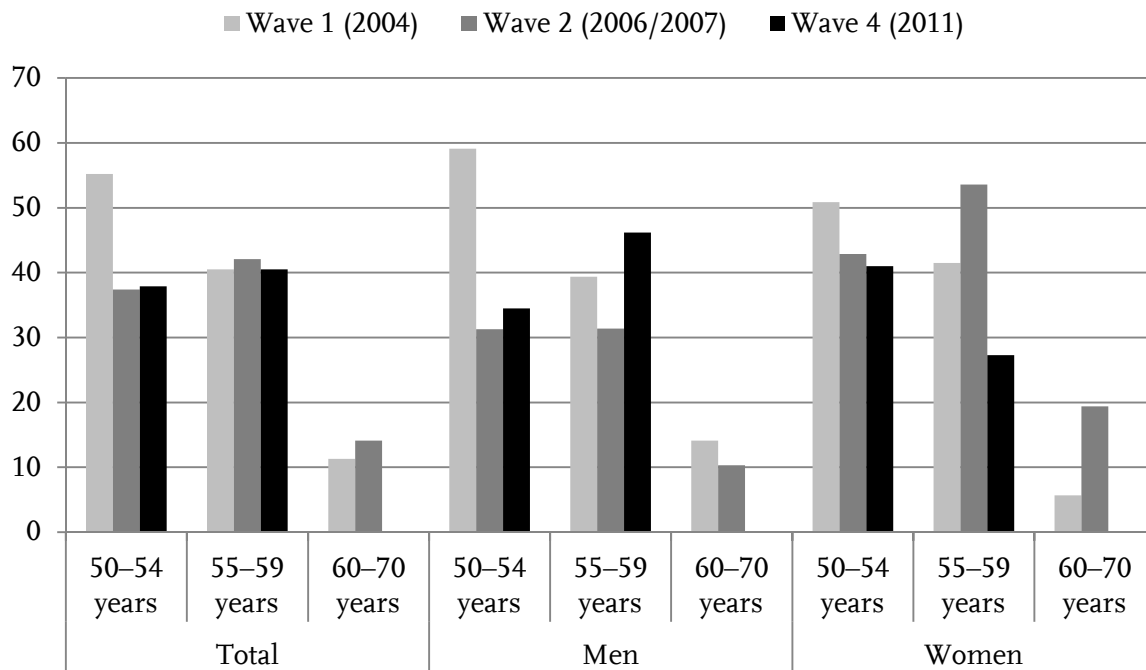
Source: Statistics Denmark (2015).

Descriptive Results for the Wish for Retirement

With these patterns and developments of employment rates in mind, I shall look at the share of older workers who “wish to retire as soon as possible” (Figure 3.9). The sample available for this analysis comprises 818 men (52 percent) and 752 women (48 percent). More than one-half of them (53 percent) are aged 50–54 years, slightly less than one-third (29 percent) are aged 55–59 years, 14 percent are in their early 60s, and only 3 percent are aged 65–70 years. Therefore, to obtain analyzable case numbers, I shall merge persons aged 60–70 into one age group. Probably due to the bias toward the younger age groups, the majority of respondents (51 percent) have an academic degree (ISCED 5), 39 percent are assigned to ISCED 3, and only 10 percent have ISCED 2 or lower. Furthermore, the Danish respondents are distributed comparatively evenly across interview waves, with 37 percent being interviewed in Wave 1, 40 percent in Wave 2, and 23 percent in Wave 4 (Table 2.8).

⁶⁶ Although most of the fieldwork was conducted in 2007, the year 2006 is chosen to represent Wave 2 in Figure 3.8 because it is the last year in which the employment rate for the age category 65–66 is available. The reason is that after the entry age to OAP was lowered to 65 in 2004, older persons were no longer regarded as part of the labor force.

Figure 3.9: *Wish to retire among Danish older workers, by gender, age group, and wave (percentage of valid responses)*



Source: SHARE Waves 1, 2, 4; own calculations.

Note: There are no columns for the 60–70 year age group in Wave 4 because none of the 15 respondents wished to retire.

Overall, the wish to retire is clearly higher among workers aged 50 to 60 than among workers beyond 60. This can be explained by a positive selection of those still employed: with progressing age, most of those who want or need to withdraw from employment have already done so.

Furthermore, the wish to retire among Danes of the youngest age group (50–54) decreases remarkably from Wave 1 to Wave 2 but remains comparatively stable until Wave 4, with the pattern being similarly shaped but more pronounced among men than among women. From age 55 on, however, gender-specific patterns emerge that match those for employment rates: Women desire retirement to a higher extent when the economic situation is good (as in the years 2006/2007), whereas men's desire is then at its lowest.

Multivariate Models

Now I shall look at the specific characteristics that make older workers want to retire (Table 3.17).⁶⁷ First of all, women's stronger tendency to express a wish to retire compared to men is rather stable throughout most models and corresponds to their lower employment rate in the late career, that is, their earlier entry into retirement. Because the age effect is due to the sample selection of those still employed, age can function only as a control variable in this context. Nonetheless the steep drop between workers in their 50s and those beyond age 60 is clearly visible.

Regarding qualification levels, the positive attitude toward retiring among older workers holding academic degrees disappears as soon as further individual and job characteristics are introduced. Evidently, the qualification level is only a proxy variable for having access to more attractive jobs that awake interest in and/or allow working longer (e.g., by being less physically demanding). Interestingly, the interaction effect for gender and qualification (Model 10) reveals opposite effects for the lowest qualified regarding the genders: Low-qualified women would like to retire more urgently than medium- or high-qualified women, whereas low-qualified men display a distinctly lower desire to leave the labor market than the reference group (see also Tables A3 and A4 in Appendix).

As historical time proceeds (measured through waves), the wish to retire decreases continuously in Denmark, reflecting successful promotion of active aging. The U shape in unemployment during the observation years is not visible here, probably because it was on a rather low level and thus irrelevant for the retirement plans of older Danes.

⁶⁷ In addition to the basic model, further individual and subjective job characteristics are tested stepwise. Unfortunately, some variables were not available for all waves or all persons within a wave (see also Data and Methods section) resulting in varying case numbers. This applies particularly for personal characteristics such as marital status, existence of grandchildren, frequency of social activities, or self-rated health. Therefore, the characteristics linked to loss of case numbers were tested step by step and only retained for further models when significant.

Table 3.17: Determinants of the wish to retire in Denmark (logit models)

	1	2	3	4	5	6	7	8	9	10
<i>Constant</i>	-0.05	0.03	0.23	-0.11	-0.17	-0.41*	-0.72**	-0.23	-0.09	0.09
<i>Sex: Female</i> (ref.: Male)	0.26*	0.29**	0.37**	0.30*	0.29*	0.54**	0.45**	0.27+	0.29*	-0.03
<i>Age (ref.: 50–54)</i>										
55–59	-0.16	-0.16	-0.21	-0.32*	-0.33*	-0.14	-0.06	-0.08	-0.06	-0.08
60–70	-1.74**	-1.72**	-1.81**	-1.76**	-1.77**	-1.57**	-1.61**	-1.67**	-1.61**	-1.69**
<i>Qualification</i>										
ISCED 1/2	0.11	0.09	0.22	0.13	0.11	-0.12	-0.15	-0.23	-0.23	-0.90*
ISCED 3 (ref.)	–	–	–	–	–	–	–	–	–	–
ISCED 5	-0.25*	-0.25*	-0.21	-0.17	-0.14	-0.22	-0.16	-0.11	-0.08	-0.22
<i>Wave</i> (ref.: Wave 1)										
Wave 2	-0.29*	-0.32**	-0.41**	-0.31*	-0.31*	-0.27	-0.29+	-0.31+	-0.31+	-0.32+
Wave 4	-0.43**	-0.51**	-0.45**	-0.60**	-0.55**	-0.46*	-0.48*	-0.50**	-0.50**	-0.50**
<i>Further individual characteristics</i>										
<i>Single</i>		-0.46**		-0.48*	-0.47*	-0.47*	-0.56*	-0.56*	-0.56*	-0.52*
<i>Partner active</i>			-0.23							
<i>Grandchildren</i>				0.26*	0.26*	0.23				
<i>Socially inactive</i>					0.23					
<i>Bad health</i>						0.89**	0.76**	0.77**	0.77**	0.81**
<i>Job-related attitudes</i>										
<i>No job security</i>							0.28+	0.29+	0.28	
<i>Dissatisfied with job</i>							2.21**	2.18**	2.18**	2.26**
<i>Physically demanding job</i>							0.80**	0.77**	0.77**	0.78**
<i>Work characteristics</i>										
<i>Real working time</i>								0.00		
<i>Public sector</i> (ref.: Private sector)								0.15		
<i>Self-employed</i> (ref.: Dependent employed)								-0.60*	-0.68**	-0.68**
<i>Income</i>								-0.27**	-0.26**	-0.26**
<i>Qualification × Sex</i>										
ISCED 1/2 × Female										1.24**
ISCED 5 × Female										0.34
Chi ²	122.03	128.40	104.91	106.95	109.18	99.82	203.36	225.16	220.73	228.44
N	1,570	1,569	1,131	1,341	1,341	1,081	1,268	1,262	1,268	1,279

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effects significant at **p < 0.01, *p < 0.05, +p < 0.10.

Among individual characteristics besides gender and age, one of the most relevant personal characteristic seems to be self-rated health status in the sense that bad health has a stable and significantly positive effect on the wish to retire

throughout all models.⁶⁸ Moreover, Danes living alone are less inclined toward withdrawal from employment than those living in a partnership, supporting the importance of the private situation for Danish older workers found in the analyses of reasons for retirement.⁶⁹ However, for those who do have a partner I was unable to find any influence of whether or not this partner is also employed. In addition, having grandchildren is influential only in early models, presumably because the Danish welfare state provides sufficient child care opportunities, and mothers' employment is not dependent on childcare being available in the (extended) family.

As Model 7 shows, perceived job characteristics exert a strong influence on the wish to retire and lead to a remarkable increase in the explanatory power of the model. In particular, both job dissatisfaction and high physical demand turn out to be major drivers for the desire to retire. Perceived job insecurity, in contrast, is, as expected, of low importance. Among the objective employment characteristics, self-employment and high income decrease the wish to retire most remarkably, whereas employees in the public sector are not significantly more inclined to withdraw as soon as possible from the labor market.⁷⁰

⁶⁸ Recall that a part of the respondents from Wave 1 were excluded in the respective models containing self-rated health due to incompatibilities with the response scales used in Wave 1.

⁶⁹ Private reasons for retirement were found to be particularly relevant for Danish women. Moreover, separate analyses for men and women on the wish to retire gave hints that partnership status is almost exclusively relevant for women (Tables A3 and A4).

⁷⁰ Because self-employment is possible only in the private sector, both variables are not absolutely independent statistically. However, excluding the 166 self-employed Danes in the sample also failed to generate a significant effect for public versus private sector.

b Views on Retirement Since German Reunification: Erosion of Bismarck's Heritage?

The main findings on observed labor market exits in older German workers point to a decreasing significance of unemployment as a pathway into retirement, resulting in a slight delay in employment exits. Nonetheless, gaps in retirement timing between men and women as well as between East and West Germans do remain. Both groups are confronted particularly with the negative consequences of low labor market incomes and career interruptions. Given the comparatively low investments in the employability of older workers, how the reforms to the German pension system will impact on future retirement behavior and the development of related inequality patterns among the elderly populations remains an open question.

Retrospective Reasons for Retirement

I shall begin by analyzing the retrospective statements of German retirees on their reason(s) for retirement and trying to answer the research questions:

- *How have the individuals themselves assessed their reasons for retirement in light of the changing institutional framework since the 1980s?*
- *What is the relational pattern between individual and workplace characteristics, personal reasons for retirement and institutional conditions?*

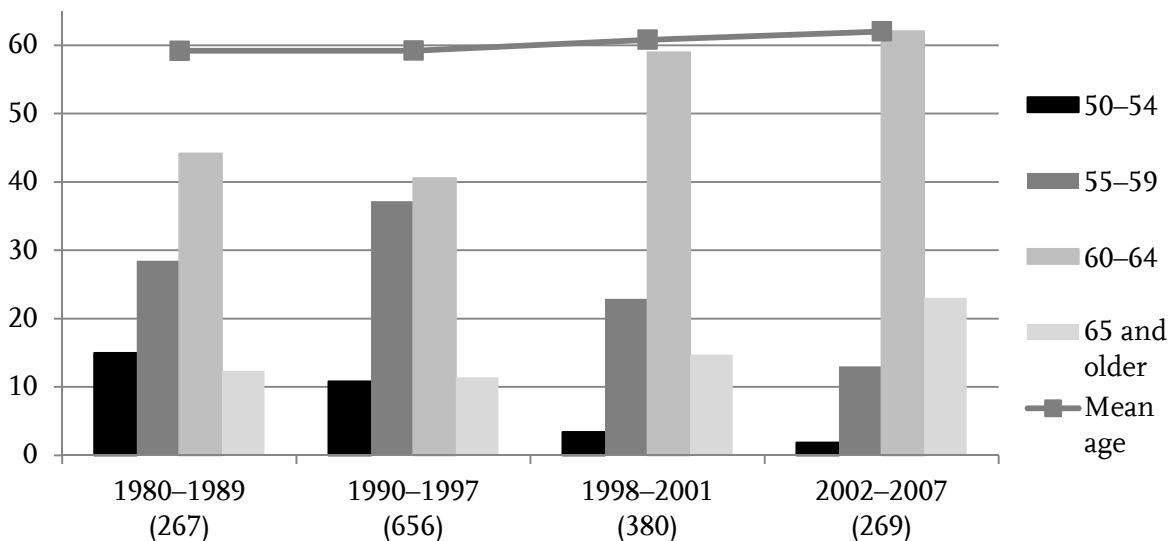
The periods used to capture historical developments in the German case study differ from those in the Danish case study because of different economic and political events:

- 1980–1989: Only West Germans are observed; unemployment fluctuated around 9 percent in most of these years with a slight decrease at the end of the 1980s (Figure 1.14).
- 1990–1997: Reunified Germany struggled with increasing unemployment in both parts, with the Eastern part being particularly struck due to the challenge of adapting to capitalism and joining the West German social security system.
- 1998–2001: The economy experienced a short boom.
- 2002–2007: Unemployment rose again to levels comparable to the mid-1990s, but decreased from 2005 onward.⁷¹ Furthermore, major pension reforms came into effect within this last period.

⁷¹ However, this was partly due to a change in the calculation method with the implementation of the “Hartz Reforms.”

As in Denmark, Figure 3.10 illustrates a progressive trend towards delayed retirement over time, but starting later and from a lower level. In addition, the early retirement movement during the “crisis years” directly after reunification is very visible. During these years, almost one-half of all retirees (48 percent) were younger than 60 when they left employment. Afterwards, the picture changes considerably, with around 60 percent of all retirees working until or beyond age 60, resulting in an increase of the mean retirement age from 59 years before 1998 to 62 years during the years 2002 to 2007. Table A5 describes the sample of German retirees used for the analyses of reasons for retirement by retirement age, gender, and qualification level.

Figure 3.10: Germany: Retirement ages of persons retiring in different historical period (in percent) and mean age of retirement in the respective period (in years)



Source: SHARE Waves 1, 2; own calculations.

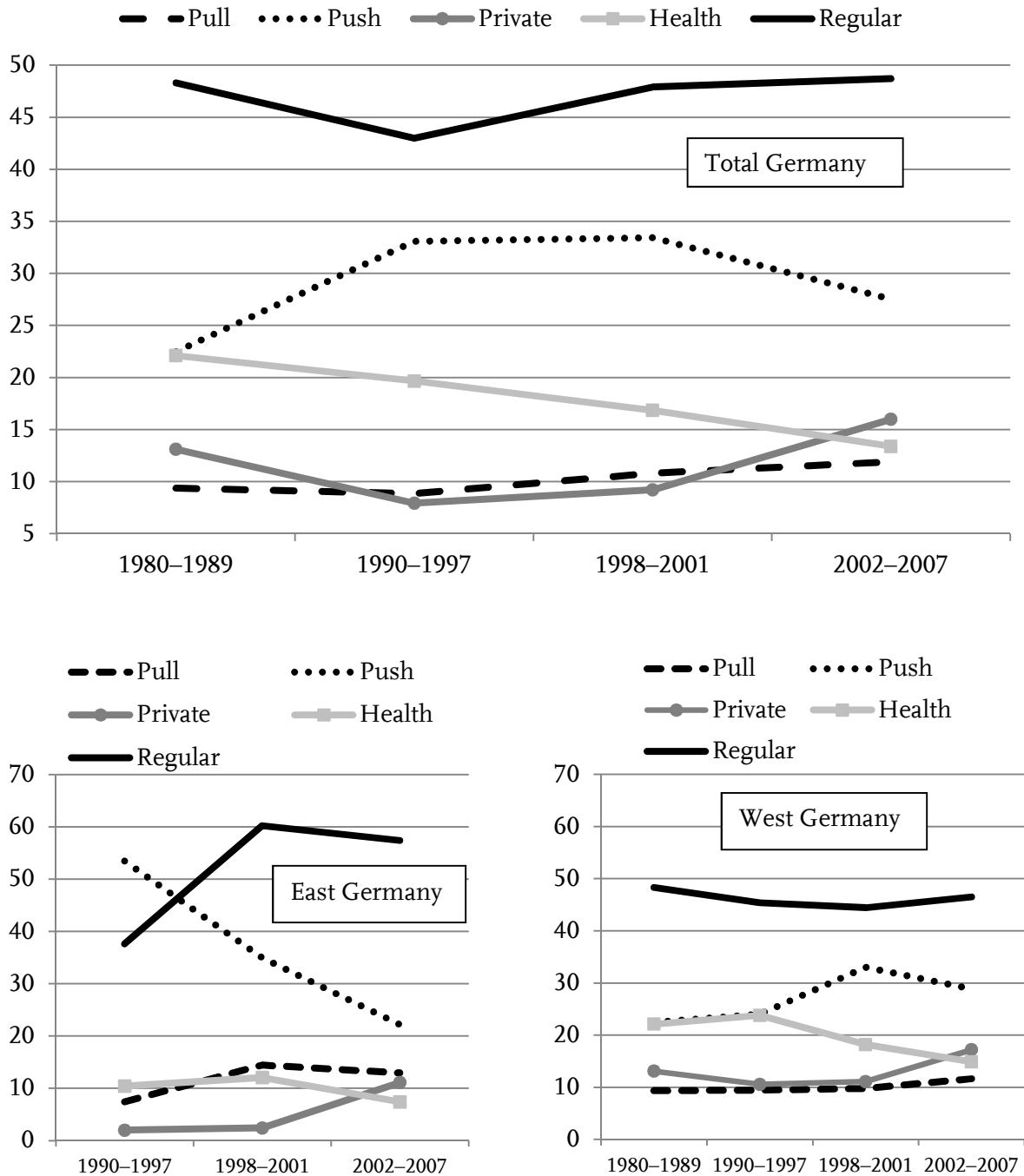
Note: Numbers in brackets show absolute cases.

In contrast to the dramatic changes over time in Denmark, the historical development of stated reasons for retirement in Germany is rather static (Figure 3.11). In all time periods, almost one-half of all retirees stated that becoming eligible for the public old age pension was the most relevant reason, reflecting the predominant position of the public pension scheme within the German social system. The temporary slight decline in the use of this pathway after 1990 is accompanied by an increase in the importance of push reasons, according to the political and economic developments following German reunification.

The region-specific tables illustrate that the strong push effect is generated predominantly by East German retirees: More than one-half of all East Germans (53 percent) who retired between 1990 and 1997 were pushed out compared to one-quarter of the West German reference group. After the turn of the millennium, with decreasing unemployment rates in both parts of the country, these

push effects decrease slightly, with still more than one-quarter of all Germans (East: 29 percent; West: 22 percent) indicating that they were pushed out. “Pull” reasons, in contrast, remain comparatively irrelevant for retirement decisions in Germany. In both parts, barely more than 10 percent of retirees state that they left due to attractive financial incentives although continued working would have been possible.

Figure 3.11: Frequency of stated reasons by historical time periods in total Germany and in East and West



Source: SHARE Waves 1, 2; own illustrations.

In sum, the multivariate analyses largely confirm the trends to be seen in the descriptive picture of Figure 3.11. Namely, there is little change over time in the distribution of stated reasons for retirement among the German population. Significant changes compared to earlier periods are found only for the latest period 2002–2007. In the German case, this was also the period when the institutional shift from early exit toward active aging took effect, and when the economic climate eventually improved. Moreover, an inspection of the changing composition of retirees in terms of retirement age, qualification level, and gender revealed notable links between individual characteristics and the propensity to retire for specific reasons. This was the aim of this research. Table 3.18 gives an overview of the findings and the direction of the effects found in the diverse multivariate models.

Table 3.18: Overview on the effect of independent variables on the propensity to list a specific group of reasons for retirement in Germany

	Pull	Push	Private	Health	Regular
Development over time	Stable	Stable	Increasing	Stable	Decreasing
Particularly relevant during the period	<i>ns</i>	<i>ns</i>	2002–2007	<i>ns</i>	Until 2001
Unemployment rate	<i>ns</i>	high	<i>ns</i>	<i>ns</i>	<i>ns</i>
Region	<i>ns</i>	East	West	West	East
Retirement age	<65	55–59	<i>ns</i>	50–59	65+
Sex	<i>ns</i>	Male	Female	Male	Female
Qualification	Medium/ High	<i>ns</i>	<i>ns</i>	Low	<i>ns</i>
Before vs. after 1995	<i>ns</i>	After 1995	After 1995	<i>ns</i>	Until 1994
Public vs. private sector	<i>ns</i>	Private	<i>ns</i>	<i>ns</i>	Public
Period × Sex (particularly relevant for...)	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Period × Qualification (particularly relevant for...)	<i>ns</i>	<i>ns</i>	High qualified after 2002	<i>ns</i>	<i>ns</i>
Overall share of individuals stating this reason	9.9%	30.4%	10.5%	18.3%	46.1%
Absolute number of persons stating this reason	156	478	165	288	724

Source: SHARE Waves 1, 2; own calculations.

Note: *ns* = nonsignificant.

In the German case, individuals who stated that they retired as reaction to a “**pull effect**,” that is, by using a pathway offering a financial benefit other than the public old age pension and without the opportunity to continue work, are a small minority (Figure 3.11). Little more can be said about them except that they

have predominantly medium or high qualifications and retire before the age of 65 (see Table A6 in Appendix). The latter circumstance, however, is more or less tautological to the concept of pull effects. Presumably, leaving employment “voluntarily” despite having the possibility to continue work is only an option for German older workers who have collected sufficient pension rights, and these tend to be those in medium- and high-skilled jobs.

On the contrary, a considerable share of retirees state that they retired due to a “**push effect**,” that is, they took advantage of an early exit pathway without continued work being possible (Figure 3.11). According to my expectations (H8), the incidence of being pushed out did not decrease remarkably within the period observed because unemployment remained almost continuously high during the observation period (Table A7). Furthermore, East Germans were affected more than West Germans, because the transformation shock impacted heavily on businesses in the former GDR and led to a massive reduction of workforces. Compared to this extreme case of economic restructuring, the globalization processes in the western part of the country were moderate. Particularly men working in private industries were sent into early retirement using special early exit routes that were opened already for individuals in their late 50s. These individuals who used the “unemployment bridge” into retirement opening at age 57/58 or the specific early retirement pathway for East Germans aged 55 and over felt pushed out rather than welcoming the early exit opportunity.⁷² Evidently, pressure to leave has outweighed voluntary decisions for retirement for a long period in Germany and, interestingly, affected individuals of all qualification levels to the same degree. Nonetheless, it remains an open question whether the progressive closure of early exit pathways in combination with the economic boom led to a decreasing relevance of push effects for German older workers (or maybe only a part of them) after 2007.

In contrast to the Danish case, “**private reasons**” reflecting retirement based on personal circumstances and preferences that are basically unrelated to financial resources played only a minor role in German retirement decisions (Figure 3.11). They only gain significance from 2002 onward, with this trend being based mainly on the increasing relevance of the respective reasons for the highest qualified and for residents of West Germany (Table A8). Overall, women were more inclined to state these reasons, which is in line with my assumptions about female workers being more likely to include aspects unrelated to financial

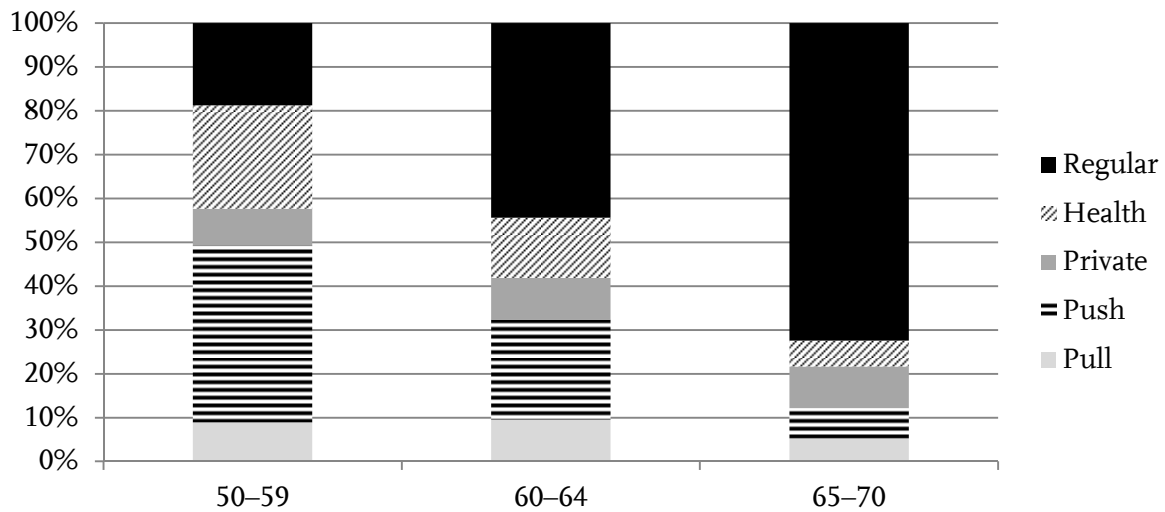
⁷² Similarly, Koenen et al. (2009) used the same SHARE indicator but a different classification to show that involuntary early retirement is concentrated among men working within large industrial firms and is more widespread in East than in West Germany.

resources into their retirement decisions (H14). As hypothesized, this should apply particularly to older German women who have been raised and spent their lives in a male breadwinner society in which care tasks (for children as well as the elderly) were assigned mainly to the women of the family. Consequently, labor market integration and individual income played only a subordinate role for them because these women were usually financially secured through their husband's labor market income or old age pension. However, this is likely to change for future cohorts of women who have a stronger attachment to the labor market.

Nonetheless, gender regime does not explain the increasing popularity of private reasons among the high qualified. In contrast to the Danish case, there is no link to the unemployment rate, thereby rejecting Hypotheses 3b and 11 on the connection between economic climate and inclusion of private considerations into retirement decisions. However, the economic boom started only very late in Germany; that is, the lack of a (significant) effect could be due to the end of the observation period in 2007 before the remarkable decrease in unemployment. Furthermore, the high qualified are the group that could cope best with the challenges posed by economic restructuring and pension reforms. Consequently, they are in a comparatively favorable and secure position and thus have more freedom to decide on the point in time when to withdraw permanently from the labor market and to include nonfinancial aspects into their decision-making processes. Again, this trend can be confirmed only with data on future retirement decisions.

Persons who stated they retired due to “**health reasons**” in the German case were rather similar to those who felt pushed out: Both are men who retired before reaching age 60 (Tables A7 and A9). However, those who indicated health issues tend to have rather low qualification levels and to live in the Western part of Germany, suggesting that it is the same target group (i.e., men in massively restructured industries such as transformation, production, construction), but that West German men tend to state health reasons, whereas East Germans tend to state a push effect. In fact, disability benefit was one of very few options to withdraw from the labor market before age 57 in West Germany. In sum, more than two-thirds (68 percent) of all individuals who retired between age 50 and 59 stated either bad health or being pushed out as their reason for retirement (Figure 3.12).

Figure 3.12: Reason for retirement by retirement age in Germany



Source: SHARE Waves 1,2; own calculations.

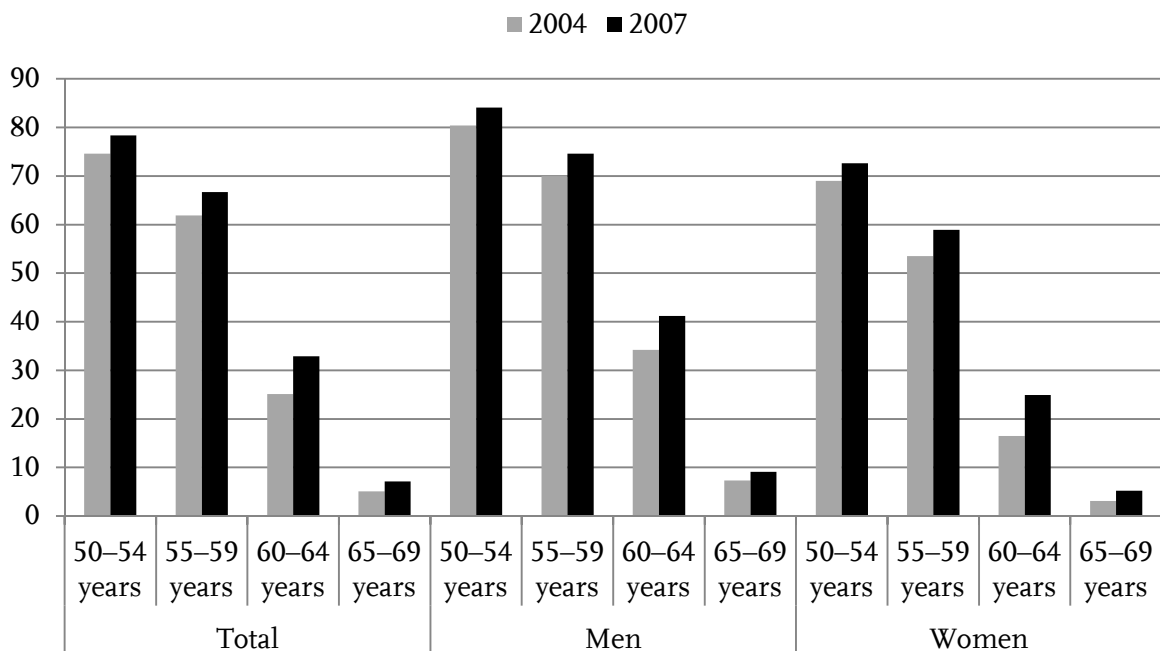
Although the relevance of **eligibility for the public old age pension** is decreasing slightly in the latest period (Table A10), the scheme still represents the most important factor influencing German retirement decisions in general (Figure 3.11). However, most of its significance is due to the lack of alternative income sources in old age, because labor market pensions and private pension plans are not (yet) very common for the German standard worker. Plausibly in light of the results on other reasons for retirement, women were more likely to use the regular pathway than men who were subject to push factors and to health-related employment exit to a higher degree. Further, women's statutory retirement age was lower than men's during most of the period under study, leading to them having less demand for other early exit pathways. Following a similar line of argument, public sector workers are less likely to be pushed out and therefore have greater chances of reaching eligibility for the public old age pension. In sum, the residual category of those retirees stating that they reached eligibility for the public old age pension displays mostly complementary characteristics to those being pushed out.

Prospective Wish for Retirement

In the previous section, I showed that the reasons for retirement stated retrospectively by German retirees do not vary much between 1980 and 2007. However, the relevance of certain reasons varies between population groups. Because Germany's institutional and economic conditions changed comparatively late, the trend toward postponed retirement started only in the early 2000s. However, due to data restrictions, no individuals from Wave 4 could be included in the analyses on older workers' wish to retire. Thus, the observation window for the wish to retire in Germany also already closes in 2007 and analyses are able to capture only the first effects of the institutional changes towards "active aging." Nonetheless, I aim to answer the following research question within the upcoming section: *Which characteristics influence the wish to retire in current older workers?*

The data used to analyze the wish to retire among German older workers were collected in the years 2004 and 2006/2007. Between these two observation points, aggregate unemployment fell from 12 percent to 8 percent, with a light rise in 2005 but a continuing regional gap (Figure 1.14).

Figure 3.13: *Employment rates for different age groups in the years 2004 and 2007⁷³ in Germany (in percent)*



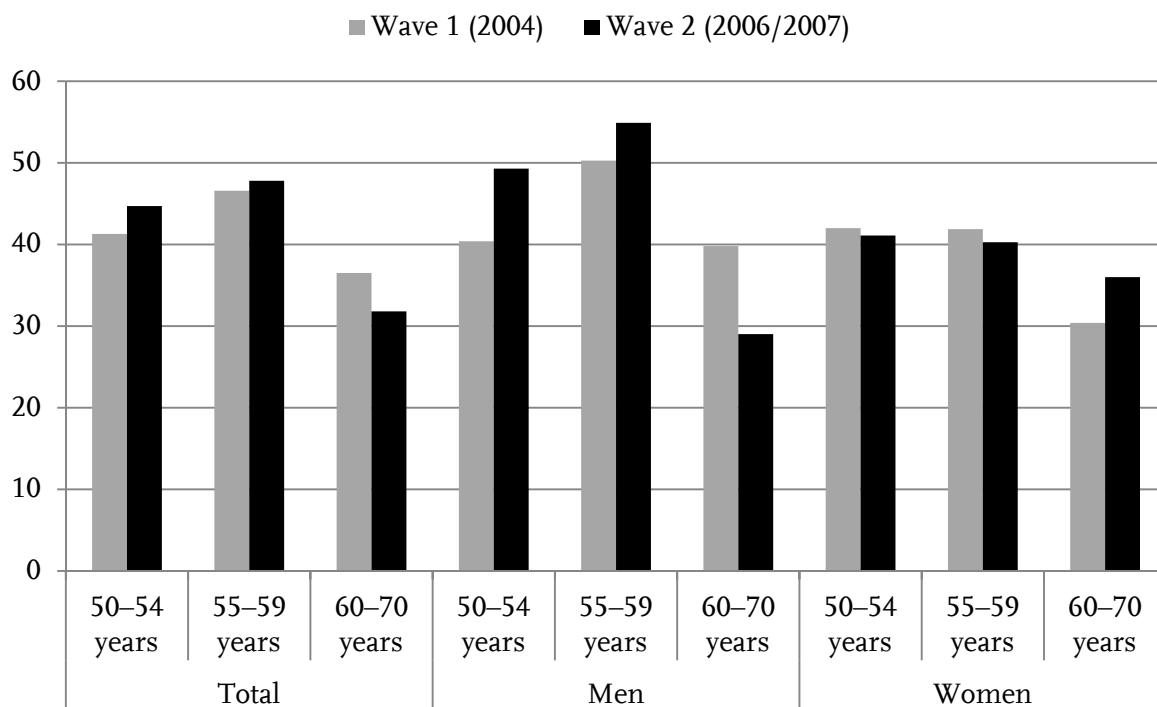
Source: OECD (2015).

⁷³2007 is chosen to represent Wave 2 because most of the fieldwork was conducted in this year.

Unfortunately some German public efforts to prolong working lives became effective only after 2007, limiting the recording of direct consequences for older workers' retirement plans between the two available observation points. Nonetheless, Figure 3.13 shows increasing employment rates for all age groups and both sexes. In the age groups "at risk" of early retirement, the respective rates even rose 5 percentage points (55- to 59-year-olds) and 8 percentage points (60- to 64-year-olds) within the 3-year period, indicating a success of active aging strategies in Germany.

With these increases in employment rates in mind, I shall now turn to the share of older workers who "wish to retire as soon as possible" (Figure 3.14). The sample used for these analyses in Germany consists of 626 men (52 percent) and 581 women (48 percent). A total of 17 percent live in East Germany and 47 percent are between 50- and 54-years-old, representing the reference category. Slightly more than one-third (35 percent) are 55- to 59-years-old. As in Denmark, all persons between age 60 and 70 are assigned to the oldest age group, comprising about 18 percent of the sample. More than one-half of all individuals (56 percent) have a qualification level assigned to ISCED 3 or 4, whereas 37 percent have ISCED 5, and only 6 percent have ISCED 2 or lower. As shown above in Table 2.8, the German respondents are distributed rather unevenly across the two waves with 70 percent being interviewed in 2004.

Figure 3.14: Wish to retire among German older workers by age group and wave (in percent of valid responses)



Source: SHARE Waves 1, 2; own calculations.

Combining the information from Figures 3.13 and 3.14, I can state that the rising employment rate in all age groups and both sexes does not mean that the wish to retire among older workers has decreased. In particular men below age 60 would prefer to withdraw from the labor market as early as possible; that is, more than one-half of them continue working rather reluctantly. Beyond age 60, the employment rate is remarkably lower, but the wish to retire is also less widespread and decreases remarkably among this comparatively small group of men. This indicates a strengthening of the positive selection into continued employment beyond this threshold. For women, however, this trend inverts, ending up with more than one-third of all female workers between age 60 and 70 wishing to retire in 2007. In sum, the attitudes of women change comparatively little with age or passing time, whereas there is remarkable development in both aspects among men. The multivariate analyses of developments over time should help to assess these trends in relation to individual and workplace characteristics.

The following logit models (Table 3.19) aim to identify determinants of older workers in Germany wishing to retire as soon as possible in 2004 and 2007, that is, at two observation points when several institutional measures to raise retirement ages started to become implemented. As already explained in the Danish case study, the additional personal characteristics led to a loss of case numbers. Therefore, they are introduced individually and stepwise, and retained only if they show a significant effect. In contrast, job-related attitudes such as perceived job security, job satisfaction, and physical demands of work along with the objective job characteristics such as weekly working hours, sector of employment (public vs. private), self-employment, and income are available for most cases. Because the majority of German respondents were interviewed in the first wave when two versions of the self-rated health indicator were tested, many cases are also lost in all models including this variable.

Despite their historical trend of earlier exit from work, female older workers' wish to leave employment is lower than men's within the observation window. However, the gender effect is due largely to segregation within the labor market, that is, women in similar job positions than men also have a similar attitude toward retirement (Models 8 to 10). Furthermore, people living in East Germany display a higher desire to retire than those living in the Western part throughout all models, indicating an enduring East–West divide as already found in the retrospectively assessed reasons for retirement and also in the objectively studied transition to retirement (Rinklake and Buchholz 2011).

Table 3.19: Determinants of the wish to retire in Germany (logit models)

	1	2	3	4	5	6	7	8	9	10	11
<i>Constant</i>	-0.17	-0.14	-0.20	-0.03	-0.28*	-0.23	-0.67**	-1.37**	-1.29**	-1.16**	-1.03**
<i>Sex: Female</i> (ref.: Male)	-0.30*	-0.29*	-0.26+	-0.36**	-0.30*	-0.40*	-0.36**	-0.24	-0.12	-0.16	-0.42*
<i>Region: East G.</i> (ref. West G.)	0.58**	0.57**	0.80**	0.58**	0.56**	0.66**	0.65**	0.51*	0.52**	0.48**	0.50**
<i>Age (ref.: 50–54)</i>											
55–59	0.17	0.17	0.11	0.06	0.18	0.13	0.21	0.22	0.24+	0.23	0.24+
60–70	-0.35*	-0.34*	-0.25	-0.52**	-0.33*	-0.34	-0.34	-0.17**	-0.19	-0.19	-0.17
<i>Qualification</i>											
ISCED 1/2	0.59*	0.63*	0.69*	0.57*	0.57*	0.52	0.59+	0.67+	0.67*	0.66*	1.30**
ISCED 3/4 (ref.)	–	–	–	–	–	–	–	–	–	–	–
ISCED 5	-0.38**	-0.38**	-0.38*	-0.39**	-0.36**	-0.47**	-0.36*	-0.47*	-0.34*	-0.32*	-0.69**
<i>Wave 2</i> (ref.: Wave 1)	0.05	0.06	-0.16	-0.06	0.05	0.06	0.10	0.21	0.14	0.14	0.15
<i>Further individual characteristics</i>											
<i>Single</i>		-0.22									
<i>Partner active</i>			0.18								
<i>Grandchildren</i>				0.04							
<i>Socially inactive</i>					0.23+	0.09					
<i>Bad health</i>						0.46*	0.37+	0.30			
<i>Job-related attitudes</i>											
<i>No job security</i>							0.55**	0.68**	0.49**	0.49**	0.45**
<i>Dissatisfied with job</i>							1.91**	1.83**	1.53**	1.52**	1.51**
<i>Physically demanding job</i>							0.42**	0.49**	0.39**	0.38**	0.36**
<i>Work characteristics</i>											
<i>Real working time</i>								0.01*	0.01*	0.01**	0.01**
<i>Public sector</i> (ref.: Private sector)								0.60**	0.37*	0.39*	0.38*
<i>Self-employed</i> (ref.: Dependent employed)								-0.76**	-0.76**	-0.76**	-0.77**
<i>Income</i>								0.02	0.08		
<i>Qualification × Sex</i>											
ISCED 1/2 × Female											-0.80
ISCED 5 × Female											0.84**
Chi ²	38.58	40.58	32.28	36.82	42.20	39.37	87.60	115.01	129.39	128.72	142.17
N	1,207	1,206	797	1,001	1,207	767	755	748	1,176	1,176	1,176

Source: SHARE Waves 1, 2; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Qualification level, in contrast, seems to have a substantial influence on the wish to retire. In other words, there is a stable gradient from high- to low qualified, indicating that the relation between retirement timing and educational level, which was also described by Rinklake and Buchholz (2011), might be supported by the individual's wish and still be topical. As shown by the interaction effect in Model 11 (and also by Tables A5 and A6), the relevance of qualification is stronger for men than for women. Furthermore, no difference can be detect-

ed between the two waves; that is, there is no change over time regarding the level of the wish to retire among the German population.

In context of non-labor-market related factors, bad health alone appears to be influential, but only for men (Table A11 and A12) and only until job-related attitudes and work characteristics come into play.⁷⁴ With the single exception of income, all job-related attitudes and observable work characteristics impact on the desire to retire: If the job is perceived as insecure, not satisfying, or physically demanding, an individual is highly prone to want to leave this job as soon as possible for retirement—just as hypothesized (H11). Also, high workloads and employment in the public sector foster the wish to retire, whereas self-employed persons prefer to remain in the labor market. Again, this result confirms what is known from German older self-employed workers' actual retirement behavior in the past (Rinklake and Buchholz 2011).

In sum, region of residence as well as qualification level appear to be influential factors on the individual level for the wish to retire among German older workers. In this context, high-qualified men reveal a particularly low desire to retire, confirming the expectation that this group is comparatively well prepared to meet the new requirements set by the public pension system. Also, attitudes toward the job play a decisive role, as well as being employed in the public sector or self-employed. The latter factors level out the gender effect but not the qualification gradient. Consequently, respective inequality structures within the German older population regarding retirement plans seem to persist.

⁷⁴ However, I cannot state whether bad health loses relevance because it is related to the latter sets of variables, or whether this is a statistical effect due to the lower case numbers in Models 6 to 8.

c Reversing the Early Retirement Trend in the Netherlands: Recovery from the „Dutch Disease“?

The research on the observed labor market exits of Dutch older workers covered only the period 1990–2001, thus missing the impact of institutional change in the early 2000s. This might be the reason why cohort comparisons do not reveal remarkable differences in employment exit. Only women show a tendency to retire earlier than older cohorts and, as a consequence, to have lower pension levels. In sum, disadvantaged population groups on the labor market such as those with low educational and occupational levels bore the highest risk or unfavorable retirement circumstances. The respective development over time cannot be analyzed due to data constraints. The following analyses might be able to fill this gap and to expand the observation period until 2007 and 2011, respectively.

Retrospective Reasons for Retirement

As in the previous country studies, I shall start by analyzing retrospective statements of Dutch retirees about the reason(s) why they retired in order to answer the research question: *How have the individuals themselves assessed their reasons for retirement in light of the changing institutional framework since the 1980s?* Furthermore, I shall conduct multivariate analyses to uncover *the relational pattern between individual and workplace characteristics, personal reasons for retirement, and institutional conditions*. Regarding the timing of the implementation of active aging policies, the Netherlands are situated between the leading country Denmark and the more laggard country Germany.

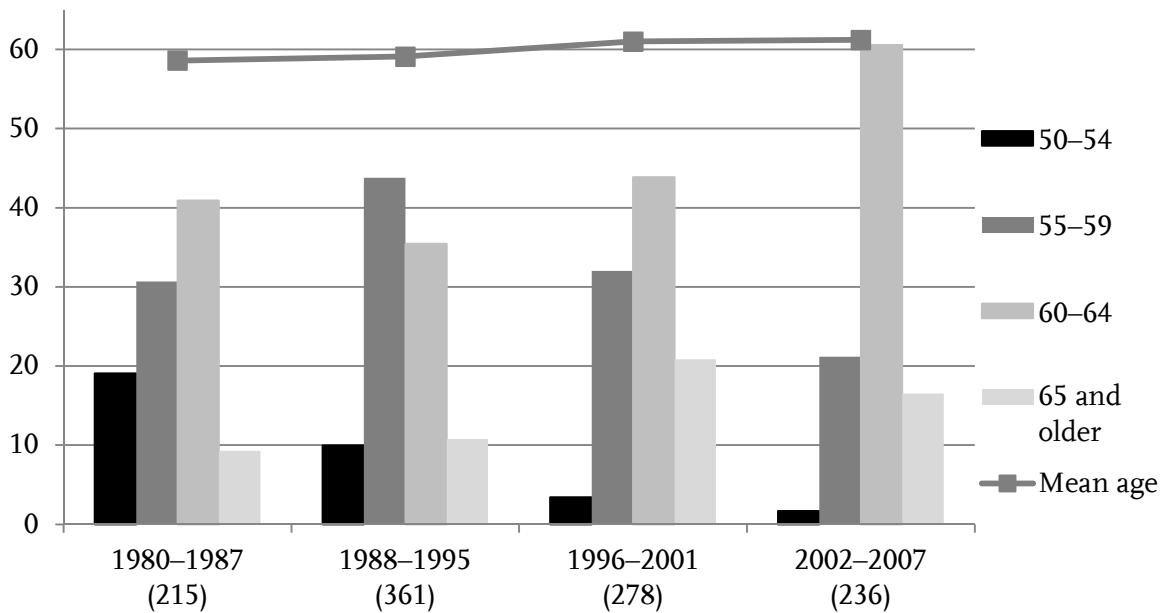
In the Dutch case, the periods used for describing historical development differ slightly from those used for either the Danish or German case studies.

- 1980–1987: The Netherlands experienced its worst economic crisis of the latest decades in the early 1980s (Figure 1.15).
- 1988–1995: Unemployment fell rapidly to about 5 percent, but rose again in the first half of the 1990s. Furthermore, the disability scheme still served as an early retirement pathway.
- 1996–2001: The disability scheme was subject to severely restrictive reforms. Also, the Dutch economy flourished and near-full employment was reached before the “dot-com” crisis caused a minor rise in unemployment.
- 2002–2007: The labor market recovered quickly and returned to unemployment rates of about 2 percent until the global financial crisis of 2008. Further efforts to promote active aging were implemented.

The development of retirement ages over these periods in the Netherlands strongly resembles the German picture, with the share of retirees withdrawing before age 60 even surpassing 50 percent in the early 1990s (Figure 3.15). Af-

terwards, however, a reversal of this early exit trend is clearly visible, ending up with more than three-quarters (77 percent) of all Dutch retirees waiting at least until age 60 for their permanent withdrawal from the labor force. In line with this, mean retirement ages have increased from 59 years before the mid-1990s to 61 years in the latest period. Table A13 shows the timing of retirement dependent on gender and qualification level. The picture is similar to the German case, but the shares of persons retiring before age 60 are the highest of all three countries.

Figure 3.15: *The Netherlands: Retirement ages of persons retiring in different historical periods (in percent) and mean age of retirement in the respective period (in years)*

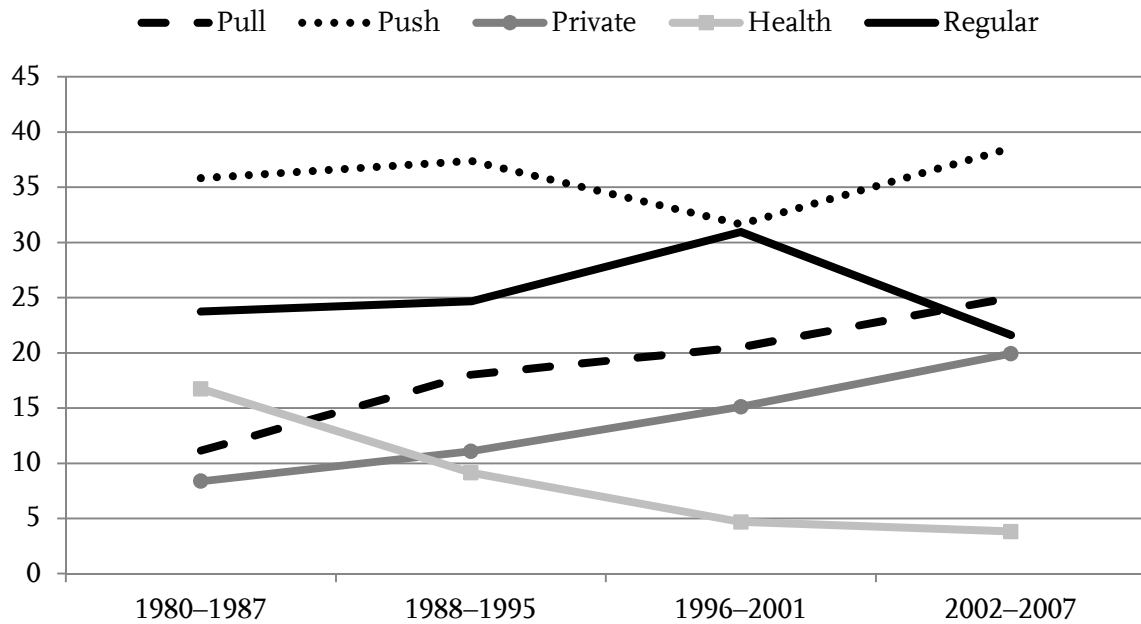


Source: SHARE Waves 1, 2, 4; own calculations.

Note: Numbers in brackets show absolute cases.

Figure 3.16 shows how the categorized statements by these individuals on their reasons for retirement are distributed across the historical time periods. Throughout the observation period, about one-quarter of all Dutch retirees state that reaching the legal retirement age or becoming eligible for AOW was crucial for their decision to retire. However, the incidence of crowding older workers out is stronger, in particular until the mid-1990s, affecting more than one-third of all retirees, before the unemployment rate fell rapidly and permanently below 5 percent.

Figure 3.16: Frequency of stated reasons by historical time periods in the Netherlands (in percent)



Source: SHARE Waves 1, 2, 4; own calculations.

Overall, the descriptive analyses propose that the majority of Dutch retirees left employment because they were either pushed out or reached the statutory retirement age. As time proceeds, however, early exits based on schemes other than the public old age pension increase along with the significance of private considerations for the individual retirement decision. Furthermore, health issues strongly diminish in relevance which is surprising considering that the disability scheme was a major early exit pathway for Dutch older workers until the 1990s. One explanation could be that the Dutch respondents do not equate “bad health” with “disability.” Alternatively, the low number of statements referring explicitly to bad health could indicate that health issues were often not the main reason for withdrawing from the labor market for retirees receiving disability benefit, confirming its function as an institutionalized early exit route. Nonetheless, the continuous decline afterwards matches the strong restriction of inflow into the scheme. In this context, it should be recalled that information is based on survey data, and I therefore do not know the true reason, but only what respondents are willing (or mentally able) to report.

Largely, the picture given in Figure 3.16 is confirmed by the multivariate analyses. These ascribe the most significant changes to the latest period 2002–2007 compared to earlier periods (Table 3.20). This finding matches Gesthuizen and Wolbers’ (2011) results indicating rather little change in retirement behavior for the period 1990–2001 and meets my expectation of the major impact of the

Dutch social policy reforms becoming noticeable only afterwards. Nonetheless, a considerable share of Dutch retirees were pushed out of employment even beyond the year 2000.⁷⁵ At the same time, and despite the successive closure of early exit pathways and increasing investment in age management strategies, pull effects have increasing power in inducing older Dutch workers to make their retirement decision dependent on financial sources other than the public old age pension AOW (and the related statutory retirement age of 65) (Table A14).

Table 3.20: Overview on the effect of independent variables on the propensity to list a specific group of reasons for retirement in the Netherlands

	pull	push	private	health	regular
Development over time	Increasing	Increasing	Increasing	Decreasing	Decreasing
Particularly relevant during the period	2002–2007	2002–2007	2002–2007	1980–1987	Until 2001
Unemployment rate	Low	High	Low	<i>ns</i>	<i>ns</i>
Retirement age	55–64	55–59	<i>ns</i>	50–59	65+
Sex	Male	<i>ns</i>	Female	<i>ns</i>	<i>ns</i>
Qualification	Low	Medium/ High	<i>ns</i>	Low	<i>ns</i>
Before vs. after 1995	After 1995	<i>ns</i>	<i>ns</i>	Until 1994	<i>ns</i>
Public vs. private sector	<i>ns</i>	Public	Private	<i>ns</i>	<i>ns</i>
Period × Sex (particularly relevant for...)	<i>ns</i>	Women after 2002	<i>ns</i>	<i>ns</i>	<i>ns</i>
Period × Qualification (particularly relevant for...)	<i>ns</i>	Medium-qualified in 1980–1987	High-qualified after 2002	Lower gap in 1980–1987	High-qualified in 1980–1987
Overall share of individuals stating this reason	18.8%	35.9%	13.5%	8.4%	25.4%
Absolute numbers of persons stating this reason	205	391	147	91	277

Source: SHARE Waves 1, 2, 4; own calculations.

Note: *ns* = nonsignificant.

⁷⁵ This does agree with findings from van Solinge and Henkens (2007) who claim that substantial numbers of older workers have limited agency over their retirement transitions. Similarly, Karpinska et al. (2012) find that negative attitudes of employers function as a normative barrier to prolonged employment which is also confirmed by Damman (2014) concluding that pressure by the employer was the most frequently mentioned factor behind involuntary retirement.

As a closer look at the single categories summarized as “**pull/push effects**” reveals, VUT (and later PP) represent the main pathway taken for both groups—that is, those being pushed and those being pulled out: 84 percent of all respondents stating “pull reasons” and 80 percent of those stating “push reasons” listed Category 4 (“was offered an early retirement option/window”), and in the Dutch questionnaires for Wave 2 and Wave 4, this category explicitly includes VUT as an example (Table A1). In this context, the low qualified tend to have been pulled out more, whereas the high qualified are more likely to be assigned to the push group (Table A15). Presumably the financial attractiveness of VUT and PP was higher for the low qualified and thus, they left rather “voluntarily”—at least in their own view. Higher qualified, in contrast, either had less chance to decline an early exit offer (in the sense of “an offer one cannot refuse” as stated by van Oorschot and Jensen 2009) or at least perceived their retirement as being “involuntary” to a greater extent. In other words, the stronger inclination of the medium and high qualified to recognize their retirement transition as involuntary might be—at least partially—a matter of perception due to, for example, their stronger work orientation. Furthermore, women retiring in the early 2000s felt affected more by crowding out than women retiring before, despite strengthened efforts for “active aging.” In other words, the gender bias of push reasons toward men is diminishing within the latest years of the observation window.

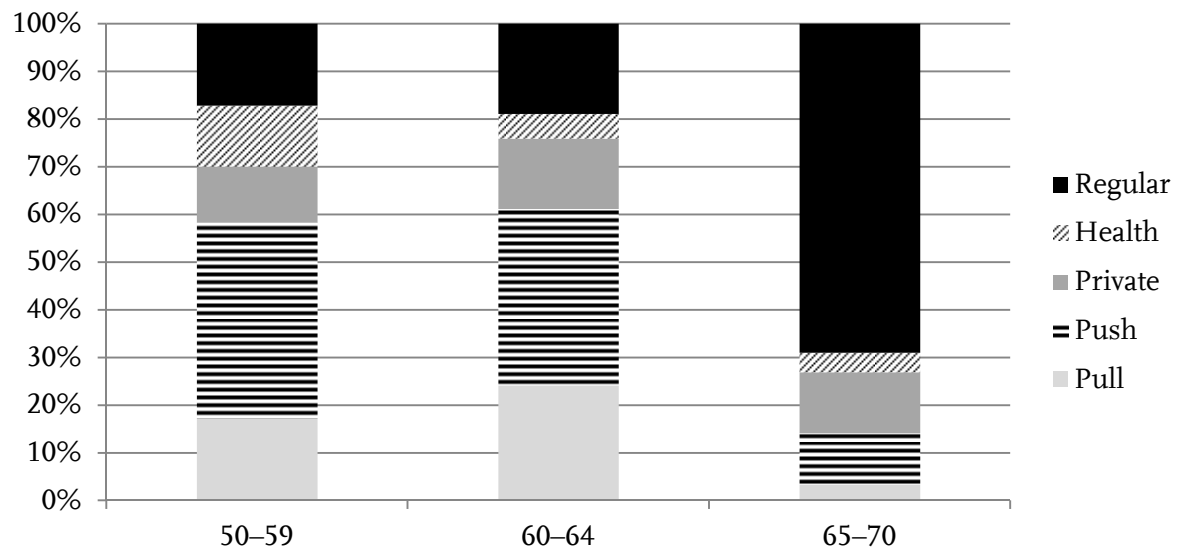
However, many of the women retiring after 2002, and particularly those among them who are high-qualified, emphasize “**private reasons**” when deciding about their individual retirement (Table A16). This is the same trend as that found in Denmark and Germany, and—as expected—the general rising relevance of private reasons is connected to shrinking unemployment in the last years under study. Thus, it applies to a larger extent to private sector employees who are affected more directly by economic fluctuations than public sector employees.

The incidence of “**health reasons**” as relevant for retirement is—as in the other countries—decreasing, but still relevant, particularly for those withdrawing before age 60 (Figure 3.17). In line with the reform of the disability scheme and the shrinkage of the share of persons already retiring in their 50s, health reasons lose relevance particularly after the mid-1990s and remain significant mainly for retirees with low qualification levels (Table A17).

With about one-quarter of Dutch retirees stating that “**reaching eligibility for the public old age pension**” is relevant for their decision to retire, the regular retirement pathway using AOW takes second place as reason for retirement. However, its relevance is decreasing since the 1980s, in particular for the high-qualified, which is in line with AOW fulfilling the function of providing a basic

income security in old age (Table A18). Due to its linkage to the minimum wage, it is thus plausible that particularly—but not exclusively—high-qualified Dutch are oriented towards more status-maintaining income sources in old age.

Figure 3.17: Reason for retirement by retirement age in the Netherlands



Source: SHARE Waves 1, 2, 4; own calculations.

Prospective Wish for Retirement

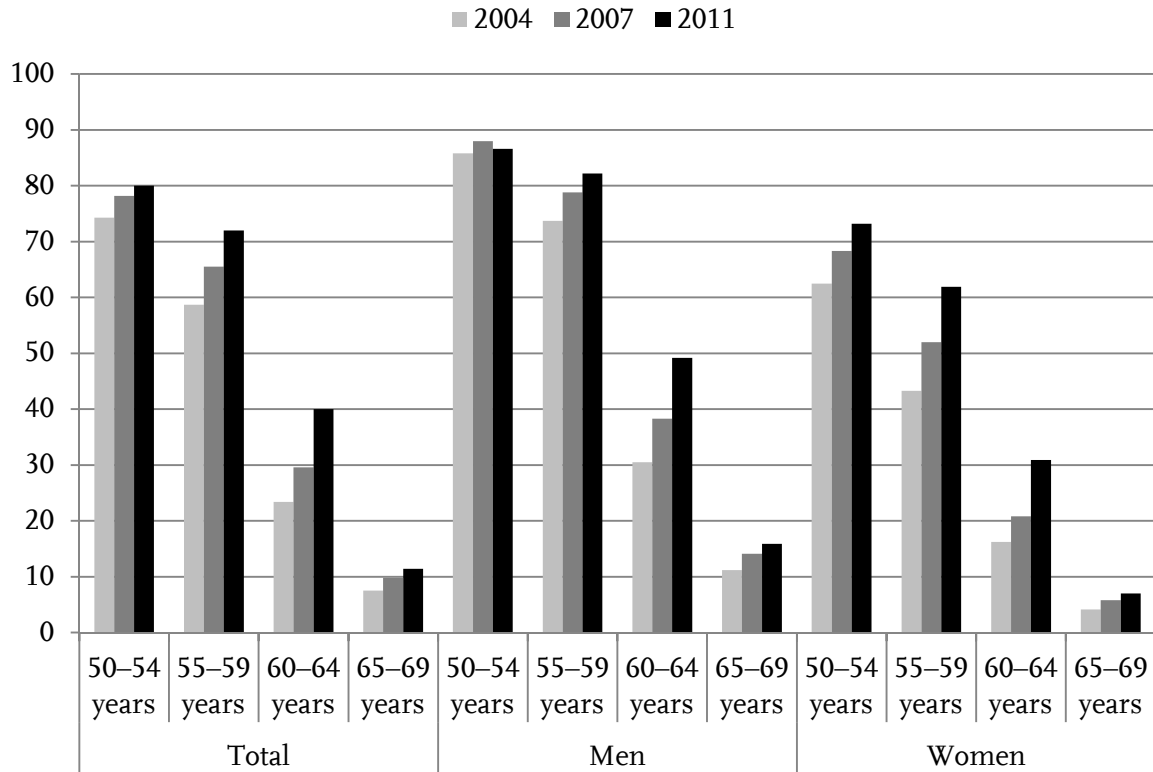
As in the Danish and Dutch case studies, I shall conclude the Dutch country study with a focus on older Dutch workers who were still in the labor market in these early years of the new millennium, that is, between 2004 and 2011. In this context, I shall examine the potential extrapolation of inequality patterns observed so far, addressing the following research question: *Which characteristics influence the wish to retire among current older workers?*

Similar to the Danish study, information on the wish to retire among Dutch older workers comes from the SHARE surveys in all three years 2004, 2007,⁷⁶ and 2011. During the first year, unemployment in the Netherlands reached a small peak of almost 5 percent. In 2007 and 2011, the rate was at a lower level of around 3 percent (Figure 1.15). Public efforts to prolong the working lives of Dutch older employees were thus accompanied by favorable economic circumstances.

Figure 3.18 indeed demonstrates that employment rates among the older Dutch have risen steadily between 2004 and 2011 (with the exception of the group of men aged 50–54 whose rate fluctuates on a rather saturated level). Among the 60- to 64-year-old age group, the total rate has even almost doubled within these 7 years. Nonetheless, there is still an immense difference to those younger than 60, resembling the steep fall after age 60 in the Danish case. With 72 percent of Dutch aged 55–59 employed and 80 percent of those aged 50–54 employed in the last observation year, the gap between individuals in their early and late 50s has diminished. In contrast, women still display clearly lower employment rates than men in all age groups.

⁷⁶ Other than in Denmark and Germany, the field work of Wave 2 in the Netherlands started (and also ended) in 2007.

Figure 3.18: Employment rates for different age groups in the years 2004, 2007 and 2011 in the Netherlands (in percent)

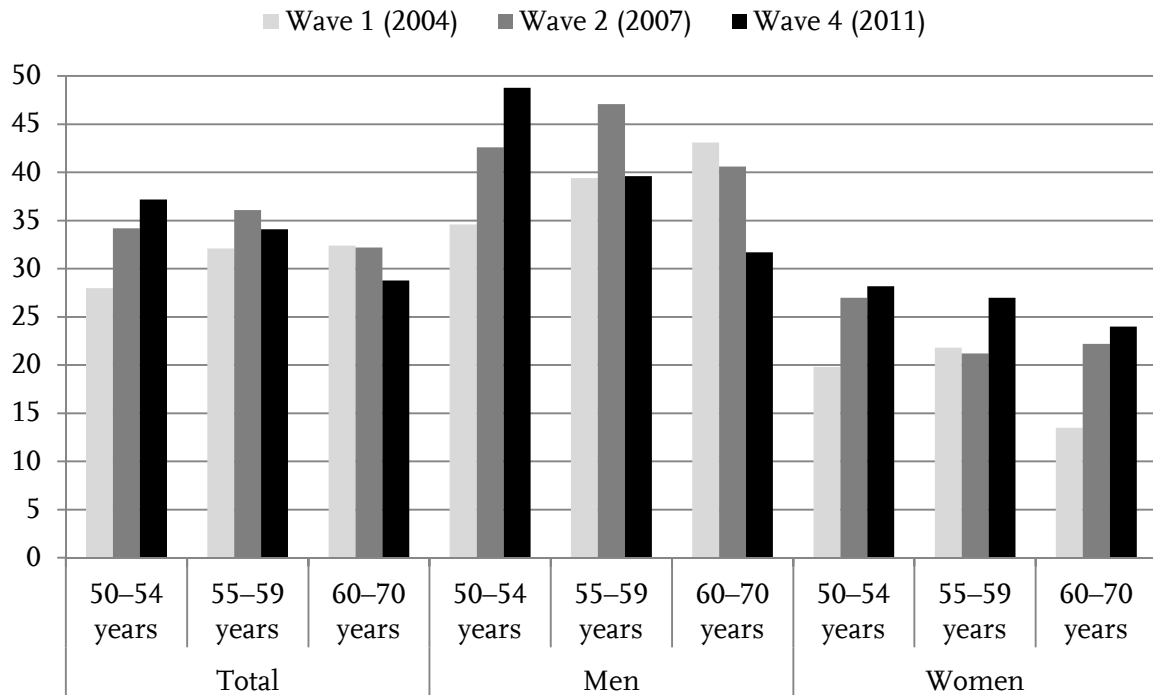


Source: OECD (2015).

With these increases in employment rates in mind, I shall now turn to the share of older workers who “wish to retire as soon as possible” (Figure 3.19). The sample used for these analyses consists of 852 men (54 percent) and 713 women (46 percent). One-half are between 50 and 54 years old, representing the reference category; slightly more than one-third (36 percent) are 55 to 59 years old; and 15 percent are in their 60s. Qualification levels are distributed rather evenly across the sample, with 35 percent having ISCED 2 or lower, 30 percent having ISCED 3, and 36 percent being assigned to ISCED 5. Similar to the corresponding German subsample, most Dutch (53 percent) were interviewed in Wave 1. Fairly equal shares of 25 and 22 percent were respondents in Waves 2 and 4 respectively.

Unexpectedly, the constant increase in employment rates visible in Figure 3.18 is not paralleled by an overall decrease in the wish to retire (Figure 3.19). In contrast, the wish for retirement strengthens visibly over time for the 50–54 age group. However, since individuals in their early 50s have few opportunities to actually withdraw from the labor market, the older age groups are more informative in this respect. Among the Dutch in their late 50s, the wish to retire does not show a clear trend. Beyond age 60, the development is gender-specific: men become more satisfied, whereas women’s wish to exit employment increases.

Figure 3.19: *Wish to retire among Dutch older workers by gender, age group and wave (in percent of valid responses)*



Source: SHARE Waves 1, 2, 4; own calculations.

The differences between the genders visible in Figure 3.19 prove to be highly significant in the multivariate analyses (Table 3.21). Women are employed to a lesser extent than men at higher ages, but those who do have a job are, on average, more satisfied with this situation than men. However, the wish to retire among Dutch older workers is increasing steadily across the observation waves—among both men and women (Tables A7 and A8). Unexpectedly, the wish for retirement is thus not decreasing in line with the strengthening of “active aging strategies” in the Netherlands. Furthermore, the variations between the three age groups depicted in Figure 3.19 do not persist in the multivariate models. Consequently, in contrast to Denmark, a positive selection of work-oriented individuals into employment beyond age 60 does not seem to take place.

Nevertheless, workers with the highest educational level display a lower wish to retire than those on medium or low levels. However, the interaction effect in Model 10 as well as separate models for men and women (Tables A19 and A20) reveal that the qualification effect is applicable predominantly for men.

As in Germany, the family situation does not exhibit a significant influence on an individual’s wish to retire. Social activities, in contrast, have a strong effect in that older workers who are less socially active have a stronger wish to retire. Remarkably, this effect remains significant after taking subjective and objective job characteristics into account. Also, bad health status increases the likelihood

of an individual wanting to retire soon, and even retains its significant positive influence when all other factors are introduced. However, similar to qualification, this influence is based mainly on men's statements (Tables A19 and A20).

Table 3.21: *Determinants of the wish to retire in the Netherlands (logit models)*

	1	2	3	4	5	6	7	8	9	10
<i>Constant</i>	-0.41**	-0.40**	-0.37**	-0.49**	-0.52**	-0.56**	-1.04**	-0.74*	-0.93**	-0.71**
<i>Sex: Female</i> (ref.: Male)	-0.85**	-0.85**	-0.91**	-0.93**	-0.85**	-0.83**	-0.85**	-0.91**	-0.90**	-1.41**
<i>Age</i> (ref.: 50–54)										
55–59	0.05	0.05	0.14	0.05	0.03	0.07	0.18	0.14	0.16	0.15
60–70	-0.13	-0.13	-0.03	-0.12	-0.15	-0.13	-0.04	0.11	0.11	0.12
<i>Qualification</i>										
ISCED 1/2	-0.00	-0.00	0.03	0.03	-0.04	-0.26	-0.28+	-0.25	-0.24	-0.42+
ISCED 3 (ref.)	–	–	–	–	–	–	–	–	–	–
ISCED 5	-0.34*	-0.34*	-0.24	-0.31*	-0.32*	-0.44**	-0.37*	-0.28	-0.34*	-0.74**
<i>Wave</i> (ref.: Wave 1)										
Wave 2	0.28*	0.27*	0.23	0.31*	0.28*	0.34*	0.43**	0.41*	0.42*	0.42*
Wave 4	0.32*	0.32*	0.18	0.47**	0.44**	0.48**	0.52**	0.51**	0.52**	0.53**
<i>Further individual characteristics</i>										
<i>Single</i>		-0.04								
<i>Partner active</i>			-0.08							
<i>Grandchildren</i>				0.05						
<i>Socially inactive</i>					0.42**	0.46**	0.43*	0.45*	0.45*	0.44*
<i>Bad health</i>						0.53**	0.46*	0.49*	0.46*	0.44*
<i>Job-related attitudes</i>										
<i>No job security</i>							0.32*	0.33*	0.35*	0.34*
<i>Dissatisfied with job</i>							1.47**	1.41**	1.38**	1.38**
<i>Physically demanding job</i>							0.42**	0.44**	0.46**	0.46**
<i>Work characteristics</i>										
<i>Real working time</i>								0.00		
<i>Public sector</i> (ref.: Private sector)								-0.19		
<i>Self-employed</i> (ref.: Dependent employed)								-1.58**	-1.45**	-1.46**
<i>Income</i>								-0.11		
<i>Qualification × Sex</i>										
ISCED 1/2 × Female										0.46
ISCED 5 × Female										1.02**
Chi ²	68.28	68.33	48.71	65.55	77.52	69.74	119.66	160.62	159.06	167.76
N	1,565	1,565	1,057	1,295	1,565	1,149	1,137	1,125	1,137	1,137

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

All three subjective assessments of the job situation exert an influence on the wish to retire in Dutch older workers: Perceiving employment as insecure, being dissatisfied, or feeling physically challenged increases the desire to exit the labor force. In contrast, income, workload in terms of weekly working hours, or

whether someone is employed in the public or private sector have no influence.⁷⁷ As expected, and similar to the other country studies and to well-known findings from other research, the self-employed are less eager to leave the labor force as soon as possible.

In the following section, I shall briefly summarize the findings from the empirical analyses on *Perceptions on Retirement* by comparing the country-specific results on the patterns of the *Retrospective Reasons for Retirement* as well as on the *Prospective Wish for Retirement*. Afterwards, in chapter IV, I shall integrate both views on retirement transitions for all three countries under study and draw conclusions from the findings regarding the relevant determinants of the decision-making process, in particular regarding the influential power of factors on different levels and within various institutional contexts.

⁷⁷ As in the Danish case, excluding the 228 self-employed respondents in the sample also does not generate a significant effect for public/private sector.

d Preliminary Conclusion on the Patterns of Retirement Perceptions in Denmark, Germany, and the Netherlands

The second empirical part *Perceptions of Retirement: The Impact of Changing Frameworks on People's View on Retirement* analyzes retirees' view on their own entry into retirement as well as the wish to retire among older employees. The idea behind including people's perspectives was to increase understanding of how retirement decisions are made and to see what role social policy instruments as well as further factors play by shaping social inequality patterns among older workers and retirees. As in *Section 1: Pathways into Retirement*, I started with detailed analyses on the case study Denmark, presenting empirical results on the distribution and historical development of self-stated reasons for retirement as well as of the desire to retire. After replicating these analyses for Germany and the Netherlands, I was able to answer three of the four research questions on the subjective perspective of Danish, German and Dutch retirees:

- *How did the individuals themselves assess their reasons for retirement in light of the changing institutional framework since the 1980s?*
- *What is the relational pattern between individual and workplace characteristics, personal reasons for retirement, and institutional conditions?*
- *Which characteristics influence the wish to retire among current older workers?*

This preliminary summary will now focus on the cross-country comparison and thereby answer the second question from an international point of view. In other words, it will contrast national institutional conditions and reform pathways with the respective changes in reasons for retirement, that is, discover country-specific patterns of framing in context of individual retirement transitions. It will also address the fourth research question on the individual and workplace characteristics of the wish to retire among older employees:

- *Do these characteristics vary between Denmark, Germany and the Netherlands, that is, between countries with different institutional contexts?*

According to the twofold research interest, the cross-country differences will then be interpreted in terms of (1) the scope of consequences for older workers and retirees over the course of the ongoing economic restructuring and reform of pension systems (development over time) and (2) differences between social groups, in particular between men and women and between persons on different qualification levels (social inequality).

Development Over Time

As expected, in all three countries, I discovered a strong relationship between macrolevel developments such as the economic cycle, (reactive) political measures and statements about the reason(s) for retirement. Hence, the mechanism proposed in the theoretical model (Figure 1.7) is confirmed: To a high degree, older workers orient their retirement behavior toward the available social policy options regarding early exit pathways, and thus react to changes in these options. Table A21 in the appendix presents the comprehensive patterns as well as country-specific aspects.

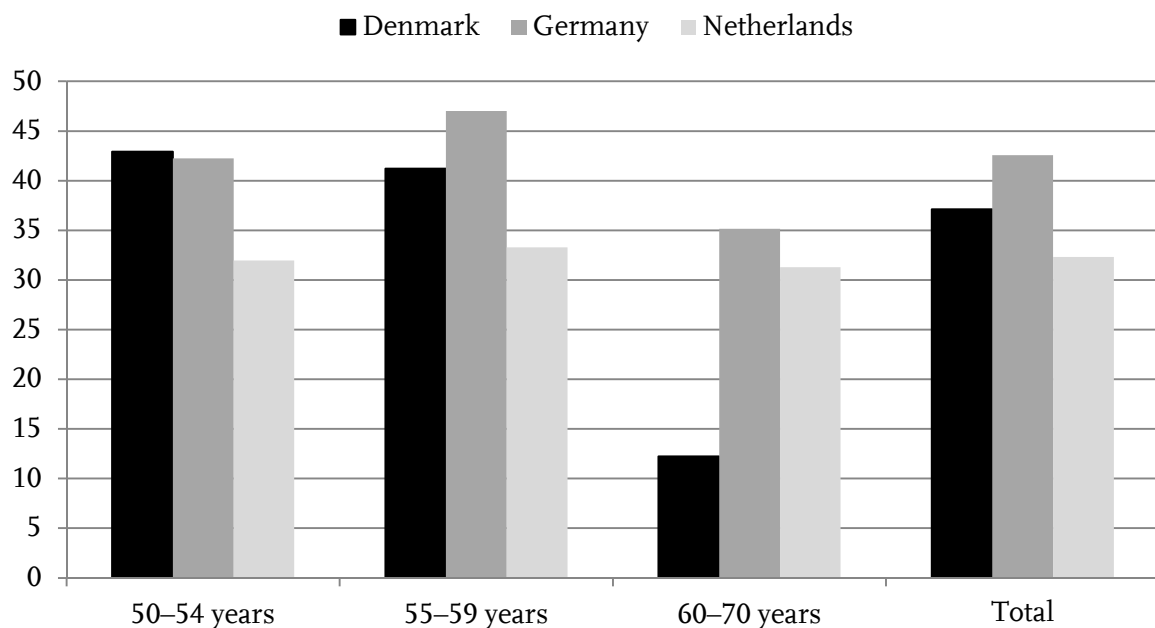
Due to the successive removal of incentives for early retirement in all countries, retirement transitions driven by “*pull factors*” were expected to decrease in relevance from about the late 1990s onward (H9). However, according to the retirees’ statements, they remained rather stable in Denmark and in Germany, and were even slightly on the rise in the Netherlands. The reasons can be found in nation-specific regulations: Most of the respective statements of Dutch retirees referred to VUT, which was abolished in 2006. Because the present observation window closes in 2007, this trend might have changed only afterwards. In Denmark, the increasing coverage of occupational pensions and their relevance for retirement decisions compensates for the closure or restriction of other early exit pathways. In Germany, pull factors generally played a minor role. Instead, retiring for the respective reasons was often perceived as being “*pushed out*” because continuing to work was not possible. Not only in Germany but also in the Netherlands and in Denmark, these push factors were revealed to be highly relevant for retirement decisions—and noticeably more relevant than pull factors. In total, more than one-third (36 percent) of all Dutch respondents stated that they were pushed out of employment, which is even more than the share among the German reference group (29 percent) who had to face a much worse economic situation during most of the observation period.

All three countries revealed a rising influence of *private circumstances and preferences* on retirement decisions, although on different levels. In the first years of the new millennium, the share of retirees listing a private reason was more than twice as high among the Danes (42 percent) than the Dutch (20 percent) or Germans (16 percent). As predicted in Hypothesis 11, this trend is linked to the positive economic development that was visible in all countries until 2007. Also in line with my assumptions, Germany’s lowest values are highly plausible because its economy was the last to recover. Another, nonfinancial aspect driving retirement decisions is the individual *health state*. The relevance of this reason declined only in the Netherlands but remained stable in Denmark and Germany. In all three countries, respective statements came predominantly from those

who retired before their 60th birthday. The “*regular*” pathway, finally, lost significance for retirement decisions in all three countries. This development is not surprising within the multipillar systems of Denmark and the Netherlands, because occupational pensions have spread to almost all groups of employees in recent decades and successively taken over the function of status maintenance. In Germany, however, the traditionally strong focus on the public pension system has shifted only marginally despite policy efforts to strengthen occupational and private provisions particularly during the 2000s.

Hence, questioning retirees on their reasons for retirement helped to reconstruct the individual framing of the retirement transition as well as the preference structure driving their decision-making. The idea behind analyzing their wish to retire within the years following the implementation of active aging measures was (1) to add more information on the decision-making process from a prospective point of view and (2) to gain insights into the acceptance and effectiveness of these measures. The development of the wish to retire is thus interpreted as a proxy of (sustainable) reform success. In that context, Hypothesis 10 must be partly rejected: In the Netherlands, the share of older workers who wish to retire “as soon as possible” is lower than in Denmark (Figure 3.20). Nevertheless, it has increased over time (Table 3.21). Unfortunately, data restrictions did not allow me to observe the respective trends in Germany beyond 2007.

Figure 3.20: Employed persons looking for retirement by age groups and by country, as a percentage of all (self-) employed persons in the respective age group



Source: SHARE Waves 1, 2, 4; own calculations.

Social Inequality

The analyses on the patterns of social inequality focus on differences between men and women and between persons with different qualification levels regarding their view on the individual retirement transition. It is important to note that these two dimensions are not independent in reality, because women within the subsample of retirees are less well-qualified than men in all three countries. However, only in Germany, this difference persists for older workers beyond the year 2000. But even when qualification is controlled, some differences remain between men and women regarding their subjective view on their own reason(s) for retirement.

In all three countries, *women* are—in their view—less affected by health issues triggering retirement and also by push factors, but instead they tend to consider private reasons to a greater extent than men in all countries (Table A21), supporting Hypothesis 14. Furthermore, a closer look at the distribution of the original answer categories reveals remarkable differences between the four categories designated as “private” (Table 3.22): In all countries, women are more inclined to retire due to ill health of a relative or friend, together with their partner, or in order to spend more time with their family. Enjoying life, however, is remarkably more relevant for men than for women, illustrating that “private reasons” for women indeed refer to their family orientation and care responsibilities (particularly in Germany). Nevertheless, having grandchildren does not result in a higher wish to retire in any of the three countries (Table A22).

Table 3.22: *Distribution of answers summarized as “private reasons” by gender (in percent)*

	Denmark		Germany		Netherlands	
	Men	Women	Men	Women	Men	Women
7. Ill health of relative or friend	5.6	12.8	12.7	28.7	6.2	12.0
8. To retire at same time as spouse or partner	17.6	25.6	4.2	24.5	6.2	30.0
9. To spend more time with family	40.9	45.0	22.5	43.6	25.8	26.0
10. To enjoy life	70.4	54.4	76.1	42.6	81.4	48.0
N	142	180	71	94	97	50

Source: SHARE Waves 1, 2, 4; own calculations.

Segmentation along *qualification levels* reveals only a few comprehensive trends with respect to the individuals’ view on retirement. Partly, this might be due to a lack of significance in many analyses due to low case numbers in certain qualification categories. Furthermore, the use of qualification levels according to the ISCED scheme and the aggregation of stages as explained in chapter II (Tables

2.7 and 2.9) led to rather different distributions across the three resulting categories in each of the three countries.⁷⁸

Unexpectedly, however, the low qualified do not feel affected the most by push factors in any of the countries (Table A21), rejecting Hypothesis 12. Whereas all Germans evidently are concerned about “involuntary” retirement to the same degree, the high qualified Danes and Dutch are even more prone to state that they had been pushed out than the low qualified within their own countries. This can be explained to a large extent by country-specific trends in early exit pathways that also influence the incidence of pull factors: In Denmark and Germany, persons with medium or higher qualifications are more likely to retire “voluntarily,” whereas the respective early exit opportunities are evidently more attractive for the low qualified in the Netherlands. These were also most likely to retire due to bad health, like their German counterparts, confirming the link between low qualification and health-related early retirement for these two countries. In addition, low qualified workers display a stronger preference to retire only in Germany and the Netherlands (Table A22), reflecting both countries’ comparatively lower success in keeping this group of older workers in the labor market.

However, next to gender and qualification, *further individual and also some job-related aspects* were expected to play a role in retirement decisions in all three countries, as stated in Hypothesis 11. In the context of the wish to retire, the influence of several variables containing information about family background, personal preferences, and attitudes as well as some work characteristics could be tested. Indeed, job dissatisfaction and the perception of high physical demand at work positively influence the wish to retire in all three countries, that is, are factors shaping in an individual’s framing of her or his retirement transition.

The following synthesis will combine the results from the objective and subjective analyses of retirement transitions and thus summarize what has been learned regarding the effectiveness of policy frameworks and the respective decision-making process in all three countries.

⁷⁸ Overall, with more than one-half (54 percent) being assigned to ISCED 1 or 2, the Dutch retirees in the sample are, on average, comparatively low qualified (percentage of persons with ISCED level 1 or 2 in Denmark: 31 percent; in Germany: 16 percent). Among the older workers who were asked for their preferences to retire, the Danes take over the lead as the best qualified group followed by the Germans and, once again, the Dutch as the least qualified.

IV Synthesis: Integrating Objective and Subjective Perspectives on Retirement

So far, objective and subjective views on retirement transitions have been analyzed and discussed separately. The first empirical part examined the “risks” of becoming unemployed and reemployed in the late career as well as of retiring along with the determinants of pension income depending on a person’s birth cohort and some further individual and workplace characteristics. In the second part, the focus switched to subjective assessments of the individual retirement transition, including reasons for foregone transitions as well as desires regarding coming ones. This section will combine the findings from both empirical sections and refer to theoretical considerations presented in chapter I. Hence, it will summarize the power of factors on the various levels to influence retirement processes and deliver a comprehensive description of how institutional contexts, workplace characteristics, and individual features interact and, consequently, shape inequality patterns among the older workforce and among retirees. Finally, I shall answer the three questions posed in the introductory section:

- (1) Is Denmark’s older population comprehensively prepared to meet the challenges of globalized labor markets and changed policy frameworks?
- (2) Does Denmark perform better in this respect than Germany and the Netherlands; and if yes, why?
- (3) How are retirement decisions made within different national contexts, and what additional knowledge can be gained by combining objective as well as subjective perspectives on the transition to retirement?

I shall proceed by discussing the country-specific situation and developments in Denmark first and finish with a cross-country comparison. The chapter closes with a summary of hypotheses including an assessment of whether they can be regarded as confirmed or rejected.

1 Denmark

Denmark is the showcase of this study and therefore, the analyses of both objective and subjective perspectives on retirement are particularly detailed here. Also, the data quality and availability are comparatively sound. Hence, pathways into as well as perceptions of retirement could be traced comprehensively for the period from 1980 up to the first decade of the third millennium. Within these years, the observed labor market risks and chances of older Danes as well as their retirement transitions strongly mirror the respective macro-level conditions, that is, the development of the business cycle and related policy reactions. When asked to give their personal reasons for foregone retirement, the answers of the Danish retirees are also clearly related to the institutional context and relevant changes over time (e.g., the progressive expansion of occupational pensions) and political answers to macrolevel developments (e.g., the introduction of TBP during the recession in the 1990s). Hence, subjective views on the retirement transition change along with the institutional context, as predicted in the theoretical model (Figure 1.7).

By integrating people's own views, I was also able to discover that "pushing out" older workers was particularly common in the 1990s' crisis, and thus responsible for a large part of early retirement during that period. However, it is recurrent since then. This pattern is exactly in line with the theoretical considerations on "push factors" explained in chapter I: When unemployment is high, older workers are at risk of being crowded out of employment because there is less demand for their labor. When the Danish labor market recovered in the second half of the 1990s, however, older workers' chances of remaining employed or finding a new job increased. Despite the massive shift toward a service-sector-based society, they were "employable" in the economic boom thanks to the tradition of lifelong learning within the Danish workforce and high public investments in ALMP. Hence, Hypothesis 1 is confirmed.

I also ascertained that, on average, effective retirement ages have increased steadily since the mid-1990s among Danes. But, at the same time, the empirical analyses reveal that the decision to retire is driven increasingly by "pull factors," that is, by financially attractive options to exit before the statutory retirement age (including VERP as well as occupational pensions), supporting Hypothesis 3a.

Evidently, since about the turn of the millennium, Danish older workers are tending to leave rather "voluntarily," that is, by making a deliberate choice for early exit with the help of whatever pathway is available. However, this "early" exit is being put off even longer because the employment rate of Danes aged 60 and older has been increasing continuously. These parallel trends indicate that more and more older workers are consciously deciding to work longer than until

VERP eligibility: in this context, Andersen and Hatland (2014) report that the number of VERP recipients has decreased by about 35 percent between 2007 and 2013. In other words, public efforts to promote active aging have been successful: Evidently, many Danes respond in the intended manner to the reduction in attractiveness of early retirement opportunities and continue working beyond age 60. The “voluntariness” of this behavior is supported by the fact that the vast majority of those who are in employment beyond age 60 do not express a desire to quit. Consequently, Hypothesis 2 can be regarded as confirmed as well: Long labor market participation is assessed positively among the Danish population, and thus, implemented.

Furthermore, public investments in requalification measures and in support for job placement provide many of them with opportunities to stay employed as long as they prefer. Nevertheless, in 2011, less than one-half of all Danes between 60 and 64 years actually were in employment (Figure 3.8). Consequently, VERP and other early exit opportunities still provide considerable incentives to retire before the regular retirement age of 65. Therefore, despite the comparatively late retirement of the Danish population, the VERP eligibility age of 60/62 years remains a crucial threshold for further pension policy.

The interpretation that older Danes have more of a “free choice” regarding the point of retirement is further supported by the finding that personal preferences represent a growing force in shaping retirement processes in Denmark, which was presumed in Hypothesis 3b. Having enjoyed a relaxed economic climate for many years, a lot of Danes take considerations about their private situation into account when deciding about their own retirement transition. Despite the strong impact of institutional framework conditions and financial (dis)incentives, personal circumstances and their perceived link to the individual retirement transition are thus far from negligible factors influencing the timing of retirement in the Danish case.

However, the freedom of choice shows a qualification gradient: On the one hand, the early exit pathways used differ between retirees on varying qualification levels, with those pathways mainly used by the low qualified being particularly affected by restrictions (VERP, TBP). On the other hand, the low qualified are less inclined to consider private reasons, highlighting the weight of financial aspects for their retirement decisions. At the same time, the situation of low qualified older workers has become more and more precarious over the course of globalization. This is illustrated by their higher risk of unemployment in the late career and the growing negative impact of these inactive periods on further employment chances and their financial situation in old age. Since the mid-1990s, employment rates of older workers with low or intermediate qualifica-

tions have increased, but a remarkable gap to the high qualified remains: In 2012, less than one-half (47 percent) of low qualified older workers are in employment, compared to almost three quarters (74 percent) of the high qualified in the same age group (Figure 1.12). For a long time, the respective early exit schemes and a generous OAP have provided low qualified—and thus, often low-paid—older Danes with decent incomes in old age despite their comparatively early withdrawal from the labor market. But the shift toward individual responsibility for pension provision and the recommodification trend have shrunk their scope of action and worsened their economic situation. Consequently, inequalities between the high and low qualified have widened via the mechanism of *cumulative disadvantage*. However, the share of low qualified Danes has been declining strongly in recent decades (Larsen and Pedersen 2013; OECD 2013b), suggesting that the disadvantaged group has been shrinking considerably. In sum, Hypotheses 4 and 5 on the influence of qualification on structural disadvantage as well as on subjective framing can be confirmed.

The second group in the special focus of this study is women, and I have thus scrutinized their potential discrimination compared to men. Strikingly, gender differences in the late career and retirement transitions as well as in the subjective assessment of the latter persist in many respects despite the decade-long high integration of women into the Danish labor market. First, retired women evaluated the early retirement pathways in the 1990s in another way than their male counterparts: They experienced the framework conditions of the time that were fostering early retirement as more of a “pulling” than a “pushing” out; that is, as attractive opportunities to withdraw from employment far before the regular retirement age. Second, they include other than economic factors to a higher degree than men into their retirement decision: Private reasons for retirement were considerably more often stated by female retirees than by males; and it is only among women that partnership status influences their wish to retire. These results are in accordance with patterns found by Larsen (2008) and Larsen and Pedersen (2013). Third, older women still have a stronger wish than men to retire “as early as possible.” I thus conclude that, on average, Danish older women are less work oriented than men and thankful for opportunities to leave the labor market early, despite the negative consequences for their income in old age.⁷⁹ In other words, not only the framing of the retirement transition but also the preference structure varies by gender (as expected in Hypothesis 7). This

⁷⁹ Women do not just have, on average, lower incomes in old age than men (which was one of the findings in context of *Late Career and Labor Market Exit Trends in Denmark*). Zaidi (2009) reports a higher poverty rate for Danish women than for Danish men in the mid-2000s.

interpretation contributes to the understanding of the results found in *Section 1: Pathways into Retirement*: Female Danes were more likely to become unemployed, less likely to be reemployed, and more likely to retire early than male Danes. Not even employment in the (usually more secured) public sector prevented them from inactivity, leading to rejection of Hypothesis 6. Presumably, women's nonemployment is thus often "voluntary," explaining the persisting gender gap regarding employment rates of older Danes in their 60s (Figures 1.8 and 3.8) despite favorable framework conditions. In line with these findings, Madsen (2012) reports that there are still high take-up rates of VERP for Danish women.

Further gender differences emerged in context with health as reason for retirement. Throughout the observation period, almost one-half (45 percent) of all Danes who retired between age 50 and 59 stated health problems as (one) reason for this step (Figure 3.7). The majority (59 percent) of these were female. Also, the sequence analysis in *Section 1: Pathways into Retirement* revealed that disability benefit as a bridge between employment and OAP was more common for women than for men (Figure 3.2). This is in line with van Oorschot and Jensen's (2009) finding that disability benefit remains a major early exit pathway for women younger than 60.

Finally, the results on Denmark clearly show that the public old age pension scheme *Folkepension* has progressively lost relevance for the retirement decisions of older Danes which is another confirmation of Hypothesis 3. On the one hand, reaching the respective eligibility age (i.e., statutory retirement age) becomes less significant as the reason for retirement. On the other hand, public pension payments contribute a decreasing share to total income in old age (Figure 3.3). Both trends contribute to the development of the first pillar provision into a public benefit securing a minimum living standard of the poorest, whereas most Danes have additional income sources available in old age (in particular, an occupational pension).

Now, I can offer an answer to the question: *Is Denmark's older population comprehensively prepared to meet the challenges of globalized labor markets and changed policy frameworks?* My answer is a "yes," conditional on a continuance of positive economic development, that is, the availability of enough jobs for the elderly workforce in the future. I therefore agree with Guardiancich (2010a:6) who states that "Denmark, (...) successfully combines the fiscal sustainability of its retirement system with quasi-universal social adequacy." Also, Andersen and Hatland (2014:277) conclude that "as regards sustainability, the Danish pension system is in an exceptionally good situation" and that Denmark, together with the other Nordic countries, has comparatively less to fear as regards demograph-

ic change, due to their high fertility rates, net immigration and reformed pension systems. Nevertheless, the specific institutional context has not avoided an objective increase in social inequalities among the population. But that does not matter for the vast majority of elderly Danes.

2 Cross-Country Comparison

The three previous sections discussed country-specific findings on the development of retirement behavior and the forces shaping it since the 1980s. The section on Denmark already addressed the research interest in *(1) how prepared Denmark's older population is to meet the challenges of globalized labor markets and changed policy frameworks.*

For the cross-country comparison, Germany was selected as a reference country because of the various ways in which it differs from Denmark regarding the institutional context of late career employment and retirement. Nonetheless, it has managed to reverse a strong early retirement trend and caught up with Denmark regarding the employment of older workers: Starting from an employment rate of 37 percent among older workers (age 55–64) in 1990, Germany ranks equally with Denmark at slightly over 60 percent in 2012 (Figure 1.8). Notably, the economic upturn and the implementation of major active aging measures took place remarkably later, in the first years of the 21st century. Unfortunately, the available data is characterized by several shortcomings, the most relevant being the lack of usable cases in SHARE's Wave 4. As a consequence, the observation window for the German case already closes completely in 2007. Therefore, potential effects of the improvement of the economic situation as well as of the implementation of major active aging measures on retirement processes can be captured only rudimentarily. In sum, the analyses on the German case study revealed that, although the Bismarckian pension system is designed according to *status maintenance*, the mechanism of *cumulative disadvantage* is likely to become effective because labor market risks over the life course accumulate for certain population groups, namely the low qualified and women.

The Netherlands was chosen as a second reference country because it combines institutional features of both Denmark and Germany and hence, takes an intermediate position. As in Germany, early retirement was used extensively from the 1970s onward until a policy shift in the 1990s reshaped those institutions that had facilitated early retirement up to that time—namely unemployment insurance and disability benefit. As a consequence, the Dutch employment rate for older workers followed a similar trend to that in Germany, rising to 59 percent in 2012 (Figure 1.8). Notably, from the early 1990s onward, the Netherlands enjoyed a much better economic standing than its newly reunified neighbor. Unfortunately, findings on objective retirement behavior from Gesthuizen and Wolbers (2011) refer only to the time span 1990 to 2001—that is, before major reforms of early retirement options became effective and measurable. Consequently, they report little change in late career stability and pension security be-

tween the cohorts under study. However, SHARE does provide sufficient case numbers to reproduce the development of subjective views on retirement until 2007 (retrospective reasons) and 2011 (prospective wish to retire). The major drawbacks in the data are the unequal distribution of men and women in the sample and the discrepancy of response categories for the reasons for retirement between SHARE's Waves 1 and 2/4 (Table A1). In sum, the Netherlands has made enormous progress in terms of promoting active aging since the 1990s. Although data restrictions limit knowledge on the "objective" development of inequality patterns, valuable insights into the subjective perspective on retirement can be gained, and these reveal several weaknesses regarding the adequacy, acceptance and comprehensiveness of the Dutch active aging strategy.

In the following, I shall answer the remaining two research questions by comparing relevant aspects of the country-specific results:

- (2) Does Denmark perform better in meeting the challenges of globalized labor markets and changed policy frameworks than Germany and the Netherlands; and if yes, why?
- (3) How are retirement decisions made within different national contexts, and what additional knowledge can be gained by combining both objective and subjective perspectives on the transition to retirement?

In other words, I shall first focus on *differences* between the three countries, thereby putting Denmark's performance into perspective; and then I shall summarize *similarities* that help understand how retirement decisions are made.

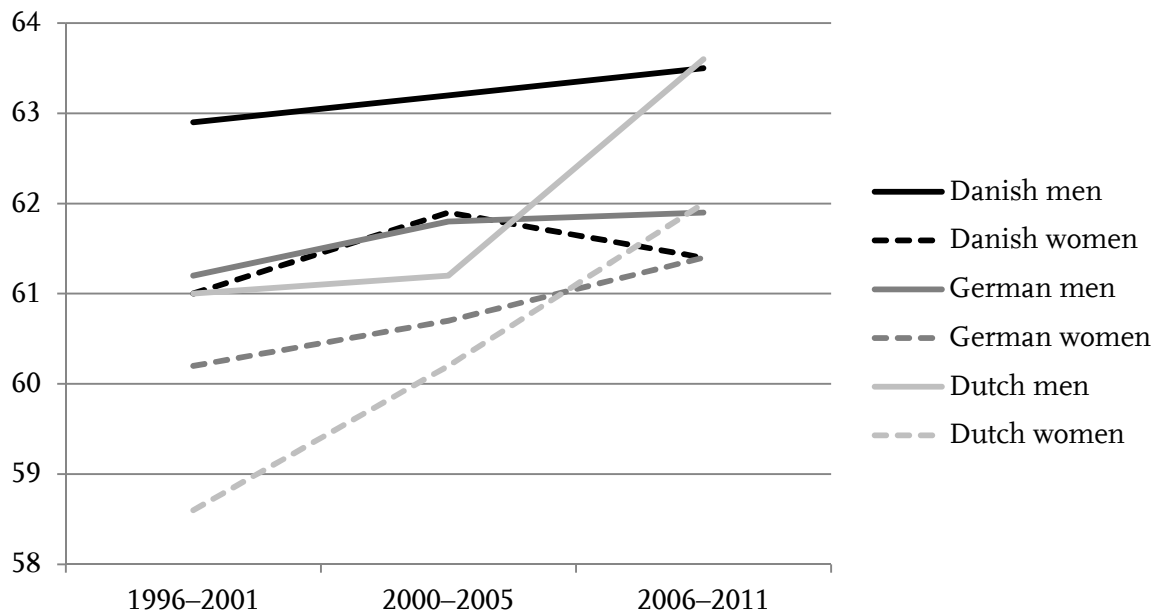
a Denmark's Performance Put into Perspective

The very detailed analyses of the Danish case revealed that the country appears to be well prepared for the new labor market conditions and policy settings created by globalization and demographic aging. Now, I shall look at the respective situations in the reference countries Germany and the Netherlands. In this study, the institutional context is understood as the main factor producing cross-country *differences* in the forms taken by late careers and retirement transitions as well as by related social inequality patterns. Hence, a crucial dimension for assessing a country's performance is comprehensiveness, that is, whether all population groups among the elderly benefit in a similar way from the favorable framework conditions. Furthermore, I integrate subjective perceptions of the framework conditions for late career employment and exit opportunities as a crucial factor for explaining and evaluating of retirement trends. I shall begin on a national level and then continue with the specific situation of different population groups.

Many findings within this work point toward an affirmation of Denmark's role model status: Through the successive postponement of retirement transitions and the decrease (or at least stability, in the Dutch case) of unemployment risks for older workers, all three countries have succeeded in raising employment rates of persons aged 50 and older, and, as expected, this has led to a rise in effective retirement ages (Figure 4.1). Accordingly, Hypothesis 9 is confirmed. The same applies to the 60–64 year age group, although on still remarkably lower levels compared to individuals in their 50s (Figures 3.8, 3.13 and 3.18). But it is only in Denmark that the vast majority (88 percent) of those who stay employed beyond their 60th birthday feel comfortable with their employment. In general, the desire to retire has decreased among older Danish workers during the 2000s (Table 3.17), whereas in the Netherlands, it has even increased (Table 3.21). In Germany, data restrictions did not allow any examination of the development over time, but almost one-half of all respondents (43 percent) stated that they would like to take advantage of the first opportunity to retire from their current job. Consequently, Germany and the Netherlands may have been similarly successful in terms of objective labor force indicators, but they are inferior to Denmark in terms of the level of acceptance of the active aging strategy among the population which was the tenor of Hypothesis 10. I argue, however, that a positive attitude towards working versus retirement is an important precondition for any comprehensive and sustainable increase in the labor market integration of older workers and the extension of late careers. The reason is that the individual view on the structural context influences retirement planning and behavior together with the preference structure in the late career.

As explicated earlier, Danes opt rather “voluntarily” for a comparatively late withdrawal from the labor market, thereby giving increasing weight—and much more than their neighbors—to private considerations in the context of their personal retirement decision. Consequently, reducing “pull factors” (e.g., VERP reforms) and enhancing “stay factors” (e.g., supporting the employability of older workers and combating age discrimination) represent the Danish government's main instruments for directing retirement behavior. Confirmation for the effectiveness of these measures is given by the empirical finding that the trend of “pushing out” older workers is recurrent (Table A21) and late careers have stabilized only in Denmark, thereby providing Danish older workers with a comparatively better protection against market risks, as formulated in Hypothesis 8. However, it has to be admitted that these market risks are comparatively low in Denmark because of the favorable economic situation during the observation period.

Figure 4.1: Effective labor force exit age by country and gender (in years)



Source: OECD 2012d, 2012e, 2012f.

Note: Effective exit age over the 5-year periods 1996–2001, 2000–2005 and 2006–2011. The effective exit age (also called the effective age of retirement) is calculated as a weighted average of the exit ages of each five-year age cohort, starting with the cohort aged 40–44 at the first date, using absolute changes in the labor force participation rate of each cohort as weights.

In Germany, in contrast, the respective growth in employment rates for older workers is accompanied by an extraordinary importance of the “Bismarckian” public pension scheme in contrast to the multipillar systems of Denmark and the Netherlands. Consequently, changing the statutory retirement age has far more impact on individuals, and pension reforms generate high financial pressure to prolong working lives by increasing the financial penalties for early exit. Hence, as hypothesized, the trend toward recommodification increases the dependence of an individual on the market, rolling back any reasons other than economic for German retirement decisions. At the same time, measures to enhance older workers’ employability remain limited, explaining the relatively widespread desire to retire among German older workers.

Nevertheless, younger cohorts in both Denmark and Germany benefit from higher pensions compared to older cohorts. However, the reasons for this trend are country-specific: In Denmark, the expansion of occupational pensions has provided an increasing share of the population with extra pension income, whereas in Germany, the cohorts under study profited from the economic boom in the 1960s and 1970s that is preserved via large “deposits” into their “pension accounts” (Rinklake and Buchholz 2011). This advantage, however, is likely to fade away for future German cohorts whose work careers include the crisis-shaken 1980s, 1990s, and early 2000s. Most Danish pensioners, in contrast, will

probably continue to benefit from labor market pensions in addition to the basic public pension. Hence, overall, their situation is expected to be more comfortable in the years to come than that of German pensioners.

In the Netherlands, the public pension scheme is also increasingly losing its power to influence retirement decisions (Table A18). Nonetheless, the limited scope of action generates dissatisfaction among older workers. Despite the favorable economic situation—comparable to the Danish business cycle—the Dutch perceived their retirement as “involuntary” to a comparatively high extent. In this context, van Oorschot and Jensen (2009) find that cultural factors such as age discrimination by employers are more pronounced in the Netherlands than in Denmark. In both the Netherlands and Germany, “push effects” are perceived by remarkable shares of retirees, and their incidence has remained stable (Germany) or even increased (the Netherlands) (Table A21). Consequently, both Dutch and German older workers are still faced with labor market difficulties that make it hard for them to continue their careers for as long as they would personally prefer—something that is evidently easier for many of their Danish counterparts and thus, agrees with Hypothesis 8.

In all three countries, however, not all population groups have equal chances of participating in the labor market and acquiring sufficient benefits from the diverse components of their national pension systems. In particular a low skill or qualification level results in objective disadvantages not only in all three countries but also in almost all respects. This confirms Breen’s (1997) expectation of an unequal distribution of risks across the workforce depending on qualification and hence, Hypothesis 12. In that context, the observed inequality between low and high qualified workers is likely to have the strongest impact in Germany and to rise even further. Together with the Netherlands, the country still has difficulties in keeping this group of older workers in the labor market, a fact that is reflected in their comparatively high preference to retire (Table 3.21) and the statistically significant link between low qualification and health-related early retirement in both countries (Table A21). But, surprisingly, the low qualified do not feel affected the most by push factors (Table A21), and this relation applies not only to Germans and Dutch but also to Danish older workers. Apparently, many low qualified workers in all three countries perceive their (early) retirement as “voluntary”; that is, they are rather thankful for the opportunities to leave the labor market before the regular retirement age, even though this leads to objective disadvantages. Only in the Netherlands, however, is this statistically supported by a high affinity of the low qualified toward pull factors (Table 3.27). Hence, I conclude that objective discrimination of low qualified older workers appears to be lowest in Denmark; but in all countries, many in this group are not reluctant to retire early. In sum, Hypothesis 13 can thus be accepted as well:

Low qualified individuals frame their retirement transition differently from high-qualified ones, contributing to an explanation of their comparatively early withdrawal from the labor market.

Similarly, it is Danish women who seem to have the best chances of catching up with their male colleagues compared to their German and Dutch consexuals when it comes to their late career employment, the timing of their entry into retirement, and their pension levels. At the same time, Danish women alone have a stronger wish to retire than their male counterparts, and they actually do retire at a remarkably earlier age than men. Evidently, they can afford to exit employment in line with their private preferences and circumstances and thus, they are less susceptible to public policy efforts to promote “active aging” than men.⁸⁰ German and Dutch women, in contrast, give the impression that they are willing to increase their labor market participation in their 50s and 60s and to postpone retirement, but are confronted with structural and normative obstacles. Both trends affirm Hypothesis 14 stating that women’s retirement behavior differs from that of men in terms of a combination of structural conditions, and a different framing of their situation, and different preference structures.

Nonetheless, in the mid-2000s, the poverty rate among Danish older women (i.e., aged 66 and older) is slightly higher than the rate of German women—however, with the gender gap being smaller in Denmark; strikingly, old age poverty in the Netherlands is negligible (Zaidi 2009). Consequently, the outcome of the Danish framework regarding women’s situation measured as old age poverty does not stand out as expected, because the share of retired women living in poverty is, at about 12 percent, higher than that in Germany and the Netherlands, ranking Denmark only in the middle field of OECD countries (Zaidi 2009).

Finally, *overall* old age poverty rates reported by Zaidi (2009) are similar for Denmark and Germany (at about 10 percent) and, again, very low for the Netherlands (about 2 percent). Furthermore, the cumulative change since the mid-1980s highlights that Denmark has succeeded remarkably well in decreasing old age poverty since the 1980s, that is, has protected its population against the negative consequences of recommodification.

⁸⁰ In this context, Danish women are surprisingly “conservative” in the sense of a family-orientation (Table 3.22). In her study on maternal employment patterns and related attitudes, Marold (2008) also found a surprisingly high preference for time with family—which was small children in that context—among Danish women, pointing toward a certain mismatch between women’s preferences and social policy instruments.

Accordingly, after summing up the respective results in this section so far, I confirm that, despite some minor drawbacks, *Denmark performs better than Germany and the Netherlands in preparing its older population for globalized labor markets and changed policy frameworks in aging societies.*

Much of this outcome can be traced back to the pension systems. The Danish *Folkepension* is the most comprehensive and most generous public old age pension. The Dutch public pension, in contrast, has similar eligibility criteria, but provides a lower benefit comparable to the kind of minimum pension for German pensioners. For most Germans, public pensions provide the only income source in old age, but they are being progressively restricted. The Danish and Dutch occupational schemes within the second pillar, in contrast, have expanded to almost all groups of workers and employees and now represent an important component of total pension income in both countries. In that context, the Dutch performance in keeping old age poverty low should not be neglected. However, just like the German social insurance pension system, the labor market pensions in Denmark and in the Netherlands are defined-contribution schemes that are sensitive to fragmented work careers and income fluctuations. Accordingly, the labor market career is more or less decisive for the standard of living in old age in all three countries under study, affirming the *theory of cumulative (dis)advantage* for all three countries—as stated in Hypothesis 15. Therefore, a precondition for the performance of the Danish as well as the Dutch pension system is a healthy economic climate and a comprehensive integration of all population groups into the labor market throughout their adult years and until as close as possible to the respective statutory retirement ages.

b Understanding the Making of Retirement Decisions

In the previous section, I focused on differences between the three countries under study in order to show why the success of “active aging” in the Danish population makes Denmark a role model for other countries. Now, I shall switch to asking which additional factors alongside a favorable institutional context are decisive for a successful prolongation of late careers. Therefore, in the following, I shall summarize *similarities* between retirement processes in Denmark, Germany and the Netherlands and work out a general description of *how retirement decisions are made within different national contexts, and what additional knowledge can be gained by combining both objective and subjective perspectives on the transition to retirement.*

In all countries, the influence of macrolevel conditions and changes therein on retirement decisions is clearly visible through the parallels to be seen in both the retrospective assessments of reasons for retirement and the contemporary framework conditions. As hypothesized, the economic cycle and respective policy reactions are revealed to be major forces in shaping late careers—reflected, among others, in the empirical linkage between “push factors” and high unemployment in all three countries (Table A21). However, my findings also confirm the significance of other determinants than institutional ones. These include expectations and evaluations of the individual situation and attitudes toward the workplace as well as individual characteristics and preferences. In this context, as an overall trend, I ascertain a rise in the weight of reasons for retirement that are outside of political control, that is, for example, the preference for time with family and for leisure (Table A21).

Among the individual factors tested in order to determine their influence on retirement transitions, a person’s *gender* and *qualification level* remain powerful in almost every analysis in all three countries. In the aggregate, women in all countries retire earlier than men and this has not changed in a noteworthy way since the mid-1990s (Figure 4.1). At the same time, they have less impression of being pushed out of their jobs and of being barred from continued employment by health issues. Instead, they express a high valuation of spending time with family and friends (Table A21). In this context, a further differentiation and more detailed examination of the “private reasons” for retirement would be informative. However, this is not possible with the available data. The results at this stage, however, suggest that women refer strongly to their social network when making retirement decisions while simultaneously assigning a low significance to labor market attachment. Men, in contrast, focus more on themselves, that is, on their career opportunities, their own health, and their personal pleasure. These results mirror traditional gendered divisions of labor, with women

being responsible for domestic care and men for breadwinning in the market sphere. In that sense, they agree with findings from Loretto and Vickerstaff (2013) gained from a qualitative study in the United Kingdom that affirm the need to take the household context into account. However, my analyses on the wish to retire do not reveal an influence of the respective variables. This may be due either to the limited statistical power of the respective data or, following Loretto and Vickerstaff (2013), to the complexity of the decision-making process within couples that is difficult to reproduce with quantitative analyses.

Furthermore, the low qualified in all three countries are subject to late career instability leading to early retirement and comparatively low pension levels. However, when asked the reason for their retirement, they frequently state that it was triggered by bad health. At the same time, they do not perceive their exit from employment as a “push out” and often even think about retirement as desirable.⁸¹ The higher qualified, in contrast, manage predominantly to avoid late career unemployment, to prolong their career in line with policy reforms, and to achieve adequate pension levels. Their comparatively favorable position even induces them to take considerations about their private situation and personal preferences into account when making their retirement decision. Nonetheless, in all countries, they have a stronger feeling of being pushed out. Consequently, this group may stick to employment even longer when persisting legal, structural, or normative barriers have been removed, because they have not only the skills but also the will to remain longer in employment. In sum, qualification thus represents an important predictor for the timing of retirement, and not only because of the respective objective chances on the labor market (H12) but also because of the differing attitudes toward work and retirement (H13). Hence, this confirms the role of individual attitudes as a link between personal characteristics (qualification) and observable behavior (retirement timing), that is, the theoretical concept of “framing” and the mechanism explained in Figure 1.7.

In this context, my findings also reveal the importance of *individual assessments of working conditions* which is stated in Hypothesis 11. Indeed, job dissatisfaction and high physical strains at work appear to foster the wish to retire in all countries (Table A22), affirming the advantage to be gained by accounting for the individual’s perspective in explaining retirement behavior. Also, not only objective but also subjective low job security is likely to increase the tendency for early

⁸¹ In the Danish case, an effect for low earners dominated over the effect for the low qualified, but there is likely to be a large overlap between the relevant population groups.

retirement—however, contingent on the nation-specific meaning of job loss. Therefore, the link is more pronounced in Germany and the Netherlands, in which unemployment used to be an institutionalized pathway into retirement, than in Denmark, in which job change and unemployment with successful reemployment are more widespread even in the late career. This gives another example of the interconnectedness of determinants on different levels, namely, of the institutional framework and individual attitudes leading to individual framing.

Furthermore, the workplace itself, as the so-called mesolevel, proves to be influential. As explained earlier, determinants on this level comprise a wide range of factors reflecting the employer's perspective as well as structural employment characteristics of which very few were available in the data, such as type of employment (dependent vs. self-employed), firm size and sector (public vs. private). In this respect, the only communalities of the three countries found was that self-employed retire later than dependent employed—however, it remains unclear, why—and workers in large firms are comparatively well protected against late career unemployment. Presumably, the reason for the latter is the higher capacity of large firms to relocate workers in internal labor markets. Benefits or drawbacks of working in the public sector, however, are highly country-specific.

Finally, research on retirement needs to pay particular attention to individual health, because good physical health is not a matter of course in one's 50s and 60s when (early) retirement becomes an issue. Because objective information on health status was not available for the analyses in *Section 1: Pathways into Retirement*, the findings in *Section 2: Perceptions of Retirement* referring to health fill a highly relevant gap in explaining retirement behavior. In all three countries, the statements about bad health as reason for retirement come predominantly from those who retired before their 60th birthday. Furthermore, those who assessed their own health as poor show a strong wish to retire. Both findings indicate that poor health still represents a major obstacle to the prolongation of employment careers.

In sum, the contribution to understanding retirement processes provided by the subjective perspective—that is, analyses of the retrospective reason for retirement and the prospective wish to retire—refers first, to the degree of “voluntariness” of retirement: The observation of the mere “outcome of retirement” is enriched by subjective information on whether someone was “pushed out” or “pulled out” from her or his last job. Second, the relation between (self-rated) health as well as private considerations about family or leisure and the retirement decision can be captured only by asking the individuals themselves. Third, attitudes toward the individual employment situation as determinants on the

microlevel have proven to be highly relevant in all countries, and have often statistically outbalanced the influence of observable features.

At this point, the major research interest of the present dissertation has been met. Denmark has been widely affirmed as a role model for “active aging,” and diverse mechanisms in decision making on the transition to retirement have been explained. Chapter V will summarize the most central theoretical arguments and the core findings and draw conclusions in terms of policy recommendations and suggestions for further research.

Table 4.1: Summary of hypotheses and result of the respective analyses

	Objective behavior	Subjective view
Development over time (Denmark)	<i>H1</i> : Employment rates of older workers have increased since the mid-1990s CONFIRMED	<i>H2</i> : Growth in late career employment is supported by widespread acceptance of active aging within society CONFIRMED
		<i>H3</i> : The public pension system loses relevance for Danish retirement decisions, whereas other retirement pathways and private reasons gain in importance CONFIRMED
Social inequalities (Denmark)	<i>H4</i> : Older workers with no or low qualifications are disadvantaged to a high degree CONFIRMED	<i>H5</i> : Subjective assessments of the individual retirement transition also vary by qualification CONFIRMED
	<i>H6</i> : Older women's labor market situation is comparatively secure because of their affinity for public sector employment REJECTED	<i>H7</i> : Men and women differ in subjective assessments of their retirement situation. CONFIRMED
Cross-country parison	Development over time	<i>H8</i> : In Germany and the Netherlands, both the labor market situation for older workers and the financial situation of retirees have worsened CONFIRMED
		<i>H9</i> : In all three countries, withdrawals from the labor market are delayed CONFIRMED
Social Inequality	<i>H10</i> : Germany and the Netherlands enjoy less support for their active aging strategies in their populations compared to Denmark CONFIRMED	<i>H11</i> : Individual assessments of the work context contribute significantly to the explanation of retirement behavior CONFIRMED
	<i>H12</i> : Low qualified individuals are disadvantaged to the highest degree in all countries CONFIRMED	<i>H13</i> : Low qualified individuals frame their retirement transition differently from high qualified ones in all countries CONFIRMED
	<i>H14</i> : Women's retirement behavior differs from that of men in terms of a combination of structural disadvantages and different framing of their situation CONFIRMED	<i>H15</i> : The theory of cumulative (dis-) advantage is confirmed for all three countries CONFIRMED

Source: Own compilation.

V Summary and Conclusions

The present dissertation traces how trends relating to globalization and demographic change impact on the labor market situation and retirement processes of older workers. The work focuses on Denmark and compares results there with findings on Germany and the Netherlands. This enables an assessment of Denmark's performance from a cross-country comparative perspective. In that context, the empirical analyses combine an examination of observed experiences in both the late career and the retirement process with how people themselves view their transition into the state of retirement.

Recapitulation of Theoretical Arguments and Most Important Findings

I argued that the two macroeconomic trends identified here as globalization and demographic change have increasingly burdened welfare state budgets and led to reforms of pension systems designed to postpone the transition into retirement and increase the role of non-public pension provisions. Due to the privatization and individualization of market risks, it was assumed that an individual's labor market position becomes more relevant for that individual's economic security in old age. Breen (1997) described this phenomenon as "recommodification" and predicted an unequal distribution of market risks across the workforce. As a consequence, social inequality patterns among older workers and retirees were expected to evolve in accordance with the *cumulative (dis)advantage theory*, that is, to widen. Nonetheless, the extent to which these inequalities rise should depend mainly on the design of national institutions—exerting their influence on retirement as "push," "pull," or "stay" factors—but also on workplace characteristics and individual features.

I chose Denmark as a case study because it is said to be a precursor in respect of "active aging" and of the social adequacy and sustainability of pensions. In addition, I selected two further countries to serve as references in order to examine the role of country-specific institutional frameworks in labor market exit processes and the shape of inequality patterns: Germany as a country with a quite different institutional context and the Netherlands as a case sharing characteristics with both Denmark and Germany. Furthermore, I chose gender and qualification as the dimensions of inequality that should be the focus of my study.

However, it was also predicted that meso- and microlevel determinants would shape retirement transitions. Due to data limitations, I was particularly able to look at the latter, that is, at individual characteristics. But among these, both observable features (such as gender) as well as assessments of the individual job situation (such as job satisfaction) are available. Empirical analyses extend not only to observed experiences in the late career such as unemployment,

reemployment, and the timing of retirement, but also to subjective views on the individual retirement. Hence, I combine two perspectives on retirement transitions in order to gain a more comprehensive understanding of how retirement decisions are made and, consequently, of how inequality patterns emerge and develop.

In summary, this dissertation gives answers to the following questions:

(1) *Is Denmark's older population comprehensively prepared to meet the challenges of globalized labor markets and changed policy frameworks?*

Traditionally, Denmark has made strong efforts to maintain the employability of its older workers. Nowadays, in the face of globalized markets, this is paying off for most Danes because it has given them the chance to stay employed or to regain employment after job loss until they become eligible for VERP, the popular early retirement pathway. This scheme has been progressively restricted and made less attractive but still represents a considerable incentive to retire before the statutory retirement age. Once they have reached age 60, Danish older workers have a certain scope of action to decide on their individual transition into retirement, and many of them—particularly high qualified and women—take private reasons into consideration. Nonetheless, effective labor market exit ages are comparatively high (Figure 4.1), reflecting the support of “active aging” within the population and also within firms.

Furthermore, recent changes in the Danish framework of pension policy have made labor-market-related components of the multi-pillar pension system the backbone of the system and thus, led to a recommodification of older workers. Consequently, social inequalities have increased in line with the *theory of cumulative (dis)advantage*, with women and the low qualified being disadvantaged, as expected. Nonetheless, I assess Denmark's elderly population as a whole to be equipped with sufficient means to counter the consequences of globalization and demographic aging, because the rise in inequality is cushioned by a solid universal public pension and a quasi-full coverage of occupational pensions. Furthermore, women evidently care less about their objective disadvantages compared to men; and the low qualified are a shrinking minority in the elderly workforce. As a precondition, however, the Danish labor market must be capable of absorbing enough older workers as it was able to do during the economic boom between the mid-1990s and the late 2000s. Nielsen (2012), for example, questions this. Therefore, further research with more recent data is needed to depict the evolution since the global crisis beginning in 2008.

(2) *Does Denmark perform better in this respect than Germany and the Netherlands and if yes, why?*

All three countries have succeeded in raising the employment rates of older workers, and they have met the Stockholm Target of bringing 50 percent of workers aged 55 to 64 into employment by 2010. However, Germany and the Netherlands had much further to go (Figure 1.8). Nonetheless, I evaluate the Danish efforts toward “active aging” as more adequate and sustainable in light of globalization and demographic aging:

Danish older workers, and particularly those in their early 60s—which are the critical years for the prolongation of labor market careers—have a more positive attitude toward their job. At the same time, despite more freedom of choice regarding their individual point of retirement, they opt “voluntarily” for comparatively late withdrawal from the labor force. In Germany, in contrast, the government has to rely on legal or financial constraints to make its citizens work longer. Likewise, many Dutch elderly feel uncomfortable with the requirement to prolong employment. I argue, however, that broad acceptance of social policies aiming toward prolonged labor market participation within the labor force—but also among employers, unions, and further political forces—is a precondition for functioning concepts of “active aging.” As a negative example, the reformed regulations including a statutory retirement age of 67 and increased deductions for early exits are highly contested in Germany. As a consequence, in 2014, the government reintroduced the possibility of already retiring with full pension entitlements at age 63 for individuals with 45 contribution years.⁸²

In addition, older Danes’ employment and particularly their positive attitude toward their job are supported by massive investments in both active and passive labor market policy, that is, strong “stay factors.” This is complemented by the low relevance of “push factors” in Denmark compared to Germany and the Netherlands. In the Netherlands, these factors still represent a strong force, despite the positive economic situation since the mid-1990. Also in Germany, insufficient measures to enhance older workers’ employability lead to a persisting significance of “push effects” in the context of retirement decisions. Consequently, older workers in Denmark enjoy more favorable circumstances to continue their careers. Among all older workers asked in SHARE for their wish to retire, the Danes were the best qualified.

⁸² However, the threshold will increase in line with the gradual increase of the statutory retirement age from 65 to 67, preserving the 2-year difference (Deutsche Rentenversicherung 2014).

However, all pension systems have recently experienced a shift toward recommodification, that is, an increase in market dependence for the individual—in Denmark and the Netherlands, due to the expansion of occupational pensions; in Germany, due to the reform of public pensions. This trend affects the low qualified most, because they have a weak labor market position. Moreover, through the accumulation of discrimination in various aspects, their situation is likely to worsen, confirming the theory of *cumulative (dis)advantages* for all three countries under study. This development is most pronounced in Germany and the Netherlands, because these countries have major difficulties in keeping this group of workers in the labor market. In Denmark, however, recommodification is comparatively modest, resulting in better protection of older workers against the impact of market risks.

Although the situation of women, in contrast, differs slightly between countries, the outcome is similar. Whereas Danish women have the best objective chances of late career employment and a high pension level—even if clearly lower than their male colleagues—they also have a high preference for withdrawal from the labor market. Because they also turn this preference into reality, they have lower incomes in old age and, accordingly, women's old age poverty rate in Denmark is not exemplary. German and Dutch women, in contrast, appear to have understood that extended labor market participation is the key to an adequate pension level in old age. However, they still face significant structural and cultural barriers. As a result, the respective gender gaps in effective retirement age have been closing gradually but continuously since the 1990s, whereas the Danish gender gap has remained stable (Figure 4.1), disclosing one of the few limitations to Denmark's role model status.

My results and hence, my positive evaluation of the Danish situation is based on data from the 1980s until 2011, with most of the findings referring to the period before the global financial crisis beginning in 2008. Hence, it may be questionable whether this assessment is up to date. However, even in 2014, the *Melbourne Mercer Global Pension Index* (MMGPI) still decorated the Danish system as the most adequate, sustainable and integer pension system in the world (Mercer 2014).⁸³

⁸³ For more information on the MMGPI, see www.globalpensionindex.com.

(3) How are retirement decisions made within different national contexts, and what additional knowledge can be gained by combining both objective and subjective perspectives on the transition to retirement?

As assumed, institutional determinants exert remarkable power on retirement decisions. However, the impact of other factors, particularly individual ones, must not be neglected. Comparing the three case studies reveals diverse similarities between the three countries under study and points toward some cross-national mechanisms of decision making.

Women's retirement processes, for example, still differ remarkably from men's, and not only in their timing but also in their reasoning. The latter aspect is reminiscent of traditional gendered divisions of labor. Also, qualification proves to be a strong predictor for the timing of retirement, because low qualified older workers bear high risks on the labor market, often suffer from poor physical health, and, additionally, tend to have a more positive image of (early) retirement. Apart from gender and qualification, it is particularly the individual perception of working conditions that appears to be highly relevant in shaping the wish to retire, namely job satisfaction and high physical strain at work and, to a less pronounced extent, perceived job security. Moreover, individual health conditions represent a decisive factor for continuing the late career beyond age 60. Structural workplace characteristics, in contrast, prove to be mainly influential in only country-specific patterns. However, in all countries—and particularly for women and for the high-qualified—considerations on non-labor-market related aspects such as time for family and leisure gain more significance for retirement decisions.

Including the subjective perspective on retirement has thus contributed to understanding retirement processes in diverse ways; for example, because some kind of information can only be collected from the individuals themselves. In this context, the distinction between “push effects” and “pull effects” becomes possible, indicating the “degree of voluntariness” of retirement decisions as well as the effectiveness of national policy measures. Moreover, the role of individual attitudes as a link between personal characteristics and observable behavior is confirmed. I therefore conclude that knowing how people view retirement is an important precondition for designing an environment that will enable older workers to opt for longer labor market participation in the sense of “active aging.” Evidently, pension policy has much power to influence retirement behavior, but it needs to respect the heterogeneity within society. Furthermore, the growing importance of private reasons exemplifies that some components of the decision-making process appear to be outside political control.

Recommendations for Policymakers, Employers, and Older Workers

I shall now summarize some recommendations for policymakers, employers, and older workers that should, according to my findings, increase employment among older workers. The comprehensive employment of older workers, that is, “active aging” should be the aim of all groups involved because (1) it enables policymakers to relieve state budgets by gaining contributors to the social systems instead of beneficiaries of transfers, (2) firms can stabilize their workforce and hence, remain competitive on global markets, and (3) individuals have labor market income and thus acquire sufficient pension claims for an adequate standard of living in old age.

A core finding of this study is that all three countries share a discrimination against low qualified older workers. Evidently, low qualification represents the main obstacle to the continuance of late careers, triggering negative consequences such as a high risk of unemployment and a low pension level. Following the Danish model, the focus on ALMP and lifelong learning thus appears to be a promising approach to prolong late careers. This is not a newly discovered result. For example, the European Commission (2012) has already stated that education and training are crucial resources for the enhancement of the productive capacities of older workers. Accordingly, support and incentives for skills updating and the (re-) qualification of older workers must be placed high on the agenda of policymakers and employers. These older workers, in turn, should be open-minded to technological progress and willing to learn new techniques in order to keep in touch with the globalized labor market and service-based industries. Consequently, a combination of “public-induced” and “market-induced” employment maintenance strategy may yield the best results.

Other findings highlight the importance of good physical health and an appropriate working environment for the success of “active aging.” Designing workplaces and working conditions according to the needs and physical abilities of individuals of “advanced age” as well as making efforts to preserve their health are, however, also nothing new. Back in 1980, one of the International Labor Organization’s recommendations was already to reduce “normal daily and weekly hours of work for older workers employed in arduous, hazardous or unhealthy work” (ILO 1980:§14). Further proposals were gradual retirement, a facilitation of part-time employment, exemption from shift work, and an increased number of annual paid holidays (ILO 1980). However, despite their age and national commitments toward the employment of older workers, the ILO recommendations appear to be far from being rooted in national employment regulations, as illustrated by the following anecdotal evidence: In 2014, a few employees of a German company went to court because workers older than 58

were being given two extra days off and hence, the younger employees felt they were victims of discrimination. Nonetheless, the court decided in favor of the company, that is, on allowing the practice, setting an example for the special treatment of older workers with the aim of securing their employment (Süddeutsche Zeitung 2014).

The security of employment is another issue to be tackled. For Germany and the Netherlands, it was shown that perceived low job security strengthens the desire to exit employment. Consequently, marginal employment and temporary contracts are no appropriate instruments in this context, forcing employers to find a trade-off between the flexibility of their workforce and prolonged careers. Moreover, firms should not only request flexibility from their older employees, but also allow them flexibility “to organise their working time and leisure to suit their convenience” (ILO 1980:§14). This practice could accommodate the rising importance of time for family and leisure for retirement decisions, and thereby keep older workers in employment by giving them the opportunity to combine employment and private commitments. Working time flexibility could be expected to be particularly suitable for older women because, in all three countries, they were likely to retire for “private reasons.” Therefore, their labor force participation may be promoted by appropriate opportunities.

In sum, policymakers are well advised to look at Denmark as a best practice model for gaining a sustainable and comprehensive increase of employment among older workers. However, it is clear that a specific institutional combination that has grown over decades cannot simply be copied by countries such as Germany or the Netherlands, and that the Danish model also has its downsides. Furthermore, both reference countries have earned top positions (Ranks 5 and 6 out of 96) in the Global Age Watch Index 2014 (HelpAge International 2014), underlining the outstandingly high well-being of their elderly population despite the supposed shortcomings in their “active aging strategies.” Accordingly, in a global perspective, the elderly in all three countries enjoy comparatively favorable conditions. Nonetheless, long-term provision for future cohorts is indispensable.

Limitations of the Data and Suggestions for Further Research

I would like to finish this work by briefly discussing the limitations to be found in the data leading to the results summarized above. Due to the dual perspective on retirement processes, different data and methods had to be used in the two empirical parts. For the objective perspective on retirement, the longitudinal datasets used were designed as well as analyzed in country-specific ways, with the Danish data being most appropriate due to its administrative origin. For Germany and the Netherlands, the respective researchers had to rely on survey

data, that is, the national *Socio-Economic Panels (SOEP)*, and, consequently, faced certain problems in terms of case numbers and missing information. Moreover, the Dutch SOEP was last conducted in 2002 (OECD 2012c); that is, it does not cover the period in which notable changes in both pension policy and retirement behavior occurred. Furthermore, the application of various datasets generated under rather different conditions raises issues of comparability, despite the common research framework of the *flexCAREER* project.

The subjective view was pictured with help of the “Survey of Health, Aging and Retirement in Europe” (SHARE) that currently represents the best international dataset for research on older workers and retirees. Although the SHARE project provides a high diversity of variables on this topic for a wide range of countries, it is also subject to the common problems of panel surveys such as (temporary or final) nonresponse, social desirability, and retrospective recall—with the latter being particularly applicable for the long-term interest studied here. Also, the inclusion of workplace characteristics as mesolevel determinants of retirement decisions could be only rudimentary, because the employer’s perspective is lacking. In addition, SHARE provides some self-made dissonances in its data; these are, for example, inconsistencies between waves regarding response scales (e.g., two different 5-point scales for self-rated health in Wave 1 of which only one was selected for the following Waves) or even the availability of entire questions (e.g., firm size was included only in Wave 1, then dropped). Consequently, for the present study, several concessions had to be made regarding the variables that were eventually used for the diverse analyses and the respective statistical models.

These concerns apply to both independent and dependent variables—as shown by the Dutch inconsistencies regarding the “reasons for retirement” in Table A1. In general, analyzing this question—particularly in a cross-country comparative approach—is challenging not only due to the multiple response design but also because of a wide scope of interpretation of the response categories, their often country-specific wordings, and their multidimensionality. As a result, the generated categories of “push” and “pull” can only be a proxy for the respective effects. A more valid measurement of these forces could be attained with direct questions,⁸⁴ potentially including also the employer’s perspective. Furthermore, I showed that a more differentiated analysis of the categories summarized as “private reasons” could deliver promising results.

⁸⁴ For example, the Module “Work Orientations” of the International Social Survey Programme (ISSP) asks explicitly whether early retirement was “by choice” or not.

Similarly, analyses of the wish to retire provide only a rough evaluation of the acceptance of the “active aging” efforts among national populations. First, the respective survey question was posed rather vaguely and with a broad scope for individual interpretation. More precise and valid indicators are provided by, for example, the European Social Survey (ESS) in its 2010 module on “Family, Work, and Well-Being” in the form of prospectively as well as retrospectively desired retirement age. This is, however, the only point in time when the respective information was collected; therefore, a longitudinal analysis is not possible with this data. Second, the SHARE question on the wish to retire is likely to capture the idealistic rather than the realistic aspiration. Hence, the impact of the wish to retire on actual retirement behavior, which is shaped strongly by institutional constraints, remains questionable. Despite the wish to retire “as soon as possible,” these respondents may nonetheless stay employed for many years. However, it is not the actual behavior that is the focus of interest here, but older workers’ perception of retirement in contrast to employment in light of the political reforms to promoting “active aging.”

Finally, a major drawback of the SHARE dataset is the lack of sufficient case numbers to study the reasons for retirement transitions in the years 2008 onward, that is, during the global financial crisis. As a result, whether the findings are also applicable to these years must remain questionable and advanced research with more recent data including SHARE Wave 5 is needed to fill this gap. In addition, other than in Wave 4, Germany then drew a refreshment sample, thereby permitting analyses of the wish to retire beyond the year 2007. For both Germany and the Netherlands, the inclusion of the latest SHARE wave(s) would enable the observation of the full process of reversing the early retirement trend. It therefore presents an agenda for further research in this field.

Appendix

Table A1: Country-specific versions of the “reasons for retirement” in the SHARE questionnaires (variable ep064)

Danish	<p><i>Hvad var årsagerne til, at De gik på pension?</i></p> <ol style="list-style-type: none"> 1. Blev berettiget til folkepension 2. Blev berettiget til arbejdsmarkeds- eller tjenestemandspension 3. Blev berettiget til private pensioner (optjent ved erhvervsarbejde) 4. Blev tilbudt en mulighed for tidlig pensionering (med særlig bonus eller incitament) 5. Blev ledig (fx efterløn/overgangsydelse) 6. Eget dårlige helbred 7. Slægtning eller vens dårlige helbred 8. At kunne gå på pension samtidig med ægtefælle eller partner 9. At kunne tilbringe mere tid med familien 10. At nyde livet
German	<p><i>Aus welchen Gründen sind Sie in Rente oder Pension gegangen?</i></p> <ol style="list-style-type: none"> 1. Erreichen der gesetzlichen Altersgrenze 2. Erfüllung der Anspruchsvoraussetzungen für eine Betriebsrente 3. Erfüllung der Anspruchsvoraussetzungen für eine private Altersrente 4. Erhielt Angebot für eine Vorruhestandsregelung 5. Wurde gekündigt (erhalte z.B. Vorruhestandsbezüge, Arbeitslosengeld, o.ä.) 6. Mein schlechter Gesundheitszustand 7. Der schlechte Gesundheitszustand von Familienangehörigen oder Freunden 8. Um zur gleichen Zeit wie Ehegatte oder Partner/in in Ruhestand zu gehen 9. Um mehr Zeit mit der Familie zu verbringen 10. Um das Leben zu genießen
Dutch <i>Wave 1</i>	<p><i>Wat was de belangrijkste reden om met pensioen te gaan?</i></p> <ol style="list-style-type: none"> 1. Ik bereikte de verplichte pensioneringsleeftijd 2. Ik kwam in aan merking voor AOW 3. Ik kwam in aan merking voor werkgeverspensioen 4. Ik kreeg vervroegd pensioenaanbod (d.m.v. eenaantrekkelijke regeling) 5. Mijn baan werd opgeheven, ontslagen 6. Eigen slechte gezondheid 7. Slechte gezondheid van een familielid of vriend 8. Om tegelijkertijd met mijn echtgeno(o)t(e) of partner met pensioen te gaan 9. Ik wilde meer tijd met mijn gezin of familie doorbrengen 10. Om van het leven te genieten

Table A1 (continued)

Dutch Waves 2 & 4	<p><i>Wat was de belangrijkste reden om met pensioen te gaan?</i></p> <ol style="list-style-type: none"> 1. Ik kwam in aanmerking voor AOW 2. Ik kwam in aanmerking voor een ouderdomspensioen 3. Ik ontving een lijfrente uitkering 4. Ik kreeg vervroegd pensioen aangeboden (d.m.v. bv. VUT) 5. Mijn baan werd opgeheven, ontslagen 6. Eigen slechte gezondheid 7. Slechte gezondheid van een familielid of vriend(in) 8. Om tegelijkertijd met mijn echtgeno(o)t(e) of partner met pensioen te gaan 9. Ik wilde meer tijd met mijn gezin of familie doorbrengen 10. Om van het leven te genieten
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Source: SHARE Waves 1, 2, 4; own compilation.

Table A2: Share of persons by number of stated reasons for retirement, by country (in percent)

Number of reasons	Denmark	Germany	Netherlands
1	79.5	81.7	85.1
2	13.2	11.9	12.3
3	5.4	4.9	1.9
4	1.3	1.1	0.5
5	0.7	0.3	0.3
6	0	0.1	0
Persons	1,184	1,572	1,090

Source: SHARE Waves 1, 2, 4; own calculations.

Table A3: Determinants of the wish to retire in Denmark, women only (logit models)

	1	2	3	4	5	6	7	8	9
<i>Constant</i>	-0.19	-0.07	0.30	-0.24	-0.25	-0.26	-0.65*	0.19	0.08
<i>Age (ref.: 50–54)</i>									
55–59	-0.01	-0.01	-0.15	-0.04	-0.04	0.11	0.12	0.14	0.16
60–70	-1.74**	-1.70**	-1.98**	-1.71**	-1.71**	-1.50**	-1.59**	-1.70**	-1.67**
<i>Qualification</i>									
ISCED 1/2	0.50+	0.47+	0.72*	0.58*	0.58*	0.50	0.43	0.38	0.33
ISCED 3 (ref.)	–	–	–	–	–	–	–	–	–
ISCED 5	-0.10	-0.10	-0.04	0.01	0.02	0.03	0.07	0.17	0.15
<i>Wave (ref.: Wave 1)</i>									
Wave 2	0.13	0.08	0.08	0.13	0.13	-0.01	-0.04	-0.03	0.01
Wave 4	-0.19	-0.30	-0.15	-0.43+	-0.43+	-0.49+	-0.41	-0.36	-0.30
<i>Further individual characteristics</i>									
<i>Single</i>		-0.52*		-0.46+	-0.46+	-0.47+	-0.73**	-0.71*	-0.69*
<i>Partner active</i>			-0.40						
<i>Grandchildren</i>				0.17	0.17	0.17			
<i>Socially inactive</i>					0.03				
<i>Bad health</i>						0.87**	0.71*	0.72*	0.76*
<i>Job-related attitudes</i>									
<i>No job security</i>							0.40+	0.37	
<i>Dissatisfied with job</i>							2.40**	2.40**	2.52**
<i>Physically demanding job</i>							0.78**	0.72**	0.73**
<i>Work characteristics</i>									
<i>Real working time</i>								-0.01	
<i>Public sector</i> (ref.: Private sector)								0.09	
<i>Self-employed</i> (ref.: Dependent employed)								-1.76**	-1.87**
<i>Income</i>								-0.36*	-0.39**
Chi ²	45.92	50.18	38.19	46.05	46.07	43.49	94.46	120.28	119.25
N	752	751	512	658	658	540	618	615	622

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effects significant at **p < 0.01, *p < 0.05, +p < 0.10.

Table A4: Determinants of the wish to retire in Denmark, men only (logit models)

	1	2	3	4	5	6	7	8	9
<i>Constant</i>	0.27	0.33+	0.45+	0.25	0.13	-0.03	-0.41	-0.27	0.05
<i>Age (ref.: 50–54)</i>									
55–59	-0.29	-0.29	-0.27	-0.60**	-0.62**	-0.46+	-0.25	-0.28	-0.26
60–70	-1.83**	-1.83**	-1.82**	-1.93**	-1.97**	-1.80**	-1.74**	-1.86**	-1.77**
<i>Qualification</i>									
ISCED 1/2	-0.34	-0.34	-0.27	-0.41	-0.42	-1.00	-0.85*	-0.97**	-0.91*
ISCED 3 (ref.)	–	–	–	–	–	–	–	–	–
ISCED 5	-0.32+	-0.33*	-0.27	-0.27	-0.22	-0.39+	-0.29	-0.27	-0.20
<i>Wave (ref.: Wave 1)</i>									
Wave 2	-0.71**	-0.73**	-0.84**	-0.77**	-0.77**	-0.58*	-0.62**	-0.66**	-0.67**
Wave 4	-0.65**	-0.70**	-0.69**	-0.76**	-0.66**	-0.48	-0.59*	-0.65*	-0.65*
<i>Further individual characteristics</i>									
<i>Single</i>		-0.35		-0.49	-0.45	-0.46	-0.18	-0.17	-0.18
<i>Partner active</i>			-0.12						
<i>Grandchildren</i>				0.35+	0.35+	0.30			
<i>Socially inactive</i>					0.42+				
<i>Bad health</i>						0.96**	0.83**	0.82**	0.85**
<i>Job-related attitudes</i>									
<i>No job security</i>							0.20	0.21	
<i>Dissatisfied with job</i>							2.05**	1.99**	2.07**
<i>Physically demanding job</i>							0.89**	0.86**	0.86**
<i>Work characteristics</i>									
<i>Real working time</i>								0.01	
<i>Public sector</i> (ref.: Private sector)								0.21	
<i>Self-employed</i> (ref.: Dependent employed)								-0.17	-0.17
<i>Income</i>								-0.22+	-0.17
Chi ²	83.78	85.36	68.38	72.59	76.27	58.39	109.58	118.40	115.03
N	818	818	619	683	683	541	650	647	657

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effects significant at **p < 0.01, *p < 0.05, +p < 0.10.

Table A5: The sample of German retirees by retirement age, gender, and qualification level

Retirement age	Men			Women		
	ISCED 1/2	ISCED 3/4	ISCED 5	ISCED 1/2	ISCED 3/4	ISCED 5
50–54	5.8	7.3	2.9	13.7	11.8	8.2
55–59	21.7	28.4	25.3	25.7	31.8	30.0
60–64	53.6	51.2	47.6	43.4	47.6	55.5
65 and older	18.8	13.2	24.2	17.1	8.9	6.4
Mean retirement age	60.8	60.3	61.3	59.8	59.0	59.4
N	69	592	277	175	349	110
	938			634		

Source: SHARE Waves 1, 2; own calculations.

Note: ISCED Code 6 is not assigned in the German case; “none” and “other” are classified as “1” (very few cases).

Table A6: Determinants for stating a “pull reason” in Germany (logit models)

	1	2	3	4	5
<i>Constant</i>	-2.34**	-2.22**	-1.91**	-2.06**	-2.24**
<i>Period of retirement</i>					
1980–1989	0.07	0.07	0.10	0.14	0.17
1990–1997 (ref.)	–	–	–	–	–
1998–2001	0.22	0.21	0.21	0.15	0.12
2002–2007	0.33	0.36	0.37	0.30	0.27
<i>Region</i>					
West Germany (ref.)	–	–	–	–	–
East Germany	0.03	0.03	0.06	-0.02	-0.01
<i>Retirement age</i>					
50–54		-0.13	-0.09	-0.06	-0.06
55–59		-0.13	-0.13	-0.14	-0.14
60–64 (ref.)		–	–	–	–
65+		-0.68*	-0.70*	-0.69*	-0.69*
<i>Sex</i>					
Male (ref.)			–	–	–
Female			-0.24	-0.08	-0.08
<i>Qualification</i>					
ISCED 1/2				-0.81*	-0.80*
ISCED 3/4 (ref.)				–	–
ISCED 5				0.27	0.30
<i>Unemployment rate</i>					0.02
<i>Sector of last job</i>					
Private sector (ref.)					–
Public sector					-0.10
Chi ²	2.43	8.27	10.04	20.52	20.89
N	1,572	1,572	1,572	1,572	1,572

Source: SHARE Waves 1, 2; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$.

Table A7: Determinants for stating a “push reason” in Germany (logit models)

	1	2	3	4	5	6	7
<i>Constant</i>	-0.94**	-1.15**	-0.39+	-0.39+	-0.24	-1.04**	-0.65
<i>Period of retirement</i>							
1980–1989	-0.30+	-0.28	-0.24	-0.22			-0.18
1990–1997 (ref.)	–	–	–	–			–
1998–2001	0.08	0.26+	0.26+	0.24			0.20
2002–2007	-0.19	0.16	0.18	0.16			0.10
<i>Region</i>							
West Germany (ref.)	–	–	–	–	–	–	–
East Germany	0.70**	0.55**	0.63**	0.62**	0.67**	0.69**	0.64**
<i>Retirement age</i>							
50–54		0.02	0.11	0.11	0.08	0.09	0.11
55–59		0.89**	0.92**	0.91**	0.89**	0.89**	0.90**
60–64 (ref.)		–	–	–	–	–	–
65+		-1.43**	-1.49**	-1.48**	-1.47**	-1.48**	-1.49**
<i>Sex</i>							
Male (ref.)			–	–	–	–	–
Female			-0.58**	-0.55**	-0.55**	-0.55**	-0.53**
<i>Qualification</i>							
ISCED 1/2				-0.22	-0.24	-0.23	-0.23
ISCED 3/4 (ref.)				–	–	–	–
ISCED 5				-0.03	-0.03	-0.03	0.03
<i>Period of retirement: binary</i>							
1980–1994					-0.21+		
1995–2007 (ref.)							
<i>Unemployment rate</i>						0.07*	0.03
<i>Sector of last job</i>							
Private sector (ref.)							
Public sector							-0.28*
Chi ²	41.44	160.23	183.30	184.69	181.30	182.82	189.69
N	1,572	1,572	1,572	1,572	1,572	1,572	1,572

Source: SHARE Waves 1, 2; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A8: Determinants for stating a “private reason” in Germany (logit models)

	1	2	3	4	5	6	7
<i>Constant</i>	-2.18**	-2.16**	-3.33**	-3.29**	-1.70**	-2.36**	-2.31**
<i>Period of retirement</i>							
1980–1989	0.29	0.27	0.19	0.18		0.06	-0.07
1990–1997 (ref.)	–	–	–	–		–	–
1998–2001	0.08	0.09	0.11	0.13		0.27	0.30
2002–2007	0.70**	0.70**	0.68**	0.70**		0.85**	0.66*
<i>Region</i>							
West Germany (ref.)	–	–	–	–	–	–	–
East Germany	-1.28**	-1.25**	-1.36**	-1.34**	-1.40**	-1.39**	-1.38**
<i>Retirement age</i>							
50–54		0.35	0.22	0.22	0.13	0.16	0.14
55–59		-0.24	-0.25	-0.25	-0.33	-0.27	-0.28
60–64 (ref.)		–	–	–	–	–	–
65+		-0.04	0.02	0.01	0.05	-0.01	-0.01
<i>Sex</i>							
Male (ref.)							
Female			0.82**	0.78**	0.81**	0.81**	0.83**
<i>Qualification</i>							
ISCED 1/2				0.15	0.10	0.10	0.14
ISCED 3/4 (ref.)				–	–	–	–
ISCED 5				-0.06	-0.06	0.02	-0.43
<i>Period of retirement: binary</i>							
1980–1994					-0.51+		
1995–2007 (ref.)					–		
<i>Unemployment rate</i>					-0.12	-0.09	-0.09
<i>Sector of last job</i>							
Private sector (ref.)						–	–
Public sector						-0.27	-0.30
<i>Qualification × 1980–1987</i>							
ISCED 1/2							-0.02
ISCED 5							0.76
<i>Qualification × 1994–2001</i>							
ISCED 1/2							-0.04
ISCED 5							0.03
<i>Qualification × 2002–2007</i>							
ISCED 1/2							-0.26
ISCED 5							1.01+
Chi ²	38.03	41.52	64.98	65.58	59.65	69.49	74.70
N	1,572	1,572	1,572	1,572	1,572	1,572	1,572

Source: SHARE Waves 1, 2; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A9: Determinants for stating the “health reason” in Germany (logit models)

	1	2	3	4	5	6
<i>Constant</i>	-1.19**	-1.38**	-0.60**	-0.57*	0.30	-0.27
<i>Period of retirement</i>						
1980–1989	-0.07	-0.09	-0.04	-0.07		-0.12
1990–1997 (ref.)	–	–	–	–		–
1998–2001	-0.26	-0.12	-0.14	-0.11		-0.07
2002–2007	-0.54**	-0.28	-0.27	-0.24		-0.18
<i>Region</i>						
West Germany (ref.)	–	–	–	–	–	–
East Germany	-0.83**	-0.98**	-0.92**	-0.89**	-0.90**	-0.92**
<i>Retirement age</i>						
50–54		0.75**	0.86**	0.87**	0.89**	0.86**
55–59		0.54**	0.56**	0.57**	0.60**	0.58**
60–64 (ref.)		–	–	–	–	–
65+		-0.97**	-1.02**	-1.04**	-1.04**	-1.04**
<i>Sex</i>						
Male (ref.)			–	–	–	–
Female			-0.59**	-0.68**	-0.68**	-0.69**
<i>Qualification</i>						
ISCED 1/2				0.37+	0.36+	0.37+
ISCED 3/4 (ref.)				–	–	–
ISCED 5				0.01	0.00	-0.04
<i>Period of retirement: binary</i>						
1980–1994					-0.22	
1995–2007 (ref.)					–	
<i>Unemployment rate</i>					-0.08	
<i>Sector of last job</i>						
Private sector (ref.)						–
Public sector						0.21
Chi ²	28.88	73.84	91.19	94.75	95.51	97.17
N	1,572	1,572	1,572	1,572	1,572	1,572

Source: SHARE Waves 1, 2; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A10: Germany: Determinants for stating “reaching eligibility for public old age pension” as reason for retirement (logit models)

	1	2	3	4	5	6	7	8
<i>Constant</i>	-0.30**	0.15	-0.88**	-0.89**	-1.16**	0.00	-0.92	-0.54
<i>Period of retirement</i>								
1980–1989	0.24	0.31+	0.23	0.24				0.18
1990–1997 (ref.)	–	–	–	–				–
1998–2001	0.20	-0.17	-0.18	-0.19				-0.13
2002–2007	0.24	-0.47**	-0.52**	-0.53**				-0.45*
<i>Region</i>								
West Germany (ref.)	–	–	–	–	–	–	–	–
East Germany	0.07	0.48**	0.40**	0.39**	0.34*	0.31*	0.33*	0.37*
<i>Retirement age</i>								
50–54		-1.56**	-1.75**	-1.75**	-1.74**	-1.70**	-1.74**	-1.75**
55–59		-1.75**	-1.82**	-1.83**	-1.81**	-1.78**	-1.81**	-1.83**
60–64 (ref.)		–	–	–	–	–	–	–
65+		1.84**	1.94**	1.94**	1.90**	1.90**	1.90**	1.95**
<i>Sex</i>								
Male (ref.)			–	–	–	–	–	–
Female			0.78**	0.79**	0.79**	0.79**	0.79**	0.78**
<i>Qualification</i>								
ISCED 1/2				-0.09	-0.08	-0.07	-0.09	-0.09
ISCED 3/4 (ref.)				–	–	–	–	–
ISCED 5				0.01	0.02	0.01	0.02	-0.06
<i>Period of retirement: binary</i>								
1980–1994					0.42**		0.36+	
1995–2007 (ref.)					–		–	
<i>Unemployment rate</i>						-0.10**	-0.02	-0.04
<i>Sector of last job</i>								
Private sector (ref.)								–
Public sector								0.29*
Chi ²	4.59	379.06	420.61	420.89	417.35	414.20	417.51	426.66
N	1,572	1,572	1,572	1,572	1,572	1,572	1,572	1,572

Source: SHARE Waves 1, 2; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A11: Determinants of the wish to retire in Germany, women only (logit models)

	1	2	3	4	5	6	7	8	9	10
<i>Constant</i>	-0.58**	-0.57**	-0.55**	-0.70**	-0.71**	-0.68**	-1.03**	-2.03**	-1.85**	-1.78**
<i>Region: East Germany</i> (ref. West G.)	0.86**	0.86**	0.95**	0.74**	0.81**	1.00**	1.09**	0.93*	0.79**	0.77**
<i>Age</i> (ref.: 50–54)										
55–59	-0.06	-0.06	-0.09	-0.01	-0.04	-0.18	-0.12	-0.06	-0.00	-0.01
60–70	-0.44	-0.42	-0.45	-0.44	-0.43	-0.49	-0.45	-0.21	-0.23	-0.24
<i>Qualification</i>										
ISCED 1/2	0.59+	0.63*	0.70+	0.54	0.58+	0.61	0.65	0.84+	0.58+	0.56+
ISCED 3/4 (ref.)	–	–	–	–	–	–	–	–	–	–
ISCED 5	0.11	0.12	0.21	0.20	0.14	-0.03	0.01	-0.17	0.08	0.10
<i>Wave 2</i> (ref.: Wave 1)	0.02	0.03	-0.13	0.02	0.02	0.06	0.12	0.32	0.18	0.19
<i>Further individual characteristics</i>										
<i>Single</i>		-0.13								
<i>Partner active</i>			0.11							
<i>Grandchildren</i>				0.23						
<i>Socially inactive</i>					0.26	0.11				
<i>Bad health</i>						0.35	0.31	0.10		
<i>Job-related attitudes</i>										
<i>No job security</i>							0.46	0.77*	0.62**	0.62*
<i>Dissatisfied with job</i>							2.15**	1.14**	1.41**	1.40**
<i>Physically demanding job</i>							0.33	0.36	0.46*	0.45*
<i>Work characteristics</i>										
<i>Real working time</i>								0.02+	0.02*	0.02**
<i>Public sector</i> (ref.: Private sector)								0.76*	0.45*	0.47*
<i>Self-employed</i> (ref.: Dependent employed)								-0.68+	-0.61*	-0.61*
<i>Income</i>								0.12	0.08	
Chi ²	20.82	21.16	18.14	18.11	23.07	20.07	42.87	61.91	71.88	71.58
N	581	580	371	499	581	372	365	359	561	561

Source: SHARE Waves 1, 2; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A12: Determinants of the wish to retire in Germany, men only (logit models)

	1	2	3	4	5	6	7	8	9	10
<i>Constant</i>	-0.13	-0.07	-0.14	0.26	-0.19	-0.24	-0.72**	0.68	-0.52	-0.60
<i>Region: East Germany</i> (ref. West)	0.30	0.30	0.60*	0.43+	0.30	0.41	0.30	0.08	0.15	0.18
<i>Age</i> (ref.: 50–54)										
55–59	0.43*	0.41*	0.33	0.14	0.43*	0.45+	0.54*	0.53*	0.49*	0.49*
60–70	-0.20	-0.22	-0.10	-0.51*	-0.19	-0.14	-0.18	-0.01	-0.02	-0.02
<i>Qualification</i>										
ISCED 1/2	0.98*	0.98*	0.88	0.94+	0.95+	0.85	0.89	0.82	1.24*	1.24*
ISCED 3/4 (ref.)	–	–	–	–	–	–	–	–	–	–
ISCED 5	-0.77**	-0.77**	-0.81**	-0.88**	-0.75**	-0.79**	-0.58	-0.60*	-0.63**	-0.64**
<i>Wave 2</i> (ref.: Wave 1)	0.11	0.11	-0.17	-0.13	0.12	0.06	0.07	0.12	0.11	0.11
<i>Further individual characteristics</i>										
<i>Single</i>		-0.32								
<i>Partner active</i>			0.23							
<i>Grandchildren</i>				-0.13						
<i>Socially inactive</i>					0.14	0.05				
<i>Bad health</i>						0.61*	0.50+	0.53+		
<i>Job-related attitudes</i>										
<i>No job security</i>							0.60*	0.61*	0.36	0.37+
<i>Dissatisfied with job</i>							1.67**	1.66**	1.59**	1.60**
<i>Physically demanding job</i>							0.48*	0.56*	0.31+	0.32+
<i>Work characteristics</i>										
<i>Real working time</i>								0.01	0.00	0.00
<i>Public sector</i> (ref.: Private sector)								0.41	0.30	0.29
<i>Self-employed</i> (ref.: Dependent employed)								-0.93**	-0.85**	-0.86**
<i>Income</i>								0.15	0.04	
Chi ²	36.90	38.58	27.17	36.17	37.58	29.03	53.88	67.55	80.61	80.53
N	626	626	426	502	626	395	390	389	615	615

Source: SHARE Waves 1, 2; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A13: The sample of Dutch retirees by retirement age, gender and qualification level

Retirement age	Men			Women		
	ISCED 1/2	ISCED 3	ISCED 5	ISCED 1/2	ISCED 3	ISCED 5
50–54	7.0	7.1	7.2	13.9	10.2	6.7
55–59	35.4	37.4	28.4	30.9	28.8	31.1
60–64	43.1	42.4	49.5	41.2	39.0	55.6
65 and older	14.5	13.1	15.0	13.9	22.0	6.7
Mean retirement age	60.0	59.8	60.4	59.5	60.0	59.6
N	429	198	194	165	59	45
	821			269		

Source: SHARE Waves 1, 2, 4; own calculations.

Notes: ISCED Codes 4 and 6 are not assigned in the Dutch case; “none” and “other” are classified as “1” (very few cases).

Table A14: Determinants for stating a “pull reason” in the Netherlands (logit models)

	1	2	3	4	5	6	7
Constant	-1.52**	-1.18**	-1.04**	-1.25**	-0.95**	-0.49*	-0.41
Period of retirement							
1980–1987	-0.56*	-0.51*	-0.52*	-0.54*			0.15
1988–1995 (ref.)	–	–	–	–			–
1996–2001	0.16	0.20	0.22	0.23			-0.15
2002–2007	0.42*	0.36+	0.38+	0.39+			-0.03
Retirement age							
50–54		-1.73**	-1.67**	-1.67**	-1.72**	-1.70**	-1.72**
55–59		-0.19	-0.20	-0.21	-0.20	-0.21	-0.20
60–64 (ref.)		–	–	–	–	–	–
65+		-2.36**	-2.38**	-2.39**	-2.38**	-2.43**	-2.40**
Sex							
Male (ref.)			–	–	–	–	–
Female			-0.71**	-0.74**	-0.74**	-0.75**	-0.74**
Qualification							
ISCED 1/2				0.33	0.31	0.36+	0.39+
ISCED 3 (ref.)				–	–	–	–
ISCED 5				0.12	0.12	0.11	0.10
Period of retirement: binary							
1980–1994					-0.49**		
1995–2007 (ref.)					–		
Unemployment rate						-0.12**	-0.14**
Sector of last job							
Private sector (ref.)							–
Public sector							0.16
Chi ²	15.50	76.55	88.88	91.95	87.19	98.07	99.53
N	1,090	1,090	1,090	1,090	1,090	1,090	1,084

Source: SHARE Waves 1, 2, 4; own calculations.

Notes: Effect significant at **p < 0.01, *p < 0.05, +p < 0.10.

Table A15: Determinants for stating a “push reason” in the Netherlands (logit models)

	1	2	3	4	5	6	7	8
<i>Constant</i>	-0.52**	-0.48**	-0.45**	-0.18	-0.97**	-1.10**	-1.00**	-1.37**
<i>Period of retirement</i>								
1980–1987	-0.07	0.02	0.02	0.05	-0.59+	-0.58+	-0.64+	0.24
1988–1995 (ref.)	–	–	–	–	–	–	–	–
1996–2001	-0.25	-0.15	-0.14	-0.16	0.15	0.16	0.00	0.45
2002–2007	0.05	0.15	0.16	0.13	0.49*	0.49*	0.32	0.68+
<i>Retirement age</i>								
50–54		-0.72**	-0.71*	-0.71*	-0.69*	-0.69*	-0.67*	-0.71*
55–59		0.34*	0.34*	0.35*	0.35*	0.34*	0.32*	0.35*
60–64 (ref.)		–	–	–	–	–	–	–
65+		-1.69**	-1.69**	-1.69**	-1.69**	-1.65**	-1.64**	-1.65**
<i>Sex</i>								
Male (ref.)			–	–	–	–	–	–
Female			-0.10	-0.06	-0.05	-0.05	-0.43	-0.06
<i>Qualification</i>								
ISCED 1/2				-0.51**	-0.53**	-0.49**	-0.49**	-0.18
ISCED 3 (ref.)				–	–	–	–	–
ISCED 5				-0.06	-0.04	-0.08	-0.07	0.32
<i>Unemployment rate</i>					0.12**	0.12**	0.12**	0.12**
<i>Sector of last job</i>								
Private sector (ref.)						–	–	–
Public sector						0.27*	0.26+	0.29*
<i>Period of retirement × Sex</i>								
1980–1987							0.27	
1996–2001							0.67	
2002–2007							0.72+	
<i>Qualification × 1980–1987</i>								
ISCED 1/2								-0.98*
ISCED 5								-1.31*
<i>Qualification × 1996–2001</i>								
ISCED 1/2								-0.37
ISCED 5								-0.42
<i>Qualification × 2002–2007</i>								
ISCED 1/2								-0.22
ISCED 5								-0.29
Chi ²	3.29	81.18	81.59	94.82	102.36	104.53	108.42	110.75
N	1,090	1,090	1,090	1,090	1,090	1,084	1,084	1,084

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A16: Determinants for stating a “private” reason in the Netherlands (logit models)

	1	2	3	4	5	6	7
<i>Constant</i>	-2.08**	-1.98**	-2.70**	-2.63**	-1.80**	-1.71**	-1.47*
<i>Period of retirement</i>							
1980–1987	-0.31	-0.32	-0.32	-0.31		0.25	-0.31
1988–1995 (ref.)	–	–	–	–		–	–
1996–2001	0.36	0.36	0.36	0.34		0.02	0.06
2002–2007	0.69**	0.66**	0.67**	0.64**		0.28	-0.56
<i>Retirement age</i>							
50–54		-0.17	-0.24	-0.23	-0.23	-0.26	-0.32
55–59		-0.13	-0.13	-0.11	-0.15	-0.07	-0.09
60–64 (ref.)		–	–	–	–	–	–
65+		-0.29	-0.29	-0.28	-0.32	-0.36	-0.37
<i>Sex</i>							
Male (ref.)			–	–	–	–	–
Female			0.56**	0.61**	0.60**	0.69**	0.70**
<i>Qualification</i>							
ISCED 1/2				-0.30	-0.28	-0.37	-0.66+
ISCED 3 (ref.)				–	–	–	–
ISCED 5				0.16	0.16	0.21	-0.21
<i>Period of retirement: binary</i>							
1980–1994					-0.20		
1995–2007 (ref.)					–		
<i>Unemployment rate</i>					-0.09*		
<i>Sector of last job</i>							
Private sector (ref.)						–	–
Public sector						-0.60**	-0.59**
<i>Qualification × 1980–1987</i>							
ISCED 1/2							0.93
ISCED 5							0.22
<i>Qualification × 1996–2001</i>							
ISCED 1/2							-0.14
ISCED 5							0.04
<i>Qualification × 2002–2007</i>							
ISCED 1/2							0.91
ISCED 5							1.34+
Chi ²	15.42	16.73	24.83	29.67	31.71	43.43	51.36
N	1090	1090	1090	1090	1090	1084	1084

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A17: Determinants for stating the “health reason” in the Netherlands (logit models)

	1	2	3	4	5	6	7
<i>Constant</i>	-2.30**	-2.77**	-3.19**	-3.62**	-4.42**	-3.48**	-4.07**
<i>Period of retirement</i>							
1980–1987	0.69**	0.65*	0.65*	0.61*		0.65	1.79*
1988–1995 (ref.)	–	–	–	–		–	–
1996–2001	-0.72*	-0.52	-0.53	-0.50		-0.52	-0.77
2002–2007	-0.93*	-0.63	-0.63	-0.61		-0.66	0.38
<i>Retirement age</i>							
50–54		1.31**	1.28**	1.27**	1.25**	1.25**	1.28**
55–59		0.64*	0.65*	0.64*	0.60*	0.65*	0.67*
60–64 (ref.)		–	–	–	–	–	–
65+		-0.28	-0.29	-0.29	-0.29	-0.32	-0.34
<i>Sex</i>							
Male (ref.)			–	–	–	–	–
Female			0.33	0.28	0.28	0.32	0.31
<i>Qualification</i>							
ISCED 1/2				0.74*	0.74*	0.71*	1.42*
ISCED 3 (ref.)				–	–	–	–
ISCED 5				0.23	0.23	0.25	0.63
<i>Period of retirement: binary</i>							
1980–1994					0.77*		
1995–2007 (ref.)					–	–	–
<i>Unemployment rate</i>					0.05	-0.01	-0.01
<i>Sector of last job</i>							
Private sector (ref.)						–	–
Public sector						-0.24	-0.19
<i>Qualification × 1980–1987</i>							
ISCED 1/2							-1.46+
ISCED 5							-0.74
<i>Qualification × 1996–2001</i>							
ISCED 1/2							0.18
ISCED 5							0.70
<i>Qualification × 2002–2007</i>							
ISCED 1/2							-1.13
ISCED 5							-1.49
Chi ²	29.58	48.81	50.59	57.81	59.40	58.85	64.87
N	1,090	1,090	1,090	1,090	1,090	1,084	1,084

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A18: Determinants for stating “reaching eligibility for public old age pension” as reason for retirement in the Netherlands (logit models)

	1	2	3	4	5	6	7
<i>Constant</i>	-1.12**	-1.29**	-1.10**	-1.19**	-1.26**	-1.03*	-0.99**
<i>Period of retirement</i>							
1980–1987	-0.05	-0.11	-0.11	-0.12		-0.03	-0.76
1988–1995 (ref.)	–	–	–	–		–	–
1996–2001	0.31+	0.08	0.08	0.09		0.01	-0.41
2002–2007	-0.17	-0.41+	-0.42+	-0.41+		-0.45+	-0.76
<i>Retirement age</i>							
50–54		0.45+	0.47+	0.47+	0.48+	0.48+	0.51+
55–59		-0.43*	-0.43*	-0.43*	-0.39*	-0.46*	-0.47*
60–64 (ref.)		–	–	–	–	–	–
65+		2.05**	2.05**	2.05**	2.07**	2.07**	2.09**
<i>Sex</i>							
Male (ref.)			–	–	–	–	–
Female			-0.15	-0.17	-0.17	-0.25	-0.25
<i>Qualification</i>							
ISCED 1/2				0.18	0.18	0.18	-0.21
ISCED 3 (ref.)				–	–	–	–
ISCED 5				0.03	0.01	0.03	-0.36
<i>Period of retirement: binary</i>							
1980–1994					–		
1995–2007 (ref.)					0.14		
<i>Unemployment rate</i>					-0.02	-0.02	-0.02
<i>Sector of last job</i>							
Private sector (ref.)						–	–
Public sector						0.12	0.11
<i>Qualification × 1980–1987</i>							
ISCED 1/2							0.78
ISCED 5							1.32+
<i>Qualification × 1996–2001</i>							
ISCED 1/2							0.67
ISCED 5							0.33
<i>Qualification × 2002–2007</i>							
ISCED 1/2							0.45
ISCED 5							0.37
Chi ²	6.59	153.12	153.88	155.01	150.16	156.15	161.92
N	1,090	1,090	1,090	1,090	1,090	1,084	1,084

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A19: Determinants of the wish to retire in the Netherlands, women only (logit models)

	1	2	3	4	5	6	7	8	9
<i>Constant</i>	-1.49**	-1.56**	-1.63**	-1.80**	-1.63**	-1.60**	-2.04**	-2.28**	-1.96**
<i>Age (ref.: 50–54)</i>									
55–59	-0.05	-0.03	0.14	0.07	-0.04	-0.06	0.11	0.08	0.11
60–70	-0.32	-0.33	-0.24	-0.12	-0.32	-0.27	-0.28	-0.13	-0.15
<i>Qualification</i>									
ISCED 1/2	0.14	0.16	0.24	0.25	0.09	-0.03	-0.01	0.17	0.07
ISCED 3 (ref.)	–	–	–	–	–	–	–	–	–
ISCED 5	0.27	0.25	0.40	0.29	0.28	0.20	0.23	0.22	0.26
<i>Wave (ref.: Wave 1)</i>									
Wave 2	0.30	0.33	0.31	0.43	0.29	0.34	0.33	0.40	0.33
Wave 4	0.43+	0.48*	0.25	0.73**	0.57*	0.52+	0.51+	0.53+	0.49
Further individual characteristics									
<i>Single</i>		0.32							
<i>Partner active</i>			-0.01						
<i>Grandchildren</i>				0.05					
<i>Socially inactive</i>					0.47*	0.33	0.32	0.30	0.32
<i>Bad health</i>						0.40	0.34	0.38	0.38
Job-related attitudes									
<i>No job security</i>							0.30	0.31	0.31
<i>Dissatisfied with job</i>							1.73**	1.71**	1.65**
<i>Physically demanding job</i>							0.36	0.32	0.34
Work characteristics									
<i>Real working time</i>								0.01	
<i>Public sector</i> (ref.: Private sector)								0.13	
<i>Self-employed</i> (ref.: Dependent employed)								-1.37**	-1.41**
<i>Income</i>								-0.01	
<i>Chi²</i>	6.54	7.74	3.98	9.69	10.78	8.28	37.19	50.18	48.72
<i>N</i>	713	713	452	584	713	531	527	517	527

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A20: Determinants of the wish to retire in the Netherlands, men only (logit models)

	1	2	3	4	5	6	7	8	9
<i>Constant</i>	-0.30+	-0.25	-0.25	-0.32+	-0.40*	-0.44*	-0.94**	0.05	-0.82**
<i>Age (ref.: 50–54)</i>									
55–59	0.11	0.10	0.12	0.03	0.07	0.14	0.22	0.16	0.18
60–70	-0.02	-0.03	0.06	-0.12	-0.05	-0.02	0.10	0.21	0.28
<i>Qualification</i>									
ISCED 1/2	-0.06	-0.05	-0.02	-0.06	-0.09	-0.39+	-0.44*	-0.49*	-0.45*
ISCED 3 (ref.)	–	–	–	–	–	–	–	–	–
ISCED 5	-0.70**	-0.71**	-0.53*	-0.62**	-0.68**	-0.84**	-0.74**	-0.56*	-0.73**
<i>Wave (ref.: Wave 1)</i>									
Wave 2	0.31+	0.30+	0.21	0.27	0.31+	0.37+	0.50*	0.44*	0.48*
Wave 4	0.26	0.22	0.13	0.30	0.37+	0.46*	0.52*	0.46+	0.53*
<i>Further individual characteristics</i>									
<i>Single</i>		-0.47							
<i>Partner active</i>			-0.08						
<i>Grandchildren</i>				0.09					
<i>Socially inactive</i>					0.38*	0.52*	0.49*	0.51*	0.52*
<i>Bad health</i>						0.60*	0.51*	0.49+	0.49+
<i>Job-related attitudes</i>									
<i>No job security</i>							0.33+	0.35+	0.37+
<i>Dissatisfied with job</i>							1.24**	1.16**	1.17**
<i>Physically demanding job</i>							0.47*	0.58**	0.55**
<i>Work characteristics</i>									
<i>Real working time</i>								-0.00	
<i>Public sector</i> (ref.: Private sector)								-0.45*	
<i>Self-employed</i> (ref.: Dependent employed)								-1.70**	-1.50**
<i>Income</i>								-0.21	
Chi ²	23.17	25.76	10.44	16.62	27.98	35.92	58.96	95.63	87.24
N	852	852	605	711	852	618	610	608	610

Source: SHARE Waves 1, 2, 4; own calculations.

Note: Effect significant at ** $p < 0.01$, * $p < 0.05$, + $p < 0.10$.

Table A21: Overview on the effects of independent variables on the propensity to list a specific group of reasons for retirement

	Pull			Push			Private			Health			Regular		
	DK	GER	NL	DK	GER	NL	DK	GER	NL	DK	GER	NL	DK	GER	NL
Relevance of reason within country ⁸⁵	**	*	**	***	****	****	***	**	**	**	**	*	****	*****	***
Development over time	↔	↔	↑	↓	↔	↑	↑	↑	↑	↔	↔	↓	↓	↓	↓
Particularly relevant during the period	<i>ns</i>	<i>ns</i>	2002–2007	until 2001	<i>ns</i>	2002–2007	2002–2007	2002–2007	2002–2007	<i>ns</i>	<i>ns</i>	1980–1987	until 2001	until 2001	until 2001
Unemployment rate	high	<i>ns</i>	low	high	high	high	low	<i>ns</i>	low	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Retirement age	55–64	<65	55–64	50–64	55–59	55–59	60–64	<i>ns</i>	<i>ns</i>	50–59	50–59	50–59	65+	65+	65+
Region (only Germany)		<i>ns</i>	.		east	.		west	.		west	.		east	.
Sex	<i>ns</i>	<i>ns</i>	male	male	male	<i>ns</i>	female	female	female	male	male	<i>ns</i>	<i>ns</i>	female	<i>ns</i>
Qualification	medium/high	medium/high	low	high	<i>ns</i>	medium/high	high	<i>ns</i>	<i>ns</i>	<i>ns</i>	low	low	low	<i>ns</i>	<i>ns</i>
Public vs. private sector	public	<i>ns</i>	<i>ns</i>	<i>ns</i>	private	public	<i>ns</i>	<i>ns</i>	private	public	<i>ns</i>	<i>ns</i>	private	public	<i>ns</i>
Period × Sex (particularly relevant for...)	Women in 1988–1993, then men	<i>ns</i>	<i>ns</i>	Gender gap decrease after 1993	<i>ns</i>	Women after 2002	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Period × Qualification (particularly relevant for...)	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	Medium qualified in 1980–1987	Qualification gap increase after 1993	High qualified after 2002	High qualified after 2002	<i>ns</i>	<i>ns</i>	Lower gap in 1980–1987	<i>ns</i>	<i>ns</i>	High qualified in 1980–1987

Source: SHARE Waves 1, 2, 4; own calculations. Note: *ns* = nonsignificant.

⁸⁵ Categories of relevance: ***** stated by more than 40 percent of retired population; **** stated by more than 30 percent; *** stated by 20–29 percent; ** stated by 10–19 percent; * stated by less than 10 percent.

Table A22: Overview of factors influencing current older workers' wish to retire by country

		Denmark	Germany	Netherlands
Basic factors	Sex	Female	<i>ns</i>	Male
	Age	< 60	<i>ns</i>	<i>ns</i>
	Region (only Germany)	-	East	-
	Qualification	<i>ns</i>	Low	Low/Medium
	Wave (development over time)	Negative (decreasing)	<i>ns</i>	Negative (decreasing)
Further individual characteristics	Single	Negative	<i>ns</i>	<i>ns</i>
	Partner in employment	<i>ns</i>	<i>ns</i>	<i>ns</i>
	Grandchildren	<i>ns</i>	<i>ns</i>	<i>ns</i>
	Lack of social activities	<i>ns</i>	<i>ns</i>	Positive
	Bad health	Positive	<i>ns</i>	Positive
Job-related attitudes	Low job security	<i>ns</i>	Positive	Positive
	Job dissatisfaction	Positive	Positive	Positive
	High physical demand	Positive	Positive	Positive
Work characteristics	Working time	<i>ns</i>	Positive	<i>ns</i>
	Sector (public vs. private)	<i>ns</i>	Public	<i>ns</i>
	Income	Negative	<i>ns</i>	<i>ns</i>
	Type of employment	Dependent employed	Dependent employed	Dependent employed

Source: SHARE Waves 1, 2, 4; own calculations.

Note: *ns* = nonsignificant.

List of Abbreviations

ALMP	Active Labor Market Policy
ATP	Labor Market Supplementary Pension
DB	Disability Benefit
DK	Denmark
DSOEP	Dutch Socio-economic Panel
EPL	Employment Protection Legislation
EU	European Union
GDP	Gross Domestic Product
GDR	German Democratic Republic
GER	Germany
GSOEP	German Socio-economic Panel
ILO	International Labor Organization
NL	The Netherlands
ns	not (statistically) significant
OAP	Old Age Pension
OECD	Organization of Economic Co-operation and Development
PAYG	Pay-as-you-go
SDP	Social Disability Pension
SHARE	Survey of Health, Aging and Retirement in Europe
SP	Special Pension Savings Scheme
SUPP	Supplementary Labor Market Pension Scheme for Disability Pensioners
TBP	Transitional Benefit Program
UB	Unemployment Benefits
UI	Unemployment Insurance
UK	United Kingdom
US	United States
VERP	Voluntary Early Retirement Program

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The present dissertation traces how trends relating to globalization and demographic change impact on the labor market situation and retirement processes of older workers. The work focuses on Denmark, which is often cited as a role model for other OECD countries due to its specific institutional context and its traditionally high labor market participation of older people. In addition, the results from this Danish country study are compared to findings from Germany and the Netherlands, enabling an assessment of Denmark's performance from a cross-country comparative perspective. In that context, the empirical analyses combine an examination of observed experiences in both the late career and the retirement process with how people themselves view their transition into the state of retirement.



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