Institutional Affinities and Extending Working Life

The Effectiveness of Activation Policies in The Netherlands, Germany and Italy

Silvia Rossetti

Thesis submitted for assessment with a view to obtaining the degree of Doctor of Political and Social Sciences of the European University Institute

Florence, 11 June 2015
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Aan Volkert, mijn partner en vriend,

Ai miei genitori Raniero e Silvana.

Cit.

“...E ancora una cosa: uno dovrebbe saper affrontare la sua cattiva sorte, i suoi errori, la sua coscienza, e simili. Insomma, contro cos’altro senz’altro avreste da lottare?...”

Joseph Conrad in “La linea d’ombra” pg. 158.

“And there's another thing: a man should stand up to his bad luck, to his mistakes, to his conscience and all that sort of thing. Why—what else would you have to fight against.”

This thesis is the outcome of a long journey, not always smooth. During my Ph.D. I had the chance of pursuing my academic interests and of carrying out a project that I first conceived during my master studies.

Since the beginning, the joy of being inspired by the novelty and the challenges of my Ph.D. project was compensated by the methodological limitations. Those limitations concerned first the lack of adequate data and then the high complexity of the research design and the theoretical framework. Overcoming these limitations was hard, but taught me how important it is to connect as much as possible the novelty of research goals with what is known to be methodologically possible and sound in the beginning.

I often heard that academic interest is generally led by personal motives and my case is of no exception to this rule. My interest for the role of social partners in the reform of early retirement incentives started in 2006 when during my master in Labour Studies at the University of Milan I attended the course in Theories and policies of the Welfare state taught by prof. dr. Maurizio Ferrera. On the one hand what struck my curiosity was the strong association between the cooperativeness of social partners and the outcomes of pension reforms in the 1990's in Europe. On the other hand I was puzzled by the contrast between the idea of early retirement as a basic social rights that social partners used in Italy to strenuously opposed to pension reforms and the memories I had of my parents experiencing their early retirement as a coercion.

After that I worked on the reversal of early retirement trends during my two masters' projects, where I started investigating the change of companies' practices toward older workers. These two projects made me understand two main points. The first is the relevance of welfare studies bridging between the political economy and a micro-sociological analysis of the effectiveness of reforms aimed at extending working life. The complex multi-layered management of retirement incentives made difficult to understand how the power distribution across actors affected their reforms, unless the stratification of the reforms' effects is considered. The second is the relevance of mechanisms of coordination between the two main sources of retirement incentives: the state and companies. This issue of how social partners not only mediated the diffusion of early retirement incentives but also their reversal started to interest me as topic of my future Ph.D. project.

What surprised me at that time was the polarization between the strategies of social partners, and especially the unions, in the Netherlands and Italy. My impressions were that in the Netherlands the unions, by accepting the reversal of early retirement, were able to redistribute more equally the costs of the population ageing. Moreover by improving the working conditions and the employability of older workers, unions gave them more power to be able to retire voluntarily. On the contrary by delaying as much as possible reforms, the unions in Italy seemed to act short-sightedly. This is because they pushed the costs of early retirement reversal on future generations, while promoting no change in the working conditions in favor of older workers willing to extend their working career.

This thesis owes its existence to my supervisor em. prof. dr. Martin Kohli, who guided me
throughout this project but never interfered with my independency as a researcher. I would like to thank him for letting me pursue my academic interests, for the trust he always placed in my project, for the freedom he granted me to make my own choices and for his support.

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Thanks to my family and especially to my parents, who always supported my choices even if they did not always understood them. Dearest mamma and papà you have been the sources of unconditional love who have made the person I am today. Thanks mamma for teaching me the importance of studying and smiling. Thanks papà for teaching me to be disciplined but always think independently. My dearest papà, your long and painful departure has been a source of deep sorrow and is still difficult to accept. What I regret the most is that you are not here to enjoy the rewards of your lifelong efforts, but I see in my heart that you are proud and smiling. Thanks mamma, zio Luigi, and Stefano for keeping our family together despite everything.

Thanks to my Dutch relatives for making me feel part of their family. Thanks for encouraging me to always be active and achieve my goals.

The most special thanks are to Volkert. Thank you for your endless love, support, and thanks for teaching me that asking for help is not a sign of weakness, but a proof of intelligence. Our lives complement one other and I am very proud of the man you have become in our 8-year journey together. In the good and in the bad, your unconditional commitment to me and to us was proven by so many and significant circumstances that nothing can make me more convinced of what I know already. I can not wait to see what the future will bring us.

I hope you will have a great time reading this book. I hope it will interest you, inform you, and inspire new thoughts. I love books and for me each book is a journey: Buon viaggio!

Silvia Rossetti

Florence, May 2015
Abstract

After pervading Western Europe for more than twenty years, early retirement trends reversed in the mid-1990's when activation policies re-converted existing incentives to extend working life (EWL). This study investigates the institutional conditions explaining the cross-national variation of activation policies' outcomes in the Netherlands, Germany, and Italy between the mid-1990's and 2009.

Revoking existing benefits for diffused and uncertain advantages, these policies faced harsh opposition from the coalitions (labour and capital organizations) interested in keeping the costs of early exit externalized for their members (older workers and their employers). In this study the central research question is: to what extent has the effectiveness of activation policies been affected by the organizational articulation of the externalization coalitions?

The articulation of these coalitions is framed according to the affinities coupling protection, production and partnership institutions. From an actor-centered perspective, the EWL re-conversion is depicted as a sequential game. Under irresistible environmental pressure, the state first interact with social partners to retrench welfare incentives and then to encourage HRM strategies to retain older workers. The higher is the organizational articulation of labour and capital, the more interactions tend to be framed in social governance modes that, discouraging opportunistic actions, convey the EWL re-conversion from the strategy of the state into the companies' HRM. In these cooperative modes social partners are thus expected to not hinder but to support the adoption of retrenchment and retaining policies. Being the articulation the highest in the Netherlands, lower in Germany and the lowest in Italy, the effectiveness of activation policies is expected to follow the same pattern.

This hypothesis is tested using Event History Analysis on data drawn from the third wave of the SHARE in a two-stage research design estimating the effectiveness of retrenchment and retaining policies. The main findings show that social partners mediated the EWL re-conversion, promoting the effectiveness of activation in the Netherlands and hindering it among their members more in Italy than in Germany.
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Part 1
Introduction and Theory
1 Introduction

After pervading Western Europe for more than twenty years, early retirement trends reversed around the mid-1990's, when a series of welfare reforms, here defined as activation policies, set incentives to extend working life (EWL). Although reversing retirement trends, these policies did not cancel out, but in some cases even raised, the cross-national variation in the average age of exit from work (OECD 2006; Gruber and Wise 1999; Phillipson et al. 2005).

The aim of this study is to investigate the institutional conditions explaining the cross-national variation of activation policies' outcomes. Activation policies for EWL by re-converting the incentives once used to foster early exit from work. Those incentives were first institutionalized in the late 1960's, when the de-industrialization process brought the inclusion of special arrangements (or pathways of exit) in the pension system granting the inflow of workers before statutory retirement age. The incentives then drifted short after as they started being massively used by employers and social partners to cope with the industrial restructuring induced by the market increased competition (Ebbinghaus 2006). Early retirement was therefore shaped by a mix of public-private incentives. Public incentives (or pull factors) granted the Governments to adjust the workforce to the external forces in a climate of social peace and general consensus. This is because pathways of exit not only increased the welfare of older workers, but also externalized the costs of the personnel's turnover within companies. Therefore pathways of exit lead to institutionalization of human resource management (HRM) practices (push factors) that aim at shedding older workers instead of promoting their work capacity. Those practices included private payments and other conditions penalizing work at later age, such as long and inflexible hours, high workload and stress, age discrimination, and the exclusion from training and career programs.

Early retirement stopped being a win-win solution when the economic and demographic expansion that once had supported its widespread turned into a persistent contraction. The permanent economic austerity and the population ageing, shrinking the room for social spending and its financing, brought European Union to prioritize activation policies in the national Governments' political agenda (Arza and Kohli 2008).

Since activation policies require a wide re-conversion of existing incentives, Governments first retrenched the social programs offering pathways of exit. Although re-conversion did not call automatically for cuts, retrenchment was in this case necessary to de-legitimize the pathways' abuse and to push the re-conversion also in companies' HRM (Arza and Kohli 2008).

Despite the decreasing returns of early retirement, activation policies were not easy to push through. Revoking existing benefits for diffused and uncertain advantages, they faced opposing forces that, despite strong, did not prove to be immovable (Pierson 2000; Pierson 1998). Those forces were represented by the expectations of beneficiaries to the extent that they could form coalitions (here defined as externalization coalitions) able to hinder the outcome of activation policies (Manow 2001; Ebbinghaus 2006).

The organization of these coalitions were shaped by the institutional setting that surrounded the actors carrying a vested interest in controlling retirement incentives. These actors included the Government and employers, who directly produced public and private incentives, and interests'
organizations, which mediated the effect of pull and push incentives (Ebbinghaus 2006). In other words, involved in the social dialogue and in the collective bargaining, interests' organizations shaped the ways in which incentives were used and expectations were formed and aggregated. In short, this setting was the result of the affinities between the logics presiding at the social protection, production, and social partnership. It moreover shaped the conditions which lead the externalization coalitions to support or hinder the EWL re-conversion (Ebbinghaus 2006).

This research investigates the institutional conditions that, conveying of the EWL re-conversion top-down, promote the effectiveness of activation policies and minimize the stratification of their effects both intra and inter-generationally.

Since in literature already extensive knowledge is found about institutional conditions pertaining to the social protection system, this study focuses on the conditions pertaining to the system of interests' intermediation. Therefore the three cases under analysis were chosen to have very similar social protection, but a system of interests' intermediation: highly coordinated in the Netherlands, less coordinated Germany, and least coordinated in Italy. Those three countries were characterized by strong early retirement patterns that have been reversed in the mid-1990's, more successfully in the Netherlands, less successfully in Germany and least successfully in Italy.

From an actor-centered perspective, the coordination of the interests' intermediation is expected to affect the partnership settings where the Government attempts at re-converting retirement incentives and thus the coalitions' opportunities to hinder those attempts (Scharpf 1997; Arza and Kohli 2008). The success of the EWL re-conversion is not measured, as it is often the case in the welfare analysis, on the bases of political outputs but on outcomes. Bridging between a political economy and a sociology streams, this research aims at examining how institutional legacies affect not only the effectiveness of activation policies, but also their distributional effects. The opposition of the externalization coalition in fact, preserving the expectations of their core members only, concentrates the effect of activation policies on social groups falling outside their membership and fosters both intra and inter-generational cleavages. This is because the costs of insiders' opportunism falls on outsiders and young generations, who have to double their sacrifices for keeping the system sustainable. This is the well known issue of the double payment: outsiders and young have to work longer before being able to retire and are entitled to lower benefits, which in turn lead them to work even longer (Ferrera and Jessoula 2007).

In the following sections the empirical and institutional aspects leading to the formulation of the main research questions (Sections 1.1-1.2-1.3), the case selection rationale (Section 1.4) the theoretical aspects leading to the hypotheses (Section 1.5), the methodological aspects leading to the research design (Section 1.6), and the outline of the thesis are explained in detail.
1.1 Extending working life: empirical trends

The empirical premises of this research is the evidence that, despite reversing early retirement trends, activation policies appear to be the most effective in the Netherlands, less effective in Germany and least effective in Italy. As shown in Graph 1.1, plotting the employment rates of workers aged 50 years or older between 1983-2009, early retirement trends reversed in the second half of the 1990's in all the three countries, but the older workers' activation is much less pronounced in Italy. While both in Germany and the Netherlands the employment of older workers reaches 65% in 2009, Italy lags behind with an employment rate of older workers below 50%.

Graph 1.1: Employment rate of older workers aged from 50 to 65 years in Germany, Italy and the Netherlands between 1983 and 2009.


Looking at the employment trends of older workers by gender in Graphs 1.2, 1.3, 1.4, it can be noticed that the mobilization was to a greater extent female. In Germany and the Netherlands the employment rate of women aged 50+ (red line) grew since the early-1980's as a result of the increased re-integration of women after child-bearing (Jacobs, Kohli, and Rein 1991c), rose steeper in the second half of the 1990's, and attained more than 50% in 2009. In Italy instead older women's employment grew only after the mid-1990's remained below 40%. The mid-1990's signed also the start of older men's mobilization (blue line), which turn out to follow the same pattern explained for women. It is again much more remarkable in the Netherlands and Germany (about 20%), than in Italy (less than 10%).

To show how long older workers remain in employment, the trends of the effective average age of retirement in the same period (for Germany available only since 1996) are shown in Graphs 1.5 and 1.6. These graphs show that in the Netherlands, despite the share of older women in employment grew since the early-1980's, the effective age of exit kept on falling for both men and women until the mid-1990's. This is because women, who increasingly returned to work in their mid-age, were also increasingly encouraged as well as men to access a pathway of exit. Once the exit age of men and women inverted their trends, they rose rather gradually. Men's age first grew from 60 to 61 years, then fluctuated between 1995-2005 and finally rose steeply by 2 years until 2009. By the same token, women's age first grew from 59 to 60 years, then fluctuated and only after 2000 grew again beyond 61.
Graph 1.2-1.3-1.4: Employment trends of older men and older women (50-64 years) between
1983 and 2009 in Germany, Italy, and the Netherlands.


The average exit age grew more steadily in Germany and Italy. In Germany it rose from 60 to 62
years for men and from 59 to 61 for women. The highest increments are unexpectedly obtained in
Italy, not so much for men's age raising from 60 to 61 years, but for women's age rocketing in less than
a decade from 57 to almost 62 years.

Graph 1.5 - 1.6: Average effective age of employment exit for men and women
between 1980 and 2009 in Germany, Italy, and the Netherlands.

Source: OECD, 2013

Combining the information from the exit age and the employment rate trends, it can be argued that
in the Netherlands, Germany, and Italy working lives are extended only after the Government
retrenched pathways of exit. While in Germany the employment growth is associated to a clear rise of
the retirement age after the mid-1990's, trends are less clear in the other two countries. In the
Netherlands the size of older workers' cohorts increases more than Germany and Italy, but the exit age
rises more gradually. On the contrary in Italy only a very selective group seems to delay significantly
their exit.

Those outcomes can be interpreted as the result of different environmental pressures. More likely
they can derive from the institutional settings, providing externalization coalitions different opportunities to hinder the EWL re-conversion. The extent to which outcomes are functional or induced by the vested interests is discussed in the next section.

1.2 Extending working life: institutional perspective

From a functionalist perspective, outcomes can be explained by different environmental pressures. As shown by Blossfeld, Buchholz, and Hofäcker (2006) and Kohli et al. (1991), the environment is a powerful trigger of institutional and behavioural change. If pressures deriving from de-industrialization and globalization pushed for the institutionalization of pathways of exit and early retirement patterns, the EWL re-conversion is pushed by pressures exerted by the ageing of the population.

One way of estimating this pressure is to look at the old age dependency ratio in the Netherlands, Germany and Italy since the early 1990's. This is calculated as the proportion of individuals at an age when they are economically inactive (aged 65+) over the working age population (aged 15-64) and it gives a clue about the financial strains pushing the re-conversion. Those strains are actually even stronger because, being the welfare based on PAYG system, early retirement increases the share of dependents in need for support, as shrinking the workforce able to finance it.

As shown by Graph 1.7, despite the demographic pressure triggered the change, it did not lead the countries under higher strain, as Italy, to achieve the highest outcomes. On the contrary, the wider mobilization of older workers occurred where the pressure was lower, in the Netherlands and Germany.

Graph 1.7: Old-age dependency ratios for Germany, Italy and the Netherlands between 1980 and 2012.

Source: World Bank, 2014

The functionalist thesis thus does not hold here, since the impact of the environmental pressure (in this case demographic) on retirement patterns is always filtered by the institutional setting (Kohli et al. 1991; Blossfeld, Buchholz, and Hofäcker 2006). The setting filters the environmental forces by limiting the possible trajectories of change that the interaction of the relevant actors lead to (Crouch 2001). The Government, social partners and employers, depending on their power balance, set the prevailing strategical goals and set policy incentives accordingly.
If the globalization pressure gave the opportunity to the beneficiaries to form a coalition to externalize the costs of the increased international competition, the cuts induced by the demographic pressure caused the coalition’s opposition. The institutional legacies shared by the Netherlands, Germany, and Italy give the externalization coalitions the opportunity to hinder the EWL re-conversion. This is because their involvement in the regulation of retirement incentives makes their involvement necessary also for their reform. The institutional specificities however might have caused the coalitions to affect the activation policies' outcomes in a different way.

This argument seems to find support in the data. Looking at the employment trend of older workers with different skills' endowment, operationalised in Graphs 1.8, 1.9, and 1.10 as the educational level, it can be noticed that activation policies created different distributional effects. In Italy the employment trend grew mainly among highly skilled workers (Graph 1.9), who are usually underrepresented in the unions' membership and more productive than the rest of the workforce. On the contrary outcomes are equally distributed across older workforce, as it is the case in Germany (Graph 1.8) and the Netherlands (Graph 1.10).

Graph 1.8 – 1.9 – 1.10: Employment trends of older workers (50-64 years) between 1992 and 2009 by educational attainment in Germany, Italy, and the Netherlands.

All in all, the institutional specificities led to a different outcomes in the EWL re-conversion, being the greatest in the Netherlands, lower in Germany, and the least in Italy. At first sight, this is because in Italy the externalization coalitions had higher opportunities to preserve the expectations of their members than in Germany and the Netherlands.

### 1.3 Research questions

This research contributes to the existing academic debate on the institutional conditions enhancing an active, healthy, and a sustainable ageing by means of a shared and integrated strategy. It does so by identifying the conditions that reduce the opportunities of the externalization coalition to hinder the effectiveness of activation policies. In more general terms these conditions refer to the institutional affinities between protection, production, and partnership. The affinities refer to a typical coupling between the logic of institutions that, in the sphere of protection, partnership, and production, regulate
1.3 Research questions

retirement incentives. This is further explained in Section 1.4.

In European countries where the affinities (based on universalistic or residual welfare logic) limited the costs' externalization of early exit, the expectations tend to be either too small or disaggregated to form a coalition threatening the EWL re-conversion. More interesting are the cases where the affinities, based on a conservative welfare logic, fostered high expectations in vertically organized coalitions, as in the Netherlands, Germany, and Italy. Here expectations were high and organized enough to impede unilateral action of the Government. Nevertheless, as shown in the previous section, their inclusion into the re-conversion process produced significantly different outcomes.

Central research question To what extent has the effectiveness of activation policies in the Netherlands, Germany, and Italy between the mid-1990’s and 2009 been affected by the organizational articulation of the externalization coalition?

The expectations of the externalization coalitions are part of the interests represented the unions and employers’ associations. The organizational articulation of these associations depends on the extent to which those interests, aggregated according to democratic criteria, can be represented at more central levels. In all the three cases the interests are articulated enough to be represented at national level by Confederation boards.

Governments were required to involve those boards since the beginning in the re-conversion process, when retrenchment policies were first formulated and then implemented. This involvement took place in different modes of social governance. The extent to which this involvement supported or hindered the effectiveness of retrenchment policies and in turn can explain the difference in the outcomes is investigated in the first empirical part of this study (Chapters 5-6-7).

RQ2: Under which institutional conditions has the involvement of unions and employers’ Confederations in the formulation and implementation of retrenchment policies promoted their effectiveness in the Netherlands, Germany, and Italy between the mid-1990’s and 2009?

The organizational articulation of interests’ associations does not only allow the expectations to affect bottom-up the policymaking. Unions and employers associations can also coordinate top-down the incentives provided by the HRM policies through the collective bargaining system. The collective bargaining system is enough vertically coordinated to constrain the companies strategies to the agreements negotiated at sectoral-industry-workplace levels in all three country. Nevertheless collective agreements (CLAs) may convey two strategies, one opposite to the other. The first is to keep on shedding older workers with incentives able to compensate the retrenchment of the pathways of exit that the coalition could not hinder above. The second is to retain older employees with incentives able to support both their productivity and their work preferences (Trampusch 2006; 2007) The extent to which the involvement of social partners in the collective bargaining supported or hindered the effectiveness of retaining policies and in turn can explain the difference in the outcomes is investigated in the second empirical part of this study (Chapters 8-9-10).
RQ3: Under which institutional conditions have unions and employers’ associations promoted the effectiveness of retaining policies in the Netherlands, Germany, and Italy between the mid-1990’s and 2009?

The vertical articulation of the interests’ organizations do not only affect the outcome of activation policies, but also their distributional effect. Depending on how encompassing the interests they represent (Olson 1982), unions and employers' associations may minimize or intensify the distributional effects of activation policies across social groups, both intra and inter-generationally (Kohli 2006).

RQ4: Under which institutional conditions have unions and employers’ associations affected the distributional effects of activation policies in the Netherlands, Germany, and Italy between the mid-1990’s and 2009?

All together, the research questions investigate the extent to which the organizational articulation of the system of interests representation explains different mobilization outcomes in the Netherlands, Germany, and Italy. This is because their different coordination lead them to either support of hinder the effectiveness of retrenchment and retaining policies. The hypotheses about the association between institutional coordination of the interests' representation and policy effectiveness is based on a twofold theoretical framework of the actor-centered institutionalism and the institutional affinities.

1.4 Theory and hypotheses

As described before, although institutionalized by public incentives, the international variation of retirement patterns can not be explained by only looking at the generosity of pathways of exit. Employers are also interested to manage the turnover of their staff and set private incentives accordingly. Finally, social partners mediate the public and private incentives in the interest of their constituencies (Ebbinghaus 2006).

From a historical institutionalist perspective, retirement patterns are therefore the outcome of the coupling between the institutions presiding at protection, production and partnership systems by Ebbinghaus (2006). This coupling tend to occur between inherently similar institutions, or in other words affinities. This is because their interaction, producing complementarities where the arrangements in one sphere enhance the results in other, grants comparative advantages. The institutional logic pursued by the three spheres are classified respectively according to the “The three worlds of welfare capitalism” (Esping Andersen 1990), “The variety of capitalism” (VoC) (Hall and Soskice 2001), and the “The three modes of interests mediation” (Crouch 1993).

The protection logic is classified according to the level of de-commodification granted by the welfare system. Despite providing opposite levels of de-commodification, residual and the universalistic logic lead to the institutionalization of pathways of exit of moderate generosity. On the contrary the most generous incentives are produced in welfare systems led by a conservative logic as
in the three cases under analysis. Being institutions affines a residual welfare is associated to poorly coordinated markets, where companies's strategy responds only to a competitive logic. As opposed to this liberal market economy (LME), in coordinated market economies (CME) companies have an interests to cooperate to the detriment of pure competitive motives and develop a system of interests representation.

The more coordinated is the system of interests' representation, the more the state can interfere with pure market mechanisms to coordinate companies' competitive strategies. The vertical coordination (or organizational articulation) is associated to a specific logic of interaction between unions, employers organizations, and the state (here defined as partnership system). The logic is pluralistic where interactions are poorly institutionalized and outcomes are therefore based on contingent relative power between actors. If interactions are instead highly institutionalized among coordinated actors, interactions are frequently iterated. The iteration lead to reciprocation and thus to a cooperative partnership, where actors prefer outcomes where mutual overcome selfish benefits. This is not the case when interactions, occurring among very fragmented interests' system, are rarer and thus contentious.

Therefore the specific mechanism that couples the institutions governing the sphere of protection, partnership, and production together affects the regulation of retirement incentives. Those mechanisms allow the push incentives, produced by HRM practices, to be strategically steered top-down by collective agreements and social policies. At the same time however those mechanisms give to micro strategies of beneficiaries the opportunity to aggregate and affect the policymaking of pull incentives.

The main argument of this research is that, once the environment pushed the welfare state to EWL, the institutional affinities, influencing the partnership system, affect the top-down conveyance of the EWL re-conversion and its outcome. The outcomes are compared in three countries with similar affinities, but for this coordination, being high in the Netherlands, medium in Germany and poor in Italy (see for more information section 3.4).

Since this comparison involves a limited part of the institutional structure in a relatively small range of time and space, the focus should deviate from institutions to actors. In the framework offered by actor-centered institutionalism the re-conversion can be depicted as a sequential game between the relevant actors, in this case: the state, employers and social partners.

Employers are considered here as partially separated from their interests' associations. This is because employers can defect from their collective actions, unless their organizations set incentive to punish opportunistic actions (Olson 1965).

The institutional setting is relevant here because, as depicted in Graph 1.10, it affects the type of game that produces the outcomes. Around the mid-1990's the EWL re-conversion, triggered by the policy environment, reaches the political agenda and started sequential game. The setting first affects the actors' orientations and capabilities. In this case the organizational articulation of interests representation affects the strategical motives leading the state, social partners, and employers to enter the interaction (this is further explained in Chapter 3). On the bases of their perceived preferences and reciprocal capabilities, bounded-rational actors order their possible courses of actions (or strategies) according to the advantages (or payoff) they perceive they would gain from them (constellation).
Depending on whether payoffs award strategies involving mutual benefits or opportunistic actions, the partnership between actors (game) tend to be antagonistic (zero-sum) or cooperative (positive-sum). The constellation furthermore, influencing the relative power among actors, define the modes of interaction, that is the mechanisms that, solving the conflict in the interaction (majority votes, unanimity, veto points etc.), lead to policy output and outcomes (Scharpf 1997).

**Graph 1.10: Feedback process in actor-centered institutionalist policy approach**

According to Ebbinghaus, the interactions between the state, social partners, and employers take place in four typical modes of social governance: consultation, concertation, self-administration, and self-regulation. Although depending on the circumstances in which these modes take place, in average consultation and self-administration make the top-down conveyance of the EWL re-conversion easier than the concertation and self-administration (see for more details Chapter 3). This is because being associated to cooperative partnership that sanctions opportunistic strategies, social partners are discouraged from hindering the policymaking and thus the outcomes of activation policies.

Since cooperative partnership is more likely to occur for higher organizational articulation of labour and capital interest, the general hypothesis tested in this research is the following. Activation policies are more likely to be effective the stronger is the organizational articulation of the system of labour and capital's intermediation system.

Accordingly activation policies are expected to be the most effective in countries with strong articulation, such as in the Netherlands, less effective in countries with medium articulation, such as in Germany, and the least effective in countries with a low articulation, such as in Italy.

Specific hypotheses pertaining to the effect of organizational articulation of labour and capital interest are derived for each instance (macro -meso- micro) in which retrenchment and retaining policies are formulated and implemented. These hypotheses are tested in two empirical sections, one for retrenchment policies and the other for retaining policies. The research design is explained in the next section.
1.5 Research design

The data on which the hypothesis is tested is the Survey on Health and Retirement in Europe (SHARE) because older workers represent the full sample of the respondents. The main dataset used is Sharelife, the third wave, because it provides comparable retrospective information over the retirement trajectories of different cohorts of older workers in Germany, Italy, and the Netherlands. This enables comparing the trajectories of older workers exposed to strong pull and push incentives and the trajectory of cohorts whose retirement incentives have been affected by activation policies.

This cohort analysis is the core of the research design, which is not aimed at evaluating these policies. Instead the goal is to infer from the typical patterns of these two different cohorts, the institutional attempts that protection, production, and partnership made to foster the extension of working life. This cohort analysis assumes different characteristics in Germany, Italy, and the Netherlands, because of the different processes by which the extending working life paradigm penetrates the institutional affinities in the three countries.

The effectiveness of retrenchment and retaining policies are estimated separately in two different analyses, which require two different processes of operationalization. In the first part of the research design that estimates the effectiveness of retrenchment policies, work-retirement trajectories are operationalized as the institutional arrangements (pathways of exit) that the individual experience to pass from employment until the statutory retirement at the age of 65. Retrenchment policies are instead operationalized as a cohort effect. In the second part of the research design that estimates the effectiveness of retaining policies, work retirement trajectories are operationalized as its starting point: the age of exit from employment. This different operationalization is due to the different nature of retaining policies that affect mainly the permanence of older workers in the job and to a lesser extent the sequence of institutional arrangement that follows the exit from employment. The different dimensions of retaining policies finally are operationalized as a set of working conditions concerning health, safety, and support in the workplace experienced by older workers in their last job. The subjective measurement of the quality of those working conditions are reduced, using Iterative Factor Analysis into three factors that represent to what extent the dimensions of physical health reconciliation, mental health reconciliation, and age equality are promoted. Other two variables are used to represent the extent HRM policies foster the dimensions of time reconciliation and employability: the performance of part-time work, and the extent skills are developed. Finally the average level of retaining measures will be interacted with the cohort effect, in order to refine the effectiveness of retaining policies from the effectiveness of retrenchment policies (main effect).

The methods used to estimate the effectiveness of activation policies and thus the top-down alignment of protection, partnership, and production to extend working life are Event History Analysis for two main reasons. First EHA is the appropriate method to investigate durations before an event, and thus the extension of the career before the exit due to retirement. Secondly, EHA can successfully deal with the right-censored observations that in the sample represent individuals that are exposed to activation policies but are still in employment.

The effectiveness of retrenchment policies are investigated using Competing-Risk model in order to estimate to what extent older workers exposed to the retrenchment policies have significantly
changed their typical retirement trajectories. The effectiveness of retaining policies is investigated using Piecewise-constant exponential model in order to estimate to what extent older workers exposed to retaining policies delay significantly their exit from employment.

1.6 Outline

In Chapter 2 a review of the literature pertaining to the institutional incentives of retirement behaviour is presented. It first reviews the theories and the contributions concerning the pull and push institutional incentives and the social stratification of their behavioural effect. Subsequently it continues with the theories that model institutional incentives as the result of the logic of different part of the institutional framework. At the end it describes the scientific contribution of this research. Chapter 3 is devoted to the description of the analytical framework. After defining the main concepts of the research (work-retirement transitions and activation policies), the main theoretical foundation is described: the theory on Institutional affinities and complementarity between protection, partnership, and production, as discussed by Ebbinghaus (2006) and actor-centered institutionalism (Scharpf 1997). Based of this theoretical model, the main hypotheses guiding this investigation are formulated.

Chapter 4 discusses the methodology for testing the hypotheses. First the operationalization of work-retirement transitions and activation policies is explained. Then detailed information over Sharelife and over the samples of the Netherlands, Germany, and Italy are provided. At the end the EHA techniques are discussed that are applied to test the hypotheses: the competing-risk model (CR) and the piecewise constant exponential model (PCE).

Chapters 5, 6, and 7 form Part 1 and contain the empirical section with the investigation of the extent to which the partnership structure has affected the effectiveness of retrenchment policies to EWL. This part answers the research questions RQ 2 and 4. It considers at whether in the Netherlands and Germany cooperative social partners have contributed to implement retrenchment policies that lower significantly more the likelihood of entering pathways of exit than the retrenchment policies implemented in Italy, where social partners are instead antagonistic.

Chapters 8, 9, and 10 form Part 2 and contain the empirical section on investigating the extent to which the partnership structure has affected the effectiveness of retaining policies to EWL. This part answers the research questions RQ 3 and 4. It analyses whether in the Netherlands retaining policies conveyed by the very coordinated social partners lower the likelihood of exiting employment more than the retaining policies conveyed respectively by the less coordinated social partners in Germany and by the least coordinate social partners in Italy.

Chapter 11 the final conclusions are summarized and the main findings, contributions and limitations of this research are discussed.
2 Literature review

2.1 Introduction

This chapter is devoted to the review of the literature on retirement determinants and to the innovative contribution of this research. The review is organized first according to the main incentives that are produced by the institutional framework, according to the widely used distinction between pull and push incentives.

Although institutions affect retirement, they do not determine a unique standardized behavior since their effect is both mediated and moderated by socio-demographic characteristics and occupational and household circumstances. On the one hand micro and meso characteristics shapes individual preferences (“agency”) and bring individuals to react differently to the same set of incentives (“structure”). On the other hand, incentives tend to be socially stratified because different outcomes is encouraged in different social groups. Therefore, we are going to consider the literature over the individual and household characteristics that mediate and interact with the effect of pull and push incentives on retirement behavior. At micro level the literature has focused on the following socio-demographic characteristics: gender, health status, education. At meso level three main spheres are relevant within the literature: the household, the occupational and social network. The relevant dimension at household level is the gender-based division of care duties that affect the institutional trajectories of the couple, which not only are interrelated as a result of joint retirement norms and preferences, but are also affected by other additional circumstances: union disruption, fertility and additional care duties of frail household's members. Occupational and social network are relevant as a sphere of socializations, where social norms are created and thus preferences are shaped, while the occupational status also stratifies both pull and push incentives.

Furthermore we are going to move to a wider perspective and we will review the theories that has tried to map retirement outcomes in Europe and beyond according to institutional logic leading the policy-making in the protection, production, and partnership spheres, which in our context are defined as institutional affinities.

We will first review the typologies based on different welfare regimes. We will then move to the concept of institutional complementarities and we will review the literature based on the VoC welfare regime approach that have investigated retirement outcomes as the results of complementary incentives set by affines institutions within protection, production, and partnership. We will then pass from a static to a longitudinal perspective and we will review the contributions that investigated tensions to institutional complementarities that govern retirement patterns caused by an external and an internal forces: namely globalization and population ageing.

We will then move on to locate the main weaknesses of the literature body that this research will address and finally we will expose the innovative contribution and the social relevance of this work.

This chapter is structured as follows. First the literature on the main effect of institutional incentives is reviewed, as divided in pull and push incentives in Sections 2.2 and 2.3. Then the literature about how preferences mediate and moderated the effect of institutional incentives is investigated by looking at the both individual socio-economic characteristic and household
composition. The remaining of the chapter is devoted to explaining how those incentives are combined in regimes characterized by different institutional affinities and how those affinities can drive institutional change. Finally the innovative character of this research is presented.

2.2 Institutional determinants of retirement behavior: pull and push incentives

As widely documented by the literature, retirement is created and lead by institutions, which provides the main direct determinants of retirement behaviour. Since the industrial revolution, the exit from employment in old-age is a very common trait, because the decline of the work capacity makes workers unemployable. Since the second half of XIXth centuries however, the state has protected elderly from the poverty that followed this transition with the introduction of old-age pension benefits that institutionalized retirement as a phase of life (Kohli 2007). Retirement thus has its origin in the public attempt of dumping the social spill-over effect caused by firm's strategy of shedding redundant elderly.

Afterwards, the economic boom after the second post-world war period made possible generous redistributive policies that anticipated the entitlement to increasingly higher social benefits (pull incentives) to improve the political consensus. Employers have in the same period created complementary incentives (push incentives) that enable them to shed older workers when they become redundant.

Different streams of literature investigated the effect of retirement incentives generated by social protection systems and employers. The economic literature has focused on retirement as a product of increasing pull incentives, under the assumption that older workers prefer to substitute work with leisure, the more pension benefit replace their last wage (among others Gruber & Wise 1999; 2004). This approach is complemented by a second stream of literature, which focus on employers' attitudes toward older workers. Under the assumption that ageing disrupt the work capacity, this stream investigates the extent to which working conditions (push incentives) are strategically set to shed older workers.

2.2.1 Pull incentives

The simplest retirement model is provided by the economic labour supply theory, which predicts that workers, because of aging, gradually substitute their work commitment for leisure until the full exit from employment (Cahuc and Zylberberg 2004). However this model proves to be unrealistic because, unless savings are concerned, retirement is possible only when the wage is replaced by other sources. The preference for leisure is found instead among the motives that, among others, makes individual more or less sensitive to retire as soon as, in Esping-Andersen's words, he becomes de-commodified, i.e. relived from the necessity of gaining their living in the labour market. The necessary resources may be found in earlier savings, in the income earned by other household's members, but more often in welfare benefits (Esping Andersen 1990).

Retirement itself is explicitly institutionalized with the creation of pension systems to de-
commodify elderly that are not anymore employable in the labour market. The offer of this institutional opportunity of de-commodified leisure attracted older workers, who were pulled into inactivity. As shown by different life course studies, this institutionalization increased the timing of employment exit highly standardized around the age that entitled individuals to the pension benefits and opened a third phase of leisure after education and work (Kohli 1986, 2007).

During the post second world war economic expansion, a series of redistributive policies have increased pension benefits to foster the political consensus. Moreover, in the mid-1970's when globalization's economic turmoil threatened the economic stability worldwide, retirement became an instrument to dampen the social costs of increasing the flexibility of the workforce.

On this purpose, additional institutional arrangements were implemented to attract older workers earlier into inactivity (the so-called pull incentives). These incentives were implemented within the pension, the unemployment, and the disability schemes and institutionalized different pathways of exit that, according to the definition of Kohli and Rein, made the transition toward retirement a trajectory (1991). As a result of these reforms, patterns of employment exit became increasingly re-standardized around earlier age and a new leisure period was institutionalized until statutory retirement (Han and Moen 1999).

The attractiveness of pathways of exit did not rely only in the earlier entitlement to social benefit and their increased generosity. More relevant was the very low opportunity cost of retiring early. Since benefits were calculated according to strong non-actuarial formula that cuts substantially the financial advantages to remain longer in the workforce. The positive causal effect of pull incentives on retirement timing has been widely assessed by numerous comparative and country-based studies (Blöndal and Scarpetta 1998; Gruber and Wise 1998; 1999; 2004).

This assessment required more complex econometric indicators, which model retirement as the comparison between the benefit streams associated to the different pathways of exit and the opportunity costs of keep on working for some additional years. Among these indicators the social security wealth (SSW) and the option value (OP) are the benchmark. The social security wealth measures “the expected discounted value of the future streams of” benefits coming from different sets of institutional incentives. The option value indicator allows to model the choice of older workers as a comparison between the SSW of retiring at present and the SSW of postponing retirement at some point in the future. In both cases the calculation of pull incentives is discounted on the life expectancy for each cohort of older workers. (Brugiavini and Peracchi 2004; Gruber and Wise 2004).

These studies suffer, among others, by three main limitations. First they assume perfect information among older workers, who actually have in average insufficient resources to both gain and elaborate the necessary information for such a long-term planning. Secondly they significantly ignore the subtle influence of social norms, which apply implicit rewards and sanctions to the conduct of their members. Finally these studies leave completely aside the complementary set of institutional incentives created by employers to manage their staff outflow. These incentives rely in the working conditions that older workers experience in their job and include both the financial gains they obtain by either working or dismissing and the quality of the working methods and of the job environment. The review of the literature that investigated the extent to which firm's incentives change the balance between work and retirement is provided in the next section.
2.2.2 Push incentives

Since the staff represents a key aspect of the firm's performance, employers have a vested interests in governing the outflow of older workers as part of their strategy to maximize their firm's competitiveness.

As widely documented by the literature, employers tend to have in general a negative attitudes toward older workers and to encourage their dismissals as soon as possible using so-called push incentives. The motives of this negative attitude relies in stereotypes that depict the work capacity as inevitably decaying with ageing and that justify the statistical discrimination of older workers in firms (OECD 2006; for the Netherlands Sonnet and OECD 2005; for Germany OECD 2005; for Italy OECD 2004).

According to the *implicit contract theory*, this negative attitude is especially developed in productive system based complex firm-specific skills, which require a high initial investment when workers are just hired and are hardly transferable. This enhance employers to retain their staff over the life course to maximize their returns, with the so-called *implicit contract*. This contract requires the earning profile to starts lower than workers' productivity to compensate the initial investment made to develop firm-specific skills, grows along with seniority and exceeds it in late career, when workers' productivity decreases. This upward career path is defined Internal Labour Market (*ILM*) and involve along time decreasing return and increasing costs. The balance between the companies returns and costs is broken in the late career, when due to ageing seniors staff experience significant productivity losses. Since ILM's are often associated with a rigid employment regulation that impede unilateral dismissals of seniors, the most rational strategy for companies is to enhance their voluntary exit, by using *push factors* (Doeringer and Piore 1985; Lazear 1979).

They can be both financial and non-financial and they complement the effect of pull incentives. Monetary push incentives support the finance of seniors after dismissals or top up social benefits when they prove to be insufficiently attractive. More in detail they can be provided by secondary or third- private pillar pension programs or by *ad-hoc* lump-sum benefits, often referred as *golden-handshakes*. Since monetary push incentives promote early retirement, by further de-commodifying seniors, they are functional substitute (Kohli et al. 1991; Ebbinghaus 2006; Casey 1989).

Non-monetary incentives instead discourage seniors to continue their career in a more subtle way. They concern the aspects of the workplace and the working conditions that can affect the performance of older workers and thus their self-esteem. While the needs, the preferences and the capacities change with ageing, those work aspects have to be adapted to support the performance of seniors. If this is not the case their productivity together with their self-esteem, encouraging them to leave the job, which they perceive they can not perform anymore (Reci and de Bruijn 2006; Ilmarinen 2005; Tuomi et al. 2001; Schmid and Gazier 2002; Montizaan, de Grip, and Fouarge 2014).

In a comparative perspective, it has been showed that in countries where internal and external rigidities are stronger, there is a higher likelihood of retiring around early age boundary as a result of heavy incentives set by HRM policies. From the perspective of seniors, whose bargaining positions is often rather weak, retirement becomes in many cases mandatory because from a pure economic perspective older workers would prefer to continue working in a context of upward wage-profile . (OECD 2006; Mortelmans and Denaeghel 2013; Blau and Shvydko 2011).
Not only, as argued by Transitional Labour market and flexicurity theory, because of those rigidities, retirement becomes an abrupt transition, notwithstanding the interest of older workers of leaving gradually their job, along with their increasing preference for leisure (Schmid and Gazier 2002). Only with a gradual withdrawal older workers can get accustomed stepwise to their new status, plan new activities, build up a new identity and avoid the typical depression symptoms that are associated to the void of leaving their job abruptly.

Therefore employers' shedding strategy can make retirement not only mandatory but also as involuntary. The possibility that retirement may hinder individual preferences has stimulated a new branch of literature on the effects and the determinants of a forced exit from employment. On one hand, different studies have found a negative effect of unmet retirement expectations on subsequent physical and mental well-being, measured as: life satisfaction, emotional satisfaction stability, usefulness, self-image, especially on men (Van Solinge and Henkens 2007; Schultz et al., 1998).

Other studies have instead further investigated involuntary retirement determinants and identified the most hampering push factors in those organizational aspects that worsen older workers' health, such as heavy physical or mental workload, long working hours, and labour market rigidities that raise the labour costs of seniors and deteriorate health conditions (Van Solinge and Henkens, 2005). Moreover involuntary retirement follow a cyclical trend. In fact during economic restructuring older workers are over-represented in collective dismissals, because their positions are often obsolete and the social costs of their dismissals is more easily compensated by public and private benefits (Van Solinge and Henkens 2007; Siegrist et al. 2007).

The push strategy has its origins not only in the high labour costs of older workers due to strong ILM, but also in a statistical discrimination due to pervasive age-stereotypes in the human resources management. These stereotypes depict an irreversible decline of the work capacity and productivity along aging, that cannot be compensated by programs of skills' updating and reconversion for two orders of reasons. On one hand the cognitive ability are thought to irreversibly decay with age, making problematic for older workers to learn new working methods. On the other hand, the training investment is judged not profitable, since the returns are limited to the short remaining working career (among others OECD, 2006; Bayl-Smith and Griffin 2014). The combination of these two reasons makes the statistical discrimination of older workers rationale in different aspects of the employment relations. For instance their exclusion from training and other innovative programs foster their productivity gap and in turns justifies their discrimination by their bosses and their colleagues (Illmarinen, 2006; Loretto and White, 2006).

As shown by gerontologist studies, these age stereotype are for the vast part irrational, since the irreversible decay of work capacity is not based on scientific evidence. In fact the natural decline of productivity is found to be compensated by the experience and the expertise developed along the career, which enhance the problem-solving skills of older workers (Illmarinen 2006). Moreover the irreversible decline of cognitive skills is denied by studies that show how learning performance can be improved by adapting learning methods to older workers' background (Schmid and Gazier 2002). Finally when health problems that compromise work capacity are concerned, evidence is found that an healthy, safe, and more comfortable job environment supports the well-being and the productivity of older workers.
In short, the general arguments of this literature is that working conditions that satisfies age-related needs extend working life, because they weaken the reasons why older workers and companies prefer early retirement. In fact these job aspects make older workers more competitive for the companies and increases their job satisfaction, their self-esteem and their will to continue working (Boockmann et al., 2012).

This last arguments is based on a basic assumption developed in work psychology and occupational sociology, that work is not only instrumental to gather economic resources. It has an intrinsic value, since it provides individuals with social status, work identity and self-esteem (Doherty, 2009 in Radl, 2010). These intrinsic rewards derives from the individual self-consciousness of mastering ones' job which as a parable increases with experience, but tend to decrease with aging, especially if working conditions do not support performance during aging (Illmarinen, 2006).

At first intrinsic rewards depends on the interaction between older workers' health and their work environment. In fact the health, the needs, and the preferences of individuals changes after mid-life making older workers either less able or less favorable to work long hours, in physically or mentally demanding jobs. Moreover if not supported by training programs older workers may experience their skills' endowment to be insufficient to perform their tasks, as modified by continuous technological innovation.

When the interaction between ageing and work environment erodes the performance and thus intrinsic satisfaction that older workers receive from work, their preference for early retirement is more likely to increase. Instead, if working conditions are manipulated to match older workers' health, needs, and wishes, intrinsic work reward and preference for work can be preserved also in the late career (Illmarinen, 2006).

The association between work characteristics and retirement timing is indirectly shown by the evidence that retirement patterns differ by sectors and by occupations. Earlier exits are in fact over-represented low-profile occupations within the industry and manufactory sector, where the working conditions are in general physically demanding and where there is a higher need to update and re-converse skills (Blöndal & Scarpetta, 1999; De Preter et al., 2013b).

A common theoretical framework within work psychology and occupational sociology is the effort-reward imbalance theory. According to this theory work characteristics can be divided in two groups: job demands and job resources (Bakker & Demerouti, 2007), which affect early retirement intention through two different causal mechanisms. Job demands are expected to enforce an energetic process that increase the perception of ill-health and strengthen the intention of retire early because the individual perceive himself as non productive. Job resources enforce instead a motivational process that encourage the work engagement and the individual work enjoyment, which in turns encourage older workers to work longer (Scheurs et al., 2010). The major part of the investigations in this field adopts this approach in their theoretical framework (Blekesaune & Solem, 2005; Wahrendorf et al., 2012; Siegrist et al, 2007). Its main prediction is that early retirement is more likely when working conditions are imbalanced toward effort and the other way around and it is supported by different studies.

A second common approach combines the effort-reward with the demand-control imbalance theory to measure the overall psychosocial stress at work. Demand-control imbalance theory instead focuses
2.2.2 Push incentives

to work aspects that measure to what extent older workers are able to autonomously control their work performance and predict that early retirement is less likely the more is the autonomy enjoyed by older workers and vice-versa. Using this combined approach Wahrendorf et al. (2012) showed that retirement timing is negatively associated to poor psychosocial stress due to low rewards and low autonomy.

The most innovative and complete work that quantified the effect of all work-related dimensions on retirement timing is found in Boockman et al. (2012) for Germany. Using the LIAB data, which longitudinally merge company HRM policies (IAB) and micro personnel careers, estimate the effect of what is called Specific measures for older employees (SMOE) at company and individual level. These policies are age-specific and involves: part-time work, reduced work requirements, mixed-age work teams, standard and specific training, and equipment of workspace. Their effect on retirement transitions are estimated on employees after 2002, when information about those measures are collected and the results are rather weak. Results report a rather consistent effectiveness of mixed-age work team and workspace equipment, which is instead weaker for the other measures, since it is concentrated in the first part of the late career for part-time work and it around certain age-boundaries for the remaining measures. These weak evidence can be interpreted as a consequence of the interaction between the effect of SMOE with the effect of welfare benefits, since they have specific age-specific eligibility conditions or as a result of an measurement mistake, since SMOE's implementation within companies does not necessarily correspond to older workers' intake of those measures.

The relevance of these work dimensions is expressed from qualitative interview as one of the main motives of their decision to retire early. The sample of Dutch employees insists with a particular emphasis on these work aspects: physical and psychological strain at work, lack of support and discrimination from other colleagues and from the management, which does not use and invest in their skills (Reeuwijk et al., 2013).

Measures that support work capacity after mid-life in are often suggested as successful good practices to encourage older workers to remain longer in employment between their health and work, especially if they are affected by some forms of disability (Fasang, 2008). The estimation of their effectiveness in doing so unfortunately does not provide unequivocal evidence.

Training quality and availability is found to have a positive and significant effect in some studies on older workers job satisfaction and retirement timing (Schils & Fouarge, 2007; De Preter et al., 2013b). However this effect is not supported in other investigations (Montiziaan et al., 2013).

Likewise the effectiveness of part-time in extending working life is ambiguous. Different theoretical approaches indicate this measures as one of the most effective to extend working life (Transitional Labour Market theory; Flexicurity; Economic Retirement model), because it is assumed that both from an economic and psychologic perspective older workers prefer to gradually withdraw from employment rather than experience an abrupt transitions. Schils found that the association number of hours worked and retirement is negative, but very little (Schils, 2008). A second stream of literature provides evidence that depict part-time work actually as a pathway of early retirement (Boockman et al., 2012). This is found particularly the case when part-time is part of phased retirement programs (Siegenthaler and Brenner 2000).
As for the job environment, the support of colleagues, bosses and the implementation of age-mixed groups are found to be one of the most important aspects that motivate older workers to stay longer in employment together with measures that reduces the unhealthiness and the strain of work (Van Solinge & Henkens, 2007; Boockman et al., 2012; Illmarinen 2006; Jepsen et al., 2002). However it may be that supportive and healthy work environment are experienced especially by seniors that work high in the occupational structure. In this case this effect masks the occupational stratification of push incentives that is in turn the effect of a HRM strategy regulating the personnels' composition.

The strategy of pushing older workers from employment is often operationalized in their effect on health status and on job satisfaction of older workers or as context variables that measures labour market rigidities from a macro perspectives (OECD, 2006).

In conclusion a plausible interpretation of the ambiguity of working conditions to extend working life is that although these measures improve the individual preferences to work, the pursuing of these preference is bounded by the strategy pursued by employers. If their policy is to shed older workers, because perceived as redundant, they will pursue this goal using other sets of push incentives. Since, as mentioned earlier, older workers have a few power to bargain their dismissal timing, these measure can be effective only if HRM are willing to retain older workers and thus extending working life.

### 2.2.3 Combination pull versus push incentives

Push factors are often not set alone, but in combination with generous monetary incentives, both public and private. The strategy of pushing older workers from employment is legitimized and supported by the pathways of exit provided by social protection system (OECD, 2001; Maltby et al., 2004), which allow the transfer the costs of the pushing strategy from companies to the collectivity (De Vroom, 2004).

The research that have tried to disentangle the effect of the two sets of incentives is rather limited. One example of these attempts is offered by Fasang. From a more explorative perspective, she uses Sequence Analysis to cluster the most common institutional arrangements used to retire early in Germany and Britain. The novelty of this research relies on especially in combining both pull and push institutional arrangements in comparing typical retirement patterns. In the longitudinal analysis of work-retirement transitions are included not only the private and public schemes that de-commodify the gap between the exit from employment and the entry into old-age pension, but also work characteristics in the late career (self-employment and part-time) which seems to be associated to the subsequent retirement transitions and often are mediated gender differences in late career (Fasang, 2010).

### 2.3 Moderator and Mediators of institutional incentives

Although institutional incentives regulate retirement transitions, individuals within the same institutional context do not follows the same trajectories, but socially stratified patterns for two orders of reasons.
2.3 Moderator and Mediators of institutional incentives

On the one hand, as pointed out by Mayer, the micro-effect of institutions (in his words “structure”) is never deterministic, since a margin of individual autonomy (in his words “agency”) makes always the behavioral outcome to a certain extent uncertain. In other words, preferences thus mediates the effect of institutions (Mayer, 2001). As for retirement, the role of individual preferences is quite relevant because the role of institutions often takes the shape of incentives, often quite persuasive, but very rarely legal prescriptions.

Individual preferences, or agency, may depends both by individual circumstances, such as gender or taste for work and for leisure, education etc., and by circumstances that occur within the households and the workplace and their mediations, make older workers react differently to the same structure of incentives.

On the other hand, another source of de-standardization of retirement patterns within the same institutional context depends on the fact that the different social groups are exposed to different sets of incentives. This moderation effect is found for example for women, that often have more looser eligibility rule to pension benefits than men, or among different occupations, where different work-related characteristic affect the likelihood to be pushed out from employment (Radl, 2010; 2013).

The literature that investigated the mediating and moderating role of micro (individual) and meso (households and workplace/social class) characteristics of institutional incentives on retirement will be presented below in Section 2.3.1 and 2.3.2.

2.3.1 Individual level

Four main individual characteristics mediate and moderate the outcomes of institutional incentives: gender, education, occupational status, health status, and preference for work.

The gender stratification of retirement behavior is explained by the literature according to the following mechanisms. Since women are more likely to bear the major part of caring duties within the household and to be discriminated in the labour market, they need to work longer than men to become eligible for pull incentives. In order to compensate this “gender disadvantage” the social protection schemes prescribed looser the entitlements conditions\(^1\) for women, who effectively retire systematically earlier than men. Moreover, as pointed by different studies, women tend to be less sensitive to monetary incentives. In more details, since women are more likely to be the second earner and the first care provider in the household, they are more likely to retire when frail members fall in need of care, even if this timing does not maximize her retirement incomes. On the contrary men in the same situation will be more likely to continue working, since they perceive their main task is to compensate for the lost resources once provided by women. A further consequence of their lower sensitteness to monetary incentives, women are more likely than men to coordinate their retirement behavior to the needs of the household (see below).

Similarly to gender, the relationship between institutions and retirement is both mediated and moderated by education. On the one hand more educated individuals are found to retire later because they enter the labour market at higher age and reach to be less sensitive to monetary institutional incentives.

\(^1\) Lower contribution period and figurative contributions that cover the gaps in the working career due to child bearing.
incentives, because they tend to have a higher taste for work. The utility that more educated individuals gain from work is less connected to the monetary outcomes and tend to rely more on the satisfaction that individuals gain in performing well their job (Duggan, 1994).

Furthermore education mediates the relationship between institutions and retirement because it stratifies individuals along the occupational structure and thus social classes, where the balance of monetary and non-monetary incentives vary (Duggan 1994). In fact, as shown by Radl and Wahrendorf, early exit are especially concentrated within middle classes, while careers tend to be longer within the low and high social classes and among self-employed workers. More in detail, low skilled and skilled blue-collar workers tend to retire involuntary, since pull incentives are more moderated and firms tend to push them by using the disability pathway. The contrary is true within unskilled and skilled service jobs, intermediate occupations, high-degree manual job and high low salariat, where retirement tend to be voluntary because workers are pulled into generous pathways of exit (Radl, 2013; Wahrendorf, 2012).

Furthermore socio-economic differences in retirement behavior are also found to depend on the variation of retirement expectations varies across social groups (Radl, 2010). Those retirement expectations are based on social norms on what is considered the proper retirement timing for different social groups, social classes etc. and have their origin in the embedment of institutional incentives. As different studies have shown, social norms help to explain the residual variance in retirement timing left after controlling for institutional incentives and delay the adoption of new behavior associated with the reform of institutional incentives (Van Solinge & Henkens, 2007).

On the same line health status is also found to both moderate and mediate the relationship between institutional incentives and retirement. As shown by a consistent body of evidence, early retirement is strongly associated with health-related problems for two orders of reasons. Firstly push and pull incentives increases the more work capacity is hindered by illnesses or disabilities. In fact, companies are interests to shed ill or disabled workers because they are redundant and because of that special social protection system have been created to protect them from unemployment, especially in the late career.

2.3.2 Meso level: Household and workplace/occupational level

This literature branch is based on life course perspective and test the hypothesis that retirement behavior is affected by a inter-relationship of earlier events that occurs in all the spheres in which the life of the individual takes place, giving then a particular emphasis to the the social embedment of retirement behaviour (Van Solinge & Henkens, 2007).

Characteristics that mediate the effect of institutional determinants on retirement are not only individuals as predicted by economic theories based on rational choice (Cahuc & Zylberberg, 2004), As described earlier often retirement patterns of men and women are shaped by household circumstances (Blossfeld et al., 2006). While women, as primary care giver, are more likely to adapt their career to household circumstances than men that, as main breadwinner; will be more likely to maximize their work income and keep on working. As a result of that, Fasang points out that while men are more likely to undertake “state-institutionalized” trajectories, women' transitions are “driven
by the institutions of the family (Fasang 2010 p. 256). In more detail, while men's employment tend to maximize their retirement income, women can decide to withdraw with a lower or without a personal retirement income. As shown by Fasang for Germany and Britain in fact, the compliance of women work decision to the household needs is reflected by the female over representation in part-time late careers and in non-decommodified retirement transitions especially in case a consistent household income is granted by a dead or alive male breadwinner (Fagan, 2008; Fasang, 2010). A partial exception regards grandchildren, since the desire of spending more time with them is a retirement motive that seems to more equally shared by older men and women (Reeuwijk et al, 2013).

The necessity to care for frail relatives for women in the late career is a recent spillover effect of the gains in life expectation that is expected to push older women out of employment, unless these caring activities can be externalized or reconciled with work. Given the preference of women for part-time, flexible work schedules are often indicated as an effective measure to extend older women working life with caring responsibility. This last argument however does not find empirical support in the work carried out by De Preter et al. whose design, by pooling data for 11 European countries perhaps fails in taking account that part-time is not always used as a reconciliation measures in Europe, but as a pathway of exit (De Preter et al., 2013a; 2013b).

Retirement decisions within the couple tend to be a “joint decision” even in absence of caring duties with the development of common retirement norms (Gustman & Steinmeier, 2000; 2004; Denaeghel et al., 2011; Reeuwijk et al., 2013). Coherently with the male breadwinner perspective, this coordination to a great extend due to women that, as secondary earners, synchronize their behavior to the retirement timing of their spouses (Moen et al., 2006). Evidence from an intercohort perspective shows that although the growth of dual-earner households, where bargaining power should be more equally distributed within the couple, woman are still following men career, especially when these latter have health problem. Instead men engage in work longer if the wife does not work for illness or due to unemployment (Denaeghel et al., 2011). Other couple's circumstances that foster the coordination within the couple are the following. At first the level of educational attainment of the husband is shown to delay retirement of women (Denaeghel et al., 2011). Moreover from a male breadwinner perspective, a wide educational gap makes the partner with a lower educational attainment more likely to retire earlier since the high income of the spouse make it affordable (Fischer & Souza-Poza, 2006). Secondly the age gap within the couple delay retirement of the couple, since probably the younger partner encourage the spouse to remain longer in employment. From a more gender-neutral perspective, if partner supports the spouse in continue working significantly lower the likelihood of involuntary retirement (Van Solinge & Henkens, 2007).

From a life-cycle perspective, other household circumstances that mediate and moderate institutional incentives rely in the disruption of family unions and fertility (Brugiavini et al. 2011). Coherently with the gender dynamics within the household, divorce and fertility delay the retirement of women and anticipate the employment exit from men, unless institutional arrangements reduce the disadvantage that women cumulate along the years they had to limit their labour market participation to care for the household and children. This long-life disadvantage developed by women due to child-raising makes them less sensitive to monetary incentives, and thus more likely to receives a lower and more polarized retirement income (Fagan, 2008).
Within the socialization of the individual within the working place and occupational groups enhance the development of social norms, which in turn affect the preferences of older workers over how their retirement should take place. The sense of belonging to the social/occupational class enhance individuals to conform to these norms to increase their social prestige within the social class. The effectiveness of these norms relies in the social sanctions that are applied by the other members in case of their violation. Social norms also are observable after reforms of institutional incentives, as a frictional force that resist to behavioural change.

Finally colleagues and bosses do not only indirectly offer models and thus social norms to conform to, but they directly affect the involuntary exit of older workers, in case they do not provide them active support to remain working (Van Solinge & Henkens, 2007).

2.4 Retirement “regimes” as result of different protection logics

Cross-country systematic differences of retirement patterns in Western-Europe are investigated from a macro perspective as a consequence of a systematically different provision of pull incentives within the protection system.

The most renowned typology of the protection logic is the “Three worlds of welfare state of welfare capitalism” by Esping Andersen (Esping Andersen 1990). The protection logic is classified according to the level of de-commodification, which measures to what extent the citizens are entitled to receive economic resources as a result of a social right and to what extent those social rights are universally granted. As of retirement, the level of de-commodification measures the generosity of factors that pull older workers toward public pathways of early exit and their level of social stratification. Three dominant regimes are identified: liberal, conservative, and universalist. The liberal logic grants a low level of de-commodification and tend to minimize early retirement trends because a residual conception of welfare limits the generosity of pull incentives. The same retirement outcome is obtained by the Universalist logic, which by combining high level of universal de-commodification a strong full-employment culture, limits the attractiveness of generous pathways of exit. In the conservatory logic instead the generosity of social rights is highly stratified and increases with seniority. In this system older workers have a privileged and highly protected position within labour market (internal labour market) that implies high labour costs for employers, which are then encouraged to substitute them early with younger workers with much lower earning. This early intergenerational transmission of work opportunities and rights was particularly enhanced in the mid 1970's onward, when early retirement had been highly encouraged as socially accepted instrument to deal with labour market redundancies in times of economic turbulence (Maltby et al., 2004).

Criticism to this typology has proposed substantive and methodological variations to the Welfare capitalism model, which very often do not substantially change how the typology maps logic and countries. One of the few criticism that introduced a variation in the way the protection logics are classified is proposed by Ferrera with the introduction of the familistic logic that distinguishes the Mediterranean regime in Southern Europe from the Continental regime (Ferrera, 1996). The familistic logic encourages early exit even more than that the conservative logic because the clientelistic
2.4 Retirement “regimes” as result of different protection logics

relationship between the government and core workers (adult and older workers) makes early retirement the only way to boost the political consensus, to grant companies a certain degree of flexibility in an otherwise very rigid labour market, and to ensure younger people with enough resources in the family redistribution (Ferrera, 1996; Jessoula & Ferrera, 2007). Another criticism is related to the uncertain and to some extent arbitrary classification of the so-called “hybrid cases”, whose protection logic tend to vary between different areas of the social security system. Typical “hybrid cases” in Europe are Finland and The Netherlands, where a prevalent universalistic logic is compensated by a strong Conservative logic that characterizes social protection and labour market institutions that govern work-retirement transitions.

One implicit aspect of all the welfare typologies that explain “hybrid” cases, is that the protection logic in different sectors of the welfare state is the product of the interaction between the strategy pursued by the state and by other institutional spheres.

2.5 Institutional affinities and complementarity

The interaction between different spheres of the institutional framework have been deeply investigated by the literature (Amable, 2000). First attempts are carried out by the Varieties of Capitalism (VoC) literature that investigates how the dominant strategy followed by the productive system affect the characteristics of the financial, protection and educational system and thus different workforce patterns (Hall and Soskice 2001).

The production logic is classified according to the level of coordination of the productive system which affect the characteristics and the stratification of push factors across firms. The typology based on this approach classifies the Western-European economies according to four production logics: the Anglophone liberal market economies (LME), the nordic centrally-coordinated market economies (CCME), the sector-coordinated market economies (SCME), and the state-coordinated market economies (StCME). The Anglophone liberal market economies follows a short-term economic strategy that pursues immediate returns of investments, minimize the investments for infrastructures, research, and inter-company coordination, that produce low-quality products by flexibly employing low-skilled workers. In this context push incentives are highly stratified and follows the economic trends, because they strictly depend on the company’ strategy and opportunities. On the contrary, nordic centrally-coordinated market economies follow long-terms strategies aimed at the production of innovative high-quality products for export thanks to the employment of highly skilled workers. The state has a strong power of coordinating employers production and human resources policies and because of that push factors is rather low and quite consistent among employees. The role of the state is lower in the sector-coordinated market economies, where instead more relevant is the coordination of interests, strategies, and thus push incentives that occur at sectoral/industry level. Much lower sectoral coordination is finally found in the state-coordinated market economies, where firms are smaller, interests and strategies are organized at a decentralized level and when necessary a more central coordination is obtained ad-hoc thanks to a state intervention. The lower is the coordination of the productive system, the more fragmented is the implementation of push factors because companies’
interests are not bounded together by central or sectoral organizations.

The most famous example is that the coordination of the productive system enhance an educational system that form highly skilled and specialized workforce, while more general skills characterize workers are preferred where the productive system is less coordinated. The production of specialized skills is then at the bases of the development of ILMs, whose strength maps the logic by which the production system contribute to the management of retirement trajectories.

According to the VoC literature the production logic enhances the formation of affines structures in other institutional spheres, which in turn are complementary in persecuting the competitiveness of the system. For instance, as shown by Schroder LME system enhances the development of an affine residual welfare, while CMEs system enhances affine generous welfare systems. As for retirement strong ILMs in CMEs enhance the generous protection schemes on which companies can externalize the social costs of early retirement, which are instead not necessary in LME's where ILM are very weak and early retirement is not a common strategy among firms. From the opposite perspective, Esping-Andersen provide arguments on how the protection logic affect the rigidity of labour market, which in turn affect the strategies of companies and their HRM. Here the residual character of social protection favors a deregulated labour market, where companies find no obstacle in employing older workers. Instead a generous welfare may enhance companies to shed older workers, the more rigidly it regulates labour markets.

From this perspective while affinities refer to the structure of the institutional system, while complementaries concern the policies that the affinities implement to enhance certain behavioral patterns. Institutional complementarities are functionally maximize the competitive advantages of the institutional affinities, which in turn justify their self-reproduction (Hall & Soskice, 2001). Nonetheless, as argued by Hall and Thelens complementaries may fail to contribute to the competitiveness and the sustainability of the system. In this case affinities shape the process of change, making it path-dependent (Hall & Thelen, 2009).

Different attempts have tried to integrate the logics of the different institutional affinities to improve our understanding of the complexity of capitalistic systems (Amable, 2003; Boyer, 2004; Schröder, 2009). In one of the most recent and most explicit effort Schröder integrates the productive and the welfare logic, while Amable's classification offer the most detailed mapping that take into account not only the the productions and welfare sphere, but also the more or less indirectly the structure of the partnership (Schröder, 2009; Amable, 2003).

The retirement institutions affinities' and complementarity have been investigated, theorized, and modeled recently, although a prevalent tendency of the literature has been to consider social protection sphere as the main driver of retirement (Ebbinghaus, 2006; Petrovici & Muffels, 2009).

2.6 Institutional complementarity as driver of institutional change

As pointed out by Hall & Thelen, the institutional complementarity theory do not only help explaining the reproduction of those configurations that bring a competitive advantage to the system. It is also useful to investigate the path of institutional change if those complementaries proof to be dis-
Institutional complementarity as driver of institutional change

In more details, the competitive advantage granted by the self-reproduction of institutional complementarities may vanish when internal and external forces turn this advantage into a disadvantage. This will enhance complementarities to change. This change may be abrupt or more gradual, but as argued by different scholars, it tend to be path-depend, since it is shaped by the institutional affinities that originated the previous complementarities.

In this section we will look at the academic debate over the re-configuration of the institutions governing retirement, when respectively an external and an internal force has put the previous complementarities under tension. Those forces are: globalization and population aging.

### 2.6.1 Globalization and early retirement

Globalization is the external force that since the 1970's has triggered the reform of institutional complementarity that regulated retirement trajectories in Western Europe. Globalization by increasing the volatility of product markets and the need of technological innovation, and labour market flexibility, became an obstacle for older workers' employment, especially in countries where labour market are rigidly regulated and ILMs strong. In these countries older workers have a over-protected positions that imply an unsustainable labour cost for companies for both dismissing or retaining them.

Furthermore the continuous technological development makes the skills endowment of older workers more and more inadequate to remain competitive. The deterioration of older workers' productivity is particularly accentuated because investing in late career is not profitable for companies (OECD, 2004). As a solution, they sponsored then the adoption of welfare programs that allow them to shift the costs of their shedding strategy on the collectivity (pull incentives provided by pathways of exit) (Ebbinghaus, 2006). Moreover in order to maximize this strategy, working conditions are set to provide strong push incentives, both monetary and non.

Since institutional affinities filter the impact of globalization, early retirement trends have been much more intense in Continental and Southern European countries, and much more moderated in Scandinavia and in Anglo-Saxon countries.

Despite its pervasiveness, the effect of globalization on older workers' careers is found to follows a common sectoral patterns in Europe and OECD's countries. In fact as shown by Blöndal & Scarpetta first and by De Preter et al. subsequently, early retirement trends are comparatively more spread in slow-growing and declining sectors (namely manufacturing), whose higher exposure to competitive pressure, make older workers' skills more likely to become redundant (De Preter, 2013; & Blöndal & Scarpetta, 2009). As pointed out earlier, these redundancies have been solved by the development of pre-existing or new social security programs that protected disability, sickness, unemployment or and old-age but eligibility conditions were loosened institutionalize early exit from the labour market. However when “institutional affinities” are tightly coupled changes that over time occur in the protection sphere are expected to cause change in other spheres (Hemerijck & Manow, 2001).

Different studies have traced and mapped the implementation of pull and push incentives in Europe and beyond. From an holistic perspective, Mayer analyses how institutional complementaries have
shaped the main transitions of the life course in the post-industrial political economies in Europe. Four different life-course regimes are found, according to the Esping-Ansenen's three worlds of Welfare capitalism as modified by Ferrera. Similarly to the Welfare Capitalism, early exit from employment is strongly encouraged in the Conservative regime, where exits tend to be again standardized around earlier ages boundaries. Early exit are also encouraged in the familistic regime, where exit patterns tend to be more de-standardized, because early retirement award only to “core” workers in a strongly segmented labour market. On the contrary when welfare is generous but labour market inclusive, as in the Social-Democratic regime, early exits are minimized and retirement trajectories remain standardized around high age boundaries. Finally a marginal welfare and flexible (“segmented”) labour market of the Liberal regime shape late, but more de-standardized retirement transitions (Mayer, 2001; 2004).

In the comprehensive study carried out by Blossfeld et al., institutional affinities of the protection and the production system are used to model the filters of the globalization impact on retirement patterns in Europe. The novelty os this model rely in the combined attention given to the logic of both social protection and companies as separate intervening variables. Systematic differences have been found among three clusters of countries. In Anglo-Saxon countries, given the original high flexibility of labour market and the residual of social protection, late exits have been employers-led. In the Social Democratic countries late exit have been publicly-led, because welfare have only moderately sponsored pathways of exit. Early exits have been strongly enhanced in Continental and Southern European countries early by a joint effort of both the welfare state and companies (Blossfeld et al., 2006).

A similar mapping has been carried out by Ebbinghaus, with a theoretical model that take more explicitly in consideration the role of social partners as an autonomous actors with a peculiar strategy and capacity of influence retirement patterns. In shorts his conclusions are that early retirement programs have been then expanded thanks to the more or less direct support of the vested interests of employers and unions, which “colluded” with the state to respectively shed the less competitive strata of the workforce and preserve the stability of late careers' members (Blossfeld et al., 2006; Ebbinghaus 2006).

As Ebbinghaus and Blossfeld have separately argued, the affinities' nexuses have a strong power in explaining to what extent early retirement was spread after globalization forces made those institutional equilibria under strain after the mid-1970's (Ebbinghaus, 2006 Blossfeld et al., 2006). While globalization made product markets more volatile, a higher flexibility both numerical and functional was needed from the labor force (Blossfeld et al. 2006). Older workers experienced then more difficulties in adapting to this flexibility, especially in Central and Latin affinities, where rigid internal labour markets (ILM) were highly institutionalized. ILMs define a rigid labour market structure that is typical of coordinated productive systems, where companies retain workers in a seniority-based upward career in order to maximize the revenue of the initial investment made on their skills. When globalization made the flexibility of the workforce a competitive resource, economies based on strong ILM struggled in imposing more flexible working conditions to older workers (Blau & Shvydko, 2007). Therefore, while Anglo-Saxon and Nordic could redistribute the costs of globalization on the overall workforce, the Central and Latin countries decided to provide “golden”
exports to older workers, while concentrating the flexibility on the cohorts of workers newly entered the labour market. As a consequence of that, while Nordic and Anglo-Saxon countries provided older workers with a few pull and push incentives and experienced a moderate trend of early retirement, Central and Latin countries strongly encouraged early exit outcomes by developing a powerful pull and push incentives, whose configuration depended on the specific nexus connecting protection, production and partnership (Blossfeld et al., 2006). One of the main contribution of Ebbinghaus' model is the argument that although the main discriminant of cross-country divergence in early retirement trends is the social protection logic, important differences can be found between countries that have generous pull incentives. It is in fact found that the higher is the coordination within the production and the social partnership spheres, the more limited early retirement trends are. More in detail the more economies are based on small and uncoordinated firms, like in Italy, the more organizations of employers and employees tend to be weak, to protect particularistic interests, and to entertain conflictual relations. Because of that interests organizations are not able to bargain a joint long-term strategy with firms and thus when older workers becomes redundant, HRM policies rely on the state to dampen the social effects of their individual adjustment strategy (Maltby et al. 2004). The production of early exit incentives result then polarized between social protection and the firms that tend to follow their particularistic and often opportunistic strategy. Instead the more the economy is dominated by large companies, as in the Netherlands and in Germany, the more encompassing are the representation of employers' and employees' interests and the more cooperative are industrial relations. As a consequence of that the implementation of pull and push incentives results to be more coordinated because the structure of collective bargaining bound the interests of individual firms within a long-term strategy centrally defined and then vertically spread downward. The extent to which the production can opportunistically relies on protection to dampen the social effect of their adjustment strategies is more limited, because it is moderated by social partnership that coordinate the overall system of institutional complementarities.

2.6.2 Ageing population: depart from historical legacy?

Institutional equilibria have been often referred as “immovable object” that tend to reproduce itself, especially in the case of retirement institutions, since they grant economic advantages for both workers and companies (Pierson 1998).

However this is not the case, as shown by the reforms that have taken place in the last 20 years that have consistently reformed the social protection and labour market institutions that affect retirement patterns and have reversed early retirement trends in all Europe (OECD 2006). Despite a certain path dependency has been found also in the shift of early retirement culture, meaning that the most efficient reforms have been implemented where push and pull incentives were more moderated, some countries, among which The Netherlands, Finland and (to some extent) Germany have proved to move away from their original early retirement culture and to drastically promote an extension of late careers (De Vroom et al., 2004).

Mortelmans & Denaegel (2013) and Ebbinghaus and Hofäcker (2013) have mapped European
countries according to the reforms of early retirement pathways within the social security and labour market institutions. Taking a longitudinal perspective, first countries are clustered according to the mix of pull and push incentives that set to encourage early retirement in the mid-1990's, according to both the welfare-state typologies carried out by Esping-Andersen, as modified by Leibfried, Ferrera, and Bonoli (Esping-Andersen, 1990; Leibfried, 1992; Ferrera, 1994; Bonoli, 1997) and to the Blossfeld's typology that integrates welfare and labour market logic. These typologies, based on macro indicators measuring the pension system generosity, labour market constrains on late careers, and retirement patterns, map Western European countries in the four usual clusters (Liberal, Social-Democratic, Conservative, and Southern-European regimes), together with a separate post-socialist countries, where institutional incentives are more country-specific. This mapping is then repeated over time in 1999, 2002, 2005, and 2008. The evolution of this mapping over time shows two main findings: a relatively persistence of the clustering in four regimes, and the displacement of some countries, namely the Netherlands and Finland, that especially from 2005 onwards pass from a Continental logic of encouraging early exit to a Social-Democratic logic of extending working life. Despite its novelty, this research suffers from methodological weaknesses that implemented policies to retain older employees, by preventing their over-fatigue, improving their work-leisure trade-off, and by fostering the update and the re-conversion of their skills. However retaining policies are implemented in times of economic growth, especially when labour shortages are experienced and as a response to the incentives and reforms that are set within welfare programs (Conen 2013a). From a European perspective the tendency of employers to retain older workers but not to hire them is confirmed, while country-specific HRM policy trends are shown. Company in Germany, France, Poland and UK are more likely to implement training plans for older workers. Programs that combine retirement and work are more instead commonly used by companies in the Netherlands and Poland. Demotion is more common among Danish and Polish companies. Under the measurement of pull and push incentives cuts over time: the welfare generosity measures dimensions that are not directly related to early exit pathways (expenditure on elderly care, social protection, and labour market policies); while the operationalization of push incentives does not isolate them completely from pull incentives (Mortelmans & Denaegel, 2013).

Recent efforts have been made to investigate changes in employers' attitudes toward older workers, considered as the main drivers of HRM policies focused on regulate the late careers of their older employees in different European countries. Among others, studies within the framework of the ASPA research project (Activating Seniority Potential in Aging Europe) offer a useful insight of how companies' strategies have changed after the retrenchment of welfare early retirement benefits between 2000 and 2009. In the Netherlands employers have increasingly implemented policies to retain older employees, by preventing their over-fatigue, improving their work-leisure trade-off, and by fostering the update and the re-conversion of their skills. However retaining policies are implemented in times of economic growth, especially when labour shortages are experienced and as a response to the incentives and reforms that are set within welfare programs (Conen 2013a). From a European perspective the tendency of employers to retain older workers but not to hire them is confirmed, while country-specific HRM policy trends are shown. Company in Germany, France, Poland and UK are more likely to implement training plans for older workers. Programs that combine retirement and work
2.6.2 Ageing population: depart from historical legacy?

are more instead commonly used by companies in the Netherlands and Poland. Demotion is more common among Danish and Polish companies. In the measurement of pull and push incentives cuts over time: the welfare generosity measures dimensions that are not directly related to early exit pathways (expenditure on elderly care, social protection, and labour market policies); while the operationalization of push incentives does not isolate them completely from pull incentives (Mortelmans & Denaegel, 2013).

Finally HRM policies that reduce the workload are more common in Denmark and the Netherlands. Although companies aim more at retaining older workers, their age-stereotypes seems to be still strong, and thus retaining policies seems to depend more on the business cycle and complementary to changes that occur in other institutional spheres and not to a genuine change of perception toward older workers. Finally HRM policies that reduce the workload are more common in Denmark and the Netherlands (Conen 2013a). Although companies aim more at retaining older workers, their age-stereotypes seems to be still strong, and thus retaining policies seems to depend more on the business cycle and complementary to changes that occur in other institutional spheres and not to a genuine change of perception toward older workers.

2.7 Contributions and innovative character

The institutional affinities that shape retirement patterns have been studied both comparatively in situation of equilibrium and when they are challenged by external forces (Ebbinghaus 2006; Blossfeld, Buchholz, and Hofäcker 2006; (Blossfeld, Buchholz, and Kutz 2011). These attempts have especially investigated the de-stabilizing effect of globalization forces and the path-dependent establishment of a new institutional and behavioural equilibria. Understudied are instead the more recent turbulence to those equilibria caused by the ageing of the population.

More in detail, while the changes within the protection system have been extensively described and investigated, insufficient is the understanding of how the population ageing pressure have affected the strategy of the actors two spheres that shape retirement patterns: the production (companies) and partnership (social partners). Some attempts have been made from a macro perspective to re-map the new equilibria to test to what extent previous typologies still hold, but a more precise investigation of the processes that lead to the new equilibria is still missing.

The aim of this research is to contribute to fill this gap in the literature. This research investigates the extent to which institutional affinities affect the configuration of the new equilibria, both institutional and behavioural. In particular it focuses on how the institutional affinities affect the capacity of social partners to mediate the output and the outcomes of policies aimed at responding to the challenge of the ageing populations.
3 Theory and hypotheses

3.1 Introduction

Given the deep embedment of early retirement patterns, the goal of extending working life called for a radical discontinuity in Germany, Italy, and the Netherlands. According to Streeck's and Thelen's classification of institutional change, it can be argued that EWL required a re-conversion of the social and labour market institutions that previously fostered early retirement (Streeck and Thelen 2004). This re-conversion, involving the retrenchment of the welfare provisions financing the so-called pathways of exit and the shift of employment practices shedding older workers, is attained respectively by retrenchment and retaining policies. Although pushed by both internal and external pressures, Governments do not have an easy time implementing them due to the opposition of the so-called vested interests. These are represented by the two main beneficiaries of early retirement: older workers and their employers, aggregated in their interests' organizations. As shown by numerous studies, this opposition is not only organized in the political arena, but also in other settings provided that, in Crouch's words, the Government share public space (Crouch 1986). According to the institutionalist approach, those settings are defined by the interaction of the institutional logics governing the spheres where retirement incentives are regulated: the social protection, social partnership, and production (Ebbinghaus 2006).

Moving to an actor-centered perspective, the interaction of the institutional logics provides the "rules of the game", or in other words the governance modes, where relevant strategy-led actors, interacting, define the magnitude of the change (Scharpf 1997). The relevant actors in the three institutional spheres governing the retirement incentives are: the Government, the social partners, and employers (Ebbinghaus 2002). While the Government include the EWL target in the agenda, the other two represent the main viscous forces trying to opportunistically hinder its achievement. They can do that by blocking or watering down Government's attempts to re-convert existing incentives both publicly and privately. Their success is inversely related to the opportunity costs that each setting set to the pursuit of opportunistic behaviours.

Having the country cases under investigation a similar social protection and production logic, this study tests the extent to which the social partnership logic matters in EWL. This logic is here mainly defined by the system of interests representation, being very coordinated in the Netherlands, moderately coordinated in Germany, and fragmented in Italy.

As already discussed by Ebbinghaus (2002), four main governance modes that presides at the interaction between the Government and social partners: regular consultation, ad-hoc concertation, self-regulation, and self-administration. Retrenchment policies are assumed to be more effective the more they privatize the pathways of exit's costs. Their formulation takes place in one of the first two modes, while the last two modes regulate their implementation. Retaining policies are assumed to be effective if they improve five main aspects of older workers' job quality: time reconciliation, physical and mental health reconciliation, age equality, and employability. Their implementation take place ultimately within companies, but their formulation can be effectively coordinated by the collective negotiations between unions and employers' association, which represent a self-regulation mode.
As it will be explained in more detail in the remaining of this chapter, the main hypothesis is that the achievement of the EWL target depends on the its top-down conveyance through a coordinated system of interests' representation. This is because, according to an actor-centred institutionalist approach, the higher the coordination the more likely social partners and companies are included in governance modes that set high costs and thus discourage the pursuit of opportunistic behaviours.

Because of that I expect the most effective activation policies are implemented in countries with a strong cooperative partnership, such as in the Netherlands, less effective activation policies are implemented in countries with medium cooperative partnership, such as in Germany, and the least effective activation policies are implemented in countries with a contentious partnership, such as Italy.

This chapter is organized as follows. In Section 3.2 the main concepts are defined. The theory is outlined in Section 3.3. From this theory the main hypotheses about the effectiveness of activation policies and its stratification are derived in Section 3.4.

### 3.2 Definition of main concepts

#### 3.2.1 Retirement: work-retirement trajectory

Retirement is a complex concept that takes different specifications according to both the institutional context we observe and the perspective we assume. From an economic perspective it can be described as the exchange of work with leisure, due to a change of preferences in older age (Cahuc and Zylberberg 2004). From a behavioural perspective, according to Feldman (1994, p. 287), retirement is a transition out of a career path of considerable duration. From a life course perspective is as a third phase of life, after education and work, characterized by leisure and an higher commitment to family, social network and other social activity (Kohli 1986; 2007; Mayer 2004).

Besides all the different perspective from which retirement can be described, it remains eventually a social practice originated and shaped by institutional factors. Depending on the goals pursued by the institutional, retirement has assumed different social functions. Along the years from an anti-poverty instrument in late old-age, retirement became first an instrument that granted a higher rewards to older workers to boost their political consensus and a socially accepted instrument to deal with labour market tensions (Kohli et al. 1991; Mayer 2004; Kohli 2007; Ebbinghaus 2006).

Depending on these functions, retirement takes over different conceptualization, depending on the way institutions govern the behavioral patterns. From a behavioral perspective, retirement is often defined as the transition from work into old-age pension system. However this concept exhausted its capacity to represent retirement in the 1970's after the institutionalization of pathways of exit, which allow to exit employment before the entitlement to an old-age pension benefit because they offer income support alternative to work (Kohli and Rein 1991).

These institutional arrangements may be both public (pull factors) or private (push factors), because they can be regulated by social security programs (early retirement, sickness, disability, and unemployment) or by programs that are collectively negotiated or implemented unilaterally by
employers that provide financial benefit associated to older workers’ premature dismissals (Kohli and Rein 1991). After the institutionalization of these pathways of exit work-retirement transitions changed into trajectories, defined as the specific combination of institutional arrangements that the individual experiences to pass from work to retirement. As pointed out by Fasang, when common patterns arises between individual work-retirement trajectories, then typical trajectories arises (Fasang 2010).

This definition may be then distinct between a the objective and subjective specification, which depends by the way retirement is measured. While the objective specification is based on the identification of the moment when the income source of the individuals shift from work wage to one of the social benefits provided by pathways of exit (Fasang 2010), the second is based on the perceived status reported by the individual . Although less reliable, this analysis adopts a subjective definition of retirement trajectory, because this is the way it has been measured by the data is used (among others, some examples making the same choice are: Blossfeld, Buchholz, and Hofäcker 2006; Blossfeld, Buchholz, and Kutz 2011).

The concept of work-retirement trajectory enable us to investigate retirement along two fundamental dimensions. The first is quantitative and refers to the length of the trajectory, by measuring to what extent individuals exit employment before the statutory retirement age of 65 years. The second is qualitative and describe work-retirement trajectories in terms of their institutional composition. Work-retirement trajectories indicate the programs effectively chosen by older workers to retire (Fasang 2010).

The advantage of this conceptualization relies in the possibility of investigating more closely the association between activation policies and their outcomes. More in detail, while the effectiveness of retaining policies are investigated on the age of employment exit, the effectiveness of retrenchment policies are analysed along both the qualitative and quantitative dimension to understand whether these reforms only delay employment exit or are associated to a significant change of typical retirement trajectories.

### 3.2.2 Activation policies

The adoption of the EWL paradigm implies the re-conversion pull and push incentives (Streeck and Thelen 2005), which is carried out with the implementation of what is defined here as activation policies. Pull factors are monetary incentives that define the financial attractiveness of public pathways of exit. Instead push factors may be both monetary and non-monetary and are regulated by collective agreements and by personnel policies that encourage older workers’ dismissals (Feldman 1994; (Shultz, Morton, and Weckerle 1998; De Preter, Van Looy, and Mortelmans 2013; Negrini et al. 2013).

Pull incentives are generally provided by social security programs that replaced the work income of older workers, namely the early retirement, unemployment and sickness and disability. Their retrenchment has been part of a quite visible reform process that involved the progressive tightening up of the eligibility conditions and the generosity of the programs. In our framework the policies implemented to cut pull incentives will be defined as retrenchment policies (OECD 2006; OECD
Conversely push incentives are much less visible. Since their ultimate regulation is within firms also their re-conversion is hardly observable. Nonetheless they are of great importance because, complementing pull incentives, they can water down or even cancel out the the effect of their retrenchment. On the one hand they can provide private benefits to directly compensate the cut of pull incentives and encourage the early dismissals of older workers (monetary- i.e. known in the literature as a golden handshake) (Ebbinghaus 2006). On the other hand they can strategically set the working conditions to encourage early exit, by boosting the decay of the older workers' ability to perform their job (non-monetary). For example HRM practices that prescribe heavy workload can harm the occupational health of older workers, who become then more likely to fall into a disability pathway. Furthermore these practices can potentially compensate the effect of retrenchment policies that narrowed the eligibility to disability if they cause older workers such a damage that they keep the entitlement to the disability benefit. Alternatively these practices can compensate the retrenchment of the generosity of disability benefit, if they make work so painstaking that older workers remain sensitive to the disability benefit (Shultz, Morton, and Weckerle 1998; Wahrendorf and Siegrist 2011; Beehr et al. 2000; Kim and Feldman 1998; Henkens and Tazelaar 1997).

Therefore fundamental is to investigate to what extent push factors were also re-converted in incentives to EWL. Being difficult to observe directly, this re-conversion is indirectly observed in the way they affect the working conditions experienced by older workers.

Some key aspects of working conditions can retain older workers in employment because they compensate the disadvantages that make older workers less self-confident in performing their job and less competitive for the companies (Walker, Taylor, and Eurofound 1998). The first aspect is time reconciliation and deals with a flexible working schedule, which is beneficial to reconcile work with health problems or caring obligations, especially for women. The second dimension is health reconciliation and indicates all those aspects of the working methods and environment reducing the physical and mental strains (Kim and Feldman 1998; Henkens and Tazelaar 1997). The third aspect is age equality, which defines a working atmosphere where older workers do not feel discriminated because of their age, but they feel supported by their bosses and colleagues (Bayl-Smith and Griffin 2014). Finally employability deals with training and lifelong learning programs that enable older workers to update their work capacity to the technological innovation and thus preserve their competitiveness within the company (Fouarge and Schils 2007; Montizaan, de Grip, and Fouarge 2014). In this framework the policies implemented to re-convert push incentives in these work dimensions are defined as retaining policies.

Table 3.1: Examples of retrenchment and retaining policies.

<table>
<thead>
<tr>
<th>RETRENCHMENT POLICIES</th>
<th>Their aim is to privatize the costs of using pathways of exit for both older workers and their employers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Narrow down the eligibility conditions to access pathways of exit</td>
<td></td>
</tr>
<tr>
<td>• Reduce the generosity of the benefits financing pathways of exit</td>
<td></td>
</tr>
<tr>
<td>• Raising the contribution rate for the use of pathways of exit</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RETAINING POLICIES</th>
<th>Their aim is to improve one of the following aspects of job quality that are effective in encouraging older workers to keep on working:</th>
</tr>
</thead>
</table>
3.2.2 Activation policies

<table>
<thead>
<tr>
<th>TIME RECONCILIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>• flexible working arrangements: such as part-time, tele-working, flexitime, job-sharing.</td>
</tr>
<tr>
<td>• Long or short care leaves</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HEALTH RECONCILIATION (physical and mental)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• greater internal flexibility and mobility: such as redeployment or outsourcing in case of reorganization or restructuring, shifting or downshifting;</td>
</tr>
<tr>
<td>• redesigning the working environment to reduce physical stresses and strains,</td>
</tr>
<tr>
<td>• ergonomics and increasing use of robotic technologies</td>
</tr>
<tr>
<td>• adapting working hours in order to avoid physically demanding working schedules; (overtime, working weekends, shift work, etc);</td>
</tr>
<tr>
<td>• pre-retirement leave, extra non-working days/holidays;</td>
</tr>
<tr>
<td>• shorter working hours in combination or not with partial retirement benefits, avoiding in principle the option of early retirement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AGE EQUALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>• anti-ageism policies</td>
</tr>
<tr>
<td>• career development for older workers</td>
</tr>
<tr>
<td>• reduce the impact of seniority rules on wage and employment protection (EPL)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EMPLOYABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>• training, long life learning programs; extra training leave.</td>
</tr>
<tr>
<td>• greater internal flexibility and mobility: such as redeployment or outsourcing in case of reorganization or restructuring needs, shifting or downshifting;</td>
</tr>
<tr>
<td>• knowledge transfer projects, adopting two approaches: parallel duty and role takeover. Parallel duty means that the mentor and trainee work side by side; important knowledge and skills are thereby transferred. Role takeover means that, under supervision, the trainee steps into the role of the mentor</td>
</tr>
</tbody>
</table>

Source: (OECD 2006; Walker, Taylor, and Eurofound 1998)

3.3 EWL and actor-centered institutionalism

As argued by Hall & Thelen, institutional affinities is a useful analytical instrument not only to model stable institutional configuration, but also to model divergent patterns of institutional change, when they exhaust their capacity to provide comparative advantages (Hall and Thelen 2008). In a path-dependent perspective, “history matters” and institutional affinities drive the trends of institutional reform (Ebbinghaus 2006; Ebbinghaus and Hofäcker 2013).

Extending working life (EWL) is policy strategy aimed at lengthening the economic activity of older workers and require a radical institutional change (OECD 2006; Ilmarinen 2005; Phillipson et al. 2005). In Streek and Thelen's words, this change implies a re-conversion, because the same institutions used to foster early retirement pattern have to be redeployed to achieve the opposite outcome (Streeck...
and Thelen 2005). Being early retirement beneficial for many constituencies and being these latter involved in its regulation, it is important to study the outcome of this re-conversion from an actor-centered institutionalist perspective. This perspective allows to identify whether the partnership institutions embedded in the three cases under investigation let the constituencies opposition hinder the achievement of the EWL target or not (Ebbinghaus 2006; Scharpf 1997).

As part of the more general active ageing strategy, the EWL target was endorsed by different international organizations. They formed an epistemic community spreading their concern about the unintended diffusion of early retirement patterns since the late 1970’s (OECD 2006; Ilmarinen 2005; Haas 1992). In the early 1990’s projections showed that due the progressive ageing of the population, the welfare and economic systems were under threat, unless a larger mobilization of older workers replaced shrinking new cohorts. Since then it became part of a policy-making process in 2001 and 2002 when the European Council in Stockholm and in Barcelona established two main targets to be achieved by 2010: raise the employment rate of the 55-65 years group to 50% and delay the effective retirement age by 5 years. These two targets became institutionalized within both the European Employment and Pension strategies based on the Open Method of Coordinations (OMC). Despite promoting the inclusion of the EWL target into the policy agenda and political debate, OMC’s soft approach left opposition forces plenty of room to hinder its achievement (Zeitlin, Pochet, and Magnusson 2005; Jepsen, Foden, and Hutsebaut 2002).

As pointed out by Ebbinghaus (2006), the state, social partners and employers colluded in supporting early retirement for different reasons (see Figure 3.1). The state first institutionalized pathways of exit in the early 1970’s to reduce the social costs of the deindustrialization, that is the crisis of the sectors employing comparatively the highest share of older workers. Employers complemented pull incentives with HRM practices pushing out employees as soon as ILM’s rules make their labour costs overcome their declining productivity. As mentioned earlier in this chapter, these practices involved both private payments and working conditions that contribute to the decline of the work capacity.

Since pathways of exit extended the social rights of older workers and externalized the costs of pushing HRM practices they were strongly supported by social partners. In the three cases under investigation social partners are collective actors hierarchically organized to represent the interests of their members (workers and companies). Workplace representatives and employers encouraged older workers to claim for pathways of exit, while unions and employers’ associations formed coalitions to foster their generosity and the externalization of their costs. This “collusion” caused the unintended expansion of pathways of exit in the late 1970’s, when the increased international competition

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Concerns over the causes of early retirement, namely health, work, and living conditions of older workers have been expressed since the first half of the 1980’s. Especially the International Labour Organization (ILO) and the World Health Organization (WHO- Helsinki meeting 1991) expressed their concern over age discrimination and to the deterioration of their occupational health that push older workers out of employment, unless actions are taken to prevent the decline of their work capacity. Their recommendations suggest then to increase the support of older workers within their working environment with public and private measures fostering: equal opportunities, safer and healthier work environment, skills training, a better match between job conditions and age-related needs and research over work and aging. Other recommendations are expressed by OECD and European Union over the harmful generosity of the widespread pathways of exit provided by public and private schemes that attract older workers out of employment.
extended restructuring processes to the rest of the economies. Also in this case the expansion was mediated by social partners that at workplace and central level shaped state's and companies' incentives for early exit (Ebbinghaus 2006).

Although pushed by both internal and external pressures, Governments do not have an easy time implementing them. Borrowing the path-dependent feedback mechanism theory from Pierson (Pierson 2000), Ebbinghaus identifies the main obstacle to the EWL re-conversion in the social expectations that workers and employers developed with regard to early retirement. The most obvious arena where these expectations find support is the political one, where opposition endorse them in the hope for later electoral punishment of the Government (Schludi 2005). However if these expectations aggregate as the core members' interest of corporate organizations that “share public space”, those organizations will form coalitions to defend them also in other settings (Ebbinghaus 2006; Crouch 1993; Crouch 2001).

The main argument of this research is that, after mediating the diffusion of early retirement incentives, social partners mediated also their re-conversion. This argument holds under the assumption that, independently from its political colour, the Government has the same commitment to EWL in the Netherlands, Germany, and Italy. From a theoretical perspective, in the constellation regulating retirement pattern it pursues public interests and is committed to general long-term goals. Given pathways of exit exerted a similar strong pressure on public finances and caused similar labour market distortions – welfare without work (Esping-Andersen 1996), employment dilemma (Scharpf 2004) –, Governments in the Netherlands, Germany, and Italy faced since the early 1990’s irresistible
forces to reform them (Eichhorst and Hemerijck 2008).

Notwithstanding those irresistible forces (Pierson 1998) and the declining strength of interests' organizations, no reform could be enforced without the involvement of social partners (Crouch 2001). This is because their institutionalized role in social insurance gave them a veto power to block unilateral actions either by mobilizing social consensus against their formulation or by hindering their implementation. The involvement of social partners was thus a necessary conditions for the EWL re-conversion to start in all three cases under investigation. (Schludi 2005; Ebbinghaus 2006; Crouch 2001).

When dealing with social partners, the Government pursue a strategy of blame avoidance, trying to reduce the political costs of unpopular policies (Pierson 1996). It is guided by mainly two goals: convince them to give up their veto power to solve a substantial problem (policy interests), or to ask their cooperation to legitimate the institutional re-conversion (politics interests). By the same token, also social partners had similar motives for entering the “public space”: preserve the interests of their members (policy interests) or defend their institutional role within corporative institutions (politics interests) (Hassel 2009).

Despite their opposition social partners were not immovable objects (Pierson 1998). These three cases showed that, as pointed out by Crouch (2001), under intolerable pressure social partners supported the depart from path-dependency by reversing early retirement patterns. Therefore if the configuration of the institutional affinities do not deterministically predict path-dependent paths, they nevertheless indicate a range of possible alternatives, among which the contingent power balance among actors expresses the final outcome.

In line with actors-centered institutionalism (Mayntz and Scharpf 1995; Scharpf 1997), it can be argued that institutional affinities explain also why the actors' constellation produce, among the alternatives, a certain outcome and not others. Outcomes are assumed to be achieved by the interdependent strategies (or games) pursued by all the actors within the constellation. Actors are assumed to be capable of evaluating ex-ante the payoffs (or the proximity to their preferences) of the outcomes generated by the possible courses of actions within the constellation and of selecting the strategy leading to the achievement of their most desirable outcome. capacity.

The institutional context is here relevant (see figure 1.1) because, influencing actors' “perceptions, preferences, and capabilities” (Scharpf 1997, pg. 38), define the ordinal ranking of the payoffs and thus the type of strategic interaction within the constellation. The context is furthermore relevant since it influences the interaction modes, that is the method solving the strategic conflict among actors. Defining the mode of interaction the balance of power among actors, it helps predicting the final outcomes of a certain constellation.

This theoretical perspective is useful to predict how social partners mediated the EWL re-conversion in the Netherlands, Germany, and Italy. This is because the different institutional affinities, explained in the next section, channelled the oppositions of vested interests into different policy interactions leading to different outcomes. Those interactions are formed whenever the Government act to formulate or implement activation policies. In other words the coalition of unions and employers (associations) hindered the effectiveness of activation policies only in constellations and modes awarding opportunistic strategies with respectively the highest payoff and a veto power.
3.4 Case selection: most similar systems design

The Netherlands, Germany, and Italy are selected according to a most similar systems design (MSSD) (Przeworski and Teune 1970). The similarity of these three cases is evaluated according to the “Institutional affinities and complementarities between protection, production, and partnership in Europe” by Ebbinghaus (2006- see Graph 3.3).

Building on the institutional complementarities' theory based on the Variety of Capitalism approach, this typology models retirement incentives (complementarities) as shaped by the interaction between the institutional affinities presiding at three main institutional spheres: the social protection, the production and the partnership. As mentioned in the previous section, the role of the partnership sphere is in this model particularly re-evaluated with respect to the earlier literatures. In this context in fact the retirement patterns are not modelled simply as the “automatic consequences of the institutional affinities between the production and welfare regime”, but as social practices mediated by social partners at central and workplace level, according to their opportunity and constrains (Ebbinghaus 2006, p. 270).

The institutional logic pursued by the three spheres are classified respectively according to the “The three worlds of welfare capitalism” (Esping Andersen 1990), “The variety of capitalism” (Hall and Soskice 2001), and the “The three modes of interests mediation” (Crouch 1993).

The protection logic is classified according to the level of de-commodification granted by welfare system. As of retirement, the level of de-commodification measures the generosity of pathways of exit (pull incentives). Of the three logic identified, the generosity of pathways of exit is limited in welfare systems dominated by a liberal and a social-democratic logics, and drifted in welfare systems that, as the three cases under investigation, are led by a conservatory logic. This is because being payroll taxes the main financing source, they are expected to protect the main contributors: older workers and their employers, especially if their welfare is threatened by external forces (as in the case of de-industrialization first and the labour market turmoils after) (Esping Andersen 1990; Esping Andersen 1999; Ebbinghaus 2006).

The production logic is classified according to the level of coordination of the economic system and affect the characteristics of push factors and the stratification across firms. The coordination is minimum in the Anglophone liberal market economies and maximum in the nordic centrally-coordinated market economies. An intermediate level is found in the Netherlands and Germany, where high coordination is found at sectoral level (sector-coordinated market economies) and one degree lower in Italy where the higher fragmentation of the economic system, composed by few big and many small companies, is compensated ad-hoc by state interventions (state-coordinated market economy) (Hall and Soskice 2001; Ebbinghaus 2010). A common trait of CME is the institutionalization of strong ILM (see Chapter 2), where seniority rules rise the labour costs until it overcome productivity in the late career. In Germany, Italy and the Netherlands push incentives are thus structural conditions to maintain ILM and not merely a cyclical measure to overcome economic downturn (Ebbinghaus 2006).

The partnership logic is classified according to three ideal-typical modes of exchange between organized labour and capital. This logic varies depending on how the actors perceive each other as
Theory and hypotheses

separated and on how explicitly regulated interactions are. In the most primitive contestation logic antagonist labour and capital engage sporadically in conflicts, which imposed costs inversely related to their power resources. Pluralist bargaining implies the mutual recognition of capital and labour and thus the development of contractual procedures to avoid conflicts (and their costs), when the density of interactions increases. Finally in bargained corporatism capital and labour engage positive-sum game, thanks to procedures that discourage short-term conflicts to foster the achievements of long-term joint interests (Crouch 1993).

According to Crouch, the bargained corporatist logic requires capital and labour to have a high organizational articulation, where central levels are able to commit memberships to a strategical and long-term course of action (Crouch 1993). The achievement of this pre-condition for bargained corporatism is the main difference concerning the affinities’ configurations of the Netherlands, Germany, and Italy.

As a result of diverse historical legacies capital and especially labour organizations have followed diversified development tracks, which in turn institutionalized different forms of policy interactions between unions, employers and governments, here defined as social partnership (Crouch 1993; Ebbinghaus 2006; Hassel 2009).

The articulation of both organizations is the highest in the Netherlands, but not monopolistic as in Scandinavian countries. Here the state since the early phase of nation building “shared public space” to build a common national identity in a context of deep religious cleavages. For that it supported central corporate structures that encouraged a co-operative inclusion of the Catholic, Protestant, and social-democratic confederations into the policymaking (Crouch 1993) and along time consolidated a logic of cooperative social partnership. As a result, the Government shares with social partners different tasks not only the formulation retirement incentives but, thanks to the development of a highly coordinated system of collective bargaining, also their implementation (Ebbinghaus 2006).

The social partnership logic is slightly less cooperative in Germany. Here during the nation-building process only one part of labour movement was recognized into the “public sphere” and in turn weakened the consolidation of a formal social dialogue structure. As a result the main level of organizational articulation was slowly established at the industry level, where the collective bargaining in leading branches (chemical and steel) coordinated standards in the rest of the productive system. As a result social partners are not explicitly involved to regulate retirement incentives, but they take part, together with a constellation of other stakeholders, the Commissions consulted by the Government (Ebbinghaus 2006; Crouch 1993).

The organizational articulation is comparatively the lowest in Italy. Here the poorer economic coordination across small-sized companies undermined the the aggregation of employers’ interests. Furthermore the Catholic domination intertwined with a weaker state politically isolated and de-legitimated the more progressive currents of the labour movement, which then assumed a contentious behaviour. Both organized labour and capitalism grew as ideologically fragmented and thus unable to be included in a stable social partnership as in the other two countries. Because of the high costs of the contentiousness pervading this partnership constellation, the interactions tend to be poorly institutionalized and occurring ad hoc whenever strictly necessary. This means that retirement incentives tend to be regulated primarily by the Government and the HRM practices unless the
opposition of interests' organizations opens a conflict that is solved by the actors' relative power (Ebbinghaus 2006; Crouch 2001).

In short the different partnership logic makes the involvement of social partners in positive-sum games the most likely in the Netherlands, less likely in Germany, and least likely in Italy. This is because the steadier corporative structure supports the pursuit of common long-term outcome, while the ad-hoc interactions in Italy lead to the pursuit of the strongest opponent's short-term interests.

<table>
<thead>
<tr>
<th>Institutional affinities</th>
<th>Protection</th>
<th>Production</th>
<th>Partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany, the Netherlands</td>
<td>Conservative</td>
<td>Sector-CME</td>
<td>Cooperative (social-partnership)</td>
</tr>
<tr>
<td>Latin:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>Conservative</td>
<td>State-CME</td>
<td>Contentious</td>
</tr>
</tbody>
</table>

Source: (Ebbinghaus 2006)

As already explained by Ebbinghaus (2002; 2010), the actors constellation regulating retirement incentives gives origin to five alternative modes of interactions: unilateral action, consultation, concertation, self-regulation, and self-administration. Being the modes in which the Government “share public space” with social partners and employers, they are defined as social governance modes and are described in the next section.

### 3.5 Modes of social governance

As pointed out by Ebbinghaus (2002; 2011), the institutional setting, more specifically the affinities between the logics of the protection, production, and partnership systems affect the governance modes of retirement incentives. Due to the high political and social consensus surrounding the institutionalization and the costs' externalization of early retirement incentives (Ebbinghaus 2006), the Government hardly faced institutionalized “veto opposition”. The opposite is true when those incentives had to be cutback and a “new politics”, based on blame avoidance, was undertaken by the Government (Ebbinghaus 2011).

According to this “new politics”, Government had the choice to share the blame within the political or the corporative arena. If the political consensus was sufficient in countries where a weak organized interests could not block unilateral actions, in The Netherlands, Germany, and Italy the Government had to search also for consensus in the corporative arena.

According to Ebbinghaus (Ebbinghaus 2002; 2011), the Government can share public space in four modes of social governance. They are graphically represented as the yellow and orange sections in Figure 3.2 and their main characteristics are summarized in Table 3.3.
This triangle represents the constellation of actors involved in the regulation of retirement incentives. The three blue space surrounding the vertices stand for the actors' unilateral governance space. For unions and employers' organizations this space represents the internal coordination between associational levels and members, ranging from the bottom-up strategical aggregation of interests to the top-down compliance rules. For single employers it also represents incentives set by HRM practices before being coordinated by collective negotiations and public policies (Ebbinghaus 2006).

The actors' prerogatives become more shared the more our attention is moved from the vertices to the centre of the triangle. Moving from Government's unilateral vertex toward the centre there are two modes of social governance in which social partners interfere to a different extent with the policymaking.

Consultation is the nearest mode to unilateral action and takes place when the Government ask social partners' view over legislative proposals. Governments can be legally obliged to consult institutionalized advisory boards or just willing to confer with social partners in less formal settings. In any case, social partners' view, expressed as opinions or recommendations, is usually not sufficient to block the policymaking. In some cases however the Government can have a moral obligation to take back a proposal, often when it is unanimously rejected by boards including Governments' or independent experts. The inclusion of independent experts prevents social partners from fostering particular interests. This is because social partners can de-legitimize Government's unilateral actions only when they foster the long-term societal welfare.

A further element that usually drives social partners toward a long-time strategy is the strong institutionalization of this practices. Interacting regularly, social partners, experts, and Government develop a common understanding of policy problems and build a consensus over joint solutions.
maximizing common and not particular interests. In short the consultation settings raises the cost of opportunistic behaviours of social partners (Ebbinghaus 2010a).

Concertation is at the centre of the constellation and requires all relevant actors to explicitly agree on a proposal that is later enacted by the Government or the Parliament. This agreement is often the result of a political exchange (Pizzorno 1978). In other words, social partners decide to endorse a Government's reform in exchange for an amendment of the original proposal or a side payments, that are concessions outside the range of issues under negotiation (Scharpf 1997). The entity and the distribution of the “political exchange” depends on three circumstances: the initial power endowment of actors, the opportunity costs that the negotiation setting associates to opportunistic behaviours and to the non-agreements option. All circumstances are affected by the institutionalization level of the concertation practices. First the more regular are interaction the more the power balance tend to be equal or in favour of the Government. Second regular interactions discourage opportunistic behaviours, because the iteration allow to sanction them. Third regular interactions tends to lower the cost of non-agreement for both the Governments and social partners, since the iteration allow to solve the stalemate at a later stage (Axelrod 1984; Scharpf 1997).

Specularly, concertation organized ad hoc is highly treacherous, but only for the Government. Since unilateral action is always preferred unless blocked, the Government's call for concertation is itself a weakness sign that set the balance power totally in favour of social partners. Moreover the lack of regular iteration limits notably the Government's chance of sanctioning opportunistic actions. Finally ad-hoc interactions make the non-agreement option very costly for the Government and is then limits its capacity of negotiating before accepting it (to the limit the lack of iteration produce a on-spot contract setting (Scharpf 1997).

In short the less institutionalized the concertation setting is the higher is the political exchange required to reach an agreement. Moreover the lower institutionalization tend to polarize the costs and the benefits of this exchange on respectively the Government and social partners.

While the consultation and concertation are the modes in which social partners influence the policymaking, self-administration and self-regulation modes characterize the social partners' role in the policy-implementation (Ebbinghaus 2011). Policy-implementation is a critical phase because social partners can opportunistically alter the intended outcome of policies, especially if they were implemented against their interests.

Self-administration stands in between the consultation and the concertation mode, meaning that the Government retains to a great extent the right of decide unilaterally the criteria regulating policy-implementation. In this mode the Government delegate to social partners the management of social insurance in the three cases under investigation. This is because social partners have a vested interest in managing schemes directly financed by their members. Besides managing the pay-roll taxes, they are also responsible for assessing the eligibility of claims within executive boards according to criteria defined previously by the Government (Ebbinghaus 2011).

This setting minimizes the opportunity costs of opportunistic behaviour under two circumstances. The first is when eligibility criteria requires a subjective assessments of the executive board. Among the welfare scheme financing pathways of exit, the management of disability is often the most problematic. This is because in many cases the eligibility assessment is based on the executive board's view on the claimants' employment perspectives. The least problematic implementation is often the
pension system, because the entitlement is usually based on objective criteria, as the age and the contribution history (Ebbinghaus 2011).

The second circumstance lowering the cost of opportunistic behaviour is the lack of independent supervision. This is often the case when the executive and supervising boards are both bipartite, meaning that controllers and controlled are both nominated by unions and employers association. To a lesser extent, this is also the case when the composition of executive boards is tripartite but decisions are based on majority rules. Although experts do not have a veto power, their inclusion provide the system with more transparency because they can report administrative distortions.

In short subjective eligibility criteria and the lack of independent supervision make self-administration the implementation mode encouraging the most opportunistic behaviour. This is because the distortion of the assessment process goes unnoticed and the costs are fully externalized.

Finally the furthest modes from unilateral action is the self-regulation. Here, according to the subsidiarity principle, the Government supports unions and employers' associations bargaining over employment and welfare issues in full autonomy (Trampusch 2007). The Government however can encroach into collective bargaining by regulating its legal framework and the taxation policies. The Government can for example declare collective agreements valid erga omnes within sectors and elevate them to a almost legal status or introduce a monetary incentives to encourage certain outcomes.

Despite the autonomy provide social partners with the full right of neglecting Government's pressure, it does not automatically encourages opportunistic behaviours. This is because at the net of Government's incentives their costs are internalized or, in other words, are born by their members: employers and workers. Opportunistic behaviours are instead encouraged the more public incentives externalize their costs.

As in the consultation and concertation, also here the level of institutionalization plays a key role in encouraging or hindering opportunistic behaviours. Moving from a central to a more decentralized perspective, the collective bargaining discourages the opportunism of single companies, as employers with regard to their employees and as competitors. The level of institutionalization defines in fact the extent to which HRM policies are vertically coordinated through the system of collective bargaining. This vertical coordination is effective when agreements have a compelling status for members and cover a wide range of issues pertaining to the employment relations, both monetary and non-monetary. The more coordinated is the bargaining system the more companies' retirement incentives are standardized according to a long-term strategy conveyed by the Confederal peaks to pursue general interests.

As described above and summarized in Table 3.3 the four modes of social governance associate a different cost to opportunistic behaviour, that is here defined as hindering the formulation and implementation of activation policies. This cost is in general higher in consultation setting with respect to concertation and in self-administration setting with respect to self-regulation, but a closer look has to be given to the specific circumstances in which those modes take place. Those circumstances, deriving from the dominant partnership logic, shape social partners' preferences toward activation policies and thus their interests in hindering or supporting their effectiveness.

Hypotheses about the extent to which the partnership logic affect the outcome of the EWL re-conversion are derived from the actor-centered institutionalist theory in the next section. In short social
3.5 Modes of social governance

partners are expected to support the effectiveness of activation policies only when their organizational articulation include them in social governance modes that minimize the payoff of opportunististic behaviour.

Table 3.3: Four modes of social governance where the involvement of social partners can affect the policymaking and implementation of activation policies.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Consultation</th>
<th>Concertation</th>
<th>Self-administration</th>
<th>Self-regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Function</strong></td>
<td>Deliberation of social partners' view on legislative proposals</td>
<td>Negotiation between Government and social partners</td>
<td>Delegation of partial authority to social interests groups for pathways of exit management</td>
<td>Collective negotiation between employers' and employees' organizations</td>
</tr>
<tr>
<td><strong>Government's role</strong></td>
<td>Consideration of vested interests</td>
<td>Discuss political exchange, threat unilateral action (shadow of hierarchy)</td>
<td>Partial delegation of authority after setting criteria- parameters</td>
<td>Subsidiary: define legal framework and support legitimacy (erga omnes extension); shadow of hierarchy in case of no agreement</td>
</tr>
<tr>
<td><strong>Partners' role</strong></td>
<td>Opinions, recommendations</td>
<td>Discuss political exchange, enforce compliance of members</td>
<td>Implementation, in some cases also supervision</td>
<td>Bipartite formulation and implementation</td>
</tr>
<tr>
<td><strong>Decision mode</strong></td>
<td>Unanimity, majority rules</td>
<td>Voluntary agreements: majority/unanimity rules, possible veto points</td>
<td>Majority decisions</td>
<td>Voluntary agreements</td>
</tr>
<tr>
<td><strong>Potential threat</strong></td>
<td>Voice, exit</td>
<td>Exit</td>
<td>Voice, exit</td>
<td>Exit</td>
</tr>
<tr>
<td><strong>Advantage</strong></td>
<td>Social legitimacy of policymaking, pursue public-regarding long-term interests</td>
<td>Social consensus, public-private actors' coordination, ensure correct implementation of the pact</td>
<td>Deliberation, implementation legitimacy</td>
<td>Internalization of costs, self-determination</td>
</tr>
<tr>
<td><strong>Problems</strong></td>
<td>Status quo defence, no decision, social tension if recommendations are neglected by Government</td>
<td>Defend particularistic short-term interests of “insiders”, obstacle re-conversion for incremental change</td>
<td>Threat of collusion for distorted implementation of unpopular policies, externalization of costs, bureaucratic, lack of competence</td>
<td>State exclusion, threat of collusion to favour narrow interests</td>
</tr>
</tbody>
</table>

Source: (Ebbinghaus 2002) and elaborated by the author

3.6 Working hypotheses

As mentioned earlier no hypotheses about institutional changes can be derived from institutional legacies unless contingent circumstances, and especially the power balance among actors, are considered. Estimating the power balance in a constellation is complex, because requires to compare at once a large number of variables related to actors' resources, legitimacy, prerogatives etc. In spite of that, it can be easily inferred by the motives moving the actors to interact: policy and power interests, which resemble the distinction between membership and influence logic (Streeck 1987; Hassel 2009; Baccaro and Simoni 2008).

In general the Government and the vested interests motives for interaction can be depicted as a cooperative strategic game (Scharpf 1997; Ebbinghaus 2006). The vested interests are referred here as externalization coalitions because preserving the externalization of pathways of exit's costs is the the most effective strategy for companies, older workers and their interests' organizations to block the EWL re-conversion at once. In fact the deadlock of this first Government's strategy undermines all its further movements.
Despite the two interests are never mutually exclusives, actors form their strategies according to the relative importance of policy and power in the specific interaction they deal with. Actors playing power-maintaining strategies tend to prefer preserving their institutional role more than achieving their policy goal. As such they reveal a weaker influence capacity, which leaves space to the counterpart to impose their policy priorities. On the contrary actors playing policy-oriented strategy are in a stronger position, since their focus on a policy target is harder to negotiate with side payments.

As argued by Hassel (2009), the strategical priorities in social partnership are shaped by the organizational capacity of interests' associations and the type of Government. They are relevant because produce configurations (ranking pay-off of the alternative strategies) leading to different outcomes (see figure 3.3). The organizational articulation of social partners and the type of re-conversion under investigation makes symmetric combinations unlikely. The policy-policy combination is typical of pluralistic settings where interests' articulation is so low as to discourage the Government to delegate institutional power and social partners to defend it. The politics-politics combination is compatible to settings where systemic transitions (as the economic transition in Central-Eastern Europe) is combined with a high fragmentation of the organized interests. Governments here tries to ensure social peace and social partners compete to build their institutional role (Hassel 2009).

Ranging from medium to high level, the organizational articulation of labour and capital interests dealing with EWL re-conversion in the Netherlands, Germany, and Italy tends to give origin to asymmetrical strategy combinations. Depending on whether the first strategic movement of the Government places it in a strong or weak influence position, the external coalitions associate a low or high payoff to policy-oriented strategy, as shown in Figure 3.3. Since their policy priorities are driven by their membership logic (Streeck 1987), which is shaped on particularistic interests, policy-oriented strategies are opportunistic and undermine the EWL reconversion by hindering the effectiveness of activation policies.

Figure 3.3: Government- externalization coalition sequential game to convey EWL re-conversion.
3.6 Working hypotheses

All in all, externalization coalitions are encouraged to play opportunistic strategies only if they are involved in interactions where the Government plays power-maintaining strategies and discouraged elsewhere. Under the assumption that the perception of relative power induces the actors to value the payoff according to the expected success of the alternative strategies (Avdagic 2011), it may be argued that policy interactions encouraging opportunistic strategies produce less effective activation policies and vice versa.

The organizational articulation (or vertical coordination) of labour and capital's interests is of extreme relevance for the outcome of EWL re-conversion because, influencing the constellation and the interaction modes of social governance, reward or punish its opportunistic obstruction. In short the organizational capacity of interests' is argued here to be the main institutional condition determining whether vested interests will hinder or support the effectiveness of activation policies.

As mentioned at the end of the previous section, social governance modes give in general a different payoff to opportunism. Further specification is nonetheless necessary to examine how vertical coordination of the externalization coalitions influences actors' motives for interaction and thus their strategy. In Figure 3.4 the power-policy motive of actors are represented as a continuum and drawn as two perpendicular lines. The vertical line represents top-down the motives of Government, while the horizontal line depicts left-right the coalitions' motives. Social governance modes find place in the upper-right quadrant if they tend to hinder opportunism or in the lower-left quadrant if they tend to discourage it. Outsides the quadrant on the left a vertical line depicts bottom-up the organizational articulation of interests' coalitions leading to more cooperative form of social partnership.

Figure 3.4: Relationship between social partnership, actor's power balance, and the payoff of opportunism behaviour.

In interactions with high interests' organizational articulation the constellation is typically characterized by positive-sum game. This constellation is shaped by a virtuous circle: the interests' articulation is developed through the iteration of social dialogue, which in turns constrains actors to reciprocity and leads to a further institutionalization of the interaction itself. Since the interaction is
permeated by mutual trust and reciprocity, the Government perceives as low the risk of de-legitimation and involve the coalitions to solve a problem at stake (*policy-oriented strategy*). The coalitions instead needs to avoid opportunism since, as a break of reciprocity, will prevent them to play future influence (*power-maintaining strategy*). As shown in the upper part of Figure 3.4 strong organizational articulation of interests' coalitions is associated to a more cooperative partnership, which tends to take place in consultation or self-regulation modes. Because of this power balance, consultation and self-regulations tend to solve the actors' conflict with modes of interaction preserving the Government's *shadow of hierarchy* (Scharpf 1997). In other words the Government can threaten credible sanctions if the coalitions hinder the EWL re-conversion.

On the contrary the lower interests' organizational articulations is the more the constellation resemble zero-sum games (prisoner’s dilemma). Being contentious and thus costly, social partnership is poorly institutionalized and tends to occur only when the Government lacks the necessary legitimacy to act unilaterally (*power-maintaining strategy*). Those circumstances shift the power balance in favour of the coalitions which makes their support conditional to the pursuit of their members' interests (*policy-oriented strategy*). The poor iteration of social partnership moreover encourages opportunism, because no credible sanctions can prevent it. Thus the lower the coalition's vertical coordination is, the more interactions move towards the lower-right area in figure 3.4, where the likelyhood of opportunism is higher. In concertation and self-administration the unilateral dependence of the Government makes mode of interaction sensitive to veto power and as such favour particular over general interests.

All things considered, the leading hypothesis of this research argues that one the affinities, the partnership, has a significant impact in enhancing the the top-down diffusion of the paradigm of extending working life in Germany, Italy, and the Netherlands.

**Hypothesis 3.1:**

*Activation policies more likely to be effective the stronger is the organizational articulation of the system of labour and capital's intermediation system.*

Because of that activation policies are expected to be the most effective in countries with *strong* articulation, such as in the Netherlands, less effective in countries with *medium articulation*, such as in Germany, and the least effective in countries with *low* articulation, such as Italy.

This main hypothesis needs to be further articulated in the three main levels of partnership where the externalization coalition mediates the EWL conversion and thus the effectiveness of activation policies. These levels are: macro-central, where social partners affect the policymaking and the implementation of retrenchment policies, meso-sectoral, where unions and employers' associations bargain retaining policies, and micro-company, where retaining policies are finally implemented (Ebbinghaus 2006).
3.6.1 Macro level

The first instance where the externalization coalition can hinder EWL re-conversion is the formulation of retrenchment policies. Being part of “austerity” measures imposing concentrated costs and diffused benefits, the Government needed the support of social partners to converge the social consensus on them and legitimate the EWL re-conversion (Pierson 1996; Ebbinghaus 2006).

This consensus is obtained with the social dialogue, that is the interaction between the Government and peak of unions and employers' confederations. The organizational articulation of interests association refers here to the bottom-up aggregation of member's interests which leads to the institutionalization of different peak structures involved in the social dialogue (Brugiavini et al. 2001; Pulignano 2010). A highly integrated interests' aggregation tends to institutionalize permanent structures capable to bargain a unitary strategy before interacting with the Government. In the Netherlands this structure is the *Sociaal Economische Raad* (SER- Social and economic council) and its consultation is legally required for the policymaking.

Conversely structures are more fragmented and transitory the lower is the vertical coordination of interests. In Germany since the 1990's different advisory boards were set up for consultation purposes: commission, and the *Bündnis für Arbeit* (Alliance for work). Finally in Italy, despite the advisory role is officially played by the *Consiglio Nazionale Economia Lavoro* (CNEL-National council for economics and work), the social dialogue occur by ad-hoc tripartite commissions, where each participate separately to the bargaining. The institutionalization of the social dialogue is of importance here because, making more complex the regulation of the interaction (independent experts are added, the decision-making rules prevent veto-points etc.), changes the constellation and the mode of interaction.

In both advisory and concertative boards outcomes are achieved through negotiations. Imagining the negotiating space as the area formed by two perpendicular axes, representing vertically the payoff of social partners and horizontally the payoff of the Government (see Figure 3.5), outcomes can be depicted as the result of the perceived payoff of non-agreements (NA). Status quo (SQ) is placed at the origin of the axes and the optimal strategy of Government and social partners is represented by A (retrenchment) and B (hinder retrenchment).

The constellation and the modes of interaction in consultation setting reduce the payoff of NA below SQ for social partners. This is because NA would de-legitimate social partners and put at risk their future involvement in policymaking. Since consultation setting requires wide consensus to be effective, in the Netherlands unanimous, a strategy seeking to hinder retrenchment would lead to NA, because it would not be backed by the experts. The negative payoff of NA lead social partners to increase the relative pay-off of A and to support it in order to avoid NA (see Figure 3.5).

The opposite is true in the concertation setting, where the payoff of NA goes under SQ for the Government. This is because it would be prevented from retrenching and, wanting social support, would risk to fall. Being poorly regulated, social partners have a veto power against proposals below B and the Government is compelled to moved towards A and support the formulation of less effective retrenchment policies.
Hypothesis 3.2:

Retrenchment policies are likely to be more effective the more similar to consultation the setting in which they are formulated is.

Because of that retrenchment policies are expected to be most effective in the Netherlands, less effective in Germany, while the least effective in Italy.

Once enacted, retrenchment policies can produce unintended effects if their implementation takes place in settings promoting hindering strategies. This occurs when social partners' role in the managing boards of the unemployment, disability and retirement schemes gives social partners the opportunity of compensating the retrenchment they could not hinder in the policymaking. As explained earlier these boards can administrate or regulate the benefits depending on whether the financing is public or private. Ideally the more private is the financing the wider are the discretionary power of social partners and vice versa.

Despite the higher discretion, the self-regulation mode discourages the compensation of retrenchment policies because the internalization of costs would lead to payroll taxes to unsustainable levels. In the administration mode instead the generosity and the eligibility of the benefits are defined by the Government leaving no opportunities for compensation. This opportunity grows the more hybrid the modes become, combining the costs externalization with social partners' discretionary power.

Being in The Netherlands, Germany, and Italy mainly the financing mode of welfare system based on payroll taxes, the administrative function is traditionally given to social partners as a guarantee legitimizing their redistribution. As explained earlier, the risk of compensation is higher in the management disability and unemployment since the eligibility assessment requires a certain discretion over the health status and the employability of claimants. Given that pathways are interchangeable, social partners may compensate the retrenchment formulated in any scheme causing the unintended rise of the inflow into others.
In the Netherlands social partners lost the opportunity for compensating since their exclusion from administrative boards between 1994-1997. In Germany this opportunity is associated to a low payoff because Government experts in both executive and supervision boards can punish it. This is not the case in Italy where retrenchment compensation has high payoff especially in the unemployment scheme.

If administration is the function legitimizing social insurance, the self-regulation requires social partners to produce a cooperative partnership able to cover the workforce and coordinate the scheme's conditions across the economy. This is because early retirement schemes are regulated by the sectoral collective bargaining only in the Netherlands and Germany. According to the subsidiarity principle the involvement of social partners has a problem-solving function, which can be only indirectly guided by the Government. This can be done through subsidies, clauses extending the validity of agreements to all employees (erga omnes), and agreements over future bargaining rounds.

The retrenchment's compensation is encouraged by subsidies that, as in Germany, externalizing the funding of early retirement schemes, moves the mode toward self-administration. On the contrary, the retrenchment is encouraged by social pacts, committing social partners' member to its implementation. This requires a very high vertical coordination for both unions and employers' associations, which it is only found in the Netherlands. It is associated with the institutionalization of a second peak bipartite board: the Stichting van de Arbeid (STvdA- Labour Foundation), providing common recommendations to the members associations engaged in the collective bargaining. STvdA gives the Government the opportunity to boost the retrenchment of early retirement scheme by negotiating a political exchange in a concertation setting. Unlike Italy, these negotiations are more institutionalized and thus discourage STvdA from the stalemate. This is because the Government does not negotiate for a want of legitimation and thus can punish the stalemate by reducing their institutional role (shadow of hierarchy). Political exchange therefore tend to not hinder the retrenchment but to involve side payments.

**Hypothesis 3.3:**
Retrenchment policies are likely to be more effective the more similar to self-regulation or to self-administration the setting in which they are implemented is.

Because of that retrenchment policies implemented in disability and unemployment schemes are expected to be most effective in the Netherlands and Germany, and less effective in Italy.

**Hypothesis 3.4:**
Retrenchment policies are likely to be more effective the more their implementation in self-regulation mode is vertically coordinated.

Because of that retrenchment policies implemented in early retirement schemes are expected to be most effective in the Netherlands, less effective in Germany.
3.6.2 Meso level

As mentioned earlier, the EWL re-conversion can be depicted as a top-down sequential game between the Government and the externalization coalition. After the central game played between the Government and the Confederation, the interaction moves at sectoral level where interests’ organizations coordinate working conditions across companies. This coordination is obtained through a self-regulatory setting, where unions and employers’ (associations) take part to a policy network motivated by policy interests (Scharpf 1997; Ebbinghaus 2006).

Working conditions provide relevant retirement incentives and, as such, are strategically used by the companies’ HRM to maximize their personnel's productivity. In the Netherlands, Germany, and Italy, HRM policies comply with ILM and working conditions encourage early exit after the age when productivity is assumed to fall under their labour costs. Since their early 1970’s those shedding policies were supported by social partners and in turn publicly legitimated by the institutionalization of pathways of exit. This means that unless pathways are considerably retrenched, no incentives for strategical change are faced by the beneficiaries of early retirement (older workers and their employers) and, following a membership logic, by their interests’ organization.

The situation of low retrenchment is depicted in the lower part of the sequential game in figure 3.3, where the optimal strategical response of the sectoral bargaining is to keep on promoting shedding policies. Thus in Italy, where retrenchment is expected to be severely hindered by the inclusion of social partners in the concertative setting, collective labour agreements (CLAs) are not expected to include retaining policies.

Figure 3.6: Tripartite governance- externalization coalition sequential game to convey EWL re-conversion.

On the contrary, the higher is retrenchment the more the costs of pathways of exit need to be internalized by companies and older workers. Although collective bargaining can be a source of additional benefits for early exit (Trampusch 2007; Trampusch 2009), the higher the retrenchment the more payroll taxes need to rise to unsustainable levels for increasingly competitive markets.
3.6.2 Meso level

As shown in the upper half of Figure 3.3, unions and employers' associations are encouraged to switch toward a retaining strategy. Being limited the margin of payroll tax increase, they have a high interest in negotiating the arrangements making EWL beneficial for their members. This interest motives unions to reduce the workers' burden and employers (associations) to boost workers' productivity. This what is expected to happen in the Netherlands and Germany, CLAs are thus expected to include arrangements over working conditions that extend working life.

**Hypothesis 3.5:**
**Retaining policies are likely to be more effective the more retrenchment policies internalized the costs of pathways of exit.**

Because of that retaining policies are expected to be most effective in the Netherlands and Germany, and less effective in Italy.

3.6.3 Micro level

The last instance where the externalizing coalition can affect the EWL re-conversion is at company level, where working conditions are ultimately set by HRM policies. This strategic choice can be depicted as the final step of the sequential game between the coalition and the Government. While companies in the countries under investigation normally shed older workers, they may shift their strategy under circumstances changing their payoffs. External circumstances, such as a shortage of the workforce during economic expansion, can lead employers to ignore their ageism and retain their older employees to replace this gap. A part from voluntaristic actions, a strategical shift can be systematically required by institutional circumstances, or in other words, as a product of binding CLAs between unions and employers' associations.

The extent to which CLA's bind companies' strategies depends on the coordination of the bargaining system and thus again on the interests' organizational articulation. In all three cases under investigation the industry is the pivotal level, which legally compel companies to implement the standards negotiated in CLAs. As explained in the previous section, in spite of its coordination, the bargaining structure in Italy is expected to not bind companies to retaining strategies, because the Government fails to provide the incentives to do so.

On the contrary in the Netherlands and Germany those incentives are conveyed through a similarly but not equally coordinated bargaining structure. The higher articulation of interests in the Netherlands lead the bargaining structure to be vertically bounded to a joint long-term strategy defined at a confederal level. The comparatively lower articulation in Germany makes instead this coordination flatter, because the strategies negotiated in few industries set the tend for the rest of the economy. What is lacking in Germany is a central structure that, as STvdA in the Netherlands, allows the Government to convey retaining policies directly in the bargaining strategies of both unions and employers' organizations at industry level.

In the Netherlands this conveyance is launched by the regular interactions between the Government
and STvdA, channelled through STvdA recommendations first and legal bounding CLAs after, finally reaches companies. This conveyance brings the HRM from a unilateral into a game setting, where the legal value of CLA imposes companies negative payoffs for shedding policies. As shown in figure 3.7, those payoff lead companies to implement retrenchment policies and thus foster their effectiveness.

In Germany this conveyance is supported by employers' organizations. This is because only employers are organized in structures so articulated as to adopt the EWL re-conversion in their strategy. Conversely due to their higher fragmentation, unions still face higher incentives to take advantage of their role in the management of early retirement schemes to hinder the EWL re-conversion. Since they are still able to foster early retirement, unions have no interests in making retaining policies binding for companies by including them in CLAs, as shown in the lower half of figure 3.7. In absence of sanctions penalizing shedding policies, in Germany companies perceive lower payoff for retaining strategy than in the Netherlands.

**Figure 3.7: Industry self-regulation - companies sequential game to convey EWL re-conversion.**

**Hypothesis 3.6:**
Retaining policies are likely to be more effective the higher is the vertical coordination of the system of collective bargaining.

Because of that, retaining policies are expected to be most effective in the Netherlands and less effective in Germany.
3.6.4 Effectiveness' stratification

As mentioned earlier, when interacting with the Government in a constellation encouraging opportunistic strategies, the externalization coalitions act according to a membership logic. This logic leads the coalitions to prefer strategies maximizing the interests of core members over the rest of the society. The more inclusive the membership is the more they pursue public-oriented interests, which lead to a fair redistribution of the costs of retrenchment policies.

In Continental Europe the representativeness of labour and capital organizations tends to be narrower and cover exclusively the interests of workers and companies at the core of the economy: adult and older workers, and large companies in private manufacturing sector. Due to this dichotomy between insiders and outsiders, the strategy of unions and employers' confederations affecting the policymaking and the implementation of retrenchment policies is not to hinder their general effectiveness. On the contrary the more they can follow their membership (as opposed to influence) logic, the more they are motivated to preserve insiders' rights and concentrate the retrenchment on the “outsiders”.

Hypothesis 3.7:
The more retrenchment policies are hindered, the more their effectiveness is expected to be lower for core members and and higher for non-members of the externalization coalitions.

Because of that the effectiveness of activation policies is expected to be: least stratified in the Netherlands, more stratified in Germany and the most stratified in Italy.

As for retaining policies, if their implementation is mutually conveyed by the interests' organization to their members, as in the Netherlands, it becomes legally compelling for companies. In this coordinated bargaining system central agreements, by limiting progressively the strategic options at decentralized ultimately at company level, are expected to produce also horizontal outcome coordination across the economy. Because of that the effectiveness of retaining policies is expected to follow no significant industry pattern.

Hypothesis 3.8:
If mutually conveyed, retaining policies are likely to the highly effective across the economy.

If retaining policies are hindered other two sets of competing hypotheses can be derived about the stratification of their effectiveness. The first set concerns the case where retaining policies is not conveyed by CLA's, as in Germany and Italy.

Under the assumption that the structural role played by early exit in high ILM lead HRM to develop negative age-based stereotypes, it can be argued that companies do not retain older workers unless constrained. This is because, the stereotypes makes older workers' skills redundant. According to this argument companies value shedding strategies always preferable to retaining strategies even

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3 Insiders and outsiders are here exclusively defined according to whether workers are part of the core membership of interests' organizations or not. Therefore, according to this distinction, public employees, normally defined as the welfare literature as insiders, belong here to the outsider group.
Theory and hypotheses under external circumstances generating a workforce shortage. Since stereotypes are generalized in HRM, the voluntaristic implementation is expected to lead to a very poor effectiveness of retaining policies across the economy.

**Hypothesis 3.9a:**
If implemented on a voluntaristic bases, retaining policies are likely to be poorly effective across the economy.

Conversely it can be also argued that this argument holds only in industries exposed to international competition and thus to high pressure for technological progress. This is because only where skills are required to be flexible age stereotypes makes older workers unfit to replace a skills shortage. On the contrary, stereotypes are weaker in sheltered industries, where skills do not need to be continuously updated. Because of that in case of skills shortage HRM are expected to prefer to retain older workers than to shed them. According to this argument, the voluntaristic implementation lead to a different industry pattern of retaining policies’ effectiveness. The effectiveness is expected to be poor in declining industries and in industries exposed to international competition and higher in growing protected industries.

**Hypothesis 3.9b:**
If implemented on a voluntaristic bases, retaining policies are likely to be more effective in industries enduring skills' shortage that older workers are fit to replace, than in the rest of the economy.

The second set of competing hypotheses refers to the case where, even if not conveyed by CLA's, retaining policies are unilaterally conveyed top-down to the membership of one interests' association. This is the case of Germany, where the employers' confederation Bundesvereinigung der Deutschen Arbeitgeberverbände (BDA- Confederation of German employers) made a coordinated efforts to foster the implementation of retaining policies among its members. However lacking this conveyance any legal constrain, it can be argued on the one hand that companies are expected to anyway retain older workers only on a voluntary bases, as in Italy (HP 3.9a-HP 3.9b).

**Hypothesis 3.10a:**
If unilaterally conveyed, retaining policies are likely to be poorly effective across the economy.

**Hypothesis 3.10b:**
If unilaterally conveyed, retaining policies are likely to be more effective in industries enduring skills’ shortage that older workers are fit to replace, than in the rest of the economy.

On the other hand it can be argued that the conveyance, although unilateral, promote a top-down learning process among the membership of BDA. In other words, spreading awareness about the future challenges and, more importantly, about the methods to improve productivity in older age works as a disincentives to opportunistic behaviour or shedding policies. By weakening age stereotypes the
unilateral conveyance encourage the implementation of retaining policies across the economy, as in the Netherlands.

*Hypothesis 3.10c:*

*If unilaterally conveyed, retaining policies are likely to be effective across the economy.*

### 3.7 Summary of hypotheses

Table 3.4: Summary of main hypotheses about how the organizational articulation of interests' intermediation mediate the effectiveness of activation policies in the Netherlands, Germany, and Italy.

<table>
<thead>
<tr>
<th>Institutional affinity and sequential game</th>
<th>Hypotheses</th>
<th>Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ACTIVATION POLICIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational articulation of interests intermedation:</td>
<td>HP 3.1:</td>
<td>Activation policies delay employment exit:</td>
</tr>
<tr>
<td>+ Cooperative partnership</td>
<td>The EWL re-conversion is more likely to be effective the stronger is the organizational articulation of the system of labour and capital's intermediation system.</td>
<td>++ in the Netherlands</td>
</tr>
<tr>
<td>- Contentious partnership</td>
<td></td>
<td>+ in Germany</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>+ in Italy</td>
</tr>
<tr>
<td><strong>RETRENCHMENT POLICIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retrenchment formulation:</td>
<td>HP 3.2:</td>
<td>Retrenchment policies reduce entry into pathways of exit:</td>
</tr>
<tr>
<td>+ articulation → consultation</td>
<td>Retrenchment policies are likely to be more effective the more similar to consultation the setting in which they are formulated is.</td>
<td>+++ in the Netherlands</td>
</tr>
<tr>
<td>- articulation → concertation</td>
<td></td>
<td>++ in Germany</td>
</tr>
<tr>
<td>-</td>
<td></td>
<td>+ in Italy</td>
</tr>
<tr>
<td>Retrenchment implementation:</td>
<td>HP 3.3:</td>
<td>Retrenchment policies reduce entry into in disability and unemployment pathways</td>
</tr>
<tr>
<td>+ articulation → regulation</td>
<td>Retrenchment policies are likely to be more effective the more similar to self-regulation or to self-administration the setting in which they are implemented is.</td>
<td>++ in the Netherlands and Germany</td>
</tr>
<tr>
<td>- articulation → administration</td>
<td></td>
<td>+ in Italy</td>
</tr>
<tr>
<td>Retrenchment regulation:</td>
<td>HP 3.4:</td>
<td>Retrenchment policies reduce entry into in early retirement pathway</td>
</tr>
<tr>
<td>+ articulation → vertical coordination</td>
<td>Retrenchment policies are likely to be more effective the more their implementation in self-regulation mode is vertically coordinated.</td>
<td>++ in the Netherlands</td>
</tr>
<tr>
<td>- articulation → - vertical coordination</td>
<td></td>
<td>+ in Germany</td>
</tr>
<tr>
<td><strong>RETAINING POLICIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social partners convey retaining policies:</td>
<td>HP 3.5:</td>
<td>Retaining policies delay employment exit</td>
</tr>
<tr>
<td>+ retrenchment → retaining conveyance</td>
<td>Retaining policies are likely to be more effective the more retrenchment policies internalized the costs of pathways of exit.</td>
<td>++ in the Netherlands and Germany</td>
</tr>
<tr>
<td>-retrenchment → - retaining conveyance</td>
<td></td>
<td>+ in Italy</td>
</tr>
<tr>
<td>Retainment regulation:</td>
<td>HP 3.6:</td>
<td>Retaining policies delay employment exit</td>
</tr>
<tr>
<td>+ articulation → collective bargaining</td>
<td>Retaining policies are likely to be more effective the higher is the vertical coordination of the system of collective bargaining.</td>
<td>++ in the Netherlands</td>
</tr>
<tr>
<td>- articulation → voluntary</td>
<td></td>
<td>+ in Germany</td>
</tr>
<tr>
<td><strong>EFFECTIVENESS STRATIFICATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retrenchment policies:</td>
<td>HP 3.7:</td>
<td>Effectiveness of retrenchment policies : ---least stratified in the Netherlands,</td>
</tr>
<tr>
<td>+ articulation → fair redistribution costs</td>
<td>The more retrenchment policies are hindered, the more their effectiveness is expected to be lower for core members and and higher for non-members of the externalization coalitions.</td>
<td>- more stratified in Germany and - the most stratified in Italy.</td>
</tr>
<tr>
<td>- articulation → costs concentrated on non-members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social partners convey retaining policies:</td>
<td>HP 3.8:</td>
<td>In the Netherlands retaining policies delay retirement in all industries</td>
</tr>
<tr>
<td>+ articulation → mutual conveyance</td>
<td>The effectiveness of retaining policies is likely to be not stratified if it is mutually conveyed</td>
<td></td>
</tr>
</tbody>
</table>
| Social partners convey retaining policies: | HP 3.9: | In Italy retaining policies:
| + articulation → voluntaristic conveyance | If implemented on a voluntaristic bases, retaining policies: |
| a: do not delay retirement in any industries | a: are likely to be poorly effective across the economy. | |
| b: delay retirement only in growing and protected industries. | b: are likely to be more effective in industries |
**3 Theory and hypotheses**

<table>
<thead>
<tr>
<th>Social partners convey retaining policies:</th>
<th>HP 3.10: If unilaterally conveyed, retaining policies are likely to be:</th>
<th>In Germany retaining policies:</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ articulation → unilateral conveyance</td>
<td>a: poorly effective across the economy</td>
<td>a: do not delay retirement in any industry</td>
</tr>
<tr>
<td></td>
<td>b: more effective in industries enduring skills' shortage that older workers are fit to replace, than in the rest of the economy.</td>
<td>b: delay retirement only in growing and protected industries.</td>
</tr>
<tr>
<td></td>
<td>c: effective across the economy</td>
<td>e: delay retirement in all industries</td>
</tr>
</tbody>
</table>
4 Research design and methodology

4.1 Introduction

This chapter describes the methodology used to test the main hypothesis that the coordination of the interests' representation significantly increases the effectiveness of activation policies. As explained in the analytical framework, this research focuses on three countries characterised by a conservative welfare logic, a coordinated market economy, but a decreasing coordination of the partnership system. Because of that, I expect the effectiveness of activation policies to be the highest in the Netherlands, lower in Germany, and the lowest in Italy.

In these three countries the EWL re-conversion is first promoted by the government that tries to retrench the financial attractiveness of the pathways of exit provided by the social protection system. These policies are opposed by social partners to preserve the benefits that pathways of exit provide to their membership (older workers and employers) (Schludi 2005c). Their success depends on the extent to which the interaction mode with the government allow them to hinder the formulation and the implementation of retrenchment policies. Since more cooperative social partners are included in interaction modes that make less likely for social partners to hinder retrenchment policies, I expect these latter to be the most effective in the Netherlands, less effective in Germany, and the least effective in Italy.

Employers are not only a part of the social partners' membership, but they represent a separate actor in the constellation that regulates the institutional incentives of retirement behaviour. Employers are responsible of the ultimate definition of the so-called push incentives, as part of their human resources' management (HRM). Employers are interested in fostering early retirement trends as a way to opportunistically shed the personnel's redundancies that limit the competitiveness of their companies. Their opportunistic behaviour can be constrained to retain older workers only if two conditions are met. The first is that social partners, as a result of the interaction with the government, adopt the EWL target. The second is that the interaction mode between social partners and employers allow the first to convey retaining policies into the latter throughout the collective bargaining structure. Since social partners with more coordinated organizations are more likely to systematically convey retaining policies, I expect these latter to be the most effective in the Netherlands, less effective in Germany, and the least effective in Italy.

Since social partners affect separately the effectiveness of retrenchment and retaining policies, this investigation is organized in two empirical part. For both of them the data is drawn by Sharelife, the third wave of the Survey on Health and Retirement in Europe (SHARE). Sharelife provides comparable retrospective information over the work-retirement trajectories of older workers cohorts that are exposed to the activation policies and earlier cohorts that are exposed to strong pull and push incentives.

The first empirical part the analysis consists of a cohort analysis, where the cohorts of older workers are compared that enter their late career before and after the mid-1990's, when the implementation of activation policies begins in the social protection system. This cohort analysis is not aimed at evaluating the outcome of the activation policies. Conversely by comparing the work-retirement patterns of the two cohorts, it is inferred which institutional attempts the protection, the
production and the partnership systems have made to foster the extension of working life.

The effectiveness of retrenchment and retaining policies are investigated separately, using different operationalization of work-retirement trajectories. In the investigation of the effectiveness of retrenchment policies work-retirement trajectories is operationalised as the institutional arrangements (pathways of exit) used by the respondents to pass from employment until the statutory retirement at the age of 65. Retrenchment policies are operationalised as a cohort effect.

In the second part of the research design work retirement trajectories are operationalized as the age of exit from employment. The different dimensions of retaining policies finally are operationalized as the aspects of the job quality that they improve. The subjective measurement of different aspects of the working conditions in the last job are reduced, using Iterative Factor Analysis into three factors that represent to what extent the dimensions of physical health reconciliation, mental health reconciliation, and age equality are promoted by HRM policies. Other two variables are used to represent the extent HRM policies foster the dimensions of time reconciliation and employability. In order to approach as much as possible the unit of analysis of retaining policies the job quality aspects are interacted with the industry where respondents work.

The methods used to estimate the effectiveness of activation policies is Event History Analysis for two main reasons. First EHA is the appropriate methods to investigate durations before an event, and thus the extension of the career before the exit due to retirement. Secondly, EHA can successfully deals with the right-censored observations that in the sample are individuals that are still in employment. The effectiveness of retrenchment policies will be investigated using Competing-Risk model. The effectiveness of retaining policies will be estimated using a Piecewise-constant exponential model.

This chapter is organized as follows. First Sharelife and the samples' characteristics are described in Section 4.2. The operationalisation of the main variables and the controls is discussed in Section 4.3. Section 4.4 is devoted to the description of the methods. At the end the main limitations of this research design is discussed in Section 4.5.

4.2 Data

The data used to test the hypotheses are drawn from the third wave of the Survey on Health, Ageing and Retirement in Europe (SHARE) conducted between 2008 and 2009. In short, the SHARE survey is a multidisciplinary and cross-national panel database of micro data on health, socio-economic status and social and family networks of more than 85,000 individuals (approximately 150,000 interviews) from 20 European countries and Israel aged 50 or over between 2004 and 2008-9.

SHARE survey represents the best available source of the secondary data analysis because it is focused on how the elderly experience ageing in different life domains, among which work and retirement in Europe. Because of that, SHARE allows a valid operationalization of the key concepts of the analytical framework. Moreover it provides me a sample that is larger with respect to surveys addressed to the overall population. Finally it grants me comparable information for the Netherlands, Germany, and Italy.

In more detail, this investigation is based on the third wave of SHARE (Sharelife) which offers a
4.2 Data

A retrospective overview over the lifecycle of the respondents. These retrospective information concern a broad range of domains, such as partnership, parenthood, health, employment and work quality. Especially these last two modules are of interest, because they provide information about the economic positions of the respondents between the age of 50 and 65 years. The items of the remaining domains are considered for the operationalization of the controls.

Sharelife questionnaire is based on Life History Calendars (LHC), a grid that graphically represents the life course in different domains as separate horizontal lines. Respondents are then asked to indicate the events of their life course in each domain as the timing in which they experience transitions between two different statuses. For example, the retrospective employment history is represented as a series of qualitative transitions. It starts with the entry in labour market after education, continues with transitions between different jobs spells and job interruptions (such as unemployment, maternity leave, training leave etc.), and ends with the a last transition out of the labour market. Since then a new set of transitions are recorded between different inactive statuses (unemployment, disability, retirement, household care etc.). For each step of the respondents' working career information are gathered over: the industry, the position of the job along the occupational structure, the employment relationship (self-employed, employee in the public sector, and employee in the private sector) and the working time etc. The same procedure is used in all the other life domains, except from work quality. Work quality is measured only in the last job if the respondents already left employment at the time of the interview or in the current job if the respondents were still working. The interviews took place between 2008 and 2009. Because of recalling issues retrospective information are not be measured in greater detail than at the yearly level.

The main advantages of choosing Sharelife among the SHARE waves are three. First it provides information about the work-retirement trajectories of a wide range of birth cohorts from the late-1910's and the late 1950's. This allows for a fairly balanced comparison between the group of older workers exposed to activation policies and the group that did not experience them. The first group includes the cohorts that in the mid-1990's did not enter their late career. The second group includes the cohorts that in the same periods are already in their late career and thus are already exposed to early retirement incentives.

Secondly, the retrospective information of Sharelife allow a longitudinal analysis of how the events in the late career affect work-retirement transitions. This allows to control the extent to which differences between the two cohorts of older workers are due to compositional effects. Thirdly, since the period of observation stops in 2009, the analysis can disentangle the effect of activation policies from the turmoil caused by the recent financial crisis.

The national samples include individuals aged 50 years or older between 2008-2009, who report to stop working between the age of 49 and 65 years. Respondents that leave employment outsides those thresholds are considered outliers and thus excluded from the analysis. Tables 4.1 provides a descriptive overview of the distribution of the variables included in the analysis in the general sample for the Netherlands, Germany, and Italy. A more specific overview of the distribution of the variables is shown in the country-chapters. The data are organized at person-spell level.

The full sample is used only to investigate the effectiveness of retrenchment policies. The case number is 2617 for The Netherlands, 2695 for Germany, and 2292 for Italy and correspond
respectively to 1227, 1401, 1283 respondents. The total number of transitions out of employment are
766 for the Netherlands and 833 for Germany, and 853 for Italy.

The effectiveness of retaining policies is estimated on the sub-sample of respondents born after
1944. This is to disentangle the effect of retaining policies from the effect of retrenchment policies.
The case number is 1505 for The Netherlands, 1149 for Germany, and 1008 for Italy and correspond to
692, 615 and 559 individuals. The total number of employment exit is 215 for the Netherlands, 151 for
Germany, and 282 for Italy.

Despite the strength of these samples, three main weak points can be detected. First the distribution
of the pathways of exit variable is quite unbalanced. The majority of the cases are divided between
still working or in the pension pathway, while the frequency of unemployment and disability is rather
marginal. This may reduce the power of the test and underestimate the real effectiveness of
retrenchment policies. The distribution is also unbalanced in the industry variable. As shown in Table
4.1 the sectors of: financial intermediation and real estate, renting and business activity are
significantly underrepresented. This can strongly affect the estimations in these sectors, especially if
retrenchment and retaining policies are interacted by industry.

Secondly, a relevant number of cases in the sample are in the other pathway. As it is explained later
in more detail, it is an exit route that is not directly associated to any institutional arrangements but
supported by personal savings or by the household's income. Such an high frequency however may be
a hint of a measurement error, which may consistently biases the estimation (see 4.3.1 for more details
details).

Thirdly, the birth cohorts of the full sample start from 1910. This means that a small part of the
respondents in the cohort <1944 group is an outlier. Since an extremely long survival is often
associated to other extreme behaviour, among which exceptionally long careers, these outliers may
bias the analysis and underestimate the effectiveness of retrenchment policies.
Table 4.1: Sample's descriptive for The Netherlands, Germany, and Italy.

<table>
<thead>
<tr>
<th>Variable</th>
<th>The Netherlands</th>
<th>Germany</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-samples</td>
<td>2617</td>
<td>2695</td>
<td>2292</td>
</tr>
<tr>
<td>N-subjects</td>
<td>1227</td>
<td>1214</td>
<td>3283</td>
</tr>
<tr>
<td>N-transitions</td>
<td>766</td>
<td>833</td>
<td>883</td>
</tr>
<tr>
<td><strong>Pathways of exit</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Still working</td>
<td>70.73</td>
<td>0.41</td>
<td>38.86</td>
</tr>
<tr>
<td>Unemployment</td>
<td>1.8</td>
<td>0.13</td>
<td>1.44</td>
</tr>
<tr>
<td>Disability</td>
<td>4.39</td>
<td>0.05</td>
<td>1.32</td>
</tr>
<tr>
<td>Pension</td>
<td>18.11</td>
<td>0.35</td>
<td>30.37</td>
</tr>
<tr>
<td>Other</td>
<td>4.97</td>
<td>0.06</td>
<td>8.46</td>
</tr>
<tr>
<td><strong>Age of exit</strong></td>
<td>M: 38.68</td>
<td>M: 38.59</td>
<td>M: 35.67</td>
</tr>
<tr>
<td></td>
<td>SD: 1.44</td>
<td>SD: 1.49</td>
<td>SD: 1.53</td>
</tr>
<tr>
<td><strong>Time varying</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort &gt; 1944</td>
<td>56.4</td>
<td>43.90</td>
<td>43.57</td>
</tr>
<tr>
<td><strong>Job quality in the last/current job (range 0-3)</strong></td>
<td>Missing N=83.67%</td>
<td>Missing N=83.5%</td>
<td>Missing N=81.6%</td>
</tr>
<tr>
<td>Would you say (on) your last/current job...?</td>
<td>Missing N=64-2%</td>
<td>Missing N=186-7%</td>
<td>Missing N=64-2%</td>
</tr>
<tr>
<td>was/it physically demanding</td>
<td>1.63</td>
<td>1.47</td>
<td>0.99</td>
</tr>
<tr>
<td>was/was uncomfortable</td>
<td>2.20</td>
<td>2.11</td>
<td>1.56</td>
</tr>
<tr>
<td>you had/you had heavy time pressure</td>
<td>1.72</td>
<td>1.30</td>
<td>1.26</td>
</tr>
<tr>
<td>more/more stress</td>
<td>1.86</td>
<td>1.38</td>
<td>1.41</td>
</tr>
<tr>
<td>you had/you had a little freedom to decide</td>
<td>2.06</td>
<td>1.97</td>
<td>1.72</td>
</tr>
<tr>
<td>your skills were/are developed</td>
<td>2.01</td>
<td>2.04</td>
<td>1.66</td>
</tr>
<tr>
<td>you had/had recognition</td>
<td>2.00</td>
<td>2.05</td>
<td>1.77</td>
</tr>
<tr>
<td>you had/had adequate support by your boss or colleagues</td>
<td>1.92</td>
<td>1.86</td>
<td>1.63</td>
</tr>
<tr>
<td>you had/had a good work atmosphere</td>
<td>2.24</td>
<td>2.37</td>
<td>2.12</td>
</tr>
<tr>
<td>employees were treated fairly</td>
<td>1.98</td>
<td>2.18</td>
<td>2.48</td>
</tr>
<tr>
<td><strong>Time varying</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time (Dummy- Ref: full-time)</td>
<td>31.89</td>
<td>18.63</td>
<td>21.03</td>
</tr>
<tr>
<td><strong>Socio-demographics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (Ref: men)</td>
<td>30.65</td>
<td>45.54</td>
<td>63.97</td>
</tr>
<tr>
<td><strong>Time varying</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illust (Ref: not ill)</td>
<td>6.65</td>
<td>45.45</td>
<td>63.97</td>
</tr>
<tr>
<td>Stress (Ref: not stress)</td>
<td>17.71</td>
<td>18.46</td>
<td>15.19</td>
</tr>
<tr>
<td>Poor health (Ref: good health)</td>
<td>11.36</td>
<td>13.64</td>
<td>8.68</td>
</tr>
<tr>
<td><strong>Family situation: Time varying</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not cohabiting</td>
<td>17.27</td>
<td>17.74</td>
<td>14.79</td>
</tr>
<tr>
<td>Cohabiting and partner never worked</td>
<td>1.22</td>
<td>0.85</td>
<td>12.87</td>
</tr>
<tr>
<td>Cohabiting and partner working</td>
<td>39.36</td>
<td>43.49</td>
<td>32.33</td>
</tr>
<tr>
<td>Cohabiting and partner stopped working</td>
<td>23.88</td>
<td>20.37</td>
<td>26.96</td>
</tr>
<tr>
<td>missing info over the partner</td>
<td>18.27</td>
<td>17.55</td>
<td>14.01</td>
</tr>
<tr>
<td><strong>Social class: Time varying</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher salariat</td>
<td>33.45</td>
<td>12.88</td>
<td>9.3</td>
</tr>
<tr>
<td>Lower salariat</td>
<td>9.03</td>
<td>11.67</td>
<td>9.39</td>
</tr>
<tr>
<td>Intermediate occupation</td>
<td>10.45</td>
<td>20.38</td>
<td>16.49</td>
</tr>
<tr>
<td>Petit bourgeoisie or independents (=agriculture)</td>
<td>5.34</td>
<td>6.41</td>
<td>19.23</td>
</tr>
<tr>
<td>Lower grade service and manual workers</td>
<td>32.04</td>
<td>38.19</td>
<td>13.93</td>
</tr>
<tr>
<td>Semi- and non-skilled workers</td>
<td>9.72</td>
<td>10.67</td>
<td>31.67</td>
</tr>
<tr>
<td><strong>Industry: Time varying</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture forestry and fishing</td>
<td>3.46</td>
<td>3.28</td>
<td>12.04</td>
</tr>
<tr>
<td>Manufacturing mining &amp; quarrying</td>
<td>12.93</td>
<td>22.53</td>
<td>17.25</td>
</tr>
<tr>
<td>Construction</td>
<td>6.08</td>
<td>6.71</td>
<td>9.21</td>
</tr>
<tr>
<td>Wholesale and retail trade, transportation and storage hotel, restaurant and catering</td>
<td>20.75</td>
<td>19.06</td>
<td>19.18</td>
</tr>
<tr>
<td>Financial intermediation</td>
<td>4.19</td>
<td>2.96</td>
<td>1.3</td>
</tr>
<tr>
<td>Real estate, renting and business activity</td>
<td>1.37</td>
<td>1.44</td>
<td>4.0</td>
</tr>
<tr>
<td>Public administration and defense, education, health and social work</td>
<td>43.88</td>
<td>12.43</td>
<td>24.03</td>
</tr>
<tr>
<td>Other community</td>
<td>7.33</td>
<td>13.85</td>
<td>16.8</td>
</tr>
</tbody>
</table>

Source: Shardullo, 2010
4.3 Operationalization

The discussion over the variables' operationalization starts with the dependent variable. Work retirement trajectories has two operationalizations because it is affected by activation policies in two dimensions. Retaining policies affect the timing of exit from employment, while retrenchment policies affect the institutional arrangements chosen to exit from employment.

Retrenchment policies are operationalized as a cohort effect, since they reduce the attractiveness of pathways of exit only for cohorts that in the mid-1990's reached a limited seniority (both biological and occupational) (Han and Moen 1999). Retaining policies instead are operationalized as the extent to which the job quality of older workers is improved by HRM policies. In order to approach the measurement unit of retaining policies, the job quality is interacted with the industry in which the individual is working. The operationalization of the controls concludes this section.

4.3.1 Dependent variable: work-retirement trajectory

Work-retirement trajectory can be operationalised both in qualitative and quantitative terms. From a qualitative perspective work-retirement trajectory can be operationalised as the institutional arrangements that is used to “bridge” the exit from employment and the entry into retirement (Fasang 2010), according to the definition of pathway of exit. From a quantitative perspective it can be operationalised as the timing of exit from employment (Lanee and Radl 2012; Radl 2013; Radl 2010). As it will be explained below, these two operationalisations will be used to estimate the effectiveness of retrenchment and retaining policies.

Retrenchment policies enhance a change both in the timing of exit and in the choice of the pathways used to carry out the trajectory between work to statutory retirement. Because of that in the first part of this investigation work-retirement trajectory is operationalized with two variables. One variables is a discrete variable and is a subjective measure of the age when career transition occur. The other gives subjective measurement about the qualitative ending point of the transition. It is a categorical variable equal to: 0 if the respondent remains into employment, 1 if the respondent enters into an unemployment pathway, 2 if the respondent enter a disability pathway, 3 if the respondent enter a retirement pathway, and 4 if the respondent enters an other pathway. This latter includes all cases where the employment exit is not directly associated to the inflow into a pathway financed by the social protection system. Respondents are included in this pathway if they claim they left their job to take care of their household or to enjoy more leisure or to take care of their assets etc. Such a different range of answers raises the suspicion that this variable may have some validity problem. It is not clear whether the variable measures the institutional arrangement (and thus the source of income) that respondents used to exit employment or their personal motivation for exiting employment. This validity problem can affect the operationalization, since respondents may be in the “other pathway” because of a measurement error.

The combination between timing and the pathway chosen to exit employment enables me to investigate whether behavioural trends are coherent with the policies implemented or whether these
4.3.1 Dependent variable: work-retirement trajectory

latter are affected by unintended effects. These effects occur for instance if the retrenchment of one pathway of exit does not correspond to a lower inflow of older workers in that pathway or is associated to an increased entry into an alternative one's. This unintended effects may be a hint that social partners and employers compensate retrenchment policies with private benefits.

Retaining policies improve the working conditions to encourage an extension of the late career and thus delay the exit from employment. Because of that in the second part of this investigation, work-retirement trajectories are operationalized with two variables measuring the timing of employment outflow. The first is a discrete variable and measures the age associated to a change in the career of the respondent. The second is a dichotomous variable equal to 0 if the respondent remains in employment and 1 if the respondent leaves employment into one of the previously described pathway.

4.3.2 Main predictors: activation policies

The range of activation policies is extensive and include a wide varieties of measures both public and private. However they have two main levels of observation.

Ideally retrenchment policies change is common to all individuals that are still in employment after their implementation. Because of that it is reasonable to assume that all individuals that are not eligible for a pathways of exit at the moment of the implementation of retrenchment policies (mid-1990's) are affected by them. Thus retrenchment policies are operationalized as a cohort effect.

The unity of observation of retaining policies is more decentralized. In fact working conditions, although centrally regulated by the law and CLAs, are mainly strategically defined by HRM policies. This strategical regulation is aimed at encouraging some behavioural outcomes in the workforce. In the case of retaining policies, the aim is to encourage the older employees to delay their outflow from the company. The critical aspect that affects their effectiveness is however the way in which they are subjectively experienced by the employees. Their will of delaying their exit depends on the extent to which they perceive their job quality increased by retaining policies. Because of that retaining policies are operationalized as the quality of some key aspects of the working conditions that is perceived by respondents in their last of current job.

4.3.3 Retrenchment policies

Birth cohort is often used to operationalize complex institutional, economic, and cultural changes, especially when the change is complex and does not have a precise temporal collocation (Blossfeld, Buchholz, and Hofäcker 2006; Blossfeld, Buchholz, and Kutz 2011; Han and Moen 1999). Retrenchment policies include a series of measures implemented in different social protection schemes along few years. Because of this complexity, this research is not aimed at evaluating the causal effect of retrenchment policies on retirement behaviour, because it is not possible to set the necessary rigorous quasi-experimental research design (Khandker, B. Koolwal, and Samad 2009). The behavioural effect of the retrenchment of pathways of exit is part of the assumptions and will not be tested.
The goal is to infer from the typical patterns of these two different cohorts the effectiveness of the Government's attempts to lower the financial attractiveness of the pathways of exit. In other words, the extent to which social partners hindered the retrenchment policies by affecting their formulation and implementation is investigated.

The use of birth cohorts assumes that retrenchment policies affect only individuals that in the mid-1990's are younger than a certain threshold (Han and Moen 1999). In pathways where the benefit depends on the contribution history, such as the pension and unemployment pathways, the use of birth cohorts can lead to validity problems. In fact among the young cohort, individuals may ripe the necessary contribution history and enter the pension pathway before the mid-1990's. By the same token, among the older cohorts, individuals may be actually exposed to retrenchment policies if they are still working after their implementation. These validity problems are strongly reduced by the transitional rules that are often set for the implementation of retrenchment policies. These rules preserve the short-term plans that older workers and their employers made on the bases of the previous incentives (or “acquired rights”) and normally exclude the whole older cohort from the exposition to retrenchment policies.

Stronger validity problems arises because retrenchment policies follow a different temporal pattern in each pathway of exit. These different patterns make difficult to exactly separate the exposed from the non-exposed group.

Despite these validity problems, the birth cohort remains the best available instrument to operationalize retrenchment policies. The cohort effect is measured in all the three countries as a dichotomous variable equal to 1 if the respondents are born in 1945 or after and 0 if they are born earlier. According to this definition the individuals that in 1995 are aged 50 years or younger are considered exposed to retrenchment policies. This operationalisation improves the validity of the measurement if retrenchment policies set a transitional implementation or take place from the end of the 1990's onwards. It provides however less valid measurements if retrenchment policies have an immediate effect, especially if they are implemented in the years immediately following 1995. The choice of this operationalization also takes into account the timing with which the main retrenchment policies are enacted in Germany, Italy, and the Netherlands.

In summary, retrenchment policies are measured as a cohort effect. Although this operationalization has some validity issues, it fits the best with the empirical cases.

### 4.3.4 Retaining policies

In literature three main approaches can be found to measure the extent to which retaining policies is part of the HRM goals. Firstly, surveys that are directly conducted on employers and HMR managers to investigate their attitudes towards older workers (Conen 2013). Secondly, company surveys that analyse the characteristics and the dissemination of HRM policies targeted at older workers (Bredgaard and Tros 2006; Tros 2005; Van Dalen, Henkens, and Schippers 2009). Thirdly, micro survey that indirectly measured HRM policies targeted at older workers by looking at the extent to which they affect the self-perceived job quality of older workers (Ilmarinen 2005).

The operationalization of retaining policies is based on this last approach. Measuring policies
4.3.4 Retaining policies

indirectly with their outcomes, presents some critical aspects because job quality presents other potential sources of heterogeneity. Job quality depends on observed structural aspects of the work organization which can be controlled for including the occupational scale into the model. More critical is the fact that job quality, being a subjective rating, is also endogenous, since it is both dependent on unobserved heterogeneity (such as individual preferences especially in connection with health conditions) and affected by measurement errors. Those errors arise first because the information are retrospective and a time-constant within the age-range even if the individual changed job.

In spite of its limitations, this operationalisation represents at the moment of writing one of the few way if not the only way of compare the effect HRM policies on retirement patterns in Germany, Italy and the Netherlands with a secondary data analysis. Databases combining information about HRM policies addressed to seniors with employees' careers are available only for Germany and only for a limited time span.

Moreover, despite the errors, a unique measurement in the last job is likely to recollect the most recent. This means that information are provided about the working conditions that respondents experience just before their employment exit or before the interview while still working. In this sense effects, whenever significant, refer to working conditions that encourage either the decision to retire or keep on working.

The subjective rating of employees, despite discretional, has to main advantages. First by drawing information to employees and not to HRM managers, it is less sensitive to socially desirable answers that can overestimate the extent to which older workers are retained. Second by looking at how HRM policies affect the job quality, they give a closer insight on the extent to which their implementation actually improve the working conditions of the older employees (Siegrist et al. 2007). For instance HRM policies may require to lower the workload after a certain age but their effectiveness depends on how substantial this reduction is, their coverage etc. This information can be drawn only by directly measuring the job quality of the respondents.

One may argue that this measurement excludes a relevant set working conditions, namely the monetary ones (De Preter, Van Looy, and Mortelmans 2013). This is a limitation of the analysis, since Sharelife does not provide information about the private benefits that employers offer to encourage their older employees' dismissal. Nevertheless if private benefits are still systematically used to foster early dismissals, then they should undermine the positive correlation between job quality and the exit timing. This was observed for instance in the case of partial retirement. Partial retirement is a measure that encourage older workers to EWL because it leaves them more time for their private life with minor or no cuts of their actual and future income. Its behavioural effect depends nevertheless on the extent to which partial retirement is profitable for employers. If it provides no savings for employers, then private benefits will be used to counteract the effect of partial retirement and the data will show that this latter has no effect or even negative effect on the exit age. All in all, if employers do not aim at retaining older workers, at the net of other effects, job quality will not show any positive effect on retirement timing, since its effect is watered down by other private benefits.

Retaining policies is operationalized as the level of job quality perceived by respondents in the set of working conditions that, according to their definition (see section 3.2), EWL. The job quality of these work dimensions is measured as follows.
Time Reconciliation policies are operationalized as a time-varying dichotomous variable equal to 1 if respondents worked part-time at least for a period during each job-spell after the age of 49 years and 0 otherwise. It measures the extent to which HRM policies give respondents the opportunity to reduce their working schedule.

Health reconciliation, age equality, and employability policies are operationalized from 11 items containing a statement about the job quality respondents experienced in their late career. The late career is defined as the current job if they are working at the time of the interview, or the last job if they exited employment earlier. Respondents rate their subjective agreement to these statements using a Likert scale (1- strongly agree, 2- agree; 3- disagree; 4- strongly disagree). Since the statements depict both situations of high and poor job quality, the items' scale are recoded to solve those inconsistencies. The statements always depict a situation of poor job quality. The strong agreement to the statements represents the worst job quality and is set to 0, while an agreement (1), a disagreements (2) and a strong disagreement (3) represent growing improvement of the job quality (see table 4.2).

Employability policies are operationalized as an time-constant ordinal variable, which measure the level of agreement of the respondents to the following statement (item H table 4.2): “Would you say that in your last/current job you had/have no opportunity to develop your skills?” In other words it measure the extent to which HRM policies update and reconvert their skills of the respondents.

Table 4.2: List of the 11 items measuring the work quality of older workers in their last/current job

<table>
<thead>
<tr>
<th>Items: Would you say (in) your last/current job... (range 0-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-... was/is physically demanding?</td>
</tr>
<tr>
<td>B-... was/is uncomfortable?</td>
</tr>
<tr>
<td>C-... you had/have heavy time pressure?</td>
</tr>
<tr>
<td>D-... involve/involved high conflict?</td>
</tr>
<tr>
<td>E-... was/is emotionally demanding?</td>
</tr>
<tr>
<td>F-... you had/has a little freedom to decide?</td>
</tr>
<tr>
<td>G-... did not/ does not give recognition?</td>
</tr>
<tr>
<td>H-... I had/have inadequate support?</td>
</tr>
<tr>
<td>I-... there was/is bad work atmosphere?</td>
</tr>
<tr>
<td>J-... employees were/are treated unfairly?</td>
</tr>
<tr>
<td>H-... you had/have no opportunity to develop your skills?</td>
</tr>
</tbody>
</table>

source: Sharelife, 2008-2009

The remaining 10 items are reduced into three factors using Factor Analysis (FA). FA reduces into one factor all the items that measure the same underlying construct by means of the linear relationships between the items. The correlation between each pair of the items (represented in the correlation matrix) is used to constructs fewer factors representing the work dimensions improved by health reconciliation and age equality policies.

Since the process of data reduction is theoretically guided, the correlation matrix is analysed using Iterative Principal Factor (IPF). IPF is run on a combined full sample for the Netherlands, Germany, and Italy. Factors are identified graphically using a scree plot, which represents the amount of items' variance explained by each factors (eigenvalues). IPF is re-run limiting the factors at 3 and the factor loadings, which represent the correlation between the items and the work dimensions, are rotated for a
better interpretation of the factors. The rotation is carried out using an orthogonal oblimax method.\footnote{It is admitted that the underlying assumption of the oblimax method - the stochastic independence between the factors - is rather unrealistic, especially between physical and mental reconciliation. Because of that first oblique rotation was opted for. However, this method proved to not give meaningful results since the correlation between the factors was too high (above 0.99). This is the reason why an orthogonal method was applied. The rotation enhances a clearer association between items and factors due to the oblimax method, which maximizes the number of high and low loadings.}

From the rotated loadings predictions are calculated and linearly combined to operationalize health reconciliation and age equality policies. The scale of these variables is discrete, according to the Likert scale of the items explained above. They range from 0 to 3, with 0 representing the lowest job quality and 3 the highest.

Health reconciliation policies are operationalized with two variables. The first is highly related to items A-B in table 4.2. They the extent to which HRM policies reduce the physical workload of the respondents and is defined as physical health reconciliation. The second variable is strongly related to items C-F in table 4.2. They measure the extent to which HRM policies reduce emotional burden and high level of stress due to deadlines and conflicts. It is defined as mental health reconciliation.

Finally the variable operationalizing age equality is mainly associated with items G-J in table 4.2. They measure the extent to which HRM policies enhance the quality of the social interactions that respondents experience at work. The social interactions range from the informal atmosphere and support to more formal behaviours, such as work recognition, or conversely, age discrimination on work practices.

Since the job quality dimensions improved by retaining policies are measured as a linear combination of the predictions calculated for all items, the issue of multicollinearity may a concern. This is the case if a significant number of items were highly correlated to more than one construct. Predictions showed that only two 2 item: D and F were not predominantly correlated to only one of the three constructs. Moreover the correlation between the three factors proved to be under the threshold of problematic collinearity both for the overall and the country samples.

The main descriptive information of the variables operationalizing retaining policies are provided in table 4.3. Since the effectiveness of retaining policies is estimated the birth cohort born after 1944, the descriptive are shown only for this subsample by country.
Research design and methodology

Table 4.3: Descriptives of variables operationalizing retaining policies for the Netherlands, Germany and Italy. Subsample: cohort> 1944.

<table>
<thead>
<tr>
<th>Variables</th>
<th>The Netherlands</th>
<th>Germany</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohort 1944</td>
<td>1505</td>
<td>1169</td>
<td>1008</td>
</tr>
<tr>
<td>N-spells</td>
<td>692</td>
<td>615</td>
<td>559</td>
</tr>
<tr>
<td>N-subjects</td>
<td>215</td>
<td>151</td>
<td>282</td>
</tr>
<tr>
<td>Time reconciliation</td>
<td>% N</td>
<td>% N</td>
<td>% N</td>
</tr>
<tr>
<td>Range (0-3)</td>
<td>M SD</td>
<td>M SD</td>
<td>M SD</td>
</tr>
<tr>
<td>Employability</td>
<td>2.02 0.99</td>
<td>1.98 0.82</td>
<td>1.7 0.91</td>
</tr>
<tr>
<td>Physical health reconciliation</td>
<td>1.94 0.74</td>
<td>1.83 0.91</td>
<td>1.69 1.07</td>
</tr>
<tr>
<td>Mental health reconciliation</td>
<td>1.79 0.82</td>
<td>1.41 1.04</td>
<td>1.63 1.03</td>
</tr>
<tr>
<td>Age Equality</td>
<td>Range (1.3)</td>
<td>2.27 0.58</td>
<td>2.35 0.65</td>
</tr>
<tr>
<td>Industry: time varying</td>
<td>% N</td>
<td>% N</td>
<td>% N</td>
</tr>
<tr>
<td>Agriculture forestry and fishing</td>
<td>3.03 43</td>
<td>2.5 25</td>
<td>6.22 61</td>
</tr>
<tr>
<td>Manufacturing mining &amp; quarrying</td>
<td>10.77 153</td>
<td>18.46 192</td>
<td>16 157</td>
</tr>
<tr>
<td>Construction</td>
<td>5.63 80</td>
<td>6.25 65</td>
<td>7.34 72</td>
</tr>
<tr>
<td>Wholesale and retail trade, transportation and storage hotel, restaurant and catering</td>
<td>19.51 277</td>
<td>17.02 177</td>
<td>18.94 177</td>
</tr>
<tr>
<td>Financial intermediation</td>
<td>4.51 64</td>
<td>2.5 26</td>
<td>1.33 13</td>
</tr>
<tr>
<td>Real estate, renting and business activity</td>
<td>1.55 22</td>
<td>10.29 107</td>
<td>0.2 2</td>
</tr>
<tr>
<td>Public administration and defense, education, health and social work</td>
<td>47.61 676</td>
<td>10.24 107</td>
<td>33.33 327</td>
</tr>
<tr>
<td>Other community</td>
<td>7.39 105</td>
<td>17.6 183</td>
<td>17.53 172</td>
</tr>
</tbody>
</table>

In order to approach as far as possible the level of observation of retaining policies the job quality variables are interacted with the industry. The industry-level leaves a consistent amount of unexplained variance in terms of business culture, conditions of the local labour and financial market and so on. At the same time however, industry captures context forces on which the strategical HRM approach toward older workers crucially depend. By capturing forces as the business cycle, the competitive pressure, and the technological development, the interaction between job quality and industry enables to investigate whether HRM policies retain older workers on a voluntaristic or on a systematic bases. The retaining is voluntaristic if it follows an industry-pattern that is explained by the external forces. The retaining is systematic if it follows an industry-pattern that is explained by the institutional mechanisms by which social partners convey top-down EWL target.

*Industry* is measured as far as possible according to the NACE 10-class classification. Due to the limitation of the coding of industry in Sharelife, industry is operationalized as a 8-class nominal variable. The correspondence between NACE, Sharelife codification, and the operationalization is shown in Table 4.4. Industry is included in the model as a set of eight time-varying dichotomous variables.
4.3.4 Retaining policies

Table 4.4: Correspondences between the 10-class NACE, the Sharelife classification, and the operationalization.

<table>
<thead>
<tr>
<th>NACE</th>
<th>Sharelife codification- industry</th>
<th>The operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Agriculture, forestry, and fishing</td>
<td>1. Agriculture, hunting, forestry, and fishing</td>
<td>1. Agriculture, hunting, forestry, and fishing</td>
</tr>
<tr>
<td>5. Information and communication</td>
<td>Missing</td>
<td>Missing</td>
</tr>
<tr>
<td>8. Professional, scientific, technical, administration and support service activities</td>
<td>Missing</td>
<td>Missing</td>
</tr>
<tr>
<td>10. Other services</td>
<td>14. Other community</td>
<td>8. Other community</td>
</tr>
</tbody>
</table>

Source: Share, 2010; European Commission, 2008

After discussing the measurement of work-retirement trajectories and activation policies, I will conclude the operationalization of the relevant variables with the controls. Controls include micro and meso characteristics that proved to mediate and moderate institutional incentives of retirement behaviour.

4.3.5 Controls

An additional set of variables will be included in the models as controls. Their main effect takes into account the compositional effects. These effects show how the correlation between institutional incentives and retirement behaviour is either mediated or moderated by other variables (for a detailed description of the pertaining literature, see chapter 2). Their interaction with retrenchment and retaining policies provide information about the social stratification of their effectiveness. The operationalization of the controls is the following.

A first set of variables controls for the following individual socio-economic characteristics: gender and health status. Gender is a dichotomous time-constant variable equal to 1 if the respondent is a woman and 0 if a man. The health status is a multivariate concept and it is measured with three different variables in order to capture the three main dimensions of its deterioration. Illness captures the health deterioration that is due to an acute and objective event. It is a time-varying dichotomous variable equal to 1 if the respondent experience a serious illness (such as cancer, asthma etc.) in the person-period spell. Poor health is a subjective measurement of a more progressive health deterioration compatible with the ageing process. It is operationalized as a time-varying dichotomous variable equal to 1 if the respondent perceive their health conditions as poor in the person-period spell. Since responses about health status may be biased toward the physical conditions, last variable captures specifically a
subjective measurement of the psychological health deterioration. Stress is a time-varying dichotomous variable equal to 1 if the respondent experience a serious situation of high stress in the person-period spell⁵.

A second set of variables controls for meso socio-economic characteristics: the family situation and the social class. Following the evidence that spouses make joint retirement plans (Moen, Sweet, and Swisher 2005), the operationalization of family situation takes into account not only the marital status of the respondents but also the economic status of the partner (Lancee and Radl 2012) (Radl 2013). Family situation is measured as a time-varying nominal variable that equals: 1- if the respondent does not cohabit with a partner, 2- if the respondent cohabits with a partner that has never worked, 3- if the respondent cohabits with a partners that still works, 4- if the respondent cohabits with a partner that already retired, and 5- if information about the partners' respondent are missing.

Finally the analysis controls for social class. Social class captures the skills' endowment (or human capital), which affects the competitive value that individuals have for their employers. At the net of other effect, skills affect the HRM strategy toward older workers. The more scarce and firm-specific the skills are the more employers will retain them and vicerversa. Because of that social class controls for HRM policies that retain older workers only because they are is highly competitive.

Social class controls also for the individual “taste for work”, that is the individual preference for work and leisure. Often the skills' endowment and the taste for work are operationalized as the attained educational level, but it can be considered to provide a less valid measurement than social class for two reasons. Firstly, the educational level is measured at the beginning of the career and does not take into account the skills acquired thereafter thanks to the training and the work experience. Furthermore the taste of work is not only innate but is mediated by other dimensions captured by social class, such as the job description. By capturing the job description, social class controls moreover for the stratification in the income distribution and in the job quality that is imputable to occupational differences. Secondly, social class controls for social norms, which are informal rules that standardize the retirement behaviour of individuals belonging to the same socio-occupational groups.

Social class is measured as far as possible to the European Socio-Economic Classification (ESEC) (see Table 4.3). The original 10-class codification can not be implemented because the relevant information are coded in Sharelife according to the International Socio-Occupational status classification (Harrison & Rose, 2006). In the final operationalization, social class is 6-class nominal time-variant variable whose measurement is described in table 4.3. Like industry, social class is included in the models as a set of 6 dichotomous variables.

⁵ Sharelife ask respondents about their health status is repeated only between 4 and 6 times. It records therefore only the major health problems the respondents experienced during their lifecourse.
4.3.5 Controls

<table>
<thead>
<tr>
<th>ESEC</th>
<th>Sharelife codification – job description (re013)</th>
<th>The operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Large employers, higher grade professional, administrative and managerial occupations</td>
<td>1-legislator senior officials and manager 2-Professionals</td>
<td>1-Higher salariat</td>
</tr>
<tr>
<td>2-Lower grade professional, administrative and managerial occupations and higher grade technician and supervisory occupations</td>
<td>3-technicians and associated professional</td>
<td>2-Lower salariat</td>
</tr>
<tr>
<td>3-Intermediate occupations</td>
<td>4-clerks</td>
<td>3-Higher grade white-collar workers</td>
</tr>
<tr>
<td>4. Small employer and self employed occupations (exc agriculture etc)</td>
<td>Self-employed: 5-service workers and shop and market sale workers 6-skilled agricultural and fishery workers 7-craft and related trade workers</td>
<td>4-Petit bourgeoisie and self-employed in agriculture</td>
</tr>
<tr>
<td>5. Self-employed occupations (agriculture etc)</td>
<td>Private and public employees: 5-service workers and shop and market sale workers 6-skilled agricultural and fishery workers 7-craft and related trade workers 10-armed forces</td>
<td>5-Lower grade service and manual workers</td>
</tr>
<tr>
<td>6. Lower supervisory and lower technician occupations</td>
<td>8-plant machine and operators and assemblers 9-elementary occupations</td>
<td>6-Semi- and non-skilled workers</td>
</tr>
<tr>
<td>7-Lower services, sales and clerical occupations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Lower technical occupations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9- Routine occupations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Never worked and long-term unemployed</td>
<td>Excluded</td>
<td>Excluded</td>
</tr>
</tbody>
</table>

Source: Share, 2010; Harrison & Rose, 2006

The descriptives of controls are provided in table 4.1. The discussion of the methodology used to investigate the effectiveness of activation policies is concluded with the statistical methods employed. These methods are described in the following section.

4.4 Methods: Event History Analysis

The effectiveness of activation policies in Germany, Italy, and the Netherlands between the early-1990's and 2008-9 is estimated using Event History Analysis (EHA) (Blossfeld and Rohwer 2002). EHA indicates a set of statistical methods that investigates the duration before the occurrence of a certain qualitative event (Bernardi 2006).

As shown by the recent literature, it is the methodological tool that fits the best research that investigates the determinants of retirement behaviour (among others see (Radl 2010; Radl 2013; Lancee and Radl 2012; Blossfeld, Buchholz, and Hofäcker 2006; Blossfeld, Buchholz, and Kutz 2011; Siegrist et al. 2007). In the research design the event is the work-retirement trajectory and the duration is measured as the number of years respondents remain in employment between the age of 50 and 65 years. This 15 years-window is defined as the time span where respondents are at risk of enter a work-retirement trajectory.

The key concept of EHA is hazard rate \( h(t) \), that is the probability that the event \( f \) occur at a certain point in \( t \) time, conditional to the fact that it did not occur before \( S(t) \).

\[
h(t) = \frac{f(t)}{S(t)}
\]
The function that represent the distribution of the hazard rate over time is defined as hazard function, while the cumulation of the hazard rate over time is defined as cumulative hazard function. EHA allows to estimate the extent the hazard function of experiencing a work-retirement trajectory is affected by retrenchment and retaining policies. The descriptives, which compare hazard functions by cohort and by job quality, are presented in each country chapter. They are estimated using Kaplan-Meier (KM) estimators (Mills 2011).

Work-retirement trajectory is defined as non-recurring event and thus respondents drop out from the sample once they exit employment (Mills 2011). The operationalization of work-retirement trajectory as a pathway of exit and as a timing of exit entails different events that require separate modelling strategies.

A further advantage of EHA is that, unlike other methods, it includes right-censored observations in the coefficients' estimation. In this research, right-censored observations are respondents that did not exit employment before the interview took place in 2008-2009. They represent a consistent part of the sub-sample born after 1944, which is assumed to be exposed to activation policies. Other methods risk therefore to underestimate their effectiveness because they exclude individuals that did not exit employment because they extended their working life. Furthermore the inclusion of right-censored observations increases the sample size and thus the power of the estimations (Bernardi 2006).

A last advantage of EHA is that they allow the covariates to vary over time, which will further reduce the bias of the estimations (Bernardi 2006). The next section provides a more detailed description of the two models chose in the two part of the research: a competing-risk model and a piecewise-constant exponential model.

### 4.4.1 EHA (1): Competing-Risk model

In the first empirical part, the effectiveness of retrenchment policies is estimated with a competing-risk model (CRM). The choice of this model is due to the operationalization of work-retirement trajectory as a pathways of exit. Since pathways of exit are multiple and competing events, the model has to estimate the cohort effect separately on the sub-hazard function of each pathway of exit.

Between the two main available approaches, the Cumulative Incidence Curve (CIC) approach is preferred to the latent one, because it provides more accurate and unbiased estimations. This is because, unlike the latent approach, the estimations based on the CIC approach does not assume the stochastic independency of the competing events. In general this is a quite problematic assumption, because it is difficult to verify. In the case under investigation it is rather unrealistic because pathways of exit are to some extent functional alternatives. Therefore if one pathway of exit is closed, the likelihood of entering the competing ones tends to increase.

Unlike the latent approach, when calculating the hazard rate of one event, the CIC approach does not assume the competing ones to be right-censored. The CIC first estimates the hazard at ordered time.

---

6 The latent approach is based on KM estimates is performed separately for each competing event while the others are treated as right-censored, that is still waiting to experience that event. Treating competing events as right-censored implicitly assumes that competing events are stochastically independent, meaning that if we set to zero the likelihood of one event, the risk of experiencing the others will not change.
4.4.1 EHA (1): Competing-Risk model

$j$ where the subjects are at risk of experiencing a failure $c$, in this case entering a work-retirement trajectory. As shown in the equation 4.2 this is done by dividing the number of events $m$, or pathways of exit, by the number of subjects at risk in each time $t$.

$$\hat{h}_c(t_j) = \frac{m_{cj}}{n_j}$$

As shown in the equation 4.3, the cumulative hazard function of the CIC approach is obtained by cumulating the hazard rate after they are discounted by the probability of surviving until time $t-1$.

$$CIC(t_j) = \sum_{j'=1}^{j-1} \hat{S}(t_{j-1})\hat{h}_c(t_j)$$

Since the likelihood of the competing events are included in the calculation of the CIC, the sub-hazard function of each event is conditional to and not independent from the competing ones (Mills 2011). Because of that, the CIC provides a more appropriate method to study the correlation between the cohort effect on pathways of exit.

4.4.2 EHA (2): Piecewise-constant exponential model (PCE)

In the second part of the investigation the effectiveness of retaining policies is estimated using a piecewise-constant exponential model (PCE). This is the standard models used by the recent retirement literature at individual level, when the event is a single occurrence, or in other words the exit from employment (Radl 2010; Radl 2013).

Different models are available to investigate the duration of our single and non-recurring events. However they fail to model correctly the hazard function of retiring, that is the likelihood of exiting employment over time before including the covariates (Mills 2011).

Since the hazard of exiting employment is concentrated around the ages in which pull and push incentives are stronger, no realistic assumptions over the shape of the hazard rate can be made (Radl 2010; 2013) PCE model is derivation of the exponential model, which assume the hazard to be constant in time, and is flexible enough to model this situation. It divides the survival time in different intervals $\alpha$ and assumes the hazard to be constant within each interval but no restrictions are made on how hazard varies between intervals (Mills 2011a). It calculates the hazard as:

$$h_i(t) = \Lambda e^{B_i x} \quad \text{ for } \alpha_{j-1} \leq t < \alpha$$

In this research the survival time is divided in three age intervals: 49-54, 55-59, and 60-65.
4.5 Summary: methodological limitations and anticipations

This chapter was devoted to the description of the two separate methodologies used estimate the effectiveness of retrenchment and retaining policies in Germany, Italy, and the Netherlands. The main methodological limitations of this study are the following.

Although Sharelife survey represents one of the best data source for this research, the distribution of the birth cohorts can raise two issues. First the sample size of the cohort born after 1944 is rather limited in all three countries and reduces the power of the estimations pertaining to retaining policies' effectiveness. Second respondents of very early cohorts are a selected group whose survival deviate extremely from the sample's and the population's mean. To the extent that their working career also far exceed the sample's mean then they will bias downward the effectiveness of retrenchment policies. This risk is however minimized in the sample because of the preventative exclusion of outliers that retired outside the 50-65 age range. Moreover the exclusion of the cohorts group at the highest risk of selection did not lead to significant changes in the estimation of the cohort effect.

Other methodological limitations concerns the operationalization of the main variables. The measurement of work-retirement trajectories as pathways of exit suffers of internal validity problems because the survey's item does not ask for an unique piece of information. The range of possible answers contains both the institutional arrangements that supported the income of respondents and the social activities they undertook after they left employment, such as holidays, voluntary work, family care and housework etc.. This flaws in the measurement of the pathway required the inclusion of the respondents that provided information about their social activities after retirement into the “other” pathway and to a reduction of the statistical power. Since those social activities tend to require a certain level of health to be performed, the other pathway is likely to include very early exits and also to underestimate in both cohorts early retirement patterns.

Furthermore the measurement of work-retirement trajectories as timing of employment outflow at yearly level is likely to underestimate the estimation of the cohort effect. This is because in the short period of observation (mid-1990's-2009) retirement changes are likely to be gradual and need a more refined measurement to be correctly captured.

Although the operationalization of retrenchment policies as a cohort effect is backed by the literature, its measurement as birth cohorts born after 1944 may rise some objections about its validity. Those objections concern mainly the extent to which it discriminate correctly between groups exposed to different institutional incentives. This measurement is thus valid enough since the purpose of this research is to investigate the extent to which the Government succeeded in delaying the exit of workers aged between 50-65 years since the mid-1990s.

As for retaining policies, a first limitations concern lack of information about monetary company incentives excludes from the analysis an important set of push incentives. Moreover the analysis is restrained to the cohort>1944. This restrain does not allow to compare the extent to which the correlation between job quality and retirement timing, and thus the HRM strategies toward older workers, changes after the mid-1990's. Nevertheless it is useful to disentangle the effectiveness of retaining policies from the effectiveness of retaining policies.
A further set of limitation concerns the lack of two main controls. The first is the company size, on which the HRM policies towards older workers critically depends. The second is a regional variable that can control for consistent economic disparities, as they exist especially in Germany and in Italy.

Finally although this analysis controls for social class, self-employed are not excluded from the sample. This may bias the analysis of retrenchment policies to the extent that those self-employed define by themselves their working conditions.

In the following chapters the two empirical parts are shown. The first will investigate the institutional conditions under which social partners hinder the effectiveness of retrenchment policies.
4 Research design and methodology
Part 2
Institutional affinities and effectiveness of retrenchment policies in The Netherlands, Germany, and Italy
Institutional affinities and effectiveness of retrenchment policies in The Netherlands, Germany, and Italy
5 The effectiveness of retrenchment policies in The Netherlands

5.1 Introduction

It was shown in Chapter 1 that the Netherlands have been the most effective in EWL with respect to Germany and Italy. The goal of this chapter is to investigate the extent to which this outcome is due to the high cooperativeness of social partnership, which prevented social partners from hindering the retrenchment of pathways of exit. The leading question of this chapter is thus: To what extent have social partners affected the effectiveness of retrenchment policies in Italy from the mid-1990's to 2009?

Chapter 3 showed that, although retrenchment policies were developed mainly by the Government, social partners could greatly hinder their effectiveness to preserve their members' expectations. Their success depended on the extent to which the social governance mode where retrenchment policies are formulated and implemented award or punish their opportunistic actions.

In the Netherlands social partners participate to the policymaking using a channel of regular consultation, institutionalized in the tripartite Sociaal Economische Raad (SER - Social and Economic Council). Being typical of iterated interactions, this SER tends to generate constellations and modes of interaction punishing opportunistic defence of particular interests. This is because recommendations are morally constraining for the government only if supported by the independent experts. Failures in delivering recommendations are considered as a sign of social partners' irresponsibility which de-legitimize their future participation in the policymaking. This is what occurred in 1992, when SER, failing to advice the Lubber III cabinet about the proposed retrenchment of the disability pathways, was not anymore addressed for the following decade. Since then social partners were encouraged to moderate their opposition and support the retrenchment of pathways of exit in order to regain the power of advising the government (power-recovering strategy- see Section 3.5).

Also limited is their power of hindering the implementation of retrenchment policies. Due to the de-legitimation endured in the early 1990's, social partners were excluded from the only board that would enable them to hinder the implementation of retrenchment of the disability pathway. Since this administrative board had given social partners the task of assessing the eligibility of claims on the bases of broad and subjective criteria in absence of external supervision, it fostered an unduly expansion of the disability pathway. This prerogative was however taken away in 1994 when the administration of social insurance was privatized. The other implementation body, based on self-regulation mode, discourage unions and employers associations from hindering the retrenchment of the early retirement pathway provided by the VUT schemes. This is because the strong vertical coordination of the collective bargaining system allowed the government to punish defections by privatizing their costs and by acting in the shadow of hierarchy. Costs of VUT schemes were fully privatized in 1999, four years after the STvdA (Stichting van de Arbeit- Foundation of Labour) was forced to foster their retrenchment under the threat of removing the legal extension of CLAs' validity (power-maintaining strategy - see section 3.5).

Being formulated and implemented in social governance modes that discourage social partners
The effectiveness of retrenchment policies in The Netherlands

opportunistic actions, retrenchment policies are expected to highly effective. The government started retrenching pathways of exit in 1993, when the TBA “act on reducing disability claims” reduces the financial attractiveness of the most popular pathway of exit. It continues in 1997, when it triggers the retrenchment of the second most attractive pathway of exit based on early retirement schemes. It finishes in 2004 when also the third pathway based on the unemployment benefit is retrenched, but only slightly.

This chapter is organized as follows. The pathways of exit provided by the Dutch protection system at the early 1990's are described in Section 5.2. In Section 5.3 the reasons why the institutional social partners cooperate to the formulation and implementation of retrenchment policies. How the retrenchment policies in the Netherlands lower the financial attractiveness of the previously described pathways of exit are further discussed and, on the bases of this the hypotheses over their effectiveness are formulated in Section 5.4. These hypotheses are tested with a competing risk model, whose estimation is interpreted in Section 5.5. Conclusions are discussed at the end.

5.2 Pathways of exit: an overview

Until 2009 the statutory retirement age is set at 65 years in the Netherlands (OECD 2014). After that the pension system provides three different sources of income protection, as regulated by the Algemene Ouderdomswet (AOW - General Old-age Act in 1957 and later modification). First, the public pension system allocates a safety-net benefit, which equals 70% of the minimum wage if the recipient resided in the Netherlands from the age of 15 years onward. Second, the occupational pension schemes preserve the past income of recipients by providing a fully-funded benefit that generally replace about the 70% of the final wage after 40 years of contribution. They are regulated by social partners in industry-wide agreements (CLAs) under a strict public and private supervision. The public supervision enhances the coverage of the occupational schemes. Thanks to tax deductions and the mandatory extension of CLA to all workers in the same industry, their coverage is almost total. The private supervision, entrusted to the Insurance Board, grants the economic viability of the schemes. Third, private pension plans can provide an additional benefit on a voluntary bases, but their diffusion is hardly supported by a tax-friendly regime (Van Riel, Hemerijck, and Visser 2002).

Until the mid-1990's however few social protection schemes subsidized a series of inactive episodes prior to retirement. As shown in Graph 5.1 the episodes were subsidized by four schemes: the occupational sickness and disability scheme, the occupational pension system, the unemployment insurance scheme, and social assistance scheme. The combination between the inactive episodes subsidized by these schemes institutionalized three main pathways of exit: disability, early retirement, and unemployment (for an extensive discussion see among others: (De Vroom and Blomsma 1991;
5.2 Pathways of exit: an overview

Van Dalen and Henkens 2002; Sonnet and Organisation for Economic Co-operation and Development 2005; van Oorschot and Jensen 2009. The episodes provided the occupational disability and sickness schemes are represented in orange, the episode provided by the pension system is represented in light blue, and the episodes provided by the unemployment scheme are represented in red.

**Graph 5.1:** Pathways of exit institutionalized by social protection system in The Netherlands until the mid-1990's.

All the relevant legislation concerning the regulation of the three pathways of exit are listed in Table 5.1.

**Table 5.1:** List of the main relevant legislation that regulated the disability, the early retirement and the unemployment pathway of exit in the Netherlands.

<table>
<thead>
<tr>
<th>Public pension system- 1st pillar</th>
<th>Unemployment pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957- Algemene Ouderdomswet (AOW)</td>
<td>1957- General Old-age Act</td>
</tr>
<tr>
<td>1952- Werkloosheidswet I (WW)</td>
<td>1952- Unemployment Benefit Act I</td>
</tr>
<tr>
<td>1963- Algemene Bijstandswet (ABW)</td>
<td>1963- Social Assistance Act</td>
</tr>
<tr>
<td>1963- Wet Werkloosheidsvoorziening, WWV</td>
<td>1963- Unemployment Provision Act</td>
</tr>
<tr>
<td>1984- Wet verlaging van Uitkeringpercentages</td>
<td>1984- Act on Lowering the Benefit Percentage</td>
</tr>
<tr>
<td>1984- Wet Verlenging van de Uitkeuringdsduur Ingevolge de Wet Werkloosheidsvoorziening voor Werknemers van 50 jaar en Ouder</td>
<td>1984- Law lengthening the benefit of pursuant to the Act Unemployment Provision that are employees aged 50 and Older</td>
</tr>
<tr>
<td>1986- Werkloosheidswet II, (WW)</td>
<td>1986- Unemployment Insurance Act II</td>
</tr>
<tr>
<td>1991- Wet Herziening Arbeidsverledeneis (WHA)</td>
<td>1991- Act on Revising Work History Requirements</td>
</tr>
<tr>
<td>1993- Wijziging Enkele bepalingen inzake het recht op uitkeren</td>
<td>1993- Changing some determinations of the Right to a benefit</td>
</tr>
<tr>
<td>1994- Wet aanscherping referent-eisen WW</td>
<td>1994- Act on tightening the conditions of the WW.</td>
</tr>
<tr>
<td>1997- Wet Overheid personeel onder de Werknemerverzekeringen (OWW)</td>
<td>1997- Act on Public Servants under the Employees Insurance Scheme.</td>
</tr>
</tbody>
</table>
### Disability pathway

<table>
<thead>
<tr>
<th>Year</th>
<th>Act Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1913</td>
<td>Ziektewet (ZW)</td>
</tr>
<tr>
<td>1913</td>
<td>Sickness Act</td>
</tr>
<tr>
<td>1967</td>
<td>Wet Arbeidsonbekwaamheid (WAO)</td>
</tr>
<tr>
<td>1986</td>
<td>Wet op de verdere wijziging van de algemene invaliditeit en de Wet op de arbeidsongeschiktheidsverzekering</td>
</tr>
<tr>
<td>1986</td>
<td>Act on further amendment of the general disability act and the act on disability insurance.</td>
</tr>
<tr>
<td>1993</td>
<td>Wet Terugdringing Beroep de Arbeidsongeschiktheidsregelingen (TBA)</td>
</tr>
<tr>
<td>1993</td>
<td>Act on Reducing Disability Claims</td>
</tr>
<tr>
<td>1997</td>
<td>Wet Arbeidsongeschiktheidverzekering Zelfstandigen, (WAZ)</td>
</tr>
<tr>
<td>1997</td>
<td>Act on Incapacity Insurance for the self-employed persons</td>
</tr>
<tr>
<td>1997</td>
<td>Wet Overheidspersoneel onder de Werknemerverzekeringen (OOW)</td>
</tr>
<tr>
<td>1997</td>
<td>Act on Public Servants under the Employees Insurance Scheme.</td>
</tr>
<tr>
<td>1997</td>
<td>Wet op de Medische Keuringen (WMK)</td>
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<tr>
<td>1997</td>
<td>Act on medical examination</td>
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<tr>
<td>1997</td>
<td>Wet Premiedifferentiatie en Markwerking bij Arbeidsongeschiktheidsverzekeringen (PEMBA)</td>
</tr>
<tr>
<td>1997</td>
<td>Act on Premium Differentiation and Market Regulation.</td>
</tr>
<tr>
<td>1997</td>
<td>Organisatiewet Sociale Verzekeringen (OSV)</td>
</tr>
<tr>
<td>1997-</td>
<td>Act over the new organization of social insurance</td>
</tr>
<tr>
<td>1998</td>
<td>Wet op de (Re)Integratie Arbeidsgehandicapten (REA)</td>
</tr>
<tr>
<td>1998</td>
<td>Disability Reintegration Act</td>
</tr>
<tr>
<td>2001</td>
<td>Wet Verbetering Poortwachter (WVP)</td>
</tr>
<tr>
<td>2001</td>
<td>Act on Improving the Gatekeeper</td>
</tr>
<tr>
<td>2001</td>
<td>Besluit Aanstelling keuringen</td>
</tr>
<tr>
<td>2001</td>
<td>Decision on Reassessment</td>
</tr>
<tr>
<td>2002</td>
<td>Invoeringswet wet structuur uitvoeringsorganisatie (ISUWI)</td>
</tr>
<tr>
<td>2002</td>
<td>Implementation structure act</td>
</tr>
<tr>
<td>2003</td>
<td>Wet Verlenging Loonbetalingsverplichting bij Ziekte, (VLZ)</td>
</tr>
<tr>
<td>2003</td>
<td>Act extending the wage payment obligation</td>
</tr>
<tr>
<td>2004</td>
<td>Wet Einde Toegang Verzekering (WAZ)</td>
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<tr>
<td>2004</td>
<td>Act abolition of the WAZ</td>
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<tr>
<td>2004</td>
<td>Schattingbesluit</td>
</tr>
<tr>
<td>2004</td>
<td>Tribunal decree. New re-assessment of WAO's recipients with tighter conditions.</td>
</tr>
<tr>
<td>2006</td>
<td>Werk en Inkomen naar Arbeidsvermogen (WIA)</td>
</tr>
<tr>
<td>2006</td>
<td>Work and Income according to the capability of working</td>
</tr>
</tbody>
</table>

### Early retirement pathway

<table>
<thead>
<tr>
<th>Year</th>
<th>Act Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Late 1970's</td>
<td>Vervroegde uittredingsregelingen (VUT)</td>
</tr>
<tr>
<td>1997</td>
<td>Pension covenant</td>
</tr>
<tr>
<td>1999</td>
<td>Wet fiscale behandeling van pensioenen (FBP)</td>
</tr>
<tr>
<td>1999</td>
<td>Act on the fiscal regulation of pensions.</td>
</tr>
</tbody>
</table>
5.2 Pathways of exit: an overview

The financial attractiveness of the three pathways increased the more their costs could be externalized and not endured by their main beneficiaries: older workers and their employers. The costs are to a great extent externalized for both of them when inactivity episodes are financed by public social policy schemes, as in the case of the unemployment and occupational disability pathways (De Vroom and Blomsma 1991). The use of these two pathways in fact imposed no additional costs to employers and limited cuts to older workers that did not nevertheless affect their future pension income.

The first pathway was provided by the insurance-based unemployment scheme (WW as regulated in 1952 by Werkloosheidswet, WW Unemployment Benefit Act and in 1981 by the Wijzinging van het Aantal Dagen Werken, Vereist voor het Recht op Uitkering, Act on Changing the Conditions of Worked Days Required to Access the Benefit) in combination with the tax-based unemployment scheme (WWV as regulated in 1963 and modified in the 1976 by the Wet Werkloosheidsvoorziening, WWV, Unemployment Provision Act and in 1984 by the Wet verlaging van Uitkeringpercentages, Act on Lowering the Benefit Percentage, and by the Wet Verlenging van de Uitkeuringsduur Ingevolge de Wet Werkloosheidvoorziening voor Werknemers van 50 jaar en Ouder; Law lengthening the benefit of pursuant to the Act Unemployment Provision that are employees aged 50 and Older) and the general social assistance (Algemene Bijstandwet, ABW Social Assistance Act as regulated in 1963) (Van Gerven 2008).

In the mid-1980's this pathway consisted of an insurance-based benefit (WW) for the first 130 days, which replaces 80% of their last wage, and by a tax-financed unemployment benefit (WWV), replacing 75% of the last wage. Although the normal maximum duration of the WWV benefit was two years, recipients above 60 years at the end of the WW benefit could withdraw the WWV benefit until pensionable age. Once the regular duration of WWV expired, recipients could postpone it for a period proportional to their age at the rate of 70% of the statutory minimum wage. If a person became recipient at the age of 57,5 years or later, they were able to reach the pensionable age at the WWV level with no obligation to further search for a new job. Younger recipients after the age of 50 years had to pay an higher cost to use this pathway. In the last years before the pensionable age the WWV benefit was substituted by the general social assistance (ABW)9 (Van Gerven 2008). The cost for these recipients is even higher because, being the ABW means-tested, it does not allow for additional compensations normally given by employers.

In 1986 the WWV scheme was abolished and the WW benefits was lowered to contain social expenditure (Werkloosheidswet II, WW Unemployment Benefit Act II). The pathway of exit based on unemployment becomes less generous but much of its costs still remained externalized. The WW scheme was structured in two episodes: the first provides 70% of the last earning, while the second benefits stood in between the latter and the social assistance. The duration of the insurance-based benefit remains proportional to the workers' age up to 4,5 years.10 After that a lower follow-up WW

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9 After WWV expired, other segments of the workforce had to resort to a means-tested social assistance benefit (RWW or ABW)

10 In fact the reform of 1986 made the duration of the unemployment insurance based on the contribution history. However this latter was inferred from the age of the recipients and included periods of notional contribution (van Gerven, 2008)
The effectiveness of retrenchment policies in The Netherlands

benefit lasted, proportionally to the age of the recipients, up to 3.5 years. Like in the previous regime, a person that entered at the age of 57.5 years or later could reach the pensionable age without resorting to social assistance (De Vroom and Blomsma 1991; van Oorschot 2007). The costs for younger recipients are however lower than in the previous regime because the newly implemented IOAW benefit allowed for lump-sum compensations of employers. Unlike ABW, IOAW benefit is means-tested only on income and not on capital.

All in all, although the unemployment pathway imposed some costs to its recipients, it was still attractive for older workers that had a more unstable careers and a low wage profile (Gruber & Wise, 1999). Despite in the 1990's different attempts were made to re-integrate unemployment recipients with activation programs and further restrictions, the unemployment pathway described above remained unchanged until 2003 (Van Gerven 2008).

The second pathway was financed by the occupational sickness and disability scheme. It offered such a financially attractive option for both older workers and employers that spread endemically until the mid-1990's (Kurzer 2013; van Oorschot and Boos 2000). Along the first part of the 1980's the occupational disability pathway consisted of two episodes. The first one was the temporary sickness episode (regulated by the Ziektewet (ZW)- Sickness Act in 1913) that lasted about 1 year. The second episode is permanent disability (Wet Arbeidsongebaatheid (WAO)- Occupational Disability Act., as regulated in 1967 and reformed in 1972) and lasted until pensionable age. Its attractiveness for older workers relied on its generosity, since in both episodes the benefit replaced 80% of the last wage. For employers it relied in the high inclusivity of the permanent disability episode. On the one hand no age limits were set. On the other hand the WAO requirements were very loose, since disability was expressed in terms of lost “earning capacity” in a suitable job. The para-public medical commissions in charge of assessing claimants' earning capacity (see section 5.3) could therefore interpret these requirements very inclusively and declare fully eligible also cases of partial disability (Kurzer 2013). Moreover the commission could also declare fully disabled also workers, whose ageing was impairing their labour market prospects. These loose requirements gave employers the opportunity of shedding their employees as soon as they became redundant especially in time of industrial restructuring. Due to the convenience of this pathway, employers were also willing to make it more appealing by topping-up both ZW and WAO benefits to 100% of the last wage with private provisions (Van Gerven 2008; van Oorschot and Boos 2000).

In 1987 the Government reduced the attractiveness of the disability pathway by lowering its generosity. The benefit was reduced by 10% and was strictly linked to the degree of the assessed disability. This measure affected not only claimants but also their employers, who needed to privately compensate these cuts to use this pathway (Van Gerven 2008 12). Employers' costs were however much lower if they shed older employees. For them partial WAO benefit could be combined with WW and WWV, provided that eligibility conditions were met, or alternatively with the IOWA benefit. This costs' externalization eased the private topping-up of both the ZW and WAO benefits carried out by

11 “Suitable job” means here a job that is compatible with both the past professional experience and the past earning profile of the claimants.

12 since this reduction was inversely related to the claimants' age and the eligibility conditions the disability episode still preserved much of its financial attractiveness Taking the same example used before, the follow-up benefit for 35 years old employee would drop to 55% of their previous wage, while the same benefit would drop up to 65% for a 55 years old employee.
5.2 Pathways of exit: an overview

CLAs and HRM policies (De Vroom and Blomsma 1991). Thanks to the combination of public and private benefits the disability pathway usually replaced 100% of the last wage in the first year, 90% in the second year, 75% in the third, and 70% until the statutory retirement age (van Oorschot and Boos 2000; Sonnet and OECD 2005; Van Gerven 2008).

The third pathway was financed by early retirement scheme (Vervroegde uittredingsregelingen-VUT) introduced in the late-1970's to facilitate the integration of younger workers. VUT schemes were established as a separate fund in the occupational pension plans and thus were regulated by collective labour agreements (CLAs), mainly at industry level. They were financed by additional contributions paid by both employers and employees, who share respectively 2/3 and 1/3 of the total amount. Although regulated by CLAs, also the early retirement schemes were strongly supported by public legal and financial measures. The legal measure consisted in extending to all employees the VUT schemes included in industry-wide agreements (erga omnes extension). The financial measure consisted in externalizing the costs of the beneficiaries with relevant tax exemptions, the so-called “reversal rule” used also for occupational pension schemes. Taxing the benefit and not the contribution base, this rule allowed a double savings because both the tax levels and the tax rates were reduced (Bovenberg and Gradus 2014; Sonnet and OECD 2005; De Vroom and Blomsma 1991). On the one hand the contributions are deduced on the gross wage, that is higher than the benefit from which taxes are computed. On the other benefits are taxed as is they were regular source of income. This rule in a progressive tax system as the Dutch one produces a consistent externalization of VUT costs (Euwals et al. 2006).

Besides this costs' externalization, employers profit from the use of early retirement pathway because it was the easiest way to shed their employees for two reasons. First, early retirement was the most accepted pathways of exit since, unlike unemployment and occupational disability, it was not associated to any social stigma. Second, it was the most financially attractive pathway, after the reform of the unemployment and the occupational schemes in 1987 (De Vroom and Blomsma 1991). Thanks to this attractiveness no additional private benefit have to be set by employers to push older employees to enter this pathway.

The benefit was financed by a PAYGO system and paid to employees that reached the minimum age and a minimum contribution period to the fund. Replacing 80% of the last monthly wage until pensionable age independently from the age and contributing history, it provides the highest benefits. Being the minimum age and contribution period set at respectively 55 and 10 years, it is the most inclusive pathway, at least for workers with a rather stable and full-time career. As the other two pathways, also the entry into the early retirement pathway does not affect future pension income, since social security contributions are paid until the age of 65 years (Euwals et al. 2006; Lindeboom 1998).

Despite employers have to pay to use it, the tax-benefits and its extreme generosity made the early retirement the most diffused pathway among older male workers until 1997, when it is retrenched for the first time (Lindeboom 1998; De Vroom 2004). The other two pathways were instead more popular among older workers with a more unstable and precarious career, such as women and low-skills workers (De Vroom and Blomsma 1991).

Part-time workers are normally excluded from VUT schemes. This explains the reason why woman are underrepresented among the recipients of this pathway (De Vroom and Blomsma 1991).
Since the mid-1990's the Dutch Government undertakes systematic attempts to extend working life by narrowing the attractiveness of these three pathways using retrenchment policies (De Vroom 2004; van Oorschot 2007). According to the analytical framework, their effectiveness depends on the role played by social partners in the process of formulation and implementation of these policies. The mechanisms by which the shared regulation of pathways of exit in the Netherlands enhanced the effectiveness of retrenchment policies (the interaction mode between protection and partnership) is further discussed in the next section.

5.3 Institutional affinities between protection and partnership

In the Netherlands the institutional affinities between the protection and the partnership systems associate a Conservative welfare logic with a cooperative logic of interests' representation (Ebbinghaus 2006). Because of their cooperativeness social partners are regularly involved in the formulation and implementation of policies regulating the three pathways of exit. Their role is then not only limited to reduce the political and popular oppositions against retrenchment policies (Schludi 2005), because it is constantly intertwined with the Government's regulation of social protection schemes (Ebbinghaus and Manow 2001).

These regular intertwined responsibility reduces social partners' interest of hindering retrenchment policies. This is because, due to this regular intertwined responsibility, social partners join interaction modes that lower their benefit/cost mix of opposing the retrenchment of pathways of exit.

Corporative practices are highly institutionalized in the Netherlands, where the social partners have a prominent role in regulating social policies since the second post-war. These corporative practices temporarily weakened during the 1970's, when the first post-war economic shock forced the Government to implement unilaterally austerity measures, such as the freezing of wages and benefits. They re-flourished again after the Wassenaar Agreements in 1982, when the social partners commit to pursue economic recovery by fostering in the next bargaining rounds wage moderation and labour market flexibility. In exchange of that they obtained the public support of pathways for older workers ejected during the economic recovery (Visser and Hemerijck 1997; Visser 1998).

The corporative practices take place in a consultation setting when the policies are formulated and in a self-administration and self-regulatory setting when they are implemented (Visser and Hemerijck 1997; Trampusch 2007). The consultation setting is firmly established in a tripartite board: the Sociaal Economische Raad (SER- Socio-economic council). Instituted by law in 1950, it is the main corporative advisory body of the Government and, as such, it is financed by the social partners. Two third\(^{14}\) of its members were nominated by the national union and employers' confederations (respectively the Federatie Nederlandse vakbeweging- FNV\(^{15}\) and and VNO-NCW- Confederation of

\(^{14}\) The composition of SER slightly changes in 1995. Before that the members nominated by social partners are at least 2/3 and after 2/3. This show that after 1995 the power of social partners weakens (see later for more details (Woldendorp 2005).

\(^{15}\) Founded in 1976 as a result of fusion of two of the three main associations that reflected the religious-political currents of the Dutch pillared society (Verzuiling): the catholic Nederlandse Katholiek Vakbeweging (NKV), and the social-democratic Nederlands Verbond van vakverenigingen NVV). The protestant Christelijk Nationaal Vakbond (Cristian National Union) joined the FNV in 1982 (Visser 1998a).
5.3 Institutional affinities between protection and partnership

the Netherlands Industry and Employers\(^{16}\) and the remaining members were independent expert appointed by the Government, the so-called *kroonleden*\(^{17}\) (crown representatives) (Visser and Hemerijck 1997; Woldendorp 2005). As a part of the corporative practices, also the Consultation process was slowed down during the 1970's and revitalized after 1983.

SER's statutory task is to provide the Government recommendations over its policy proposals (*puzzling role*-Eichhorst and Wintermann 2005). Its advising role is so significant that whenever relevant reforms are discussed in the political arena the Government is obliged to ask SER's recommendations (Woldendorp 2005). Although not legally binding, SER's recommendations are taken in high consideration by the Government because its support can smoothen the policy process. This holds especially when they raise a wide oppositional front, as in the case of retrenchment policies (*powering* (Eichhorst and Wintermann 2005). The powering force of SER is however limited only when recommendations are adopted unanimously. The *kroonleden* hold in fact a veto power, which protect the policy-making from for corporative interests that harm the long-term sustainability of the system (Eichhorst and Wintermann 2005). Therefore despite their overrepresentation, social partners do not benefit from maintaining intransient positions because they will be hold responsible for SER's inefficiencies and loose their credibility.

This is what social partners learnt in the early and in the late 1980's when, accused of purposely slowing down the economic recovery to defend the particular interests of their members, the Government acted in the shadow of hierarchy (i.e. threatened to act unilaterally). If in the early 1980's they could preserve their legitimacy by signing the Wassenaar agreements, their positions in the late 1980's were too intransient to reach another compromise. This is because in 1982 social partners modernized the labour market on condition that the costs of redundancies, the most of them older, were externalized (Visser 1998; Rhodes 2001). When in the late 1980's the Lubbers III Government (based on the coalition between Christian and social democrats) asked them to cut this externalization with retrenchment measures, they failed to give up their previous compromise. Because of this social partners lost their legitimacy and after 1995 also the prerogative of advising the Government, which does not anymore address to SER when relevant reforms are discussed (Visser and Hemerijck 1997; Hemerijck and Marx 2006)

All together, the consultation setting gives social partners very few incentives to hinder tout-court retrenchment policies. This is because the intransient defence of pathways of exit further de-legitimize social partners and trigger more stricter unilateral measures of the government. Its shadow of hierarchy makes more beneficial for social partners to endorse retrenchment policies in order to avoid further retrenchment and re-gain the necessary legitimacy to play the puzzling role (Visser

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\(^{16}\) VNO-NCW was founded in 1996 after the merging : *Nederlands Christelijk Werkgeversverbond* (NCW- Dutch Cristian employers' confederation) instituted from the previous fusion between the Protestant PCW and the Catholic NKW) and the liberal *Verbond van Nederlandse Ondernemingen* (VNO- Federation of the Dutch Businesses) (Visser 1998).

\(^{17}\) Independent experts are chosen among university professors in economics, political science and law and, by virtue of their offices, the directors of the Dutch Central Bank and the *Centraal Planbureau* (CPB- Netherlands bureau for economic policy analysis- the main independent research institute responsible for macro-economic model of the Dutch economy and for the forecasting of potential effect of the political reform). With the exception of these two last members, the experts are expression to some extent of the main political parties ((Eichhorst and Wintermann 2005; Woldendorp 2005).

Retrenchment policies are in second place implemented by a self-regulatory setting in the early retirement pathway and by a self-administration setting in the disability and unemployment pathway. In both bodies social partners play a predominant role, but different is their accountability and thus their incentives of hindering the retrenchment policies (Visser and Hemerijck 1997).

The self-regulatory mode, where VUT schemes are implemented, is the collective bargaining level where the occupational pension funds are managed. The collective negotiations are centrally coordinated by the Stichting van de Arbeid (STvdA- Foundation of Labour). Established in 1947, this board is a national private institution where the peaks of unions and employers' organizations provides members with common recommendations about the priorities that need to be addressed (Woldendorp 2005; Pulignano 2010).

Although no interference is played by the Government, in this setting social partners have normally little interest of hindering retrenchment policies because this opportunistic behaviour would increase the payroll taxes. This is not the case in the Netherlands because the VUT schemes are consistently subsidized by tax incentives. This tax incentives lower significantly the social partners' costs of expanding VUT schemes and thus increases their interests of hindering the retrenchment of early retirement pathway (Euwals et al. 2006).

The Government enacted three measures to enhance unions and employers' association to retrench VUT schemes. At first, as an employer, it bargained the retrenchment of VUT schemes in the public sector (Sonnet and OECD 2005). Second in 1996 it spent its shadow of hierarchy to conclude with STvdA the so-called Pension Covenant. In this agreement STvdA recommended its member organizations to retrench VUT schemes according to the model offered in the public sector (Visser 1998; Woldendorp 2005). Yet, due to their soft nature, these recommendations did not compel them to reach precise targets concerning the magnitude or timing of the retrenchment. Therefore, in 2001-4 the third and decisive measure removed the tax incentives that had externalized the costs of VUT schemes on the public finances. This increased the accountability of social partners for the heavier contributory pressure on employers and employees and enhanced the correct implementation of retrenchment policies in the VUT schemes. All in all making social partners directly accountable for the costs of their opportunistic behaviour, in the Netherlands the self-regulation setting enhance the implementation of retrenchment policies and thus their effectiveness (see Section 5.4.3).

The administration setting, responsible for the premium collection, claims' assessment, and benefits' payment, is mainly organized in the Bedrijfsverenigingen (IIA- Industrial Insurance Association) and is supervised by the Sociaal Verzekeringen Raad (SVR- Social Security Council) (Borghi and Van Berkel 2007). The main critical aspect of this setting is that social partners have no legal or financial accountability for the administration of the unemployment and disability pathway for two reasons. First since IIA's and SVR's members are nominated by unions and employers' organizations, the supervision of the administration process is distorted because controllers and controlled are driven by the same corporative interests. Second, since the financing of the unemployment and disability are totally externalized the opportunistic expansion of their attractiveness does not cause any direct costs on social partners' members (Stigter 1997). Because of this, social partners have a high interests of hindering the implementation of retrenchment policies.
Yet, the Government neutralized this threat with a deep reorganization of the administrative setting in occasion of the report of the Commission Buurmeijer (or All-Party Commission's inquiry) in 1993. This report imputed to the implementation distortions the main responsibility for the massive expansion of disability and unemployment as a pathway of exit (Visser and Hemerijck 1997). This distortions proved to be stronger in the disability scheme, where social partners have a much higher discretionary role in manipulating the eligibility assessment and the benefit generosity. The evidence of this opportunistic behaviour publicly de-legitimized corporate associations as reliable partners of social policy administration. The distortions of this administrative setting were therefore removed by progressively excluding social partners from the responsible boards. In 1994 (Invooeringswet Organisatiewet Sociale Verzekeringen -IOSV- Act over the new organization of social insurance) the SVR supervising board is substituted by an independent institution: the College van Toezicht Sociale Verzekeringen (CTSV- Board of Social Insurance Supervisory). The IIA had to externalized their administrative tasks and has to share their managerial tasks with the regional public employment service agencies (PES). The national coordination of the IIA boards is taken by the Tijdelik Instituut voor coördinatie en afstemming (TICA-Temporary Institution for the coordination and tuning), which is still composed by social partners' representatives but are lead by an independent chair (van der Veen and Trommel 1999; Stigter 1997).

As of 1997 social partners are further deprived from their prerogatives by the Organisatiewet Sociale Verzekeringen (OSV- Act over the new organization of social insurance). The IIA boards were in fact substituted by private organizations and the administration of social insurance became a “quasi-market” setting. In the same year the coordination role of the TICA is taken over by another independent board: the Landelijk Instituut Sociale Verzekeringen (LISV-National Institute for Social Insurance). Finally in 2002 the Invooeringswet wet structuur uitvoeringsorganisatie (ISUWI-Implementation structure act) merged the LISV into the Uitvoeringsinstituut Werknemersverzekeringen (UWV- Institute for Employee Insurance) (Visser and Hemerijck 1997; Hemerijck and Marx 2006; Johnston, Kornelakis, and d’Acri 2011).

All in all social partners can not hinder the retrenchment policies implemented in the unemployment and disability schemes. This is because after 1994 they do not play anymore a role in their administration.

According to the hypothesis HP 3.2-3.3 in the Netherlands social partners have a low interest to hinder both the formulation and implementation of retrenchment policies. The hypotheses about how this low interest enhanced the policies' effectiveness in lowering the attractiveness of the pathways of exit are derived in the next section.

5.4 Retrenchment policies: working hypotheses

A list of the policies that retrenched the pathways of exit until 2008 in the Netherlands is presented in Table 5.1. The weak interference of social partners allowed the Government to substantially lower the attractiveness of using the pathways of exit for both older workers and their employers. Retrenchment policies in the Netherlands did not affect substantially the eligibility conditions, which still allow the uses of the three main schemes as pathways of exit. Nonetheless the financial attractiveness of
The effectiveness of retrenchment policies in The Netherlands

The effectiveness of retrenchment policies in The Netherlands is expected to be high and only slightly stratified. This is because social partners could not preserve the pathways of exit for their core members.

Hypotheses concerning the effectiveness of retrenchment policies are expressed as the extent to which they are expected to lower the likelihood of entering a pathway of exit in a cohort that newly enter their late career (or in other words get 50 years old) in the mid-1990's with respect to the older cohort. Once these hypotheses are tested, it is possible to estimate the effectiveness of retrenchment policies in the Netherlands between 1995 and 2009.

5.4.1 Unemployment pathway

Despite different public interventions reformed the unemployment scheme to activate the recipients between 1987 and the early-2000, they hardly affected its attractiveness as a pathway of exit. The unemployment pathway was not the first target of the Government, because it represented a residual pathway for a marginal group of older workers, who could not access more generous public provisions. Its popularity nevertheless increased after the retrenchment policies notably increased the costs of using the disability pathway (see next section), although private benefits (severance payment) had to compensate unemployment's lower generosity (Van Gerven 2008).

Along the 1990's social partners regained progressively enough credibility to affect the policy-making by severely moderating their positions in SER. This allowed them to preserve the unemployment pathway as a redundancy absorber in return for legitimizing the retrenchment of the other two pathways. In 2003 however in the midst of a severe recession, the newly-established conservative-liberal Government (Balkanende II) decided to retrench also the unemployment pathway. Its proposal is aimed at reducing severely the externalization of its costs by subtracting from the public benefit the amount of the severance payment. Despite the retrenchment could not be fully rejected, social partners exceptionally managed to discuss it in the setting where STvdA and the Government coordinate the collective bargaining rounds in 2004. This setting gave STvdA the power to weaken the Government's proposal in exchange for supporting wage moderation and the further retrenchment of the other pathways, as signed in the so-called Museum square pact. Being unanimously approved by
5.4.1 Unemployment pathway

SER, this pact is the only measure that allows social partners to partially hinder the formulation of retrenchment policies in the Netherlands (Hemerijck and Marx 2006).

Despite weakened by the interference of social partners, the retrenchment of the unemployment pathway substantially limited the externalization of its costs. In 2004 the maximum duration of first more generous WW episode is connected to the actual contribution history and not anymore to the age (Wijziging van de Werkloosheidswet en de Wet Structuur Uitvoeringorganisatie Werk en Inkomen in Verband met de Vervanging van Fictief Arbeidsverleden door Feitelijk Arbeidsverleden en de Beperking van het Verzorgingsforfait, Act on Changing work history requirements to actual work history). In the same year the Wet Afschaffing van de Vervolguitkering (Act on abolition of the follow-up benefit) abolished the follow-up WW episode, meaning only at the age of 60.5 years or later recipients with full requirements did not fall into the social assistance (IOAW). In 2006 this minimum age was further delayed to 61 years and 2 months when Wijziging onder meer WW in Verband met Aanscherping Werkeis (Act on Tightening the Work record conditions of the WW) restricted the maximum duration of the WW episode from 54 to 38 months (Van Gerven 2008; OECD 2014).

Finally the re-integration of older recipients was stimulated in 2004 when the Regeling vrijstelling Verplichtingen WW (Regulation on Exemption from obligation under the WW) re-introduced their legal duty to search for a job. Three exemptions were however reserved for: recipients older than 64 years, recipients that fell out of the disability pathway after the age of 57.5 years, and recipients with very poor chance for re-integration (Sonnet and OECD 2005; van Oorschot 2007).

If social partners could slightly hinder the formulation of retrenchment policies, they have no power to hinder their implementation. Their complete exclusion from the self-administration boards make them in fact unable to interfere with the claims' assessment or with the recipients' re-integration. This is especially important because it prevents them from opportunistically exploiting the third criterion that exempt from the job search duty to foster the use of unemployment as a pathway of exit. In summary, despite the limited role of social partners, retrenchment policies have only marginally affected the attractiveness of the unemployment pathway between 1995 and 2009. They are implemented rather late with respect to the other two pathways and this delay increased the relative attractiveness of unemployment. Retrenchment policies made its used more costly, but did not undermine its function of residual exit route for redundancies excluded by the retrenchment of the disability pathway. Because of that the hypothesis is that the cohort born in 1945 or after will not have a significantly lower hazard of entering a pension pathway than the older cohort (HP 5.1).

5.4.2 Disability pathway

The retrenchment of the disability pathway was the first and main target of the Dutch Government to EWL. As explained in section 5.3 in 1991 the Government decided to boost the work participation by sharply cutting the inflow into disability. Due to their intransigent position, social partners failed to channel their criticism from SER to the Government, which felt legitimized to act unilaterally in 1992. Being discredited in the formal consultation setting, social partners tried to hinder the retrenchment of the disability pathway by mobilizing in may the public opinion in one of the largest post-war protest. In spite of this success, also their credit among the public opinion soon plunged when
the Commission Buurmeijer reported that their opportunistic administration had expanded social expenses to externalize the social costs of industrial restructuring. Being this report focused especially on the misuse of the disability scheme as a pathway of exit, social partners failed to hinder its retrenchment by mobilizing the public against it (Yerkes 2011; Visser and Hemerijck 1997).

The Government in 1992 and 1993 unilaterally enforced two acts: the Wet Terugdringing Beroep op de Arbeidsongeschiktheidsregelingen (TBA - act on reducing disability claims) and the Wet Terugdringing Arbeidsongeschiktheids Volume (TAV - Reducing disability Volume act), which increased substantially the costs of disability for both recipients and their employers (Kautto and Bach-Othman 2010).

TBA increased recipients’ costs for three main reasons. First from permanent the WAO benefit (loondervingsuitkering- wage loss benefit equal to the 70% of the previous wage) was limited to a maximum period of 6 years for claimants aged 58 years or older, to 3 years at the age of 53 years and to 2 years at the age of 43 years. After that the benefit (vervolguikitkening- follow-up benefit) plunged between the statutory minimum and the previous wage (Van Gerven 2008). Due to this temporal limitation, TBA strongly discouraged disability as a pathway of exit before the age of 59 years, when claimants can not anymore transit into statutory retirement age with the full WAO benefit. Second the follow-up benefit was actuarially adjusted, meaning that it approached more the minimum wage the lower is the age when recipients got entitled to it. Third a new more stringent eligibility criteria made more selective the assessment. Disability was defined as a reduction of the earning capacity due exclusively to a medically-assessed physical or mental impairment. The earning capacity was determined as a residual capacity of performing a socially accepted job, independently from the previous individual professional experience (Van Gerven 2008; De Vroom 2004; van Oorschot and Boos 2000).

TAV increased employers’ costs increased by introducing a bonus-malus system in the calculation of disability contributions, hitherto based on a single national percentage of the gross wage. While providing incentives to hire disabled workers (see section 8.2), it sanctioned employers if their employees were laid off as a result of disability. Since the oppositions of employers against this sanction could hinder the implementation of this system in the administrative body (still dominated by social partners), it was abolished in 1995 with the Wet Afschaffing Malus En Bevordering Reintegratie (AMBER- Act Abolition of “Malus” and Improvement of Reintegration) (van Oorschot and Boos 2000).

However, to repair the sharp discredit they suffered from the Commission Buurmeijer’s report, social partners drafted a STvdA’s bilateral agreement in December 1993, where they showed a cooperative attitude toward the retrenchment of disability. Their further exclusion from the administration bodies in 1994 fully prevented them to hinder also its future implementation (J. Visser and Hemerijck 1997; Hemerijck and Marx 2006; van der Veen and Trommel 1999; Yerkes 2011).

As a result of the marginalization of social partners, following acts managed to increase employers' costs by progressively privatizing the costs of sickness and disability insurance. They are implemented by two main coalitions dominated by the social-democratic party and led by Wim Kok. Former head of the FVN at the time of the Wassenaar agreement, Kok promoted, as a part of the well-known strategy “job, job, job”, retrenchment policies that increased the employers’ costs, without further cutting the
5.4.2 Disability pathway

benefit's generosity.

The *Wet Terugdringing Ziekteverzuim* (TZ - Act on reducing sickness absence) in 1994 limited this privatization in the first 6 weeks\(^\text{18}\), obliging employers either to pay directly to their sick employees at least 70% of their last wage or to reinsure this risk in the private market. In 1996 the *Wet Uitbreiding Loondoorbetaling bij Ziekte* (WULBZ- Act on Extension of Wage Pay in Case of Sickness) extended this obligation to 1 year, privatizing *de facto* the whole sickness episode (van Oorschot and Boos 2000; Kauto and Bach-Othman 2010), which is finally extended in 2004 with the *Verlenging Loondoordertalingsverplichting bij Ziekte* (VLZ- Act extending the wage payment obligation) extended. The disability risk was privatized also, but only partially. In 1996 the *Premie-differentiatie en Marktwerking bij Arbeidsongeschiktheidsverzekeringen* (PEMBA- act on premium differentiation and market regulation) differentiated the employers' contribution to the WAO scheme according to the risk, calculated as the number of claims filed in each firms and industry. In order to dampen employers' opposition, the Government included an opt-out option that for 5 years let them insure their risk with a private insurance company (Kauto and Bach-Othman 2010).

These policies, sanctioning employers abusing of disability to lay off their older employees, included also measures that promote the re-integration of the recipients. In fact the ARBO act required employers to hire a certified private company specialized in occupational health and safety service (*arbo-dienst*) to implement anti-absenteism policies and policies that prevent the risk of sickness and disability by improving the working conditions (see Section 7.2 for more information). ARBO is then renewed in 1998 to strengthen employers' private responsibility for prevention measures, by imposing a fine to employers that does not fulfil the rule prescribed by the ARBO act (van Oorschot and Boos 2000).

Employers and employees' responsibility was also strengthened for the effectiveness of reintegration from sickness and disability by the *Wet verbetering poortwachter* (WVP - Act on Improving the Gatekeeper) in 2001. This act compel them to a series of timetabled activity in the first two years of sickness, when the risk is employers' responsibility. Among others, these activities include the implementation of a personalized reintegration plan after 8 weeks of sickness, whose progress had to be regularly reported to the public authority. The non-compliance to these rules led to sanctions for both employers and employees. The will of reactivating older workers is further shown in 2004 when recipients aged between 50 and 55 years had to endure a re-assessment of their current eligibility (*Schattingsbesluit, Tribunal decree. New re-assessment of WAO's recipients with tighter conditions*) (Yerkes 2011; Kauto and Bach-Othman 2010).

In all, retrenchment policies enacted hitherto selected the inflow from the ZW into the WAO episode so that the costs' externalization can not be opportunistically used by employers, and to a minor extent, employees. This is obtained not only by increasing the private costs of disability, but also by compel their active support.

Having remarked the cooperative attitudes shown by social partners after 1993 (and especially in 2003 with the Museum square pact- see Section 5.4.3), the Kok II Government in 2002 and the Balkanende I Government in 2004 integrated SER recommendations in the final and most radical

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\(^{18}\) This period was limited to 2 weeks for companies with less than 15 employees (van Oorschot and Boos 2000)
The effectiveness of retrenchment policies in The Netherlands

Retrenchment of the disability pathway in 2006, when WAO are substituted by WIA schemes (Werk en Inkomen naar Arbeidsvermogen- WIA, Work and Income according to the capability of working). The retrenchment in this case affected mainly employees with partial impairments.

The minimum disability threshold is increased by 15 to 35% and two different schemes applies to full and partial disabled recipients: IVA (Inkomensverzekering voor volledig en duurzaam arbeidsongeschikten- Income insurance for fully and permanently disabled) and WGA (Werkhervatting gedeeltelijk arbeidsongeschikten- Employment reintegration of partially disabled). Recipients are defined as fully disabled if their lost at least 89% of their working capacity, are awarded with a benefit equal to 75% of their last wage, and their disability is re-assessed every 5 years. For partial recipients this benefit expires after only 38 months, and is replaced with flat-rate benefit about 20-25% lower. They are furthermore obliged to seek and accept any socially acceptable job, whose wage can top-up the flat-rate benefit (Van Gerven 2008; Kautoo and Bach-Othman 2010; Yerkes 2011).

Summing up the consultation setting gave the Government the power to discredit and marginalize the radical opposition of social partners. This marginalization increased social partners' benefit of endorsing rather than hindering the retrenchment of disability. The same consultation process then allowed the Government to re-integrate social partners again in the policy-making after their attitude became cooperative. Furthermore the early exclusion of social partners from the self-administration setting prevented them from opportunistically hinder the implementation of the policies formulated to retrench the disability pathway. As a result of the successful neutralization of social partners' opposition, the retrenchment policies in the Netherlands have strongly reduced the financial attractiveness of the disability pathway of exit for both employers and employees. Therefore it is hypothesized that the cohort born in 1945 or after will have a significantly lower likelihood of entering a pension pathway than the older cohort (HP 5.2).

5.4.3 Early retirement pathway

Apparently early retirement is, among the three pathways, the most hard to retrench for the Dutch Government for mainly two reasons. First since it is the most main route among “core workers”, its retrenchment is the most unpopular because employees get to deserve it as a result of their long work commitment. Second the regulation of VUT schemes are under the authority of the main defender of those acquired rights, social partners, and the Government has no legal right to interfere with it (see Section 5.2).

In spite of its lack of legal authority, as mentioned in Section 5.2, the Government managed to force the retrenchment policies in the so-called “shadow of hierarchy” (Scharpf 1997). In other words, bargaining with STvdA the guidelines for the next collective bargaining rounds, it threatened to abolished with a unilateral action the tax incentives that partially externalized the costs of the overall occupational schemes, of which VUT were part. Facing the threat of a large increase of the payroll taxes, in the so-called Pension Covenant in 1997 STvdA recommended their members to follow the guidelines provided by the CLA in the public sector, in which the Government bargained the substitution of the VUT with the less generous pre-pension schemes (van der Meer and Visser 2010; Sonnet and OECD 2005; De Vroom 2004; Wilthagen 2003).
Graphs 10 and 11 compare the generosity of pre-pension schemes negotiated in the public sector in the transitional and in the fully implemented regime with the generosity of VUT schemes. As opposed to VUT schemes, pre-pension schemes does not set a minimum age to draw a full pre-pension benefit. The benefit follows nevertheless the principle of actuarial parity and its level is thus reduced the earlier older workers make use of this pathway. The overall idea is that the total benefit stream that recipients withdraw along this pathway is the same independently from the the age of employment exit. While the VUT benefit replaced 80% of the previous earnings from the age of 60 years onward, the pre-pension benefit fall under 30% of the last wage at the age of 55 years and approaches the generosity of the VUT only the age of 61. In order to preserve acquired rights, the retrenchment of the early retirement pathway in the public sector is limited in the short-term by a transitional regime between 1997 and 2002. Moreover both transitional and pre-pension regimes provide cohorts of older workers born in 1947 or earlier for more favourable conditions (see Graph 5.2). The goal of this transitional regime is thus to delay by at least 1 year the entry in this pathway (Sonnet and OECD 2005).

The pre-pension benefit can be furthermore cumulated with work earnings to enhance partial retirement in the last years before statutory retirement. In this period recipients that work part-time can compensate the lost wage withdrawing a pre-pension benefit with no repercussions for the future pension streams. This option is particularly favourable within the last ten years before the statutory retirement age (65), because it fully-cover the contribution and does not affect future pension streams (Feldstein and Siebert 2002; Henkens and Schippers 2008; De Vroom 2004).

Table 5.2: Replacement rates of VUT, transitional and pre-pension schemes in the public sector by age and cohorts.

<table>
<thead>
<tr>
<th>Age cohort</th>
<th>VUT scheme</th>
<th>Transition scheme 1997-2002</th>
<th>Pre-pension scheme after 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; April 1942</td>
<td>April 1942- March 1947</td>
<td>&lt; April 1942</td>
</tr>
<tr>
<td>55</td>
<td>0</td>
<td>27 25</td>
<td>27 25</td>
</tr>
<tr>
<td>56</td>
<td>0</td>
<td>30 28</td>
<td>30 28</td>
</tr>
<tr>
<td>57</td>
<td>0</td>
<td>35 32</td>
<td>35 32</td>
</tr>
<tr>
<td>58</td>
<td>0</td>
<td>40 38</td>
<td>40 38</td>
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<tr>
<td>59</td>
<td>0</td>
<td>48 45</td>
<td>48 45</td>
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<tr>
<td>60</td>
<td>80</td>
<td>59 55</td>
<td>59 55</td>
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<tr>
<td>61</td>
<td>80</td>
<td>75 70</td>
<td>75 70</td>
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<tr>
<td>62</td>
<td>80</td>
<td>75 70</td>
<td>75 70</td>
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<tr>
<td>63</td>
<td>80</td>
<td>75 70</td>
<td>100 90</td>
</tr>
<tr>
<td>64</td>
<td>80</td>
<td>75 70</td>
<td>100 100</td>
</tr>
</tbody>
</table>

Source: Euwals, 2004 in (Sonnet and OECD 2005)

As shown in Table 5.2 also the new pre-pension regime implemented in 2003 provides for a more generous actuarial adjustment rules for cohorts that were born in 1947 or earlier. For those cohorts the pre-pension scheme approximates the generosity of the VUT schemes at the age of 61. Nonetheless it sets a further incentives of postponing the entry into this pathway until the age of 62 years, when the benefit almost equals the last wage. A similar progression but translated one year after, concerns the pre-pension benefit of younger cohorts, who are thus encouraged to delay their entry into this pathway accordingly.

As for the private sector the substitution of VUT scheme was delegated to the collective negotiations of the social partners. This self-regulation gave them a great deal of power to disregard the implementation of the Pension Covenant, which did not legally compel the bargaining members of
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Nevertheless since 1999 the Government managed to encourage the retrenchment of the early retirement pathway by gradually transferring the costs’ externalization from VUT to pre-pension schemes. Fiscal facilities for older workers that opt for pre-pension schemes were introduced in 1999 by the *Wet fiscale behandeling van pensioenen* (FBP - Act on the fiscal regulation of pensions) (De Vroom 2004; Sonnet and OECD 2005). The abolishment of VUT fiscal facilities is included in 2004 in a new Museum square pact between STvdA and the Balkenende II government (see also Section 5.4.1). During the negotiations the Governance acted in a strong shadow of hierarchy and threatened to introduce tax penalties on early retirement benefits and to limit the authority of social partners on pre-pension schemes with opt-out clauses. Facing also additional threats concerning the Government's plan of retrenching also the other pathways of exit, social partners decided to satisfy some of its counterpart requests to preserve their authority over pre-pension funds and to hinder the retrenchment of the unemployment pathway (see Section 5.4.1) (van der Meer and Visser 2010).

The early retirement pathway is phased out in 2015, when pre-pension schemes are substituted by life-course saving scheme. Since 2005 pre-pension schemes remained available only to older workers aged 55 or more. Younger cohorts are able to retire early only at the age of 63 years after 40 years of work history, according to the rules that regulates the occupational pension schemes (Sonnet and OECD 2005).

By increasing their financial accountability, the abolition of tax incentives strongly promoted sectoral representative organizations to adopt pre-pension schemes already in the next bargaining rounds. As a result of that, the actual substitution of VUT with pre-pension schemes in the private sector has been gradual but extensive. In the end of the 1990's VUT schemes were still included in almost the majority of the sectoral collective agreements, but they become marginal in 2005 (2%) (OECD, 2005). The specific conditions of transitional and pre-pension schemes in the private sectors varied across industry (Trampusch 2009), but they all provide for a similar actuarial adjustment to the rule I have shown for the public sector in Table 5.2.

In all the retrenchment of the early retirement pathway was triggered in 1997, when the Government obtained in the shadow of hierarchy the commitment of social partners and gave them a benchmark by implementing pre-pension schemes in the public sector. The retrenchment was further promoted in the private sector by the fiscal incentives that, increasing the private costs VUT schemes, discouraged social partners from preserving them. Since social partnership did not hinder both the formulation and the implementation of policies retrenching its financial attractiveness, it is hypothesized that the cohort born in 1945 or after will have a significantly lower likelihood of entering a pension pathway than the older cohort (HP 5.3).

Table 5.3 gives an indication over the retrenchment of early retirement pathway, by showing the percentage of workers covered by VUT, transitional, and pre-pension schemes in 2001, 2006. At first glance the implementation of pre-pension schemes seems to be rather fast. In fact in 2001 VUT schemes are significantly replaced in all the industries with the exception of trade and catering and

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19 This opt-out clauses were meant to give employees the opportunities of exiting collective pre-pension schemes and to join private funds (Pochet et al. 2010).
20 Alternatively 3 years earlier in case they will use all their disposable time of the life-course saving schemes at the end of their working life (OECD, 2005).
corporate service. In 2006 VUT schemes become even more marginal, but remain still significant in the service sector. The retrenchment of early retirement pathway was thus more consistent in the primary and secondary sectors than in the tertiary.

Table 5.3: Diffusion of VUT transitional and pre-pension schemes in 2001 and 2005 across industry, expressed as percentage of workers covered by these collective negotiated schemes.

<table>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and fishery</td>
<td>n.a.</td>
<td>0</td>
<td>n.a.</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>20</td>
<td>10</td>
<td>77</td>
<td>33</td>
<td>52</td>
</tr>
<tr>
<td>Construction</td>
<td>20</td>
<td>0</td>
<td>77</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>Trade and catering</td>
<td>43</td>
<td>24</td>
<td>45</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Transport and communication</td>
<td>n.a.</td>
<td>19</td>
<td>n.a.</td>
<td>44</td>
<td>69</td>
</tr>
<tr>
<td>Corporate services</td>
<td>14</td>
<td>17</td>
<td>69</td>
<td>28</td>
<td>50</td>
</tr>
<tr>
<td>Other services</td>
<td>14</td>
<td>7</td>
<td>69</td>
<td>36</td>
<td>50</td>
</tr>
<tr>
<td>Public sector</td>
<td>0</td>
<td>n.a.</td>
<td>100</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Source: (Spijkerman and Klaassen 2002; Beeksma, Junger, and De la Croix 2007)

Note: The industry classification in 2001 and 2006 differ. In 2001 information are available for:
- Industry, that in the Table is represented by manufacturing and construction,
- Trade, that in the Table is represented by trade and catering
- Service, that in the Table is represented by corporate service and other services
- Public sector: information are available only for 2001.

According to the pace of retrenchment across industries, it is hypothesized that among cohort$\geq$1945 the likelihood of entering a pension pathway is significantly higher in the industries where the dissemination of pre-pension schemes is slower: trade and catering and corporate services (HP 5.4).

A summary of the hypotheses about the effectiveness of retrenchment policies for the Netherlands between mid-1990's and 2009 is provided in Table 5.3.

Table 5.3: Summary of how retrenchment policies lower the financial attractiveness of the three pathways of exit in the Netherlands and their hypothesized effectiveness in extending working life.

<table>
<thead>
<tr>
<th>Pathways of exit</th>
<th>Retrenchment policies (RP)</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment pathway</td>
<td>Social partners hinder the formulation of retrenchment policies, they do not significantly reduce its financial attractiveness. It remains a sort of &quot;last resort&quot; pathway.</td>
<td><strong>HP 5.1</strong>: since the financial attractiveness of unemployment is not considerably reduced, the hypothesis is that the cohort born in 1945 or after will NOT have a significantly lower hazard of entering a pension pathway than the older cohort.</td>
</tr>
<tr>
<td>Disability pathway</td>
<td>Since social partners can NOT hinder the formulation of retrenchment policies, these latter successfully lower its financial attractiveness: - benefit is significantly reduced for early entrants - eligibility is narrower with the introduction of a stricter disability definition. Social partners can NOT hinder the implementation of the retrenchment policies.</td>
<td><strong>HP 5.2</strong>: Since social partnership can NOT hinder the formulation and the implementation of policies retrenching its financial attractiveness, it is hypothesized that the cohort born in 1945 or after will have a significantly lower likelihood of entering a pension pathway than the older cohort.</td>
</tr>
<tr>
<td>Early retirement pathway</td>
<td>Thanks to its shadow of hierarchy the Government formulates with social partners retrenchment policies that do significantly reduce its financial attractiveness: - VUT is substituted by pre-pension scheme,</td>
<td><strong>HP 5.3</strong>: Since social partnership can NOT hinder the formulation and the implementation of policies retrenching its financial attractiveness, it is hypothesized that the cohort born in 1945 or after will have a significantly lower likelihood of entering a pension pathway than the older cohort.</td>
</tr>
</tbody>
</table>
whose benefit is based on actuarial parity. Social partners can NOT hinder the implementation of the retrenchment policies, because their financial accountability is increased by the Government.

BUT:
- Dissemination of pre-pension scheme is limited in two industries: trade and catering and corporate services.

| HP 5.4: It is hypothesized that among cohort>=1945 the likelihood of entering a pension pathway is significantly higher in the industries where the dissemination of pre-pension schemes is slower the following industries (as classified in the sample):
- Wholesale and retail trade, transportation and storage & catering.
- Financial intermediation
- Real estate, renting and business activity
- Other community

5.5 **Findings**

The hypotheses outlined in the previous sections are tested using a Competing-Risk model (CRM). Estimations are expressed in hazard ratios in Table 10.3. The descriptive of the Sharelife sample that were used in this analysis are presented in Section 4.2.

The work-retirement trajectories are compared between the cohort of older workers born in 1944 or earlier and the cohort born after 1944. It is estimated the extent to which these two cohorts have a different likelihood of undertaking four types of trajectories: unemployment pathway, disability pathway, early retirement pathway, and “other” pathway. The fourth (other) pathway represent the exit from employment without a income support, because an alternative support is found either in the household resources or in savings. Since this typical work-retirement trajectory is not associated to any of the three pathways of exit investigated here, the estimations pertaining to this other pathway will not be interpreted and therefore are not presented in Table 5.4. These estimation will instead be presented, together with the estimations of the controls, in Appendix 2.

Model 1.1, model 2.1 and model 3.1 include the cohort>1944 variable and the controls (whose estimations are presented in the appendix) for the three pathways of exit (unemployment, disability, and early retirement) and they respectively test HP 5.1, HP 5.2, and HP 5.3. Model 3.2 include also the interaction between the cohort>1944 variable and industries in order to test HP 5.4.
5.5 Findings

Table 5.4: Competing risk models (CRM) estimating the effectiveness of retrenchment policies on the hazard of undertaking one of the four pathways of exit (1. unemployment; 2. disability; 3. early-retirement). Estimates are expressed in hazard ratios.

<table>
<thead>
<tr>
<th>Cohort &gt;1944</th>
<th>(1.1) Unemployment</th>
<th>(2.1) Disability</th>
<th>(3.1) Early Retirement</th>
<th>(3.2) Early Retirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction: Cohort&gt;1944<em>Industry (Ref: Construction</em> Cohort &gt;1944)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort &gt;1944* Agriculture forestry and fishing</td>
<td>2.650</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort &gt;1944* Manufacturing mining &amp; quarrying</td>
<td>1.263</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort &gt;1944* Wholesale and retail trade, transportation and storage &amp; horeca</td>
<td>1.086</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort &gt;1944* Financial intermediation</td>
<td>3.021*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort &gt;1944* Real estate, renting and business activity</td>
<td>2.330</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort &gt;1944* Public administration and defense, education, health and social work</td>
<td>1.754</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort &gt;1944* Other community</td>
<td>2.550*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Failures</th>
<th>Cohort &gt;1944* Agriculture forestry and fishing</th>
<th>Cohort &gt;1944* Manufacturing mining &amp; quarrying</th>
<th>Cohort &gt;1944* Wholesale and retail trade, transportation and storage &amp; horeca</th>
<th>Cohort &gt;1944* Financial intermediation</th>
<th>Cohort &gt;1944* Real estate, renting and business activity</th>
<th>Cohort &gt;1944* Public administration and defense, education, health and social work</th>
<th>Cohort &gt;1944* Other community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjects</td>
<td>1408</td>
<td>1408</td>
<td>1408</td>
<td>1408</td>
<td>1408</td>
<td>1408</td>
<td>1408</td>
</tr>
<tr>
<td>Total Observations</td>
<td>2,399</td>
<td>2,399</td>
<td>2,399</td>
<td>2,399</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIC</td>
<td>45</td>
<td>106</td>
<td>463</td>
<td>463</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** p<0.01, ** p<0.05, * p<0.1


Note: Short variables' description:

Dependent variable:

Work-retirement trajectory: time-varying categorical variable equal to: 0 if the respondent is working at the end of the person-period spell or exit employment at the statutory retirement age of 65 years, 1 if the respondent entered a unemployment pathway at the end of the person-period spell, 2 if the respondent entered a disability pathway at the end of the person-period spell, 3 if the respondent entered an early retirement pathway at the end of the person-period spell, and 4 if the respondent entered other pathways at the end of the person-period spell.

Independent variables:

Cohort: 1944: time-constant dummy variable equal to 1 if the respondent is born after 1944

Industry: time-varying set of dummy variable over the industry where the respondent is working in the person-period spell.

For a more detailed description see Chapter 4. The full model is shown in Appendix A.

The cohort effects in models 1.1, 2.1 and 3.1 in Table 5.4 show that, since social partner have a limited power of hindering retrenchment policies in the Netherlands these latter have been very effective. Starting from model 2.1, the cohort effect shows that, according to HP 5.2, older workers born after 1944 are significantly less likely to enter the disability pathway than older workers that are born earlier. This result supports the argument that their inclusion in a consultation setting prevented social partners from hindering the government's formulation of retrenchment policies. Because of that the government managed to strongly privatize the costs of the disability pathway for both employers and older workers. This result supports moreover the argument that the exclusion of social partners from the social security administration prevented them from opportunistically compensating the disability's retrenchment in its implementation. All in all, since social partners could hinder neither the formulation or the implementation of retrenchment policies, the latter are effective in lowering the
attractiveness of the disability pathway after 1995.

Moving to the cohort effect estimated in model 3.1, according to HP 5.3, older workers born after 1944 are significantly less likely to enter the early retirement pathway than earlier cohorts. This result supports the argument that social partners, initially forced to include retrenchment policies in the Pension Covenant in 1997, did not hinder their further implementation in the industry negotiations. Their compliance was not only the result of their commitment, but was enhanced by a tax regime that fully privatize the costs of VUT schemes. Since this regime made social partners financially accountable for the regulation of the early retirement pathway, they promote its retrenchment to cuts the costs of their members.

With regards to the effectiveness of retrenchment policies by industry the HP 5.4, predicting a significantly higher likelihood to enter the early retirement pathway in industries where the dissemination of pre-retirement schemes is slower, is only partially confirmed by model 3.2. Here the interactions between the cohort effect and industries are included and the construction industry, where the pre-retirement schemes diffused faster than in the other industries, is used as reference. The cohort*industry interactions show that, against HP 5.3, the likelihood of entering the early retirement pathways is not significantly higher in the wholesale and retail trade, transportation and storage & catering, and in the renting and business activity industry. Instead according to HP 5.4, the older workers are significantly more likely to enter the early retirement in the other two industries financial intermediation and other community industries. Furthermore the fact that the likelihood of entering early retirement pathway does not significantly vary in the remaining industries mirrors the fact that in those industries the dissemination of transitional and pre-pension schemes occurs to a similar pace, as shown in Table 5.3.

The final hypothesis HP 5.1 predicting the low effectiveness of the unemployment pathway's retrenchment is supported by model 1.1, showing that the likelihood of entering this pathway does not statistically differ between the cohorts born before and after 1944. This result supports the argument that the retrenchment of the unemployment pathway occurs in the only setting where social partners could weaken the government's plan: the social dialogue over the collective bargaining. In exchange for its commitment to support the retrenchment of the other pathways, STvdA preserved the function of unemployment as the safety net for older workers shed by restructuring processes and excluded from the disability pathway.

At the same time the risk of unemployment does not significantly increase, meaning that this scheme did not massively sheltered older workers excluded from disability. This can have two explanations. First its low attractiveness, further retrenched in 2004, limits its function of alternative pathway. Second, the exclusion of social partners from the administration of the unemployment insurance, limited their capacity of expanding its generosity in the implementation phase.

In conclusion retrenchment policies proved to be effective in extend working life in the Netherlands. The limited interference of social partners makes the Government more effective in reducing the attractiveness of the disability pathway. Moreover the implementation of retrenchment policies is supported, rather than hindered by social partners, who further contributed to their effectiveness.
5.6 Conclusion

This chapter investigated the effectiveness of retrenchment policies between 1995 and 2009. The estimations of the CRM show that retrenchment policies were highly effective. This is because social partners, interacting in modes of social governance punishing opportunistic actions, were discouraged from hindering the retrenchment of pathways of exit for their core membership.

The consultation mode and the privatization of social insurance administration supported the retrenchment of the disability pathway. As shown by the estimates, not affected by the opposition of social partners in the phases of formulation or implementation, those policies significantly reduced the inflow into disability trajectories.

The self-regulation mode supported the retrenchment of early retirement pathway. Since social partners have to bear the costs of VUT scheme, they were encouraged to substitute them with transitional and pre-pension scheme, which preserve the right to exit early and at the same time contain the costs. Nevertheless since these transitional and pre-pension schemes are less financially attractive, they strongly discourage early retirement trajectories.

As shown by the estimation, the effectiveness of retrenchment policies follows to some extent the industry dissemination of transitional and pre-pension scheme, but not for the wholesale and retail trade, transportation and storage & horeca (hotel, restaurant, and catering) industries. Maybe a more precise estimation would have benefit from separating the effect in the transportation and storage, where diffusion of transitional and pre-pension scheme was much faster than in the rest of the industry.

The only ineffective retrenchment concerned the unemployment pathway. This can be interpreted as the side payment that the government had to pay in exchange for social partners' support of other pathways' retrenchment. In the unions and employers' associations perspective, it represented the safety pathways for older workers and companies facing strong international competition.

An interesting matter for discussion are the reasons behind this industry pattern. One can claim that sheltered industries are more likely to retrench the early retirement pathway than the industries that are more exposed to globalization forces. This argument however does not find empirical support, since the effectiveness of retrenchment policies in exposed industries (such as manufacturing mining & quarrying and wholesale and retail trade, transportation and storage & catering), is not significantly different with respect to protected industries, as construction. Alternatively one can claim that the retrenchment is less effective in the industries characterized by the lowest coverage of the collective bargaining (Traxler and Behrens 2002). The effectiveness of the early retirement's retrenchment followed a pattern opposite to the distributional effects expected for social partners' hindering strategies. It is higher in industries where the social partners' power of coordinating HRM practices is stronger and lower elsewhere. In all, social partners in the Netherlands from immovable object (Pierson 1998) became actively involved in promoting the effectiveness of retrenchment policies.

Therefore can be a hint that companies and collective bargaining at some point in the mid-1990's started to intentionally retain older workers. This argument is also supported the failed expansion of unemployment as an “alternative” pathway of exit. Companies could have offered additional private benefit to encouraged older workers to dismiss and enter unemployment, but this is not shown by the data. The extent to which companies have effectively retained older workers from the mid-1990's
The effectiveness of retrenchment policies in The Netherlands onwards is the topic of the second part of the investigation in Chapter 8.
6 The effectiveness of retrenchment policies in Germany

6.1 Introduction

As shown in Section 1.2 the outcome of activation policies in Germany laid in between the outcomes in the Netherlands and Italy. This chapter investigates the extent to which this intermediate outcome was the result of the moderate cooperativeness of the partnership, which let social partners hinder the effectiveness of retrenchment policies. The main research question is: To what extent have social partners hindered the effectiveness of retrenchment policies in Germany between the mid-1990's and 2009?

Because of their moderately strong articulation, labour and capital interests are vertically integrated into two confederations: the BDA (Bundesvereinigung der Deutschen Arbeitgeberverbände) and the DGB (Deutsche Gewerkschaftsbund), organize respectively the employers' associations and union. Those confederations take part in the policymaking in settings that are more institutionalized than in Italy, but less than in the Netherlands. Although a tripartite advisory board monitors the viability of the statutory pension system yearly, social partners affected the formulation of retrenchment policies through a series of temporary ministerial commissions. Those commissions displayed a mode laying in between consultation and concertation, depending on the force balance between actors. As in the Netherlands, the Government could overcome the social partners' deadlock in the shadow of its hierarchy, but only if it could mobilize a vast political consensus against their opportunism. As in Italy, if the government lacked a strong base of political legitimation, social partners had the chance of hindering the formulation of retrenchment policies.

According to the constitutional principle of selbsterwaltung, social partners dominated the boards administrating their members' contributions. Their incentive of hindering the implementation of the pension retrenchment is severely limited by eligibility and benefits' criteria giving them no discretional power (Lehmbruch 2003) This is not true in the disability and unemployment pathway, where social partners have a high discretion role in assessing the health conditions and the residual employability of claimants. These prerogatives were nevertheless removed by the Harz Commission in the early 2000's (Eichhorst and Wintermann 2005).

The Kohl government started retrenching the pension and the unemployment pathways of exit in 1989. Nevertheless the implementation of these policies was delayed by the turmoil aroused in the aftermath of the German economic unification first to 1992 and then to 1997. This turmoil caused also the adoption of emergency measures that partially contradicted the previous retrenchment. Between 1990 and 1995 a temporary unemployment scheme was opened for older workers massively expelled in the Easter regions.

Finally the economic turmoil created a favourable conditions for social partners to distort the finality of the old-age part-time scheme, originally adopted to delay the exit from work. This is because, although managed in self-regulatory modes, those schemes are supported by public subsidies that greatly externalized their costs. These subsidies encouraged social partners to negotiate schemes on vertical part-time that, instead of reducing the working schedule, shortened the working life.

Because of this interference played by social partners both in the formulation and the
implementation of retrenchment policies, the effectiveness of the retrenchment policies in Germany is expected to be lower than in the Netherlands, where social partners can not hinder any phase of the retrenchment policies' development. Conversely it is expected to be higher than in Italy, where social partners could hinder not only the implementation but to a greater extent the formulation of retrenchment policies.

This chapter is organized as follows. First the pathways of exit are described that used to be offered by the German protection system in Section 6.2. In Section 6.3 the institutional channels are discussed by which social partners cooperate to the formulation and implementation of retrenchment policies maximize their opportunity of hinder both the last phase. Further discussion on how the retrenchment policies in Germany lower the financial attractiveness of the previously described pathways of exit is presented in Section 6.4 where, on the bases of this, the hypotheses over their effectiveness are formulated. The hypotheses are tested with a competing risk model, whose estimation is interpreted in Section 6.5. Conclusion about the effectiveness of retrenchment policies are presented at the end.

6.2 Pathways of exit: an overview

In Germany the social protection system managed three main pathways of exit at the beginning of the 1990's. The “statutory pension insurance” system, as regulated by the pension system reforms in 1957 and in 1972 (Rentenreform I-II- Pension reform I- II), covers about 9/10 of the workforce\(^{21}\) and fix at 65 years the statutory retirement age. In spite of that, it granted four episodes that led to the withdrawal of a full pension benefit by the age of 60 years or earlier. Other pathways, namely the unemployment and disability schemes, as regulated between 1972 and 1996, provided episodes anticipating the exit from work by three years or more (Jacobs, Kohli, and Rein 1991a).

An overview of the pathways of exit available in Germany at the beginning of the 1990's is shown in Graph 6.1. Here the episodes provided by the occupational disability schemes are represented in orange, the episodes provided by the public pension system are represented in read, and the episodes provided by the unemployment scheme are light blue. Episodes are drawn according to the earliest age when they became available.

\(^{21}\) only a particular category of public employees (Beamte- about 7% of the workforce) have a separate “pension regime”.
A list of the relevant legislation regulation of pathways of exit that will be mentioned in this and in the following sections is provided in Table 6.1.

**Table 6.1: List of the main relevant legislation and social agreements that regulated the disability, the early retirement and the unemployment pathway of exit in Germany.**

<table>
<thead>
<tr>
<th>Unemployment pathway</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1983</strong> - Arbeitslosengeld I SGB III- Erweiterung (1)</td>
<td>1983 Insurance-based unemployment benefit SGB III- the maximum duration of the insurance-based unemployment benefit is extended to 12 months for older workers (54 years and more).</td>
</tr>
<tr>
<td><strong>1985</strong> - Gesetz zur Reform der Job-Förderung und Rentenversicherung</td>
<td>1985- Act on the Reform of Job Promotion and Statutory Pension Insurance- the maximum duration of the insurance-based unemployment benefit is extended to 18 months for older workers (49 years and more).</td>
</tr>
<tr>
<td><strong>1986</strong> Gesetz zur Reform der Job-Förderungsgesetz</td>
<td>1986- Law on the Reform of the Job Promotion Act- the maximum duration of the insurance-based unemployment benefit is extended to 24 months for older workers (54 years and more).</td>
</tr>
<tr>
<td><strong>1987</strong> - Gesetz über die Erweiterung des Versicherungsschutzes in Arbeitslosigkeit und Kurzarbeit</td>
<td>1987 Act on the Extension of Insurance Coverage in Unemployment and Short-time work- the maximum duration of the insurance-based unemployment benefit is extended to 32 months for older workers (54 years and more).</td>
</tr>
<tr>
<td><strong>1986</strong>- Gesetz zur Reform der Job-Förderungsgesetz § 428 of SGB III</td>
<td>1986- Law on the Reform of the Job Promotion Act § 428 of Social Law Book III - workers aged 58 years or older are exempted from searching for a new job.</td>
</tr>
<tr>
<td><strong>1989</strong> Altersteilzeit (1)</td>
<td>1989- Introduction of old-age part-time work</td>
</tr>
<tr>
<td><strong>1990-1995</strong> Altersteilgangsgeld</td>
<td>1990-1995 Early retirement benefit on the bases of long-term unemployment. Provisions offered to older unemployed in the Eastern regions that up to 5 years before the entry into a pension pathway (55 years)</td>
</tr>
<tr>
<td><strong>1994</strong>- Altersteilzeit (2)</td>
<td>1994- Relaxed conditions for old-age part-time work</td>
</tr>
<tr>
<td><strong>1996</strong>- Gesetzes sur Förderung eines gleitenden Übergangs in den Ruhestand (3)</td>
<td>1996- Reform of old-age part-time work to encourage progressive retirement</td>
</tr>
<tr>
<td><strong>1998</strong>- Altersteilzeit (4)</td>
<td>1998- Further prolongation of old-age part-time work</td>
</tr>
</tbody>
</table>
The effectiveness of retrenchment policies in Germany

<table>
<thead>
<tr>
<th>Year</th>
<th>Law/Act</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>Zweites Gesetz zur Fortentwicklung der Altersteilzeit</td>
<td>Second Law for the further development of old-age part-time scheme.</td>
</tr>
<tr>
<td></td>
<td>(5)</td>
<td>- Abolish the regulation § 428 of Social Law Book III that exempts workers aged 58 years or older from searching for a new job.</td>
</tr>
<tr>
<td>2005</td>
<td>- Hartz IV- Vierte Gesetz für moderne Dienstleistungen am Arbeitsmarkt</td>
<td>2005 - Hartz IV Fourth Act for Modern Services on the Labour Market</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Maximum duration of insurance based unemployment benefit (Arbeitslosengeld I) is shortened.</td>
</tr>
</tbody>
</table>

**Disability pathway**

<table>
<thead>
<tr>
<th>Year</th>
<th>Act/Reform</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>- eligibility to disability pension scheme are narrowed-down.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- years before the age of 60 years are fully taken into account for the actuarial adjustment of the benefit.</td>
</tr>
<tr>
<td>2001</td>
<td>&quot;Gesetz zur Reform der Rehabilitation und Teilhabe behinderter Menschen</td>
<td>2001 - Act to reform Rehabilitation and Participation of Disabled People</td>
</tr>
</tbody>
</table>

**Early retirement pathway**

<table>
<thead>
<tr>
<th>Year</th>
<th>Act/Reform</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957</td>
<td>Rentenreform I</td>
<td>1957 - Pension reform</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- introduces the pension unemployment scheme at the age of 60 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- introduces the pension female at the age of 60 years and after 15 years of contribution.</td>
</tr>
<tr>
<td>1972</td>
<td>Rentenreform II</td>
<td>1972 Pension reform</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- introduces the pension long-term insured scheme at the age of 63 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- introduces the pension disability scheme at the age of 60 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- It is legislated in 1989, but its implementation is delayed to 1992.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- All pathways that allow to exit before the age of 65 are set to be progressively phased out by 2012.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- the actuarial parity of the benefit is strengthened (-0.3% for each month before the age of 65 years).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- The phasing out of pathways of exit without actuarial adjustment of pension benefit is accelerated from 2012 to 2004.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- disability pension scheme: eligibility is delayed by 3 years (60 → 63 years) or is maintained at the age of 60 years and the benefit is actuarially adjusted (-0.3% a month).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- the actuarial parity of the benefit is further strengthened with the so-called “demographic factor” - eligibility to disability pension scheme are narrowed-down.</td>
</tr>
</tbody>
</table>


The unemployment pathway was institutionalized in 1983, when the insurance-based unemployment benefit was extended to 12 months for unemployed older than 54 years (Arbeitslosengeld I SGB III- Erweiterung (1)). Insurance-based unemployment benefit replaced 67% of the last wage if the unemployed had dependent children or 60% otherwise. After that recipients got entitled to the means-tested unemployment benefit (Arbeitslosenhilfe I). Its replacement rate was in average 10% lower (57% of the last wage with dependent children and 53% otherwise) but it could be withdrawn without any general maximum period of receipt\(^{22}\). The maximum duration of the insurance

\(^{22}\)In 2006 this scheme was abolished and it was substituted by a "unemployment benefit II" providing flat rate benefit for the most basic need under a stricter means-tested conditions and only in case they actively search for a new jobs (Radl, 2010).
benefit was extended to 18 months in 1985 with the Act on the Reform of Job Promotion and Statutory Pension Insurance (Gesetz zur Reform der Job-Förderung und Rentenversicherung), to 24 month in 1986 with the Act on the Reform of Job Promotion and Statutory Pension Insurance (Gesetz zur Reform der Job-Förderungsgesetz), and finally to 32 months in 1987 with the Act on the Extension of Insurance Coverage in Unemployment and Short-time work (Gesetz über die Erweiterung des Versicherungsschutzes in Arbeitslosigkeit und Kurzarbeit) (Jacobs, Kohli, and Rein 1991a).

This extension created high incentives for older workers and companies to make extensive use of this pathway and progressively anticipate the exit from employment at the age of 57 years and 4 month. These incentives were further reinforced by the introduction of the Law on the Reform of the Job Promotion Act § 428 of Social Law Book III (Gesetz zur Reform der Job-Förderungsgesetz § 428 of SGB III) in 1986, because it exempted unemployment benefit's recipients aged 58 years or older from the obligation of searching for job. The unemployment pathway was so beneficial for companies during the economic restructuring of the 1980's and 1990's that they provide older workers with generous severance pay or other private transfer to compensate the difference between the previous wage and the unemployment benefit. The use that companies make of this unemployment pathways is so systematic that the exit at the exit from employment at the age of 57 years (the so-called 57th rule) become institutionalized both as a social norm and a HRM practice (Jacobs, Kohli, and Rein 1991a; Schmähl 2003).

The disability pathway was provided by the occupational disability scheme since the mid-1970's. If individuals with a contribution history of at least 5 years and worked at least 3 out of the last 5 years lost 50% of their working capacity, they could receive 2/3 of the full old age benefit for one year. In case after that year they were unable to find a full or part-time job, they are entitled for general disability pathway, where full-old age benefit is granted (Jacobs, Kohli, and Rein 1991a).

Finally, as mentioned at the beginning of this section the old-age pension pathway provided four different episodes between the age of 60 and 63 years, namely long-term unemployment, women, and seniority. The financial attractiveness of these episodes strictly depends on the length of the contribution history, since the pension formula for the calculation of the benefit on the so-called “earning points” cumulated along each year of effective or figurative contribution. This earning points represent at least 75% of the annual salary and lead to a net replacement rate of about 70% after 45 years of work.

The unemployment episode was created as early as in 1957, when the Adenauer's reform (Rentenreform), restructured the pension system in the second post-war period. This episode was

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23The extent to which and the period in which older workers were compensated depended upon the “social plan” employers stipulated with older workers before the dismissals. This practice became institutionalized as 58 ot 59 rule.

24General disability is given to people that were not healthy enough to perform any regular employment on a regular bases (80% of the pensions delivered). The intake rate was very high. It has been calculated that 32% of male blue-collar workers in 1987 were entering disability retirement. Applications were not automatically approved, but they were subjected to the approval of the retirement insurance. The rate of approval was about 2/3 and appeals were rarely successful. Rejected applicants could either return to the labour market, or enter unemployment episode (12 months at 63% of last net income). After that means-tested unemployment assistance and welfare benefits are available.

25 According to OECD (2005) the standard net replacement rate represents the replacement rate with average 45 earning point, cumulated over 45 years of contributions based on the average net earning of all current workers.
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opened from the age of 60 years for seniors with a work history of 15 years or longer that had lost their job at least 1 year earlier. With the minimal requirements these episodes provide low benefits. Nonetheless their attractiveness increased for women if other more generous pathways were open to other members of the household, typically the partner, according to a male breadwinner logic (Blossfeld and Drobnic 2001). For men their attractiveness increased also if these benefits were supported with lump-sum by employers. This was the case of the unemployment scheme, which undertake a big diffusion in the mid 1970's and 1980's as a socially legitimated way to adjust the workforce to the market pressure induced by the globalization (Jacobs, Kohli, and Rein 1991a; Börsch-Supan and Wilke 2006).

Other two much more generous episodes are available for “core” male older workers, where open in 1972, when the second expansive reform of the pension system (Rentenreform (2)) took place. The first is the flexible retirement episode and includes the long-term insured and made individuals that worked at least 35 years eligible for a old-age pension at 63 years. The second episode was opened for older workers that at the age of 60 years old and after a contribution history of 35 years were declared affected by a severe disability that impair at least 50% of their earning capacity. The financial attractiveness of this episode relies in two elements. The first is the generosity of the benefit, which is near to the average replacement rate discussed above. The second is the ambiguity of the eligibility conditions, which mixed both health and labour market criteria. These conditions entitle on the one hand older workers that experience an an objective reduction of the working capacity by 50% or a reduction of earning capability below a minimum threshold for any reasonable occupation (“erwerbsunfähig”, EU) or a lack of vacancies that can enable him to earn at least 50% of their previous wage (“berufsunfähig”, BU) (Jacobs, Kohli, and Rein 1991a; Schmähl 2003).

Recipients of episodes belonging to the pension pathway had a status of retirees, as if they retired at the statutory age of 65 years. As a consequence of that they received full old-age pension benefit, whose amount depends almost entirely by the contributions they had paid throughout their overall working career. The pension pathway reduces the final pension benefit only indirectly by interrupting their contribution records, since no actuarial adjustments are applied (Jacobs, Kohli, and Rein 1991a) (Börsch-Supan and Wilke, 2006).

The cumulation of the necessary contribution period does not means that effective work had to be performed until the entry into one of the pension pathway's episodes. In fact the benefit could also be accrued by the so-called figurative contribution periods, that are period in which the career is temporarily interrupted for socially legitimated reasons, such as maternity, education, unemployment, disability etc. In particular unemployment and disability provide older workers with preliminary pathways that anticipate their employment exit before the eligibility to the pension pathways (Jacobs, Kohli, and Rein 1991a; (OECD 2005).

After describing the main pathways of exit available in the social protection system in Germany the institutional affinities that enable social partners to participate to their regulation are presented in the next section.
6.3 Institutional affinities between protection and partnership

In Germany the social governance modes where social partners participate to the regulation of the three main schemes that build pathways of exit (disability, early retirement, and unemployment) limit their capacity of hindering the formulation of retrenchment policies (Schludi 2005a). but not their implementation (OECD 2005; Trampusch 2004).

Because of their moderately strong articulation, labour and capital interests are vertically integrated into two confederations: the BDA and the DGB, organize respectively the employers' associations and union. Those confederations take part in the policymaking in settings that are more institutionalized than in Italy, but less than in the Netherlands.

A tripartite advisory board, the Sozialbeirat (Social Advisory Council) monitors the financial evolution of the statutory pension system yearly and the repercussions of law changes. As in the Netherlands, their opinion is compelling for the government only if they are unanimous. Although their monitoring had an influence on the formulation of retrenchment policies, this influence was difficult to observe since it was overwhelmed by other interaction settings, the ministerial commissions (Steinmeyer 2000).

Since these commission appointed temporary and their membership could vary, they did not develop a constellation as cooperative as in the Netherlands. As a result they displayed a mode laying in between consultation and concertation, depending on the force balance between actors. As in the Netherlands, the Government could overcome the social partners' deadlock in the shadow of its hierarchy, but only if it could mobilize a vast political consensus and push them toward power-maintaining strategies. As in Italy, if the government lacked a strong political legitimation, social partners had the chance of playing policy-oriented strategies and hindering the formulation of retrenchment policies (see section 3.5) (Schludi 2005a).

The first commission was appointed by labour minister Blüm of the Kohl christian-democrat cabinet three years before the the first pension reform was legislated in 1989. Since the proposal was delivered after a lengthy discussion and obtained a general consensus among all political forces, it was also backed by the social partners. More problematic was to obtain such a wide political consensus after the German economic unification (Hinrichs 2003). Given the unification turmoil the implementation of this pension retrenchment had to be postponed. At the same time unions (IG metall) asked for the appointment of a second commission: the bündnis für arbeit (alliance for job) to promote the economic recovery and the creation of new jobs. This commission failed in 1996, when the Kohl cabinet refused to moderate their proposal concerning the implementation of the 1992 reform. The withdrawal of the unions led the government to implement their policy unilaterally and generated massive protests which obliged the government to postpone again their proposal by three years. Not backed up by a wide political consensus, this unilateral action turned against the government at the elections in 1998. The new Schröder cabinet appointed a new alliance for job, where he successfully re-plan the enactment of the 1992 reform in 2001 (Riester commission) and the retrenchment of the unemployment pathway in 2005 (Hartz commission). This was because the design of these commissions allowed the chairmen to avoid social partners' veto by searching wide consensus among the political forces within the majority and the opposition (Lehmbruch 2003(Schludi 2005a) Schludi
The effectiveness of retrenchment policies in Germany

According to the constitutional principle of selbsterwaltung, social partners dominated the boards administrating their members’ contributions. Their incentive of hindering the implementation of the pension retrenchment is severely limited by eligibility and benefits’ criteria giving them no discretionary power (Lehmbruch 2003). This is not true in the disability and unemployment pathway, where social partners have a high discretionary role in assessing the health conditions and the residual employability of claimants. These prerogatives were nevertheless removed by the Harz Commission in the early 2000's (Eichhorst and Wintermann 2005).

Finally social partners take part in the implementation of the old-age part-time schemes, originally adopted to delay the exit from work. However the economic turmoil created favourable conditions for social partners to distort its function. This is because, although managed in self-regulatory modes, those schemes are supported by public subsidies that greatly externalized their costs. These subsidies encouraged social partners to negotiate schemes on vertical part-time that, instead of reducing the working schedule, shortened the working life (Trampusch 2004).

All in all, the limited cooperativeness of the partnership system encourage social partners to hinder not much the formulation but rather the implementation of retrenchment of the pension and unemployment pathway. The next section discusses the expected empirical implication of this interference.

6.4 Retrenchment policies' effectiveness: working hypotheses

During the 1990's different sets of policies to extend work life have reformed the existing pathways of exit (Teipen and Kohli 2004). A first set of passive policies to extend work life is introduced with the goal of retrenching the institutional opportunities to use the pathways of exit (especially the pension pathway) already in 1989. The implementation of the new regime however was interrupted in the aftermath of the German Reunification in 1990 (Schludi 2005a).

The reunification posed a great challenge for the entire German economy. In fact if companies in the Eastern regions were suddenly exposed to the economic turmoil induced by globalizations, companies in the Western regions had to support the former by massively increasing their non-wage labour cost, both in terms of tax and contributory rates. As a result of this, German economy had to incur a massive process of industrial restructuring in which a large mass of workers were expelled from the productive system (Teipen and Kohli 2004). Because of that the government applied emergency measures that partially contradict the EWL target. The retrenchment pathway if first postponed to 1992 and then to 1997 and at the same time a new temporary scheme in the unemployment pathway between 1990 and 1995 is targeted to older workers massively expelled by the productive system in the Eastern regions (OECD 2005). Because of that the top-down conveyance of the EWL re-conversion is partially interrupted until 1996. After that no significant attempts are made by the government and the Confederations to enhance this conveyance downward to the organizations implementing incentives in the disability and unemployment pathway (OECD, 2005).
6.4.1 Unemployment pathway

The government was also in Germany very cautious in retrenching the unemployment pathway, since it represented a safety-net for older workers not eligible for other more generous pathways. The retrenchment of the unemployment pathway was legislated until 2005, when the so-called Hartz IV reform (Hartz IV- Vierte Gesetz für moderne Dienstleistungen am Arbeitsmarkt-Hartz IV Fourth Act for Modern Services on the Labour Market), reduces the maximum duration of the insurance-based unemployment benefit (Arbeitslosengeld I).

Nonetheless other attempts were made since 1989 to reduce the abuse that companies made of this pathway (57th rule explained above), by introducing an alternative pathway the “old age part-time work scheme” (Altersteilzeit)\textsuperscript{26}. Under the assumption that lighter working conditions would have encouraged a longer working life, workers older than 55 years could half their working time for 6 years or until they turned 60. During this 6 years they were receiving 70% of their previous earnings and social security contributions were topped up 90% of their former value and was subsidized by the unemployment insurance, which refunded 20% of the companies' costs for six year\textsuperscript{27}. The implementation of these schemes was demanded to the collective negotiations, which provided also additional benefits for older workers such as lump- lump payments and compensation for future reduction on pension benefits, (Jacobs et al., 1991; (Radl 2010); OECD, 2005, Frerichs Naegele, 2008).

Despite the public subsidies, the old-age part-time scheme did not overrule for companies the opportunity cost of shedding older redundant workers full-time as soon as they become eligible to the unemployment pathway at the age of 57 years and 4 months (57th rule). Because of that this scheme is only marginally disseminated until 1996. In 1996 the social protection system introduced the Act on the Promotion of a gradual transition into retirement (Gesetz zur Förderung eines gleitenden Übergangs in den Ruhestand). It reduces the minimum age of entry into an old-age part-time scheme from 58 to 55 years and give social partners the role of implementing those scheme into companies throughout the collective negotiations.

In 1996, the EWL re-conversion was not yet conveyed the strategy of the organizations responsible for the collective bargaining. On the one hand the target was not centrally conveyed by central social agreements as in the Netherlands. On the other hand the government itself until the previous year, financed additional pathways of exit to boost the economic recovery in the East (Trampusch 2004). Because of that they attempts at hindering the implementation of old-age part-time scheme, by applying a concept of vertical rather than horizontal part-time. Thanks to this concept instead of shortening the working schedule and lengthening the working life (progressive time model), social partners can bargain a model where the working time remain unaltered and the working life is halved

\textsuperscript{26} The old-age part time retirement scheme substitute the so-called pre-retirement schemes (May 1984-December 1988) people could exit labour market at the age of 58 years old. They could officially retire at 60 year with early retirement pathway and in the mean time was supported by the employer and the unemployment office (OECD (a), 2006).

\textsuperscript{27} These subsidies were provided if employer progressively replaced older workers with a younger unemployed or trainee. However afterwards a non-funded version of this program was introduced and in this case the intergenerational replacement was not taking place (Frerichs Naegele, 2008). Since only the participants to the funded early retirement are registered, the total uptake of this program is underestimated.
Social partners were encouraged to hinder the implementation of old-age part-time scheme, because they are not financially accountable for that. In fact the unemployment insurance fund allocates to companies that adopted the old-age part-time scheme vertically, with the so-called *Blockmodell* the same subsidies provided for the progressive time scheme and no additional costs have to be bear by social partners or their members (Schmähl 2003).

The public subsidies is finally abolished in 2000, but because of the long transitional period, only in 2009 they will become financially accountable for the implementation of old-age part-time scheme. Because of that along the overall observation period social partners can successfully hinder the retrenchment of the unemployment pathway.

As mentioned earlier, a measure to discourage the use of a insurance-based unemployment episode before a pathway of exit was implemented only in 2006 as part of a major labour market reform (“Hartz reform IV”). As shown in graph 1.7 it first reduced the maximum duration of the unemployment episode. Until 2006 previous rules granted a higher maximum duration of the benefit from the age of 45 onward and it granted up to 32 months at the age of 58. Under the 2006 regime, the maximum duration of the benefit increased only from the age of 55 from 12 to 18 months. This reform is partially reversed in 2008, when the maximum duration of the benefit increased at the age to 15 months from the age of 50 and rise up to 24 months at the age of 58 (Aleksandrowicz 2014; Radl, 2010).

Furthermore the “Hartz reform” further reduces the profitability of unemployment episodes that exceed the maximum duration of the regular benefit because it substituted the generous *Arbeitslosenhilfe* with a means-tested and tax-funded social assistance transfer (*Arbeitslosengeld II* – unemployment benefit II)\(^{28}\) whose amount covers only the most basic needs (Frerichs Naegele, 2008 ; Radl 2010).

\(^{28}\) Unemployment benefit I was providing a benefit equal to about 50% of the last net income to a single person and 53% of the last net income to a married person.
6.4.1 Unemployment pathway

**Graph 6.7:** Maximum duration of the unemployment episode by age groups between 1987 and 2006, from 2006 and 2007 and after 2008.

Since social partners can hinder the implementation of retrenchment policies, the hypothesis is that the cohort born in 1945 or after will NOT have a significantly lower hazard of entering a unemployment pathway than the older cohort (HP 6.4).

Since social partners can hinder the implementation of retrenchment policies especially in the old-age part-time schemas, the hypothesis is that among the cohort born in 1945 part-time workers will have a significantly higher likelihood of entering an unemployment pathway than full-time workers (HP 6.1).

Since the public sector had higher eligibility conditions, it is expected that among the cohort born in 1945 older workers in public Administration and defence, and in the education, health and social work have significantly lower likelihood of entering a pension pathway than the older cohort working for the private sector (HP 6.2).

Since social partners hindered the implementation of retrenchment policies significantly more in industries exposed by the globalization, it is hypothesized that among the cohort born in 1945 older workers will be more likely to undertake this pathway if they work in: wholesale and retail trade, transportation and storage & catering; real estate renting and business activity, and financial intermediation; manufacturing, mining & quarrying (HP 6.3).

### 6.4.2 Disability pathway

The occupational disability episode was radically modified in 1999 by the Act to reform the public pension system" (Pension Reform Act 1999 - RRG 1999) on 22.12.1997 SGB VI ("Gesetz zur Reform der gesetzlichen Rentenversicherung" (Rentenreformgesetz 1999 - RRG 1999) ist am 22.12.1997 SGB VI- "- also known as Riester reform). As much as in the pension pathway, social partners play no direct role also in the formulation of retrenchment of the disability pathway. The social protection system could therefore reform drastically the eligibility conditions that regulated the access to this pathway. The concept of “disability” is in fact redefined as a reduction of work capacity...
due only to a deterioration of physical or psychological conditions. After 1999 the occupational disability due to a disadvantage in the labour market is abolished (Börsch-Supan & Wilke, 2006; OECD, 2005).

The retrenchment of the entitlement conditions that regulate the access to the disability pathway is however undermined in the implementation phase by the active role played by social partners in the self-administration bodies (PES) that are responsible of assessing the eligibility of claimant. Moreover social partners have a discretional power in defining whether the claimants and recipients have a reasonable perspective to re-integrated into labour market or not. In the first case recipients can be included into rehabilitation programs, as considerably improved in 2001 by the act to reform Rehabilitation and Participation of Disabled People, and re-integrated into labour market (Gesetz zur Reform der Rehabilitation und Teilhabe behinderter Menschen). In the second they are just included in a disability pathway.

Because of the role they play in PES for the implementation of disability benefits, social partners can manipulate the allocation procedures to assess older workers eligible to enter disability pathway (and not a rehabilitation program) with more “inclusive” criteria without being hold accountable for that. As a result, social partners are given the opportunity of watering down the retrenchment formulated in 1999.

Since social partnership can hinder the implementation of retrenchment policies, it is hypothesized that the cohort born in 1945 or after will NOT have a significantly lower likelihood of entering a pension pathway than the older cohort (HP 6.4).

6.4.3 Pension pathway

The retrenchment of the pension pathway starts in 1989, when the Act to reform the public pension system (Gesetz zur Reform der gesetzlichen Rentenversicherung- Rentenreformgesetz RRG 1992 -11/4124 SGB VI) (Schmähl 1993). This reform provides for the progressive increase of the minimum eligibility conditions to enter the different episodes of the pension pathway: the women's, seniority, occupational disability, and unemployment episode. Moreover it improves the actuarial parity of the pension benefit, which, besides the working history, is also adjusted to the effective age of exit from employment. The implementation of the reform is set to take place as of 1992, but the economic emergency raised by the reunification process bring the social protection system to delay this process (Rürup, 2002; OECD, 2005). The implementation process is then accelerated in 1996 with the Act on the Implementation of the Program for improved growth and employment in the areas of pension and employment promotion (Gesetz zur Umsetzung des Programms für mehr Wachstum und Beschäftigung in den Bereichen der Rentenversicherung und Arbeitsförderung). This act anticipate the phasing-out of the pension pathways of exit from 2012, as originally established in 1992, to 2004. The transitional rules are graphically represented in Graph 5.2 for the seniority episode, Graph 5.3 for the women's episode, Graph 1.4 for the disability episode and Graph 1.5 for the unemployment episode.
6.4.3 Pension pathway

**Graph 6.3:** Transitional change in the eligibility conditions for the female pathway as defined by reforms in 1992 and 1999.

The implementation of these policies is gradual to preserve the acquired rights of older workers that built up expectations based on the previous rules. The transitional rules showed that the aim of these reforms is not to close the institutional opportunities to use these pathways of exit but to make them a less profitable option. In more details the implementation process provides two different transitional rules. In the first set of rules, where the recipient receive a full old-age pension benefit without actuarial adjustment, the minimum age to become eligible to enter the pension pathway increases by 6 months every years. The starting time of the implementation of this transitional rules varies according to the episodes. The earliest implementation takes place in the unemployment episode in 1997. It is then followed by the implementation in the seniority and female episodes in 2000, and in the disability episode in 2001 (Berkel and Börsch-Supan 2004).

From a comparative perspective, the women' episode was the pension scheme that undertook the greatest retrenchment. In fact while the minimum age of the other “male” episodes increases progressively, the entitlement for women rise abruptly from 40 to 60 years in 1997 at the beginning of the transitional period.
The second set of transitional rules required instead an actuarial adjustment of the benefit to the actual retirement age but leave unaltered the eligibility conditions for at least 15 years, as in the case of the unemployment scheme. In other cases the benefit's actuarial adjustment is not accompanied by any increase of the minimum age, as the disability pathway and of the long-term insurance pathway (where the minimum age actually decrease by one year to 62 years in 2013).

Also in the second set of transitional rules the women's episode is exposed to the greatest retrenchment, since also in this case the minimum age jumps from 40 to 60 years in 1997, but further increases are delayed as of 2011.

As for the actuarial adjustment of the pension benefit, Figure 1.6 compares the retirement-age-
specific adjustments on the bases of the pre- and post- 1992 reforms rules. According to the post-1992 regime, the full old-age pension benefit, calculated according to the earning points cumulated in the working life, is delivered entirely only at the age of 65 (100%). The benefit is reduced by 0.3% for each months the retirement is anticipated from the pivotal age of 65. The total actuarial reductions cannot exceed 10.8%. Simmetrically, the old-age pension benefit is increased by 0.5% for each additional month the individual retire after the statutory retirement age of 65 (Radl, 2010; OECD, 2005).

The actuarial parity of the pension benefit is further increased in 1999, when a new demographic factor is added to the calculation of the pension benefit ("Gesetz zur Reform der gesetzlichen Rentenversicherung" (Rentenreformgesetz 1999 - RRG 1999) ist am 22.12.1997 SGB VI- "Act to reform the public pension system" (Pension Reform Act 1999 - RRG 1999) on 22.12.1997 SGB VI). This demographic factor connects further reduces the benefit generosity in case of early exit, because it connects the benefit to the projections concerning the population ageing.

Graph 6.6: old-age pension benefit adjusted on the actual retirement age, calculated as the percentage of the full old-age benefit that the individual would receive at the statutory retirement age of 65.

All in all, retrenchment policies, although delayed by the consequences of the economic reunification, have significantly lowered the financial attractiveness of the pension pathway. Because of that, it is hypothesized that the cohort born in 1945 or after have a significantly lower likelihood of entering a pension pathway than the older cohort (HP 6.5).

In addition, since the retrenchment of eligibility conditions is higher for women than for men, it is

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29 The calculation of the retirement-age-specific adjustments assumes that previous earnings are constant after 60 years old and that the 1992 reform is fully phased in.

30 Although relevant, this reform decreases but do not eliminate the monetary incentives to retire early. In fact the German old-age pension system should impose a penalization of 8-9% by year in order to be actuarially fair and eliminate early exit incentives (Börsch-Supan & Schnabel, 1997; Börsch-Supan & Wilke, 2006).

31 Also in this case these measures are also implemented gradually in order to distribute the burden over different cohorts, reducing the effective impact of the reforms that are implemented until 2005 (Radl, 2010 (c)).
hypothesized that *among the cohort born after 1944 women are less likely than men to undertake a pension pathway* (HP 6.6).

**Table 6.2:** Summary of how retrenchment policies lower the financial attractiveness of the three pathways of exit in Germany and their hypothesized effectiveness in extending working life.

<table>
<thead>
<tr>
<th>Pathway of exit</th>
<th>Retrenchment policies</th>
<th>Working hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment pathway</td>
<td>Social partners can NOT hinder the formulation of retrenchment policies in the consultation process. The social protection system tries it formulating old-age part-time schemes to substitute the unemployment pathway. This latter is only marginally reformed. It remains a sort of “last resort” pathway for older workers expelled from the productive system. Social partners can hinder retrenchment policies by manipulating the implementation of old-age part-time schemes. More in detail they can implement these scheme in the block model instead of the progressive time model without being accountable for that</td>
<td>HP 6.1: Since social partners can hinder the implementation of retrenchment policies, the hypothesis is that the cohort born in 1945 or after will NOT have a significantly lower likelihood of entering a pension pathway than the older cohort. HP 6.2: Since the public sector has higher eligibility conditions, I expect that among the cohort born in 1945 older workers in the -Public Administration and defence, -education, health and social work have significantly lower likelihood of entering a pension pathway than the older cohort working for the private sector. HP 6.3: Since social partners hinder the implementation of retrenchment policies significantly more in industries exposed by the globalization, I expect that among the cohort born in 1945 older workers will be significantly more likely to undertake this pathway if they work in: wholesale and retail trade, transportation and storage &amp; catering; real estate renting and business activity, and financial intermediation; manufacturing, mining &amp; quarrying.</td>
</tr>
<tr>
<td>Disability pathway</td>
<td>Social partners can NOT hinder the formulation of retrenchment policies in the consultation process. The social protection system manage to unilaterally reduce its financial attractiveness because increases the eligibility conditions and the actuarial fairness of the benefit. On the contrary social partners can hinder the implementation of retrenchment policies, since in the Public Employment Service (PES) they discretionary power in allocating the benefit to the claimants.</td>
<td>HP 6.4: Since social partnership can hinder the implementation and the of retrenchment policies, I hypothesize that the cohort born in 1945 or after will NOT have a significantly lower likelihood of entering a pension pathway than the older cohort</td>
</tr>
<tr>
<td>Pension pathway</td>
<td>Social partners can NOT hinder the formulation of retrenchment policies in the consultation process. The social protection system manage to unilaterally reduce its financial attractiveness because increases the eligibility conditions and the actuarial fairness of the benefit. However: Because of the economic emergency induced by the German reunification, these retrenchment policies are progressively implemented between the late 1990 and the 2010s. Comparatively the retrenchment of the eligibility is higher for women than for men.</td>
<td>HP 6.5: Since social partnership can NOT hinder the formulation and the implementation of policies retrenching its financial attractiveness, I hypothesize that the cohort born in 1945 or after will have a significantly lower likelihood of entering a pension pathway than the older cohort HP 6.6: Since the retrenchment of eligibility conditions is higher for women than for men, I hypothesize that among the cohort born after 1944 women will be significantly less likely than men to undertake a pension pathway.</td>
</tr>
</tbody>
</table>
6.5 Findings

The hypotheses outlined in the previous sections are tested using a Competing-Risk model (CRM). Estimations are expressed in hazard ratios in Table 9.3. The descriptive of the sample that I have used in this analysis were presented in Chapter 4.

The work-retirement transition of the cohort of older workers born in 1944 or earlier and the cohort born after 1944 are compared. In particular it is estimated to what extent they have a different likelihood of undertaking four types of work-retirement trajectories based on: unemployment pathway, disability pathway, early retirement pathway, and “other” pathway. The fourth (other) pathway represent the exit from employment without a income support, because an alternative support is found either in the household resources or in savings. Since this typical work-retirement trajectory is not directly affected by the retrenchment policies explained here, the results concerning this other pathway are not interpreted. The estimation is instead presented, together with the full model in Appendix B.

Model 1.1, model 2.1 and model 3.1 include the cohort>1944 variable and the controls (whose estimations are presented in the appendix ) for the three pathways of exit (unemployment, disability, and early retirement) and they respectively test HP 6.1, HP 6.3, and HP 6.4. Model 1.2 includes also the interaction between the cohort effect and industries in order to test HP 6.5 HP 6.6.

At first glance, retrenchment policies in Germany are effective only in the pension pathway. The cohort effect estimated for the pension pathway in model 3.1, it shows that, according to the HP 6.5, older workers born after 1944 are significantly less likely to enter the early retirement pathway than older workers that are born earlier. This result offer empirical support to the argument that the effectiveness of retrenchment of the pension pathway is boosted by the impossibility of social partners to hinder both their formulation. This argument is also supported by the fact that no significant pattern exist between core members and outsiders (model 3.2).

Furthermore, according to the HP 6.6, since the retrenchment of the eligibility conditions is comparatively greater in the women’ episode than in other pension episodes, model 3.2 show that the interaction between the cohort effect and gender is significant and higher than zero. This means that among the cohort born after 1944 women are significantly less likely than men to undertake a pension pathway.

Moving to the disability pathway, model 2.1 supports the HP 6.4, showing that the cohort born in 1945 or after does not have a significantly lower likelihood of entering a pension pathway than the older cohort. This supports the argument that the effectiveness of retrenchment policies in the disability pathway is hindered by the social partners in the implementation phase. Social partners take part in the PES, where can successfully manipulate the assessment of older claimants to systematically include them into disability pathway and not in rehabilitation programs also after the reform set in 2001.

As for the unemployment pathway, the cohort effect in model 1.1 show that, according to the HP 6.1 the cohort>= 1945 does NOT have a significantly lower likelihood of entering a pension pathway than the older cohort. Following the argument this result is due to the massive dissemination of old-age part-time schemes based on the block models that distort the finality of these schemes from EWL into fostering early exit. This massive dissemination was enhanced by social partners in the collective
negotiations, especially because the can opt for a block model without loosing the public support.

Table 6.3: Competing risk models (CRM) estimating the effectiveness of retrenchment policies on the hazard of undertaking one of the four pathways of exit in Germany (1. unemployment; 2. disability; 3. early-retirement). Estimates are expressed in hazard rates (Full model shown in Appendix B).

<table>
<thead>
<tr>
<th>Cohort&gt;=1945</th>
<th>1,1 unemployment</th>
<th>1,2 unemployment</th>
<th>1,3 disability</th>
<th>2,1 unemployment</th>
<th>3,1 pension</th>
<th>3,2 pension</th>
<th>4 other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.900</td>
<td>0.772</td>
<td>0.921</td>
<td>0.631</td>
<td>0.398**</td>
<td>0.281**</td>
<td>0.703</td>
</tr>
<tr>
<td>Interaction: Industry*Cohort&gt;=1945</td>
<td>3.520</td>
<td>2.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort&gt;=1944* Agriculture forestry and fishing</td>
<td>0.704</td>
<td>2.042</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort&gt;=1944* Manufacturing mining &amp; quarrying</td>
<td>ref</td>
<td>ref</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort&gt;=1944* Construction</td>
<td>0.951</td>
<td>1.421</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort&gt;=1944* Wholesale and retail trade, transportation and storage &amp; hotel</td>
<td>1.758</td>
<td>0.857</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort&gt;=1944* Financial intermediation</td>
<td>0.371</td>
<td>3.408</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort&gt;=1944* Real estate, renting and business activity</td>
<td>0.295</td>
<td>2.705</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort&gt;=1944* Public administration and defense, education, health and social work</td>
<td>1.872</td>
<td>0.314</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort&gt;=1944* Other community</td>
<td>0.278</td>
<td>1.040</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction: Cohort&gt;=1945*women</td>
<td>0.545*</td>
<td>0.610</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction:Cohort&gt;=1945*part-time</td>
<td>3.552***</td>
<td>3.528**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BIC: 2560.33  2560.79  2611.34  998.1  6496.99  6496.28  1345.95

Number of events: 1380  1380  1380  1380  1380  1380  1380
Observations: 2,469  2,469  2,469  2,469  2,469  2,469  2,469

*** p<0.01, ** p<0.05, * p<0.1

Note: Short variables’ description:
Dependent variable:
  Work-retirement trajectory: time-varying categorical variable equal to: 0 if the respondent is working at the end of the person-period spell or exit employment at the statutory retirement age of 65 years, 1 if the respondent entered a unemployment pathway at the end of the person-period spell, 2 if the respondent entered a disability pathway at the end of the person-period spell, 3 if the respondent entered an early retirement pathway at the end of the person-period spell, and 4 if the respondent entered other pathways at the end of the person-period spell.

Independent variables:
  Cohort>=1944: time-constant dummy variable equal to 1 if the respondent is born after 1944
  Industry: time-varying set of dummy variable over the industry where the respondent is working in the person-period spell.

For a more detailed description see Chapter 4. For the full model see Appendix B.


Since they can hinder the implementation of a scheme originally set to delay the entry into unemployment without being accountable for that, the effectiveness of retrenchment policies in the unemployment pathway is low. The validity of this argument is furthermore increased, by including the interaction between the cohort effect and the part-time. As it is shown in model 1.2, the cohort main effect remains non-significant. This shows that older workers working full-time in the two cohorts have no significantly different likelihood to enter an insurance-based unemployment episode, that actually is reformed only in 2006. More interesting is the estimations of the interaction, indicating
that among the cohort born in 1944 and after part-time\textsuperscript{32} workers have a much higher likelihood to enter unemployment than full-time workers (HP 6.2). This is a strong indication of the widespread diffusion of these schemes and of the extent to which social partners could implement it to foster rather than retrench the entry in unemployment pathway.

Finally, HP 6.3 is rejected by the interaction between the cohort effect and industries in model 1.3, since no interaction results to be significant. Against the expectations, social partners hinder retrenching policies not only for exposed industries but for the overall economy. Because of that among the cohort born in 1945 older workers are not significantly more likely to undertake this pathway if they work in industries exposed by the globalization forces than in protected industries. This may be interpreted on one hand as a result of similar eligibility conditions set across industry to access the old-age part-time schemes and the other episodes based on the insurance-based unemployment benefit. On the other hand this offer empirical support to the argument that the bock model is the highly preferred sets of old-age part-time scheme implemented by social partners in the collective bargaining across the whole economy. First they expand in the two main “pace” industries (chemistry and metal- here manufactory industry) and institutionalize a new standards of social rights and norms about early exit that further spread to other industries.

\section*{6.6 Conclusions}

In this chapter it was investigated to what extent the moderate achievements in EWL can be partially explained as the outcome of a hindering strategy played by social partnership system that successfully undermined the effectiveness of retrenchment policies.

First the financial attractiveness of the main pathways of exit provided by the social protection system in Germany were described. Subsequently the institutional channel by which social partners can hinder the implementation was discussed, but not the formulation of retrenchment policies. Since they are involved in the implementation of episodes in the disability and the unemployment pathway, it was hypothesized that they hindered the effectiveness of retrenchment policies in those two pathways of exit. The results of the PCE models carried out on Sharelife data significantly support the hypotheses, showing that retrenchment policies have been effective in the only pathway, whose retrenchment social partners had no power to hinder: the pension pathway. From this results it can be concluded that the moderate cooperativeness of social partners in Germany have moderately reduced the effectiveness of retrenchment policies.

The consultation channel by which social partners participate to the policymaking process enhance the effectiveness of retrenchment policies, because it does not allow them to significantly affect the content of the policies. Because of that the social protection system manages to significantly retrench unilaterally the financial attractiveness of the most main pathway of exit Germany: the pension pathway.

On the contrary he institutional channels by which social partners participate to the implementation of retrenchment policies also hinder the effectiveness of retrenchment policies. Since social partners

\textsuperscript{32} Since in the data it is not specified whether the part-time is intended as horizontal or vertical, it is assumed that part-time is intended in both senses.
are not financially accountable for their administration, they water down the restriction of the eligibility conditions, as in the case of the disability pathway's retrenchment. Not only social partners are also encouraged to hinder the effectiveness of retrenchment policies also in self-regulatory bodies, as in the case of unemployment pathway. Since social partners do have to bear the costs of the diffusion old-age part-time scheme and no restrictions is made over the characteristics that these scheme must have, social partners are free to distort the finality of this scheme from EWL to foster early retirement. Because of that old-age part-time schemes produce the unintended effect of significantly enhancing rather than discouraging exits toward the unemployment pathway.

Finally the hypotheses concerning the social stratification of the effectiveness of retrenchment policies is only partially supported by the results. According to the hypothesis retrenchment policies have a higher effectiveness on women, because the reform of the incentives included in the women's episode is greater than in the other pension episode. Against the hypothesis, social partners do not hinder retrenchment policies in the industries exposed to globalization forces but in the overall economy.

In summary, this chapter provided empirical evidence that, because of their moderate cooperativeness, social partnership have hindered the effectiveness of retrenchment policies in Germany. The extent to which social partners have hindered rather than enhanced the effectiveness of retaining policies are investigated in Chapter 9.
The effectiveness of retrenchment policies in Italy

7.1 Introduction

In comparison to Germany and the Netherlands, in Italy the outcome of the EWL re-conversion was the most modest. The goal of this chapter is to investigate the extent to which this outcome is due to the high contentiousness of the social partnership, which allowed social partners to hinder the retrenchment of pathways of exit. The leading question of this chapter is thus: to what extent have social partners affected the effectiveness of retrenchment policies effectively EWL in Italy from the mid-1990's to 2009?

According to the hypotheses (HP 3.2 and 3.3) in Chapter 3, the effectiveness of retrenchment policies is expected to be greatly hindered by social partners. This is because, due to their poor organizational articulation, social partners interact in social governance modes encouraging them to hinder both the formulation and the implementation of retrenchment policies.

The institutionalization of the pathways of exit started in the mid-1960's in the public pension system under a strong clientelistic pressure. This pressure created the main pathway consisting of different episodes for insider and outsider groups: older men and older women, older workers in a private and public sector, and older workers with a stable rather than unstable career. The disability pathway was institutionalized in the 1970's when the pension system proved to be insufficient to shed the redundancies of the economic restructuring. After the access to disability was strictly limited in 1984, a further pathway was institutionalized in the unemployment scheme but only for the “core” sectors of the economy.

Their retrenchment was proposed first by the Amato's Government in 1992 and then by the following five Governments until 2004 (Ferrera and Jessoula 2007). Due to their contentiousness, social partners are not steadily involved in the policy-making in consultation boards, as in the Netherlands and Germany, but only in situation of economic and political emergency in an ad-hoc concertation modes. Playing a power-maintaining strategy the Government could not spend its shadow of hierarchy to force the retrenchment but is subjected to the social partners’ policy-oriented strategy, aimed at preserving the expectations of their members. Their inclusion is thus expected to hinder the effectiveness of retrenchment policies among older employees in the core industries of the private sector (see section 3.5).

If social partners are normally excluded from the policy-making, they used to dominate the boards administrating the social security schemes. Again under a strong clientelistic pressure, social partners faced great incentives to compensate the retrenchment policies, because it does not imply any additional costs. Those incentives used to be particularly high in the administration of the disability scheme, where social partners have a great discretion in assessing the eligibility of the claimants. After they were excluded by the administration boards in 1994, incentives to compensate retrenchment policies remains only in management of the unemployment pathway. This is because employers and unions define jointly the redundancies and can therefore concentrate them on older workers with no additional costs.
This chapter is organized as follows. The pathways of exit provided by the Italian protection system are described in Section 6.2. Section 6.3 provides the reasons why the institutional settings including social partners the formulation and the implementation of retrenchment policies let them hinder both the phases. Section 6.4 describes how these settings affected the retrenchment of each pathways of exit and from this information hypotheses over its effectiveness are derived. These hypotheses are tested with a competing risk model (CRM), whose estimations are interpreted in Section 6.5. Conclusion about the effectiveness of retrenchment policies are finally discussed.

7.2 Pathways of exit: an overview

In Italy the old age insurance (called cassa nazionale di assistenza sociale (CNAS) - National fund for the social assistance) was first introduced at the end of the 19th century in the public sector and then extended to private blue-collar employees as a voluntary and fully-funded scheme with the D.M. n. 350/1898 (Castellino 1976). Between 1945 and 1959 (D.lgs.lgt. 177/1945, Legge 218/1952, Legge 104/1957, Legge 1047/1959) the old age insurance was organized as a public system of mandatory occupational schemes for both employees and self-employed. The statutory retirement age was set at 65 years and the contribution-based benefit was integrated to a minimum thanks to the gradual implementation of a PAYGO financing method (Ferrera and Jessoula 2007; Brugiavini 1999; Castellino 1976). Despite all changes that occurred since then, 65 remained the age at which old-age is protected independently from the contribution history.

Like in Germany and in the Netherlands pathways of exit were institutionalized first to award the generations that contributed to the post-war reconstruction (pension pathway) and then to absorb the redundancies of economic adjustments (disability and unemployment pathways). In Italy nevertheless their expansion drifted under the pressure of a strong political clientelism. Clientelism led the expansion within each of the three pathways of extremely generous episode to ensure the political loyalty of the so called insiders and less generous episodes to increase the political dependence of the so-called outsiders (Ferrera 1996; Mirabile 2004).

An overview of the pathways of exit that were available in Italy at the beginning of the 1990's is shown in Graph 7.1. Here the episodes provided the occupational disability schemes are represented in orange, the episodes provided by the public pension system are represented in read, and the episodes provided by the unemployment scheme are represented in light blue.
Graph 7.1: Pathways of exit and episodes that were available in Italy at the beginning of the 1990's.

The list of the main relevant legislation and social agreements that regulated the disability, the early retirement and the unemployment pathway of exit Italy is presented in Table 7.1.

Table 7.1: List of the main relevant legislation and social agreements that regulated the disability, the early retirement and the unemployment pathway of exit Italy.

<table>
<thead>
<tr>
<th>Pathway</th>
<th>Legislation</th>
<th>Act</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unemployment pathway</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Legge 164/1975- Intervento straordinario della Cassa Integrazione Guadagni</td>
<td>Act 164/1975- Extraordinary intervention of the earning support funds</td>
</tr>
<tr>
<td></td>
<td>Legge 155/1981- Regolamentazione del Prepensionamento</td>
<td>Act 155/1981- Introduction of the pre-retirement benefit</td>
</tr>
<tr>
<td><strong>Disability pathway</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Legge 118/1971 - Nuove norme in favore dei mutilati ed invalidi civili</td>
<td>Act 118/1971- New norms in favour of the disabled and the invalid</td>
</tr>
<tr>
<td></td>
<td>Legge 222/1984- Revisione dell' invalidità pensionabile</td>
<td>Act 222/1984- Reform of the eligibility criteria for the disability scheme</td>
</tr>
<tr>
<td><strong>Early retirement pathway</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D.lgs.lgt. 177/1945- Introduzione di una componente a ripartizione</td>
<td>Act 177/1945 Introduction of a PAYGO component</td>
</tr>
<tr>
<td></td>
<td>Legge 218/1952- Riforma della componente a ripartizione. Introduzione dell' integrazione al minimo</td>
<td>Act 218/1952- Reform of the PAYGO component. Introduction to an integration to the minimum</td>
</tr>
<tr>
<td></td>
<td>Legge 104/1957- Estensione della copertura ai lavoratori autonomi agricoli</td>
<td>Act 104/1952- Coverage extension to agricultural workers</td>
</tr>
<tr>
<td></td>
<td>Legge 1047/1959- Estensione della copertura agli artigiani</td>
<td>Act 1047/1959- Coverage extension to craft workers</td>
</tr>
<tr>
<td></td>
<td>Legge 903/1965- Pensioni di anzianità per I dipendenti privati</td>
<td>Act 903/1965- Introduction of seniority pension for employees in the private sector</td>
</tr>
</tbody>
</table>
Unlike the Netherlands and Germany, pathways of exit in Italy are entirely financed by public insurance schemes. The pension system offered exit routes to all workers, while unemployment and disability schemes were used to absorb workers laid off before these routes. Given the prohibitive private costs of individual dismissals for economic reasons, as regulated by the Legge 604/1966 (Norme sui licenziamenti individuali- Act 604/1966- Regulations about the individual dismissals), separate schemes were introduced to finance the unemployment pathway. These schemes offered three episodes of different generosity according to the economic position of the claimants, that in this case are the companies themselves (Mirabile 2004) (Tursi and Varesi 2013).

The Cassa Integrazione Guadagni (CIG- Earning support funds Legge 869/1947-Regolamentazione della Cassa Integrazione Guadagni Ordinaria -Act 869/1947- Introduction of temporary earning support funds-) had been originally established to partially externalize companies's costs up to 1 year for restructuring processes due to a limited numbers of “ordinary” objective events (such as seasonal market fluctuations, weather events etc.). Subsequent ad-hoc acts enlarged its coverage, originally very limited, to the whole industrial, construction, and agricultural sector to temporary to support companies during the first restructuring processes induced by Globalization. Once those processes became more complex and less predictable the CIG was extended to the so-called extraordinary events ( Legge 164/1975- Intervento straordinario della Cassa Integrazione Guadagni or CIGS- Act 164/1975- Extraordinary intervention of the earning support funds) (Tursi and Varesi 2013).

Although not targeted at older workers, these CIG schemes tended to overrepresent them because seniority was one of the most important criteria used to select the employees, who had to suspend their work. This allowed to first suspend from the work of older workers that could directly inflow into a pension pathways afterwards. Since this group at the same time represented the highest part of the labour cost, their working time is reduced to the utmost possible, that is zero hours, to maximize the

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>613</td>
<td>Estensione della copertura ai commercianti</td>
<td>Legge 613/1966</td>
</tr>
<tr>
<td>238</td>
<td>Passaggio al sistema retributivo per I lavoratori dipendenti</td>
<td>Act 238/1968</td>
</tr>
<tr>
<td>177</td>
<td>Riforma del sistema retributivo per I dipendenti pubblici. Prestazioni più generose.</td>
<td>Act 177/1976</td>
</tr>
<tr>
<td>233</td>
<td>Introduzione del sistema retributivo per I lavoratori autonomi</td>
<td>Act 233/1990</td>
</tr>
<tr>
<td>503</td>
<td>riforma del sistema pensionistico pubblico</td>
<td>Act 503/1992</td>
</tr>
<tr>
<td>335</td>
<td>Riforma del sistema pensionistico obbligatorio e complementare</td>
<td>Act 335/1995</td>
</tr>
<tr>
<td>449</td>
<td>Riforma Prodi</td>
<td>Act 449/1997</td>
</tr>
</tbody>
</table>

Source: (Mirabile 2004) Ferrera and Jessoula 2007
7.2 Pathways of exit: an overview

companies' saving. As for older workers, this episode was very attractive because it replaced the 80% of the forgone gross earnings (roughly equal to the pension benefit received after 40 years of contributive history) and did not affect their future pension income. Social contributions were in fact totally covered by CIG (Brugiavini and Peracchi 2012).

The maximum duration of the two CIG episodes varied according to the nature of the events that caused the company's redundancy. The longest episode was provided by CIGS until 4 years in cases where market's circumstances imposed a permanent re-structuring, a re-conversion, or a re-organization of the company's production process. Initially the CIGS was available for companies that were already covered by the CIGO or with 15 employees or more. However its coverage was progressively enlarged ad hoc to support systematic process of re-conversion and re-structuring in sectors originally not covered by CIGO, such as the service sector, and the craft sector33 (Vesan and Ferrera 2006).

A common trait of CIG schemes is that, when their maximum duration expired, they required the reintegration of recipients that were not eligible for another pathway. The high private costs of updating and re-converting older workers' expertise previously undermined by a prolonged suspension from work pushed to the institutionalization of a further episode to fill this gap between the CIG episode and the pension pathway.

The mobility episode (regulated by the Legge 223/1991 (Disciplina dei licenziamenti collettivi - Regulation of the collective dismissals) is, as the CIGS episodes, only open for employees working in medium or large companies (more than 15 employees) or in core private industries that are involved in a plan aimed at dismissing at least 5 employees. The dismissed workers receive a benefit (indennità di mobilità - mobility benefit) normally for a period of 12 months and the duration increases with age, because the chance to gain new employment is supposed to lower progressively34. For older workers the duration was increased up to 36 months in the hope that they reach the entitlement for one of the pension pathways. If this did not occur, the benefit was further extended up to 5 years (the so-called long-mobility scheme) (Mirabile 2004)35. During this period they withdraw a very generous benefit. It replaces 100% CIGS benefit in the first year, which in turn replaces 80% of the last wage and about 100% of the same PAYGO benefit ones' would withdraw after 40 years of contribution history. This amount is reduced to 80% of the CIGS benefit the following years, but no penalty for the future benefit they eventually get in the seniority or old-age pathway (OECD 2004; Vesan and Ferrera 2006).

All in all thanks to the sequence of the CIG and the mobility pathway the unemployment pathways supported the exit from employment up to 9 years before the entry into a pension pathway. Despite its attractiveness it was reserved to stable male workers and to companies in a “core” sector: industrial, construction. Others recipients have to endure a far poorer exit route, based on the very marginal generosity of the ordinary unemployment benefit. This disparity had its rationale in the Italian familistic system, where the presence of a “core” worker at the head of the household compensated the

33 In this sector firms are either big or under the influence/control of other big firms
34 The maximum period of receipt in fact increased to 24 months if the worker was older than 40.
35 The disability pathway was existing until 1984, when older workers could retire permanently from the labour market because the disability concept included cases of competitive disadvantage in the labour market. Since then the concept of disability include only a reduction by at least 60% of the work ability due to physical and psychological reasons that have to be repeatedly verified every three years (OECD (b), 2006).
lower treatments reserved to the other members (Brugiavini 2009).

A final ad-hoc scheme was introduced when restructuring processes risked to become too hard for companies that fell out the unemployment pathway. They financed a pre-retirement episode aimed at protecting older workers laid off as a result of this economic turbulence. Nevertheless it was officially classified as a pension pathway, because it just anticipated by 5 years the entry into the old-age or the seniority pathway with no solution of continuity (Brugiavini 1999; Mirabile 2004; Brugiavini and Peracchi 2004).

A second pathway used to externalize the costs of the economic restructuring for companies that did not benefit from the “privileged” unemployment episodes is the occupational disability pathway. Despite not originally designed with that function, the disability scheme institutionalized the first episode in 1971 when the Legge 118/1971 (Nuove norme in favore dei mutilati ed invalidi civili- New norms in favour of the disabled and the invalid) loosened significantly the requirements. It lowered the minimum loss of earning capacity from 75 to 50%. This earning capacity's loss could be measured on the bases of either health-related or socio-economic criteria. Older unemployed could inflow into “civil” disability if their prospects to gain new employment compatible with their professional history were judged by a para-medical commission (see section 7.2) to be less than 50%. These criteria is officially withdrawn in 1984, when a reform (Legge 222/1984 Legge 222/1984 Revisione dell' invalidità pensionabile- Act 222/1984 Reform of the eligibility criteria for the disability scheme) limited the definition of disability to psycho-physical health impairments, according to the notion of residual working capability (OECD 2003; Mirabile 2004). This reform included other three main changes. It discouraged the jump from unemployment to disability pathway by including two new requirements: recipients have to be insured for at least 5 years and have worked in the last 3. Moreover it made the episode temporary, because the recipients had to be reassessed two times every three years before it was extended until the earliest pension episode. Finally the full disability was only granted if the working capacity was reduced by more than 2/3 with reference to a socially acceptable job. If these threshold was not met, or met only with reference to a suitable job, then the disability was assessed as partial. Partial disability gave access to a lower benefit, calculated on the level of disability, and did not granted the payment of notional contributions, which then affected the future pension benefit (Brugiavini 1999; Brugiavini and Peracchi 2014; Brugiavini and Peracchi 2012). In case of full disability benefit's generosity increased with the work history. For stable older workers it was very generous since it amounted to 80% of the pensionable income (it is calculated using the same formula for the pension benefit and amount roughly at 2% of last wage per year of contribution- see later) and granted the payment of the notional contributions necessary to accrue their future pension benefit (Jessoula and Ferrera 2006).

Finally disability scheme institutionalized a second episode for workers that became disabled as a direct consequence of performing their job (professional diseases and work injury). They obtain a “privileged” benefit, since it is granted also when claimants do not met the contribution requirements explained above (Ales 2002).

All in all disability episode offers different treatment that “award” core workers and “save” marginal workers. The attractiveness of this pathway was officially retrenched for older workers in 1984 but it is important to investigate whether social partners could hinder in the next section its implementation and cause unintended effects (De Zorzi, Fallani, and Belloni 2001).
The third and most attractive pathway of exit in Italy was financed by the public pension system itself, as regulated by a series of legislative acts between 1945 and 1990 (see Table 7.1). Two episodes in the pension pathway were initially introduced in 1969 for the men and women employed in the private sector (Legge 238/1968 Passaggio al sistema retributivo per i lavoratori dipendenti- Act 153/1968 Passage to the retributive system for employees), with the purpose of facilitating the industrial restructuring and the intergenerational transmission of work. Other episodes were further introduced for civil servants in 1976 (Legge 177/1976 Riforma del sistema retributivo per i dipendenti pubblici. Prestazioni più generose- Act 177/1976 Reform of the retributive system of the employees in the public sector) and to self-employed in 1990 (Legge 223/1990 Introduzione del sistema retributivo per i lavoratori autonomi- Act 223/1990 Extension of the retributive system also for the self-employed). The financial attractiveness of the different episodes in the pension pathway was enhanced by a common retributive formula that did not take into account the age of exit, but solely the contribution history, either effective or notional. The pension benefit was in fact calculated as the product of a reference wage and the years of contribution. The reference wage was based on the earnings gained in a reference period, the last 5 years of work for private employees and the last month for public employees. Since earnings increase with seniority, the benefit formula was very generous since it took as a reference the highest part of the earnings' profile. The benefit consisted of 2% of the reference wage for each year of contribution history.

Despite the common retributive formula, the financial attractiveness of the pension pathway varied across episodes, since the eligibility conditions differed by gender and occupational status. The old-age episode and is open at the age of 60 years, provided that claimants has a contribution history of at least 15 years in the private sector and is male. The second is the women's old-age episode and grants women the opportunity of withdrawing an old-age pension benefits at the age of 55 years with the option of counting the period of childbearing as notional contribution history. For public servants and self-employed the same old-age pathway is available only for women 5 years later at 60 years.

These two first episodes did not provide particularly generous benefits (the so-called pensione di vecchiaia- old-age pension benefit), since the minimum eligibility conditions replaced only 30% of the last year's wage. These two episodes were targeted at older workers with an unstable career, who could not access more attractive pathways. In spite of the low benefit, this episode could be attractive if other more generous pathways are open to other members of the household (typically to the partner). This logic explains the looser criteria set for women, who have a more marginal career than men and have more difficulty to become entitled to a pension benefit. Thanks to this pathway women could follow their partners once they access a pathway of exit. Additional incentives provided to withdraw from employment with this pathway is provided by the so-called Trattamento di Fine Rapporto (TFR; severance pay). It is a severance pay, which amounts to one monthly wage per year in the same job and is withdrawn whenever the employment contract is resolved. The short-term availability of such a lump-sum benefit together with additional private employers' payments could reduce older workers' concern for the long-term losses in pension income due to their premature exit.

Other more generous pathways of exit are available for “core” male older workers, whose generosity further increases if they worked in “core” industries: the public and the industrial sector.

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36 The pension benefit is first indexed first to the wages and afterwards to the prices.
The seniority episode was introduced in 1965 (Legge 903/1965 Pensioni di anzianità per I dipendenti privati- Act 903/1965 Introduction of seniority pension for employees in the private sector) only for employees in the private sector that worked at least for 35 years. The initial purpose of this scheme is to provide a relief for workers who since their early life contributed to the economic growth after the post-war period. Once the pathway is extended to the rest of the workforce, it is clear enough that the purpose becomes political and aimed at claiming credits in the next elections. The financial attractiveness of this pathway for private employees and self-employed is very high: the minimum eligibility conditions grants a benefit (the so-called- pensione di anzianità- seniority pension benefit) that replaces at least 70% of the last year's wage and is not connected to any kind of actual parity. Because of that for workers that start working early this episode was attractive from the age of 50-55 years (Ferrera and Gualmini 2004; Brugiavini 1999). The seniority episode provided much looser requirements for civil servants. After 1976 they could obtain a so-called baby pension (pensione baby-baby pension, as regulated by the Legge 177/1976 Riforma del sistema retributivo per I dipendenti pubblici. Prestazioni più generose. - Act 177/1976 Reform of the retributive system of the employees in the public sector) after 20 years of contribution if men and after 15 years of contribution if women and mothers (Jessoula and Ferrera 2006; Franco and Marè 2002).

In the early 1980's, once globalization shook the economy, an third episode was introduced to ease the companies' task of shedding older redundancies in the private sector: the schema di pre-pensionamento (pre-retirement scheme) as regulated by the Legge 155/1981 (see table 7.1). The access into the seniority and old-age pathway was forwarded by 5 years and the benefit is calculated according to the retributive formula explained earlier with no actuarial adjustment. The lower generosity of this pathway, especially for older workers that developed a short contribution history, is often compensated in their eyes by the short-term availability of the TFR and of a golden-hand shake (that is a monetary lump-sum) that the company provides to encourage their early exit. Besides that, older workers might opt for less generous but ready-to pay episodes because of their limited computational skills, which prevent them from comparing correctly different streams of income (Brugiavini 1999). Alternatively they may forced to accept them in order to avoid their dismissals due to the so-called “giustificato motivo oggettivo” (justified objective reason, or in other words for economic reasons- as regulated by the Legge 604/1966). The individual dismissal scheme is much less generous since, beside the TFR, the severance pay covers only up to 6 monthly wages and the residual unemployment benefits is very low (about 30% of the last wage)(Tursi and Varesi 2013).

After describing the main pathways of exit available in the social protection system in Italy, I will present the institutional affinities that enable social partners to participate to their regulation. As it will be discussed in the next section, these institutional affinities are the same mechanisms that allow social partners to hinder both the formulation and the implementation of retrenchment policies.

### 7.3 Institutional affinities between protection and partnership

In Italy the institutional affinities between the protection and the partnership system combine a conservative welfare logic and a contentious logic of interests' representation. The contentiousness of social partners discourages the Government from explicitly involve them into the policy-making on a
7.3 Institutional affinities between protection and partnership

The highly fragmented social partners' structure makes difficult to reach general consensus between the different ideological positions at the Confederational level, where the social dialogue takes place (see section 3.5) (Baccaro 1999). Because of this contentiousness in Italy there are no steady unitary bodies expressing to the Government the social partners' view, neither unilaterally (as the BDA and the DBG in Germany\(^{37}\)) nor bilaterally (as the StvdA in the Netherlands\(^{38}\)).

Social partners interact with the Government in two modes, which represent the most subtle and the most explicit interference to the policy-making. The first is the political lobby. Until the 1970's unions and employers' associations could be directly represented by their members in the Parliament. After the direct representation was abolished in the mid-1970's, their interests were represented by the lobby of their referent party\(^{39}\).

The second is the social concertation (the so-called concertazione sociale). Usually social concertation is defined as a stable negotiation between social partners and the Government to reach shared economic and social. This kind of “shared Government” does not have deep-rooted traditions in Italy. Due to their contentiousness, social partners lack here the necessary cooperativeness that makes a steady concertation possible in other “corporatist” countries in Northern Europe (see section 3.3).

The formulation of retrenchment policies mainly were affected by social partners through the concertation mode. As explained by different scholars, this interaction mode take place in Italy only under two main conditions. The first is a contingent emergency, meaning an extraordinary external or internal challenge that make urgent and non-deferrable the retrenchment of pathways of exit. The second is a structural weakness of the Government lacking the political legitimacy to unilaterally impose unpopular measures. In exchange of political legitimacy, the Governments provide social partners a disproportionate power of leading the negotiations. The first concertation processes took place two times along the 1970's and the 1980's, to legitimize the first austerity measures. Of these two processes only one leaded to an pact in 1983. In exchange of social partners' support of wage moderation policies, the Government had to compensate the sacrifices of workers and employers required by externalizing social security costs (Regalia and Regini 2004).

The third concertation process is enacted by the Government in 1992 to legitimize the retrenchment of the most attractive and popular episodes of the pension pathway. The reform of the pension system was the main budgetary measure proposed by the Amato's Government to tackle the dramatic deficit threatening the public financing. Facing the exclusion from EMU and the further financial instability that this implied, the executive was empowered (with the so-called Legge delega) to adopt the emergency measures without the direct Parliaments' approval (Schludi 2005; Ferrera and Jessoula 2007; Ferrera and Gualmini 2004).

This unilateral approach was strongly attacked by the social partners, and especially the unions,

\(^{37}\) As explained in Chapter 6 and 9 the DGB (Deutsche Gewerkschaftsbund) and the BDA Bundesvereinigung der Deutschen Arbeitgeberverbände) are the Confederations representing respectively unitarily German unions and employers in the social consultation with the Government.

\(^{38}\) As explained in Chapter 5 and 8 StvdA (Stichting van de Arbeid) is the bilateral foundation representing the interests of both employers and employees at national level. Besides taking part to the Consultative process with the Government and give a strategical address to their members (as BDA and DGB) they can steer directly the industry-level bargaining by signing agreements and common recommendations.

\(^{39}\) The radical side of the social-democratic party for CGIL, the christian-democratic party for CISL, the moderate side of social-democratic party for UIL, and the liberal party for Confindustria (Baccaro and Pulignano 2009).
who threatened to mobilize the public opinion against these measures, unless they got involved in the policy making. This threat concerned greatly the Government, who suffered from a lack of social support due to the institutional crisis following the scandal known as “Tangentopoli” (Ferrera and Jessoula 2007). (Baccaro and Simoni 2008) The public evidence of the rooted and generalized net of corruption among the greatest part of the political and economic elites caused in 1992 the establishment of a new technical government leaded by Giuliano Amato. Facing a fatal de-legitimation and the worsening of the institutional crisis, the Government could not spend his *shadow of hierarchy* and push its plan unilaterally. It was instead forced to formulate the retrenchment of the pension pathway together with the social partners. The negotiations took place informally with the separate Confederal representatives of Confindustria, CGIL, CISL, UIL and only the parts of of the original draft gaining the consent were presented to the Parliament for the confidence vote (Schludi 2005).

After this experience showed the risks of bargaining with social partners only in emergency, the Government pushed for counterbalancing their predominant power by institutionalizing modes of social dialogues that promote shared instead of imposed solutions. The tripartite agreements of the 27 of July 1993 regulated the social dialogue as a regular consultative practices and required the concertative practices for reforms requiring relevant impact on labour market. The only weak aspect of this agreements was its enforcement (Regalia and Regini 2004).

In fact strong of the electoral support gained at the first elections of the second republic, the Berlusconi's government in 1994 disregarded the agreements and proceeded unilaterally with the retrenchment seniority episode^40^, formerly excluded by the unions from the Amato’s reform. Also this time however the Italian Government could not spend enough *shadow of hierarchy* to prevent the social partners, and especially the unions, from hindering the the formulation of its draft. Excluded from the policy-making, social partners managed to de-legitimize the Government by organizing the a general strike and the largest social protest after the second world war.

The fall of the Berlusconi's government boosted again the power of the social partners when they faced 1 year later the proposal of the next cabinet to further retrench the pension pathway. The economic situation, after the first relief granted by the Amato's reform, required further emergency budgetary policies to meet the Maastricht parameters. The political situation was still highly precarious and the Berlusconi's government was replaced again by a technical cabinet leaded by Lamberto Dini. Aware of the failure of his predecessor, Dini enforced the 1993 agreement and explicitly invited the social partners to bargain the pension pathway retrenchment. Nevertheless the balance of power was not the one promoted by the agreement. Social partners, and especially the unions, also in this case could use the pressure exerted by the EU to hinder the retrenchment of the pension pathway, at least for their core membership. Due to the unduly mild retrenchment of the seniority episode, Confindustria refused to sign the agreements.

A similar context framed the involvement of social partners in the formulation of the 1997 Prodi's reform. The economic pressure was now intensified by a tightening of the Maastricht criteria which then required a drastic restriction of public expenditure on the seniority benefit. The political weakness was now caused by the fragmented coalition backing the Prodi's Government, which included parties

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^40^ The Government draft planned to reduce the benefit by 3% for each year below the legal retirement age and to cut the benefit's accrual rate from 2 to 1.75% for older workers with at least 15 years of contribution (Ferrera and Jessoula 2007).
Institutional affinities between protection and partnership

from center to radical left. While the Government had already given generous concessions with regard to its original proposal (made by the so-called Onofri Commission) and was near to an agreement with the social partners, the most extreme wing of both the unions and the party coalition withdrew their support and blocked the negotiations. The deadlock was solved and the negotiations resumed when the more intransigent wings were granted with the total exclusion of their core members, the blue-collar workers, from the seniority episode's retrenchment (Schlu di 2005; Ferrera and Jessoula 2007).

Finally the reform on 2004 (the so-called Maroni-Tremonti) is the only following a rather different formulation. The Berlusconi's Government enacting this bill was supported by a more homogeneous center-right coalition and thus by Confindustria. Moreover it was less prone to give concessions to the unions. In spite of that, unions managed again to block the unilateral attempts of the cabinet to retrench drastically the seniority benefits by mobilizing their members against it. Once again unions forced the Government into a concertation process, which finally brings to the enactment of a much milder retrenchment.

All in all the concertation process that took place in Italy along the 1990's id often praised by the literature as the mechanisms that made the implementation of unpopular but necessary retrenchment of the pension's pathway. What is often neglected is that their involvement allowed social partners to preserve to a great extent their members' pathways from retrenchment.

The ad-hoc inclusion of social partners in the policy-making is counterbalanced by a regular involvement in the two main boards administrating the benefits financing all three pathways of exit (Regonini 1984). The Istituto Nazionale per la Previdenza Sociale (INPS- National institute for the social security management) and the Istituto Nazionale per l' Assicurazione contro gli Infortuni sul Lavoro (INAIL- National institute for the social insurance against work accidents). Until 1994 these two boards were dominated by social partners, who nominated 2/3 of executive council' s members. The executive council had a key role in assessing the claims and thanks to their number social partners could ease the entry of older claimants into the disability pathway. Their power was reduced in 1984, when the disability criteria became less discretional. However thanks to their key position not only into the executive but also in the monitoring board, social partners could compensate the tighter requirements with a looser assessment. This administrative setting, which strongly favour the hindering of retrenchment policies, was reformed in 1994. Social partners were excluded from the boards of INPS and INAIL and their role was limited to the claims' support with the system of the so-called patronati (patronage). Although still involved in the management of claims, their exclusion from the board assessing them limit their capacity of hindering the implementation of further disability retrenchment (Jessoula 2013; Brugiavini and Peracchi 2014).

More problematic is the involvement of social partners in the boards administrating the benefits of the unemployment pathway. Although eligibility criteria to access CIG and mobility funds are defined by law and the financing is delivered by INPS (Istituto Nazionale di Previdenza Sociale- National Institute of Social Security) for CIGO and on the labour ministry for CIGS, unions contribute to the company restructuring plan. More specifically, unions have to agree on the companies' proposal on how to minimize the social costs of the re-structuring plan. In other words they can push companies, if they did not do so already, to steer the collective dismissals to older workers, who can undertake the
The effectiveness of retrenchment policies in Italy

unemployment pathway until statutory retirement. This capacity of steering the costs of industrial reconstruction on older workers is conserved after the Government decide to restrain the use of the CIG schemes at the end of the 1990’s and in turn can considerably hinder the retrenchment of the unemployment pathway in the industrial and service sector (Mirabile 2004).

In the sectors not covered by CIG (mainly construction and craft) the capacity of social partners to hinder the retrenchment of the unemployment pathway is consistent. In fact they self-administrate bilateral unemployment funds (the so-called enti bilaterali), with which they can grant comparable unemployment pathways to older workers not covered by CIG. In this case however the funds are not public and social partners are to a some extent more accountable for the costs that using the unemployment pathway involve (Pancaldi 2012).

In summary, the institutional channel by which social partners participate to the formulation and the implementation of retrenchment policies, enable them to hinder significantly both processes. In the next section the hypotheses are provided about the extent to which this hindering strategy has affected the effectiveness of retrenchment policies to extend working life.

7.4 Retrenchment policies’ effectiveness: working hypotheses

Since the early 1990’s onwards retrenchment policies reformed mainly the two main episodes provided by the public pension system: the old-age and the seniority. The retrenchment process was however severely hindered by social partners that, in the Concertative arena, succeeded to preserve the acquired rights of their “core” members. The major costs are shed on the future cohorts of recipients, on the self-employed and on the public sector (Ferrera 2006).

In the same period the unemployment and the disability pathways are only mildly retrenched. Important is to investigate to what extent social partners could use their role in the administrative boards to still foster their use. This was especially the case of the unemployment pathway, since social partners were in the position of concentrating the costs of industrial restructuring on older workers before the younger one’s (Mirabile 2004).

The effectiveness of retrenchment policies will be estimated by investigating whether the hazard of accessing those pathways of exit significantly vary between the cohort born before and after 1945. This cohorts' selection allow me to investigate to what extent retrenchment policies lower the risk of entering a pathway of exit in a cohort that newly enter their late career (or in other words get 50 years old) in the mid-1990’s with respect to the cohort that enter their late career before the EWL target enter into the strategy of the social protection sphere.

7.4.1 Unemployment pathway

After 1991 the unemployment pathway is subjected to no systematic retrenchment. Informal ad-hoc political interventions are undertaken by the Government in two opposite direction. On the one hand, in 1994 the Government tried to discourage the companies' claims and abuses by reducing the
7.4.1 Unemployment pathway

economic events entitling to the CIG financing. On the other hand it extended the CIG financing to the sectors (such as craft, trade, and other service industries) progressively overwhelmed by the restructuring processes in the second half of the 1990's (Barbieri and Scherer 2011; Tursi and Varesi 2013). Furthermore social partners remain in the position of concentrating the occupational redundancies on older workers. Because of that the hypothesis is that the cohort born in 1945 or after have a significantly higher hazard of entering the unemployment pathway than the cohort born earlier (HP 7.1).

Since the financial accountability of social partners in the implementation of unemployment pathways is lower in the sectors covered by the CIGS and mobility schemes than in sectors covered by bilateral funds, it is expected that among the cohort born in 1945 or after older workers in in the sectors covered by the CIGS and mobility schemes have a significant higher hazard to enter the unemployment pathway than older workers in other sectors (HP 7.2).

7.4.2 Disability pathway

After 1984 no further reforms retrenched the disability scheme. Formally this pathway can not be used anymore as a pathway of exit, since only objective psycho-physical impairments and not productivity losses are admitted as eligibility criteria (Brugiavini and Peracchi 2014). Nonetheless the health degeneration that older workers experience with ageing can be used by social partners to facilitate the acceptance of their claims provided that they have an active role in their assessment. Disability pathway can be restored to substitute other pathways of exit (such as the old-age and the seniority pathways) once they are retrenched. In Italy social partners are not in the position to do so since 1994. Assessments boards are composed only by medical doctors, who have the task to objectively evaluate the extent to which the claimants' health impairment affect his work capacity (Jessoula 2013; Ales 2002) Social partners have the task to assist the claimants during the administrative procedure, but they have no power to manipulate the allocation of these benefit. Because of that the hypothesis is that the likelihood of undertaking the disability pathway of exit significantly decreases between the two cohorts (HP 7.3).

7.4.3 Pension pathway

Four reforms in about a decade⁴¹ significantly changed the main features of the Italian pension system (Franco 2002). From a monolithic defined-benefit pay-as-you-go system it became a multi-pillar, fully-funded system. In spite of these systematic changes, these reforms did not significantly modify the attractiveness of the pension pathways, at least in the short-term and in the private sector. This is due to the prominent role played by social partners in the concerted formulation of these policies, which enable them to postpone the retrenchment to the very long transitional rules (Schludi 2005b).

The first reform was enacted by the Amato's Government with the Legge 503/1992. This act

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introduced two sets of retrenchment measures. The first reduced the benefits' level, by extending the calculation of the reference wage on the earnings obtained along the overall working career. The second tighten the requirements to access the old-age episode by 5 years for what concerned both the minimum age and contributions.

Although informal, the concertation setting allowed social partners to force, in exchange of their support, the inclusion of a very gradual and long phase-in period that exempted to a greatest extent their members from the retrenchment. The benefit's old generosity was preserved for workers with more than 15 years of contribution, since for them the reference wage was extended only from 5 to 10 years. Workers with less than 15 years of contribution had their reference period extended \textit{pro-rata}: to 10 years for the contribution developed until 1993 and to the whole career for the subsequent period. The calculation of the reference wage was fully extended to the whole working career only for newly-entrants. The minimum requirements to access old-age episode grew only by 6 months each year and thus increased by only one year when the phasing-in was interrupted by the enactment of a new pension reform (Morcaldo 2007).

Another concession that social partners obtained in 1992 was the total preservation of the seniority episode in the private sector. Its retrenchment, which was supposed to increase the minimum contributory period from 35 to 36 years, was erased from the Government's proposal\textsuperscript{42}. Coherently with the interests of CGIL, CISL, UIL, and Confindustria, the seniority episode is retrenched only in the public sector, where the minimum contribution (15 years) is progressively harmonized to 35 years, as in the private sector (Ferrera and Jessoula 2007).

Similar concessions were made by the Government in 1995, when social partners are included in the formulation of the \textit{Legge 335/1995}, the act that is defined as the “Copernical revolution” of the Italian pension system. The main change was the shift of the benefit's calculation from an earnings-related to a contribution-related formula. Contributions are notionally cumulated in personal accounts indexed to the mean GDP growth of the last 5 years (Ferrera and Jessoula 2007). Contrarily to the previous attempts of restricting the access to the old-age episode, the minimum requirements are loosened in 1995. The contribution period is reduced from 20 to 5 years and the legal age is set between 57 and 65 years. Within this spell the individuals can retire under the condition that their account can be converted to a minimum pension benefit (equal to 1.2 the minimum allowance that individual in need receive after the age of 65 years).

The definition of looser and more flexible minimum requirement is combined with a benefit formula penalizing early access into the pension pathway. According to this formula, the benefit is not only directly proportional to the contribution history, but is also actuarially adjusted by a so-called \textit{transformation coefficient}. This coefficient converts the account into a benefit according to the expected period of recipiency, which in turn depends on the effective age of exit and the life expectancy of each cohort. It is substituted every 10 years to take into control relevant changes of demographic and economic factors (Ferrera and Jessoula 2007; Jessoula and Ferrera 2006).

Finally the Dini's reform included for the first time a retrenchment for both the public and the private sector. The retrenchment consisted in a consistent rising of the minimum requirements. Despite

\textsuperscript{42} According to Jessoula and Ferrera (2007), the employees and employers' confederation accepted the retrenchment of both the benefit formula and the old-age pathway only in exchange of the omission in the final bill of measures requiring a short-term retrenchment of the seniority pathway.
its outstanding potential, also the Dini’s reform was hindered by the long transitional rules required by the unions to protect the acquired rights of their members. The new contribution-related formula is in fact fully implemented only for the new entrants in the labour market, while, according to the transitional rules set by the Amato’s reform, workers with more than 18 years remain fully subjected to the retributive regime with a reference period of 10 years. Workers with less than 18 years of contribution are only partially subjected to the new contributive regime pro-rata. For each contributive year before 1995 the benefit is calculated according to the retributive formula, while for the subsequent years the new contributive formula is applied (Ferrera and Jessoula 2007).

As for the seniority pathway, two set of long transitional rules are introduced. The first set took into account only the contribution history. As shown in Graph 7.2, the minimum contribution history increases by 5 years in transitional period of 13 years. This transitional rules are fully phased-in in 2008, when the minimum contribution history reaches 40 years (Morcaldo 2007).

**Graph 7.2**: Progressive increase of the minimum contribution history for seniority pathway (eligibility 1).

The second set of transitional rules still granted the access seniority episode after 35 years of work, provided that a minimum age is reached. As shown in Graph 7.3, this minimum age is set at 52 years in 1996 and it is progressively increasing by one year each 2-years period. The minimum age at the end of the period of observation\(^{43}\) in 2008 reaches 57 years for both men and women\(^{44}\) (Morcaldo 2007; OECD 2004).

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\(^{43}\) Self-employment age limit is 1 year higher and they can retire at 61 years old and 35 years of contribution. Afterwards, the age limit is increased for both employees and self-employed. Since 2010 it will be respectively of 61 and 62 and since 2014 it will be 62 and 63 (Morcaldo 2007).

\(^{44}\) For women the age-regime is fully phased-in in 2007 when they can retire after 35 years of work at a minimum age of 57, while for men the period of transition finishes in 2014, when they can withdraw a seniority pension benefit after 35 years of work at a minimum age of 62 (Morcaldo 2007).
In spite of the long transitional rules, the unions’ acceptance of the seniority episode’s retrenchment required a further concession from the Government: the exemptions of workers engaged in “strenuous work”. Being this criteria defined by the unions themselves on behalf of the Government, unions were given the chance of exempting their core members even from the slight retrenchment of the seniority episode (Schludi 2005c).

The only measure undertaken in 1995 that retrench in the short-term the seniority pathway is the temporary block of their access during 1995. For the rest, the rise of the eligibility conditions impose only marginal retrenchments to current cohorts of older workers in the private sector (Morcaldo 2007).

A radical retrenchment of the seniority episode concerned self-employed and public employees, that is the workforce falling outside unions’ memberships. The pathway reserved to public employees (the so-called baby seniority pension) was definitely harmonized and the eligibility conditions follows the same progression as in the private sector. The seniority pathway of self-employed, harmonized in 1990 with the norms valid for employees in the private sectors, was drastically retrenched. The minimum contribution history rocketed to 40 years and the minimum age after 35 years of work is set to 58 years, without any transitional regime.

Also hindered by social partners is the third reform of the pension pathway, the so-called Prodi’s reform (Legge 449/1997) (Schludi 2005c). In fact, the Government's initial plan was to accelerate the retrenchment of the seniority episode enacted in 1995 and the phase-in of the contribution-based system for workers with a contribution record longer than 18 years. Social partners, backed by the most radical part of the Government coalition (Rifondazione comunista), forced to enact this further retrenchment only to white-collar workers. Social partners' core constituency continued profiting from the pension pathway without experiencing major retrenchment (Schludi 2005c; Ferrera and Jessoula 2007).

Finally the Maroni-Tremonti reform succeeded in shortening the transitional rules of the seniority episode's retrenchment in all the private sector. The obstruction of the unions however postponed the enactment of this harsh measure after 2008, when the period of observation substantially stops.
that the unions imposed the Government a softer approach to postpone the entry into a seniority episode (Schludi 2005c). Older workers eligible for a seniority pension were exempted from paying social security contributions if they kept working for other 2 years. Despite those monetary incentives, the soft approach proved to be ineffective and was not repeated (OECD 2004).

Although financed by the public pension funds, the pre-retirement episode is not affected by a previous reforms. Social partners were formally not involved in their regulation and they were used ad hoc by the Government to externalize the costs of extraordinary restructuring processes, especially in companies controlled by the State (such as railways, energy etc.). A reform of this scheme introduced the partial retirement scheme, but no systematic retrenchment is implemented since its introduction in 1981 (Mirabile 2004). Because of that they might have compensated the retrenchment of pension pathway also in the public sector.

All in all, the retrenchment of pension pathways was to a great extent hindered by the social partners. Their involvement in the policy-making preserved the attractiveness of the pension pathway for their core members: older workers and their employers in the private sector. The major retrenchment are therefore concentrated on the public sector, the self-employed and younger workers. Because of that it is hypothesized that the cohort born in 1945 or after will have a significantly lower likelihood of entering a pension pathway than the older cohort (HP 7.4).

Since the retrenchment of the pension pathway is more significant for public employees than for private employees, it is hypothesized that among cohort born in 1945 or after the likelihood of entering a pension pathway is higher among private employees than among public employees (HP 7.5).

Among public employees the major retrenchment is experienced by women, who experience a greater extension of their minimum contribution history (from 15 to 35 years) than men (from 20 to 35 years). Because of that it is hypothesized that among cohort born in 1945 or after the likelihood of entering a pension pathway is lower for women than for men (HP 7.6).

Despite the pension pathway of self-employed was affected by a severe retrenchment, the fact that this pathway was institutionalized only in 1990 reduces the likelihood of noticing changes in the trajectories of the two cohorts. Because of that it is hypothesized that the likelihood of self-employed of entering a pension pathway does not significantly vary between the cohort born before and after 1945 (HP 7.7).

Table 7.2 summarizes the extent to which retrenchment policies lower the financial attractiveness of pathways of exit and the hypotheses over their effectiveness in extending working life.
The effectiveness of retrenchment policies in Italy

Table 7.2: Summary of how retrenchment policies lower the financial attractiveness of the three pathways of exit in Italy and their hypothesized effectiveness in extending working life.

<table>
<thead>
<tr>
<th>Pathways of exit</th>
<th>Retrenchment policies</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment pathway</td>
<td>CIGS and the mobility schemes are not formally retrenched by the Government after 1991. Interventions are used ad hoc to buffer the redundancies created by the widespread process of restructuring in core “industries” In the implementation of CIG and mobility schemes the role of social partners allow them to concentrate those redundancies on older rather than on younger workers.</td>
<td><strong>HP 7.1:</strong> The cohort born in 1945 or after have a significantly higher hazard of entering the unemployment pathway than the cohort born earlier <strong>HP 7.2:</strong> among the cohort born in 1945 or after older workers in in the sectors covered by the CIGS and mobility schemes have a significant higher hazard to enter the unemployment pathway than older workers in other sectors</td>
</tr>
<tr>
<td>Disability pathway</td>
<td>No further reform after 1984. Social partners are not involved in implementation organs where they can manipulate the allocation of the benefits only after 1994.</td>
<td><strong>HP 7.3:</strong> the likelihood of undertaking the disability pathway of exit significantly decreases between the two cohorts</td>
</tr>
<tr>
<td>Pension pathway</td>
<td>Social partners can successfully hinder the formulation of retrenchment policies in a concertation arena where they have a disproportionately high bargaining power with respect to the Government. Retrenchment policies involve only marginally their core constituency in the private sectors. Old-age and especially seniority pathways are substantially retrenched only for civil servants (especially women) and self-employed.</td>
<td><strong>HP 7.4:</strong> the cohort born in 1945 or after will have a significantly lower likelihood of entering a pension pathway than the older cohort <strong>HP 7.5:</strong> among cohort born in 1945 or after the likelihood of entering a pension pathway is higher among private employees than among public employees <strong>HP 7.6:</strong> among cohort born in 1945 or after in the public sector the likelihood of entering a pension pathway is lower for women than for men <strong>HP 7.7:</strong> the likelihood of self-employed of entering a pension pathway does not significantly vary between the cohort born before and after 1945</td>
</tr>
</tbody>
</table>

7.5 Findings

The hypotheses outlined in the previous sections are tested using a Competing-Risk model (CRM). Estimations are expressed in hazard ratios in Table 7.4. The descriptive of the Sharelife sample are presented in Section 4.2 Sharelife is a retrospective survey, where the information over the lifecourse of representative sample of Italian individuals age 50 years or older are gathered between 2008 and 2009 (for a more extensive description of Sharelife sample, see Section 4.2 ).

In the CRM the work-retirement transitions of the cohort born in 1944 or earlier and the cohort born after 1944 will be compared. Estimates are expressed in hazard rates. Model 1.1, model 2.1 and model 3.1 include the cohort>1944 variable and the controls (see appendix C) for the three pathways of exit (unemployment, disability, and early retirement) and they respectively test HP 7.1, HP 7.3, and

45 The dependent variable includes also a fourth other pathway. It represent the exit from employment without a income support, since an alternative support is found either in the household resources or in savings. Since this trajectory is not associated to any of the three pathways of exit investigated here, its estimations is not be interpreted. The full model is available in appendix ...
7.5 Findings

HP 7.4. The interaction between the cohort>1944 variable and industries are included in model 1.2 and 3.2 to test respectively HP 7.2 and HP 7.5. The interaction between cohort, industry and gender are included in model 3.3 to test HP 7.6. Finally model 3.4 includes the interaction between cohort and self-employment to test HP 7.7.

Table 7.4: Competing risk models (CRM) estimating the effectiveness of retrenchment policies on the hazard of undertaking one of the four pathways of exit (1. unemployment; 2. disability; 3. early-retirement). Estimates are expressed in hazard rates. Full model is shown in Appendix C.

<table>
<thead>
<tr>
<th>Cohort&gt;=1945</th>
<th>1.1 Unemployment</th>
<th>1.2 Unemployment</th>
<th>2 Disability</th>
<th>3.1 Pension</th>
<th>3.2 Pension</th>
<th>3.3 Pension</th>
<th>3.4 Pension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction: Industry*Cohort&gt;=1945</td>
<td>2.448**</td>
<td>1.052</td>
<td>0.498</td>
<td>0.702***</td>
<td>0.601***</td>
<td>0.595***</td>
<td>0.596***</td>
</tr>
<tr>
<td>Cohort &gt;1944* Agriculture forestry and fishing</td>
<td>2.95e-06***</td>
<td>0.930</td>
<td>0.933</td>
<td>1.047</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Cohort &gt;1944* Manufacturing mining &amp; quarrying</td>
<td>1.861</td>
<td>1.476</td>
<td>1.489</td>
<td>1.531*</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Cohort &gt;1944* Construction</td>
<td>3.71e+00***</td>
<td>1.849*</td>
<td>1.886*</td>
<td>2.037**</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Cohort &gt;1944* Wholesale and retail trade, transportation and storage &amp; horeca</td>
<td>1.517</td>
<td>0.746</td>
<td>0.751</td>
<td>0.842</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Cohort &gt;1944* Financial intermediation</td>
<td>1.184</td>
<td>2.666</td>
<td>2.655</td>
<td>2.685</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Cohort &gt;1944* Real estate, renting and business activity</td>
<td>0.918</td>
<td>3.51e-06***</td>
<td>3.57e-06***</td>
<td>4.14e-06***</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Cohort &gt;1944* Public administration and defense, education, health and social work</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Cohort &gt;1944* other community</td>
<td>6.291</td>
<td>1.208</td>
<td>1.605*</td>
<td>1.695*</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Interaction: *Public administration etc. *Cohort&gt;=1945 *women</td>
<td>0.441*</td>
<td>0.430*</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Interaction: Self-employed*Cohort&gt;=1945</td>
<td>0.677</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
</tbody>
</table>

Number of events 33 33 18 685 685 685 685
Observations 2,199 2,199 2,199 2,199 2,199 2,199 2,199

*** p<0.01, ** p<0.05, * p<0.1

Source: Sharelife, release 3.1 November 2010.

The estimations at first glance show that the effectiveness of retrenchment policies is quite limited in Italy. According to HP 7.1 model 1.1 shows that the cohort>1944 has higher likelihood of entering a unemployment pathway than the earlier cohort. This results can be explained as a consequence of the role that social partners play in the administration of CIG schemes. Thanks to this role, unions and employers can concentrate the growing redundancies of the economic restructuring on older workers with no additional private costs.

In order to refine this argument, model 1.2 tests whether the use of the unemployment pathway is significantly lower in companies not covered by CIG scheme, where the private costs are higher (HP 7.2). Unfortunately the main eligibility criteria of CIG, the firm’s size, is not provided. Thus the cohort effect is interacted with industry and the public sector, not covered by the CIG and mobility schemes, is compared with all the other industries. Workers in industries in the private sectors (with the exception of agriculture and real estate, renting and business activity) are more likely to enter the unemployment pathway than workers than in the public sectors. However against HP 7.2, this
likelihood is statistically significant only for workers in the construction industry.

As for the disability pathway, in model 2.1 the cohort effect has the same direction hypothesized in HP 7.2. This can be explained by the fact that, although no further retrenchment takes place after 1984, the exclusion of social partners from the administration boards of INPS and INAIL in 1994 reduced the inappropriate use of disability as an early exit route. In spite of that, the lower likelihood of accessing the disability pathway does not reach a significant level.

Looking finally at the cohort effect estimated for the pension pathway, a first consideration is that, according to HP 7.4, due the retrenchment of the pension pathway, the cohort >1944 significantly delay their entry in it. In order to test whether social partners managed to hinder the effectiveness of retrenchment policies in model 3.2 interactions between cohort and industry are included. They test whether social partners successfully preserved the pension pathway attractive in the private sector, while retrenching it in the public sector (HP 7.5).

HP 7.5 finds only partially empirical support. Only workers in the construction industry experience a significantly higher likelihood than public employees to enter a pension pathway, while in the real estate renting and business activity the likelihood turns up to be lower. This may be interpreted as the result of the unions' “strenuous work” exemptions, which concentrated the retrenchment fully on white collar workers. Other non-significant effects may be, as mentioned earlier in section 7.4.3, the unintended effect of the extensive use of pre-retirement schemes, which compensated the retrenchment of the seniority pathway in the public sector.

Model 3.3 includes the triple interaction between cohort public sector and gender. As expected in HP 7.6, model 3.3 shows that due to the exposure to an harsher retrenchment, among public employees >1944 the entry of women is delayed significantly more than men. This specification provides a little more support to HP7.5, since also workers in the other community industry turn out significantly more likely to enter the pension pathway after public employees.

Finally, according to HP 7.7, model 3.4 shows that among self employed the cohort>1944 does not reveal a significantly different pattern with respect to the earlier cohort. The interpretation of this result may be twofold. First the pension pathway was opened for self-employed for a very limited amount of time (since 1991) and their retrenchment was sharper. Second, self-employed are generally less sensitive to early exit routes than employees.

The inclusion of the interaction between self-employment and cohort effect refines the estimations concerning the interaction between industry and the cohort effect. Increasing the support to HP 7.4, the positive effect of the interaction between cohort>1944 and manufacturing mining and quarrying becomes significant. This is again the consequence of the “strenuous work” exemption and strongly reinforce the argument that the concerted formulation of the pension pathway's retrenchment let social partners hinder its effectiveness among their core membership.

7.6 Conclusion

The main goal of this chapter was to investigate the extent to which social partners affected the effectiveness of retrenchment policies in Italy. Due to their contentiousness, the overall hypothesis is
that social partners severely hindered the effectiveness of retrenchment policies. This is because they were included in social government modes that let them obstruct the policies' formulation and implementation.

The effectiveness of retrenchment policies was hindered when social partners needed to be actively involved in their formulation in the concertation setting. This is the case of the retrenchment of the most important exit route: the pension pathway. The context of great economic emergency and political weakness at the back of the formulation of these policies makes social partners' support unavoidable and prevent the Government from spending its shadow of hierarchy during the negotiations. Because of that social partners succeeded in forcing the Government to exempt their core members from the retrenchment. This was obtained with very long transitional rule for the phasing-in, which projected the policy effect on the future and with explicit clauses that concentrate the costs outside their membership, namely on the public sector, self-employed, and on white-collar workers.

The social partners' involvement in the formulation of retrenchment policies proved to effectively limit their effectiveness in the three main categories of workers placed under the “strenuous work” exemption in the construction, manufacturing mining and quarrying, and other community industries. The same hindering effect however is not clearly displayed in the rest of the private sector with respect to the public sector. Despite the harmonization of the pension rules concerning public and private employees retrenched abruptly the seniority pathway of the former, a significant effect is shown only for women working in the public sector. This counterintuitive result may be due to the pre-retirement schemes that, used ad-hoc to shed redundancies in the public sector, compensated the retrenchment of the pension pathway.

Despite obtaining no exemption from the social partners, self-employed are found to be not significantly affected by the pension pathway's retrenchment. This result is less counterintuitive as it seems, since their pension pathway is effectively opened only for a few years and they are less sensitive to early retirement incentives.

All in all, this investigation proved that, the Concertation setting let social partners hinder the effectiveness of retrenchment policies among the blue-collar workers.

The effectiveness of retrenchment policies were also hindered in Italy due to the inclusion of social partners in the administration of the CIG and mobility schemes. The use of unemployment as an early exit route is not found to decrease but to become even more likely after the mid-1990's. This is easily explained by the combined effect of the increasing economic restructuring and the possibility of unions and employers to concentrate redundancies on older workers with no private additional costs. Also in this case the use of unemployment pathway is fostered only in industries dominated medium and large companies and thus with a strong unions presence. In industries where the size of companies is smaller the diffusion of the unemployment pathway is weakened by the higher private costs that it implied. Although the direction of the estimates are coherent with this patterns, their significance levels are affected by the very small sub-sample size of the transitions into unemployment.

Finally, because of the exclusion of social partners from the administration of the disability scheme, since 1994 they are prevented from compensating the 1984 retrenchment with a accommodating evaluation of the disability level of older workers. Although the direction of the effect support this argument, the significant level is again affected by the extremely small size of the sub-sample of
disability trajectories.

All in all, this chapter provided empirical evidence that, because of their contentiousness, social partnership have severely hindered the effectiveness of retrenchment policies in Italy. Social partners affected furthermore the policies' distributional effects, by concentrating the effectiveness outside their core membership and on future generations. The extent to which social partners have hindered rather than enhanced the effectiveness of retaining policies will be investigated in Chapter 10.
Part 3
Institutional affinities and the effectiveness of retaining policies in The Netherlands, Germany, and Italy
Institutional affinities and the effectiveness of retaining policies in The Netherlands, Germany, and Italy
8 The effectiveness of retaining policies in The Netherlands

8.1 Introduction

As pointed out in Chapter 3, extending working life requires not only that the protection system retrench pathways of exit, but also that companies retain older workers. The necessary condition for the implementation of retaining policies is that the EWL re-conversion became a strategical target of the companies' human resource management (HRM). Social partners play a key role in enhancing or hindering the top-down penetration. They can limit the strategical advantage of firms to shed older workers and enhance the implementation of retaining policies. The main research question of this chapter is: to what extent has the strong organizational articulation of unions and employers’ associations influenced the effectiveness of retaining policies implemented between the mid-1990's until 2008-2009 in the Netherlands?

According to the hypothesis (H 3.5), the highly coordinated collective bargaining system in the Netherlands successfully conveyed retaining policies into companies' HRM strategy and fostered their effectiveness. Retaining policies extend working life by improving some key work dimensions: time reconciliation, mental and physical health reconciliation, age equality, and employability.

This top-down conveyance is successful because of two main institutional mechanisms. The first is the high vertical coordination between the confederal level and the industry organizations responsible for the collective bargaining. This high coordination is granted by the STvdA (Stichting van de Arbeid), a bilateral body that conveys the EWL target with joint recommendations. Thanks to this joint recommendations the EWL target is mutually transferred into the strategy of both industry's unions and employers' associations, which translate this target into policies that are then included into collective labour agreements (CLA's). The second mechanism is the high coordination between the industry and the company level, which makes CLAs legally compelling for companies. All in all, the coordination of the collective bargaining system constrained companies' HRM to include retaining policies as long as they are negotiated in central CLAs. According to my HP 3.4 the STvdA is encouraged to promote a retaining strategy because retrenchment policies internalized to a great extent the costs of pathways of exit. This strategy is pushed downward through the collective bargaining system, which is expected to coordinate the HRM practices to retain older workers. Because of that, retaining policies are highly effective (HP 3.5) across the economy (HP. 3.8).

The empirical expectations concerning the effectiveness of retaining policies are derived from data concerning their dissemination in CLA's. The higher is the dissemination in CLA's of retaining policies the higher is their effectiveness supposed to be, since a higher share of companies are compelled to implement them in their HRM. Because of their systematic dissemination: time reconciliation, physical and mental health reconciliation, and age equality are expected to be effective in EWL. Moreover their dissemination is quite consistent in all the industry, with the exception of the agriculture, fishery and forestry. Hypotheses are tested using a PCEM.

This chapter is organized as follows. Section 8.2 describes the social protection system's attempts to convey retaining policies top-down by mainly endorsing the highly coordinated partnership system. Section 8.3 is devoted to a more detailed description of the aspects that makes the vertical organization
of social partners in Germany the collective bargaining system highly coordinated. In Section 8.4 the hypotheses concerning the effectiveness of retaining policies are derived from data that show the dissemination of the different sets of retaining policies by CLAs between 1998 and 2006 in the overall economy and by industry. The results of the piecewise constant exponential model is shown and interpreted in Section 8.5 and conclusions about the effectiveness of retaining policies are discussed at the end of this chapter.

8.2 Protection’s attempts to convey top-down retaining policies

The governments conveyed the EWL re-conversion into the HRM strategy mainly by endorsing social partners to disseminate retaining policies throughout the collective bargaining system. The social protection system provides a general legal framework that indirectly support the implementation of retaining policies, but without binding directly companies with financial incentives or legal constrains. The only exception is represented by the health reconciliation policies. Employers are made directly financially accountable for directly reducing the inflow of older workers into disability scheme by systematically improving the healthiness of their working conditions.

The attempts of the social protection system to convey top-down the implementation of retaining policies are listed in Table 8.1.

<table>
<thead>
<tr>
<th>General-employability</th>
</tr>
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<tbody>
<tr>
<td>2004- Tijdelijke subsidieregeling stimuleren leeftijdsbewust beleid.</td>
</tr>
<tr>
<td>2006-nu bonus voor werknemers en werkgevers: o.a. de doorwerkbonus – de arbeidskorting voor oudere werknemers – de premiekorting oudere werknemers plus loonkostensubsidie bij ziekte van oudere werknemers</td>
</tr>
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<table>
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<tr>
<th>Time reconciliation</th>
</tr>
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<tbody>
<tr>
<td>1996- Wet Verhoop onderscheid arbeidshuur (VOA)</td>
</tr>
<tr>
<td>1996- Pension Covenant</td>
</tr>
<tr>
<td>2000- Wet Aanpassing Arbeidshuur (WAA)</td>
</tr>
<tr>
<td>2004- Sociale afspraken over vervroegde-uitredingsregelingen en spaarregelingen levensloop</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Health reconciliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993- Wet Terugdringing Beroep de Arbeidsongeschiktheidsregelingen (TBA)</td>
</tr>
<tr>
<td>1993- Wet Terugdringing Ziekteverzuim (TZ)</td>
</tr>
<tr>
<td>1993- Arbewater (ARBO)</td>
</tr>
<tr>
<td>1996- Wet Uitbreiding Loodoorheibingsverplichting bij Ziekte, (WUBLZ)</td>
</tr>
<tr>
<td>1997- Wet Overheidspersoneel onder de Werknemerzverzekeringen</td>
</tr>
</tbody>
</table>
A longer retention of older workers in employment is first enhanced unilaterally by the Government, with both direct and indirect measures. Direct measures are relatively recent (between 2006 and now) and offer employers financial incentives if they hire or retain workers between the age of 50 and 62 years, whereby subsidies and tax benefits (STvdA 2011). Other temporary subsidies are offered in 2004 in a program co-managed by social partners (Tijdelijke subsidieregeling stimuleren leeftijdsbewust beleid, 2004). For the first three years it focused on large enterprises, while in the two years on medium and small enterprises. The subsidies are used to develop employers' skills and knowledge that enable them to elaborate a successful strategy to both retain older workers and to keep them productive. On this purpose a new benchmark is diffused among the employers that takes part to the program: the WAI (Work Ability Index). It calculates the fitness of different dimensions of the work ability of the personnel (among which health, training, skills etc.), allowing the employers to implement targeted actions to prevent productivity drops. Although innovative this programs involve companies only on a voluntaristic bases, which makes its coverage rather limited (European Commission 2010).

Indirect measures instead are not targeted specifically on retaining older workers, but indirectly improve some of the work dimensions that extend working life, namely health reconciliation, time reconciliation, and age equality. A first set of unilateral measures made employers responsible for preventing long-term illnesses and impairments among their employees and indirectly improve health reconciliations, that is the healthiness of the working conditions that older workers experience. On the one hand these measures makes employers financially responsible for the disability and sickness claims that arise among their personnel. The TAV “act on reducing the disability volume” in 1992 made the employers' social insurance contributions proportional to the past inflow of their employees into disability, whereby a bonus-malus system that is abolished in 1995 because ineffective (AMBER-“Act Abolition of “Malus” and Improvement of Reintegration”). The TZ “act on reducing sickness absence” (1993), the WULBZ “Continued Payment of Salary (Sickness) Act” (1996), the WVP “Act on Improving the Gatekeeper” and (2001) the VVLZ “Act extending the wage payment obligation” (2004) privatized the protection of sickness risk in the first two years in order to encourage employers to re-integrate recipients before they fall into disability (see Table 8.1) (van Oorschot and Boos 2000). On the other hand these measure made employers responsible for the prevention of long-term illnesses and impairments among their employees by improving the working conditions. The PEMBA act “on premium differentiation and market regulation” (1996) declare employers accountable not only to cut

<table>
<thead>
<tr>
<th>(OOW)</th>
<th>Scheme.</th>
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<tbody>
<tr>
<td>1997- Wet op de Medische Keuringen (WMK).</td>
<td>1997- Act on medical examination</td>
</tr>
<tr>
<td>1998- Wet op de (Re)Integratie Arbeidsgehandicapten (REA).</td>
<td>1998- Disability Reintegration Act</td>
</tr>
<tr>
<td>2001- Wet Verbetering Poortwachter (WVP)</td>
<td>2001- Act on Improving the Gatekeeper</td>
</tr>
<tr>
<td>2003- Wet Verlenging Loondoorbetalingsverplichting bij Ziekte. (VVLZ)</td>
<td>2003- Act extending the wage payment obligation</td>
</tr>
</tbody>
</table>

Age equality

| 1994-2004 Algemene Wet Gelijke Behandeling- AWGB | 1994-2004 Anti-discrimination law as emended in 2004, when age is officially included among the criteria for which discrimination in employment acts is illegitimate |
disability claims but to prevent them and the “Arbo act on working circumstances” (1993) strengthen the role of “arbo-dienst” (companies that provide professional services on occupational health and safety), which have to be mandatorily employed by companies to plan and monitor the improvement of working conditions (van Oorschot and Boos 2000; Sonnet and OECD 2005; Van Gerven 2008).

A second set of unilateral measures indirectly promoted time reconciliation, that is the shortening of the working time, because they fostered the diffusion of part-time work among the whole workforce. The VOA Prohibition of Discrimination by working hours act (“Wet Verbod onderscheiding arbeidsduur”) in 1996 establish the right of equal treatment of part-time workers as full-time workers. Moreover the WAA Adjustment of Working hours act (“Wet Aanpassing Arbeidsduur”) in 2000 introduces the right of workers to unilaterally change from full-time to part-time an existing employment relationship (Visser and Hemerijck 1997; Visser et al. 2004).

A final set of unilateral measures indirectly boost age equality, that is the support of bosses and colleagues of younger age, by officially banning age discrimination in HRM (the so-called ageism-OECE, 2005). First age discrimination is banned in the collective dismissals procedure in 1995, when the compulsory preference for older workers is abolished. Moreover the ban is extended to any other aspect of the employment relation by the AWGB Equal Treatment Act (Algemene Wet Gelijke Behandeling- 1994, as amended in 2004)46 (Sonnet and OECD 2005).

In all these three sets of unilateral measures does not have the express aim of extending working life, but as an indirect effect, they provide a broader legal framework that support social partners, once they start boosting the implementation of retaining policies. The choice of boosting retaining policies arises in the Confederal organizations in the STvdA board at least since 1993, when the first retrenchment policies start to undermine the right of older workers to use the pathways of exit (Wilthagen 2003). On the unions' side, the rationale of this choice consists of improving the working conditions to alleviate the additional work burden of older workers, once pathways of exit are retrenched. On the employers' associations' side, this choice is motivated by the aim of making the extension of working life an advantage for companies, by boosting older workers' productivity (De Vroom 2004). Confederal institutions convey this message to the lower organizations, which in turn enhance the implementation of retaining policies within companies thanks to the two institutional mechanisms that will be explained in the next section.

8.3 Institutional affinities between partnership and production

Social partners in the Netherlands can significantly steer companies' HRM policies thanks to its highly coordinated structure of the collective bargaining system. As described by Windmuller and Visser this system was legally regulated in response to the economic recession between the 1920's and the 1930's against the risk of unfettered wage competition. The two most important measures are in this respect

46 The non-discrimination ban is applied unless the distinction is based on objective justifications, and a further protection is case of dismissals and victimization is the shifting of the proof burdenIt excludes situations where the distinction is based on labour policies aimed at encouraging the employment of other age-group, or is due to the termination of the employment relations for the achievement of the legal retirement age and the individual is eligible for AWO. In case an appealing is made an Equal treatment commission is appointed and expresses an opinion, which however is not legally binding, and the applicant may bring the employer to court (OECD, 2005)
After 1945 the role of the state increased, since it maintained until the outbreak of the oil shocks a statutory wage policies implemented in close cooperation with STvdA. After a decades where central corporative practices were interrupted under strong external market pressure, STvdA negotiated all the most important social pacts that since 1982 (Wassenaar agreements) fostered the recovery and competitiveness of the Dutch economy (Visser 1998b; Rhodes 2001). Since then STvdA interacted regularly with the governments to coordinate the policymaking and collective negotiations for what concerns wage and other terms of employment. The regular interactions institutionalized a cooperative setting that enabled the governments to commit STvdA first to retrench the pension pathway and then to promote the negotiations of retaining policies.

This structure enabled to successfully convey the EWL re-conversion from the government to the companies' strategy. Two aspects are important here. At central level the conveyance of retaining policies downwards to industry-level organizations is granted by STvdA (for more information see Section 5.3).

This commitment led STvdA to deliver a series of joint recommendations where it encouraged their members to include retaining policies in their negotiations. Despite non-legally bounding this soft dissemination provided a common platform that informed their members' strategies (Wilthagen 2003). Once the bargaining parts are informed over the necessity of retaining of older workers by promoting a set of work dimensions that extend working life, it is their task to translate this indications, according to their specific strategies, into concrete retaining policies, and to include them in CLAs.

The second mechanism is the vertical coordination between the industry and the company bargaining level, which coveys the retaining policies from CLAs into HRM. In the Netherlands this high level of coordination is granted by the status of CLA's, which are legally binding for both the more decentralized negotiations and for personnel policies of companies. Therefore once retaining policies are included into an industry-level CLA, then social partners and the HRM at company-level can only acknowledge those policies and implement them. In all when a industry CLA requires the improvement of one of the work dimension that extend working life, the same or a better improvement have to be implemented by companies that are covered by this CLA.

In short, the two mechanisms explained above enable the partnership system to successfully convey the EWL target from the protection to the production system in the Netherlands. The top-down process by which the strategical alignment between partnership, and production takes place will be explained in more detail below.

**8.4 Retaining policies: top-down alignment**

Since the early 1990's social partners in the Netherlands proved to actively encourage the penetration of the EWL target into the HR management of companies (Tros 2005).

At confederal level STvdA started to convey the EWL target into the strategy of the lower structures of the social partners' organizations. Since the beginning of the 1990's, a number of joint recommendations addresses not only to the general goal of extending working life but specifically endorse social partners to negotiate a reform plan which can foster the implementation of retaining policies within the companies. Here are some examples that deal with different retaining policies'
dimensions: growing older at work (1993 – StvdA, 1993) working on your job (Werken aan je werkkring, 1996); lifelong learning at work (Een leven lang lerend, 1998); making employability policy work (werk maken van employabilitybeleid, 2001) and more is needed (meer is nodig, 2001). Similar recommendations are then repeated in the subsequent years, but along time they assume a wider scope. In fact in “removing obstacles to working after the age of 65” (2006), what we can do together (StvdA, 2008); and “policy agenda 2020: Investing in participation and employability” (StvdA, 2010) the extending working life becomes part of a more general process of fostering full employment in each phase of the life-cycle (Wilthagen 2002; Troos 2005; (STvdA 2011)).

With these recommendations the StvdA attempted to persuade unions and employers' organizations that, while early retirement's gains are shrinking, they could make extending working life advantageous for older workers and for companies. Older workers can benefit from extending working life because, after the retrenchment of the pathways exit, it is their only way to accrue their retirement wealth. Thus it is the unions' primary interest to foster their members' welfare by negotiating working conditions that can relieve their strain of working longer. Companies can profit from extend working life as well, because they can retain skills that are becoming increasingly scarce because of the population ageing. Therefore it is a primary interests of employers and their representatives to bargain and implement measure that keep older workers competitive, by preventing skills to deteriorate with ageing.

As explained in the previous section, these recommendations were the common platforms from which industry negotiations formulate retaining policies. Once they become part of a CLA then they bind lower CLA's and companies that are members of the signatory organizations to implement policies that improve working conditions at least until the level included in industry CLA's.

Due to the specific characteristics of the workforce and of the economic system, retaining policies formulated by the industry negotiations in the Netherlands may improve some work dimensions rather than others. Moreover depending on the productive system and the economic performance, social partners in some industries can be more successful in disseminating retaining policies than others.

The dissemination of retaining policies in central CLAs from the late 1990's onward is described in the next section both for the overall economy and by industry. The dissemination of retaining policies is expressed as either the % workers covered by CLA's that contains them or the % of the total number of CLA's that contain them, depending on data availability. According to the hypothesis (H 3.4), it is argued that the higher is the dissemination of retaining policies the stronger is the capacity of social partners to coordinate the implementation of retaining policies within companies, which in turn will make these latter more effective in extending working life. This is the main argument upon which the working hypotheses are formulated in the next section.

8.5 Working hypotheses

8.5.1 Hypotheses by retaining policies

The working hypotheses are based on the extent to which industry- CLAs coordinate the
implementation of retaining policies within companies. This coordination is more intense the more widespread is the coverage or the percentage of CLAs that include policies that improve the work capacity of older workers according to the dimensions defined earlier: time reconciliation, health reconciliation, employability and age equality. Therefore the working hypothesis are split first on the different types of retaining policies and then by industry.

Information over the dissemination of different types of retaining policies over the whole economy between 1998 and 2009 are provided in Table 8.2. They express the way in which recommendations are translated into retaining policies and are conveyed into HRM strategy. Since recommendations represent the platform that inform the collective negotiations over the topics that needs to be regulated, then the dissemination of retaining policies will progressively increase after recommendations are made. According to the specific characteristics of each industry, social partners can prioritize some types of retaining policies rather then others. Data over the dissemination of retaining policies in CLA’s are available only for the private sector. However since in the public sector the Government itself plays as employer in the collective negotiation, I assume that in the public sector retaining policies are systematically disseminated. This is because the Government directly internalize in its negotiating strategy the target of retaining older workers.

Table 8.2: Retaining policies' dissemination in CLAs' expressed as percentage of workers covered by these measures (with respect to the total number of older workers covered by CLAs) or as percentage of the total CLA's valid in 1998, 2001, 2008, and 2009.

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<tbody>
<tr>
<td>General</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Retaining policies (% workers)</td>
<td>36</td>
<td>40</td>
<td>69 (% CLA)</td>
<td>79 (% CLA)</td>
<td></td>
</tr>
<tr>
<td>Time reconciliation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shorter work schedule** (seniors’ measures (% CLA)</td>
<td>67</td>
<td>60</td>
<td>55</td>
<td>56</td>
<td>55</td>
</tr>
<tr>
<td>With wage reduction, of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than proportional (% CLA)</td>
<td>29</td>
<td>31</td>
<td>29</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Working time: (% CLA)</td>
<td>21</td>
<td>21</td>
<td>18</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>Health reconciliation</td>
<td>76</td>
<td>76</td>
<td>77</td>
<td>74</td>
<td>77</td>
</tr>
<tr>
<td>Health reconciliation</td>
<td>60</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td>69/8</td>
</tr>
<tr>
<td>Lighter work burden (% CLA)</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>14</td>
<td>67</td>
</tr>
<tr>
<td>Relieve policies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age Equality</td>
<td>2 (% CLA)</td>
<td>42(% CLA)</td>
<td>35</td>
<td>44</td>
<td>38</td>
</tr>
<tr>
<td>Employability</td>
<td>7(%) CLA</td>
<td>8(%) CLA</td>
<td>7</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Training leave for older workers</td>
<td>5 (%) CLA</td>
<td>18 (%) CLA</td>
<td>13</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Skills development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


The first row in Table 8.2 describe in general terms the dissemination of policies aimed at retaining older workers. Between 1998 and 2001 about 40% of workers are covered by a CLA containing retaining, policies. Their dissemination steadily increase, and support the general hypothesis that since the late 1990’s onwards CLA’s in the Netherlands have channelled the EWL policies into the HR management through the collective negotiation. Therefore the general hypothesis is that retaining policies effectively extend working life in the Netherlands (HP 3.6).

The other four sections of Table 8.2 give an overview of the dissemination of four different sorts of retaining policies: time reconciliation, health reconciliation, age equality, and employability. The most diffused way of retaining older workers appears to be with time reconciliation policies. In fact between
1998 and 2009 more than ¾ of CLAs include measures that regulate flexible working time and more than 50% of them include specific measures to enhance a shorter working schedules among seniors.

Because of the compulsory status of industry CLAs that time reconciliation policies since the late 1990's onwards will undertake a comparable dissemination among companies' HRM. Since time reconciliation policies are systematically implemented by CLA's, it is hypothesized that older workers working part-time will have a significantly lower likelihood than full-time workers to experience a work-retirement trajectory (HP 8.1).

As shown in Table 8.2, it is not the reduction of the working time itself that is implemented by CLAs to retain older workers. In fact the far majority of policies that are included in the CLA's to reduce the working time of older workers implies a reduction of less than proportional of the wage. This means that time reconciliation policies are especially conveyed by the partial retirement schemes, developed within the pre-retirement programs. This scheme provides older workers with higher incentives to extend working life than part-time in terms of present and future streams of income, but require a relatively stable career to benefit from them. Since men have in average a more stable career than women, the hypothesis is that working part-time will lower the likelihood to undertake a work-retirement trajectory, significantly more for the former than for the latter (HP 8.2).

The dissemination of health reconciliation policies among CLAs indicates that a very diffused method to reduce the strain of work is to enhance the healthiness of older workers' schedule. In fact already in 1998 60% of CLAs contain measures restricting companies' freedom to organize seniors' work according to unhealthy schedules, such as overwork, shift work and irregular schedules. This percentage increases to 80% in 2001 and remain rather constant afterwards. Less systematic information are available for the dissemination of other measures that improve health reconciliation. Only the 14% of CLAs in force in 2008 includes lighter work burden for older workers, which makes reasonable to attribute the 67% of relieve policies (general measures aimed at reducing the psycho-physical workload) found in 1998 to measures regulating the working schedule rather than other working conditions. Nevertheless the dissemination of health reconciliation policies by CLAs can be by-passed by a central dissemination steered by the Governments itself (De Vroom 2004; van Gerven 2008; Oorschot 2010). The policies that privatize the prevention of sickness and disability created a direct employers' duty to improve working conditions which does not need additional measures to bind the companies' strategy. As mentioned earlier, although these policies are not directly targeted on older workers, they can indirectly retain them, because older workers are the main recipients of disability scheme. Since health reconciliation policies are directly promoted by the social protection system, it is hypothesized that older workers that experience a low physical and mental strain at work will have a lower likelihood to enter a work-retirement trajectory than older workers that do not experience them (HP 8.3).

According to the definition, age equality policies enhance the support and the recognitions of bosses and colleagues, the work atmosphere, and the fairness of work relations. The quality of the social interactions that older workers experience at work is indirectly improved by eliminating all the limitations that justify age discrimination in the employment relations and thus in the social interactions. Since 2001 older workers are not directly exposed to discrimination in many aspects of their working conditions. In fact no CLAs contains age limitation for recruitment and selection, promotions, additional bonus and incentives, bond premium and to the access to education and
training in the framework of promoting lifelong education and sustainable employment (Spijkerman & Klassen 2002; Beeksma et al., 2007; 2008; 2009; Smits, 2010). Moreover the Table 8.5 shows an extensive diffusion between 1998 and 2001 of policies that grant also to older workers the opportunity of pursuing an upward career. Career policies are important to improve age equality, because they support older workers' perception to be fairly treated and their social status among younger co-workers. Since age equality policies are indirectly promoted by the social protection system and systematically disseminated by CLA's, it is hypothesized that older workers that experience a supportive atmosphere and a fair treatment at work will have a lower likelihood to enter a work-retirement trajectory than older workers that do not experience them (HP 8.6).

According to Table 8.2, employability policies undertake the least dissemination in CLAs in the Netherlands. In 1998 policies that enhance the development of older workers' skills are included only in 5% of CLAs. In 2001 this percentage increases till 18% but it still involve a limited portion of the production system. Even lower is the diffusion of policies that prescribe training leave especially for older workers. Because employability policies are NOT systematically disseminated by the CLA's, it is hypothesized that older workers that experience skills' development at work will NOT have a significantly lower likelihood to enter a work-retirement trajectory than older workers that do not experience them (HP 8.8).

Since the CLAs under observation are negotiated at industry level, it is important to investigate whether retaining policies' dissemination significantly varies by industry. Industry unions, even within the same confederation, can differ in a variety of features: ideological, to structural and strategical. These differences derive from the intrinsic structure of each industry and its economic development, which in turn affect the extent to which recommendations on EWL are adopted by the collective negotiations. Since the dissemination of retaining policies in the CLA's increases the share of companies that are bound to implement them, it is argued that their effectiveness in extending working life is higher in industries where higher is their dissemination in the early 2000's onwards. Information over the dissemination of retaining policies by industry will be provided in the next section together with the hypotheses over their expected effectiveness.

8.5.2 Hypotheses by industry

Information over the dissemination of retaining policies in CLAs by industry are available only for time reconciliation and employability. Because of that, only for these two retaining policies working hypotheses can be split by industry.

Time reconciliation policies, that are measures which shorten the working schedules of older workers, are fairly disseminated in the CLAs of all industries, as shown in Table 8.3. Already in 2001 the companies that employ the far majority of the workforce are bounded by CLA's to adopt measures that can grant a better time reconciliation for older workers. The only exception is agriculture and fishery, where the coverage is only 40%. The service sector includes the industries where time reconciliation are diffused the most, since a range between 88% to the 71% of the workers are covered by these policies in the 2000's. An intermediate diffusion takes place into the manufacturing, construction, and the trade and catering industries.

Given the dissemination of time reconciliation policies, it is hypothesized that working part-time
will lower the likelihood to undertake a work-retirement trajectory: the most in public administration, health, education and social work, real estate renting and business activity, financial intermediation, and other community; less in manufacturing, mining & quarrying, construction, wholesale and retail trade, transportation and storage & catering, and the least in the agriculture, forestry and fishery (HP 8.3).

Table 8.3: Dissemination of time reconciliation policies (reduction of the working time for older workers) in CLA's by industry between 2001 and 2009, measured as the % of workers covered by CLA's that contain employability policies in each industry.

<table>
<thead>
<tr>
<th>Retaining policies</th>
<th>Time Reconciliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
<td>2001</td>
</tr>
<tr>
<td>Agriculture and fishery</td>
<td>40</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>57</td>
</tr>
<tr>
<td>Construction</td>
<td>57</td>
</tr>
<tr>
<td>Trade and catering</td>
<td>64</td>
</tr>
<tr>
<td>Transport and communication</td>
<td>75</td>
</tr>
<tr>
<td>Corporate services</td>
<td>75</td>
</tr>
<tr>
<td>Other services</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
</tr>
</tbody>
</table>


Data concerning the coverage of CLA's containing employability policies across industries are available only since 2006 as shown in Table 8.4. The diffusion of policies that foster the training and education for older workers is consistent only in manufacturing and construction industry, where in 2006 and 2008 it reaches respectively almost 50 and 40% of the total workforce. On the contrary almost no employability policies are disseminated in the agriculture and fishery, in other service, and in the transport and communication industries, since there the CLA's coverage range between 0 and 3%. Finally an intermediate diffusion occurs in the trade and catering and the corporate services industries, where CLA's containing employability policies covers about 10% of the workforce. Given the dissemination of time reconciliation policies, it is hypothesized that skills' development at work will lower the likelihood to undertake a work-retirement trajectory: the most in public administration, health, education and social work; manufacturing, mining & quarrying; and construction, less in wholesale and retail trade, transportation and storage & catering; real estate renting and business activity, and financial intermediation, and the least in the agriculture, forestry and fishery, other community (HP 8.8).
### Table 8.4: Dissemination of employability policies (agreements on education and training for older workers) between 2006 and 2009, measured as the percentage of workers covered by CLA’s that contain employability policies in each industry.

<table>
<thead>
<tr>
<th>Sector</th>
<th>2006</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and fishery</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>48</td>
<td>43</td>
<td>18</td>
</tr>
<tr>
<td>Construction</td>
<td>37</td>
<td>37</td>
<td>0</td>
</tr>
<tr>
<td>Trade and catering</td>
<td>12</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Transport and communication</td>
<td>1</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Corporate services</td>
<td>8</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Other services</td>
<td>3</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>13</td>
<td>9</td>
</tr>
</tbody>
</table>


Since incentives to implement health reconciliation policies are the same for the whole economy, it is hypothesized that **no significant industry pattern is expected in the likelihood of entering a work-retirement trajectories among older workers experiencing a low physical and mental strain at work (HP 8.5).**

Finally, to information are available to derive hypothesis about industry pattern in age equality effectiveness.

The summary of the top-down dissemination of retaining policies in the Netherlands of their expected effectiveness is provided in Table 8.5.

### Table 8.5: Summary of the top-down dissemination of retaining policies and hypotheses.

<table>
<thead>
<tr>
<th>Retaining policies</th>
<th>Top-down dissemination</th>
<th>Effectiveness retaining policies: HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time reconciliation</td>
<td></td>
<td><strong>HP 8.1:</strong> Since time reconciliation policies are systematically implemented by CLA’s, it is hypothesized that older workers working part-time will have a significantly lower likelihood than full-time workers to experience a work-retirement trajectory.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>HP 8.2:</strong> Since men have in average a more stable career than women, the hypothesis is that working part-time will lower the likelihood to undertake a work-retirement trajectory, significantly more for the former than for the latter</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>BY INDUSTRY:</strong></td>
</tr>
<tr>
<td>Physical and mental Health reconciliation</td>
<td>Since 1993 the government indirectly enhance the dissemination of both physical and mental health reconciliation policies by privatizing the risk of sickness and disability. However since the main recipients of sickness and disability schemes are older workers, the social protection system introduces a direct responsibility of employers to retain older workers by improving HP 8.4: Since health reconciliation policies are directly promoted by the social protection system, it is hypothesized that older workers that experience a low physical and mental strain at work will have a lower likelihood to enter a work-retirement trajectory than older workers that do not experience them.</td>
<td></td>
</tr>
</tbody>
</table>
The effectiveness of retaining policies in The Netherlands

<table>
<thead>
<tr>
<th>HP 8.5: Since incentives to implement health reconciliation policies are the same for the whole economy, NO significant industry pattern is expected in the likelihood of entering a work-retirement trajectory among older workers experiencing a low physical and mental strain at work.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age equality</td>
</tr>
<tr>
<td>The social protection system bans age discrimination only in 2004 and since then indirectly enhance the dissemination of age equality policies.</td>
</tr>
<tr>
<td>No CLA include age-limits in any phase of the HRM.</td>
</tr>
<tr>
<td>The dissemination of career policies for older workers rockets from 2 to more than 40% in 2001 and remain relatively constant afterwards.</td>
</tr>
<tr>
<td>HP 8.6: Since age equality policies are indirectly promoted by the social protection system and systematically disseminated by CLA's, it is hypothesized that older workers that experience a supportive atmosphere at work and a fair treatment at work will have a lower likelihood to enter a work-retirement trajectory than older workers that do not experience them.</td>
</tr>
<tr>
<td>BY INDUSTRY:</td>
</tr>
<tr>
<td>No data are available to derive hypothesis about industry pattern in age equality effectiveness.</td>
</tr>
<tr>
<td>Employability</td>
</tr>
<tr>
<td>The dissemination of employability policies are quite limited. Less than 10% of CLA regulate training leave for older workers between 1998-2008. CLAs that foster the skills' development of older workers rise from 5% to only 18% in 2001 and decrease to 13% afterwards. Thus only a limited share of companies is bound to implement employability policies.</td>
</tr>
<tr>
<td>Dissemination BY INDUSTRY:</td>
</tr>
<tr>
<td>-High: manufacturing and construction, and public sector</td>
</tr>
<tr>
<td>-Medium: trade and catering and the corporate services</td>
</tr>
<tr>
<td>-Low: agriculture and fishery, in other service, and in the transport and communication.</td>
</tr>
<tr>
<td>HP 8.7: Because employability policies are NOT systematically disseminated by the CLA's, it is hypothesized that older workers that experience skills' development at work will NOT have a significantly lower likelihood to enter a work-retirement trajectory than older workers that do not experience them.</td>
</tr>
<tr>
<td>BY INDUSTRY:</td>
</tr>
<tr>
<td>HP 8.8: Given the dissemination of employability policies by industry, it is hypothesized that skills' development at work will lower the likelihood to undertake a work-retirement trajectory:</td>
</tr>
<tr>
<td>- the most in public administration, health, education and social work, manufacturing, mining &amp; quarrying, construction</td>
</tr>
<tr>
<td>-less in wholesale and retail trade, transportation and storage &amp; catering; real estate renting and business activity, and financial intermediation.</td>
</tr>
<tr>
<td>-the least in the agriculture, forestry and fishery, other community.</td>
</tr>
</tbody>
</table>

8.6 Findings

The hypothesis outlined above are tested using a piecewise-constant exponential model (PCE). The sub-sample is restricted to the cohort born from 1944 onward, because the extent is investigated to which the entry in the work-retirement transition of the cohorts that reach the age of 50 years in the mid-1990's have been significantly affected by the implementation of retaining policies.

The sample for Italy is obtained from Sharelife survey, that provides retrospective information over the working career and the job quality gathered between 2008 and 2009 (for a more extensive description of Sharelife data, see Chapter 4). Estimations are expressed in hazard ratios in Table 8.6. The descriptive of the Sharelife sample that was used in this analysis is presented in Chapter 4.

Model 8.1 includes the controls (see the controls' estimations in Appendix D) the five job quality dimensions and the interaction between gender and time reconciliation. It tests HP 8.1 and HP 8.2, HP 8.4, HP 8.6 and HP 8.7. The subsequent models include the interaction between each job quality dimension and the industry: model 8.3 includes interaction between industry and time reconciliation policies and tests HP 8.3; model 8.4 includes interaction between industry and physical health reconciliation policies and test; model 8.5 includes interaction between industry and mental health reconciliation policies.
reconciliation policies and test. They both test HP 8.5. Finally model 8.6 includes interaction between industry and age equality policies, and model 8.7 includes interaction between industry and employability policies and test HP 8.8.
Table 8.6: Piecewise-constant exponential model (PCE) estimating the effectiveness of retaining policies in extending working life in the Netherlands.

<table>
<thead>
<tr>
<th>Retaining policies</th>
<th>b_1</th>
<th>b_2</th>
<th>b_3</th>
<th>b_4</th>
<th>b_5</th>
<th>b_6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Reconciliation</td>
<td>0.451*</td>
<td>4.442</td>
<td>0.380**</td>
<td>0.417**</td>
<td>0.463*</td>
<td>0.397**</td>
</tr>
<tr>
<td>Physical Health Reconciliation</td>
<td>0.774**</td>
<td>0.774**</td>
<td>0.525</td>
<td>0.776*</td>
<td>0.777**</td>
<td>0.753**</td>
</tr>
<tr>
<td>Mental Health Reconciliation</td>
<td>0.906</td>
<td>0.907</td>
<td>0.890</td>
<td>0.748</td>
<td>0.898</td>
<td>0.891</td>
</tr>
<tr>
<td>Age Equality</td>
<td>0.800*</td>
<td>0.816</td>
<td>0.802</td>
<td>0.809</td>
<td>0.580</td>
<td>0.784*</td>
</tr>
<tr>
<td>Employability</td>
<td>0.973</td>
<td>0.968</td>
<td>0.927</td>
<td>0.958</td>
<td>0.849</td>
<td>0.927***</td>
</tr>
<tr>
<td>Interaction: Time Reconciliation* women</td>
<td>2.654**</td>
<td>3.236**</td>
<td>3.154**</td>
<td>2.869**</td>
<td>2.620*</td>
<td>2.945**</td>
</tr>
<tr>
<td><strong>Time Reconciliation</strong> Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Agriculture, forestry and fishery</td>
<td>Ref</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Manufacturing, mining &amp; querying</td>
<td>0.274</td>
<td></td>
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<tr>
<td>Construction</td>
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</tr>
<tr>
<td>Wholesale and retail trade, transportation and storage &amp; horeca</td>
<td>0.0437***</td>
<td></td>
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<tr>
<td>Financial intermediation</td>
<td>0.142</td>
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<tr>
<td>Real estate renting and business activity</td>
<td>0.695</td>
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</tr>
<tr>
<td>Public Administration and defence, education, health and social work</td>
<td>0.0003***</td>
<td></td>
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<tr>
<td>Other community</td>
<td>0.0969**</td>
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<tr>
<td><strong>Physical Health Reconciliation</strong> Industry</td>
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<td></td>
</tr>
<tr>
<td>Agriculture, forestry and fishery</td>
<td>Ref</td>
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<tr>
<td>Manufacturing, mining &amp; querying</td>
<td>2.448</td>
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<td>Construction</td>
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<tr>
<td>Wholesale and retail trade, transportation and storage &amp; horeca</td>
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<td></td>
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<td>Financial intermediation</td>
<td>1.911</td>
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<td>Real estate renting and business activity</td>
<td>2.845</td>
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<td>Public Administration and defence, education, health and social work</td>
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<tr>
<td>Other community</td>
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<tr>
<td><strong>Mental Health Reconciliation</strong> Industry</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry and fishery</td>
<td>Ref</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Manufacturing, mining &amp; querying</td>
<td>1.743</td>
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<tr>
<td>Construction</td>
<td>1.705</td>
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<tr>
<td>Wholesale and retail trade, transportation and storage &amp; horeca</td>
<td>1.263</td>
<td></td>
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<td>Financial intermediation</td>
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<td>Real estate renting and business activity</td>
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<tr>
<td>Public Administration and defence, education, health and social work</td>
<td>1.132</td>
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<td>Other community</td>
<td>1.016</td>
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<tr>
<td><strong>Age Equality</strong> Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry and fishery</td>
<td>Ref</td>
<td></td>
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<tr>
<td>Manufacturing, mining &amp; querying</td>
<td>1.546</td>
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<tr>
<td>Construction</td>
<td>0.694</td>
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<tr>
<td>Wholesale and retail trade, transportation and storage &amp; horeca</td>
<td>1.580</td>
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</tr>
<tr>
<td>Financial intermediation</td>
<td>1.732</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real estate renting and business activity</td>
<td>2.168</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Public Administration and defence, education, health and social work</td>
<td>1.367</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other community</td>
<td>1.554</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Employability</strong> Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry and fishery</td>
<td>Ref</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing, mining &amp; querying</td>
<td>0.275*</td>
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<td></td>
</tr>
<tr>
<td>Construction</td>
<td>0.108***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale and retail trade, transportation and storage &amp; horeca</td>
<td>0.175**</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Financial intermediation</td>
<td>0.0852***</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Real estate renting and business activity</td>
<td>0.0948</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Administration and defence, education, health and social work</td>
<td>0.134***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other community</td>
<td>0.175**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Failures                            | 218   | 218   | 218   | 218   | 218   | 218   |
| Subjects                            | 809   | 809   | 809   | 809   | 809   | 809   |
| Total observations                  | 2,239 | 2,239 | 2,239 | 2,239 | 2,239 | 2,239 |

*** p<0.01, ** p<0.05, * p<0.1

8.6 Findings

Note: Short variables' description:

**Dependent variable:**
- **Work-retirement trajectory:** time-varying categorical variable equal to: 0 if the respondent is working at the end of the person-period spell, 1 if the respondent left employment at the end of the person-period spell

**Independent variables:**
- **Time reconciliation:** time-varying dummy equal to 1 if the respondent is working in a part-time job in the person-period spell
- **Physical health reconciliation:** time-constant interval scale obtained by Factor Analysis (see chap.4) equal from 1 to 4. It measures the self-perceived quality of the material working conditions in the last/current job by looking at how the job is physically demanding and the workspace comfortable
- **Mental health reconciliation:** time-constant interval scale obtained by Factor Analysis (see chap.4) equal from 1 to 4. It measures the self-perceived emotional burden of the last/current job looking at the time pressure, the emotional burden, and conflicts that the work implies.
- **Age equality:** time-constant interval scale obtained by Factor Analysis (see chap.4) equal from 1 to 4 measuring self-perceived recognition and support on the last job, the quality of the working atmosphere and the respondents' perception over how fairly they are treated by their bosses
- **Employability:** time-constant interval scale equal from 1 to 4 measuring the extent to which the skills of respondents are developed in the last/current.
- **Gender:** time-constant dummy variable equal to 1 if the respondent is a woman
- **Illness:** time-varying dummy equal to 1 if the respondent experience a serious illness (such as cancer, asthma etc.) in the person-period spell
- **Stress:** time-varying dummy equal to 1 if the respondent experience a serious situation of high stress in the person-period spell
- **Family situation:** time-varying set of dummy variable combining information over the cohabiting status of the respondent with and the career of the partner in the person-period spell.
- **Social class:** time-varying set of dummy variable over the social class the individual belong to in the person-period spell
- **Industry:** time-varying set of dummy variable over the industry where the respondent is working in the person-period spell.

For a more detailed description see Chapter 4.

Model 8.1 show the effectiveness of retaining policies in the Netherlands is quite high, because successful their conveyance into companies' HRM practices. In fact three out of the five working dimensions proved to have been systematically improved by companies to effectively EWL. Looking at the separate sets of retaining policies it can be seen that, according to the hypothesis, this conveyance is successfully carried out by social partners, thanks to their coordinate structure, and by the social protection system itself.

As hypothesized in HP 8.1, working part-time in the late career reduces significantly the likelihood of exiting employment. This empirical result supports the argument that the widespread inclusion of time reconciliation policies between 1999 and 2009 in CLA's bound a large part of Dutch companies to shorten their working schedule to retain older workers. This systematic dissemination has significantly extended the working life of older workers that are affected by time reconciliation policies, who show to be about 55% less likely to undertake a work-retirement transition than full-time workers. According to HP 8.2, this result hold only when the reduction of the working time occurs under the more favorable conditions offered by the partial retirement schemes. In fact when the part-time is experienced outside these schemes, it does not extend working life. This is the case of women that, after childbearing, re-enter the labour market predominantly with part-time schedule to better reconcile work with their caring obligations (Jelle Visser et al. 2004). Because part-time is prevalently their ordinary working schedule, which is not chosen in late career to adapt their working conditions to their ageing and moreover is not accompanied by monetary benefit as in the partial retirement schemes, it does not decrease women’ s likelihood to enter a work-retirement trajectory. In fact if working part-time women are more than two times more likely than men to exit from employment.

A second set of retaining policies whose effectiveness is enhanced by their systematic dissemination in CLA's is age equality. According to HP 8.6, older workers that experience a supportive atmosphere and a fair treatment at work will have a lower likelihood to enter a work-
retirement trajectory that is 20% lower than older workers that do not experience them.

This finding supports the argument that, even in absence of a legal age discrimination ban, social partners systematically convey policies that eliminate the age-based limitations in all aspects of the employment relation, comprised the possibility of pursuing an upward career, already in 2001. These policies penetrated the HRM of a significant part of Dutch companies and systematically improved the quality of the social relations that older workers experience on-the-job. The social protection system supports the dissemination of these policies in the rest of the economy only in 2004, when the age discrimination ban is introduced47 (OECD, 2005).

The argument that the effectiveness of retaining is enhanced by their systematic diffusion in CLA’s is also supported by the non-significant effect of employability policies. According to the HP 8.7 in fact older workers that experience skills' development at work do NOT have a significantly lower likelihood to enter a work-retirement trajectory than older workers that do not experience them. Although age limitations have been eliminated also for what concern the access to training programs, social partners fail to systematically convey policies that constrain companies to develop older workers's skills, that in fact are included only in a small minority of CLA’s between 1998 and 2009. Since only a marginal portion of the productive system is constrained to implement employability policies, their effectiveness is shown to be low.

The findings concerning the last two sets of retaining physical and mental health reconciliation support only partially the hypothesis HP 8.4. According to HP 8.4, older workers that experience a low physical strain at work will be about 25% less likely to enter a work-retirement trajectory than older workers that do not experience them. Against the hypothesis HP 8.4, the same finding does not hold for older workers that experience a low mental strain at work, that show no significant difference in the timing they outflow from employment with respect to older workers that experience high mental strain. These results support the argument that the effectiveness of health reconciliation policies is boosted by the incentives and sanctions set by the social protection system to companies to reduce the incidence of occupational disability on the workforce. In fact, since older workers are the major recipient of this scheme, companies, under the threat of financial sanctions, are constrained to retain them longer by improving the healthiness of their working condition. The results show that employers have mainly improved the physical healthiness and to a less systematic extent the mental healthiness of the working conditions. In the case of health reconciliation policies the conveyance of social partnership is not necessary, since the constrains set by the social protection system by-pass the collective bargaining system and affect companies directly.

The hypotheses concerning the industry industry patterns in the effectiveness of retaining policies are tested in model 8.2-8.3-8.4-8.5. According to the hypothesis HP 8.4, no significant industry patterns are found in the effectiveness of the only set of policies conveyed directly by the social protection system: health reconciliation policies. The effect of a low physical and mental strain at work on the timing of the employment exit does not significantly vary across industry, because the social protection's constrains and sanctions are the same in the whole economy. Industry patterns are also not significant in the effectiveness of age equality policies (see model 8.5), for which no hypothesis made due to the lack of data showing their dissemination in industry CLAs.

47 Although relevant this measure only indirectly conveys age equality because it increases the accountability of employers once the discriminatory act are brought to trials, but does not affect the discriminatory attitudes towards older workers. As in the Germany and Italy this ban is the adoption of the directive 2000/78/EC (OECD, 2005).
8.6 Findings

As for the remaining to sets of retaining policies, time reconciliation and employability, the findings show to a significant extent the hypotheses HP 8.3 and HP 8.8, despite they do not display a gradient as depicted in both hypotheses. For both sets of retaining policies as a reference were chosen the industry where the most marginal their dissemination was: the agriculture, forestry and fishery. According to the HP 8.3, the likelihood of entering a work-retirement trajectories of older workers experiencing is far much lower in where the time reconciliation policies have been more systematically disseminated by the collective negotiations, namely: public administration, health, education and social work, in wholesale and retail trade, transportation and storage & catering, than in the agriculture, forestry and fishery industry. Although similar results hold also for the other industries indicated in HP 8.3 (the hazard ratios are also for these industries lower than 0), namely manufacturing, mining & quarrying, construction, real estate renting and business activity, and financial intermediation, their estimations unfortunately do not satisfy the significance level.

Finally the results in model 8.6 support even more strongly the argument that the effectiveness of retaining policies is directly related with the extent to which they have been disseminated into the companies HRM strategy by the collective negotiations. Despite model 8.1 shows that employability policies have no significant effect on the overall workforce, model 8.6 shows that this result is due to the fact that their dissemination across industries is highly diversified. They are not disseminated in the agriculture, forestry and fishery industry and relatively much more diffused in the rest of the economy. Because of that, according to the HP 8.6 older workers experiencing skills' development are between 70% and 90% significantly less likely to undertake a work-retirement transition in all industries with respect to agriculture, forestry and fishery. The only exception is here represented by the financial intermediation industry, where the hazard ratio score less than 0 but it is not significant.

All in all, the results of the CRM models show that the effectiveness of retaining policies to extend working life is high in the Netherlands. According to the hypotheses retaining policies are effective on the one hand when their implementation is successfully conveyed by the social protection system as in the case of physical health reconciliation policies. On the other hand they are effective only when they are disseminated by social partners through mechanisms, as the highly coordinated bargaining system, that constrain the strategy of companies to retaining older workers.

8.7 Conclusion

In this chapter it was investigated the extent to which the coordinated partnership in the Netherlands enhances rather than hinder the effectiveness of retaining policies between 1995 and 2009. The main conclusion from the analysis is that, because of their high coordination, the institutional channels by which social partners can affect the conveyance of the EWL target from the social protection systems to the production system enhance the effectiveness of retaining policies, which result to be high. Because of the high vertical coordination of the social partners' organizations, the EWL target is successfully conveyed into the collective bargaining system. Once retaining policies are included into CLA's, then companies are compelled to implement them. The collective bargaining system is therefore the structure that constrain companies to reverse the opportunistic strategy from
shedding older workers to effectively EWL.

Secondly it can be concluded that the more systematic is the diffusion of retaining policies, the higher is the share of companies that are constrains to implement them and the higher their effectiveness results to be. This is supported by data showing that the only retaining policies that is not effective is employability that, because of their marginal coordination, do not systematically bind companies to offer older workers training to retain them.

Thirdly, because their dissemination is not voluntaristic, but systematically coordinated by the collective bargaining system, the effectiveness of retaining policies does not follow a marked industry patterns, but is quite uniform.

The last conclusion is that, when the conveyance of retaining policies is carried out by the social protection system with appropriate demand and supply incentives or constrains, then the conveyance through the collective bargaining system is not necessary for retaining policies to be effective.
9 The effectiveness of retaining policies in Germany

9.1 Introduction

As argued in HP 3.6, the intermediate outcome attained in Germany was due to the intermediate level of coordination of the system. The research question that will be answered in this chapter is: The main research question of this chapter is: to what extent has the strong organizational articulation of unions and employers' associations influenced the effectiveness of retaining policies implemented between the mid-1990's until 2009 in Germany? The alignment of companies' HRM policies (extending working life), is, according to the HP 3.3, first enhanced by the successful to-down conveyance of retaining policies into the coordinated Confederations representing at the peak the interests of employees and employers.

Because of their coordinated vertical structure, social partners can aggregate their different branches into national unitary confederations: the BDA (Bundesvereinigung der Deutschen Arbeitgeberverbände) and the DGB (Deutsche Gewerkschaftsbund), which organize respectively the employers' associations and union. Like in the Netherlands, those confederations, by aggregating the interests they represent, offer the possibility to social partners to participate to a rather institutionalized Consultation process with the Government. Nonetheless this adoption is more fragmented because it is not performed by a bilateral body, as in the Netherlands, but by two separate Confederations, which can not coordinate the collective bargaining with common recommendations. Two different strategical addresses are instead transferred to the decentralized organizations. While BDA attempts to encourage their members to retain older workers disseminating informations and resources, DGB has a more antagonistic positions.

Moreover, according to the HP 3.6, this alignment is limited because companies strategies can not be bounded, as the Netherlands, by a highly coordinated system of collective bargaining. In fact due to a recent process of erosion, industry CLAs have lost its capacity to uniform the working conditions across companies for two main reasons. At first the collective bargaining has reduced its coverage, significantly cutting the percentage of companies that are legally bound by CLAs that contains retaining policies. Secondly the introduction of opening clauses allows companies to derogate from the minimum standards set by industry CLAs to retain older employees in case “hardship circumstances” occur. In other words, whenever retaining older workers attempts on the companies' economic viability, work councils can derogate from the implementation of industry CLA's aimed, in the parts aimed at achieving this outcome.

All in all, because of its moderately coordinated structure, the capacity of social partnership to convey retaining policies into companies' strategy is limited. From a central level it is strongly conveyed top-down by the state together with the two Confederations, especially BDA. The employers' Confederation engages their members in information campaigns that raises their awareness over the ongoing workforce's shrinking and over the best practices to minimize the decline of their seniors' productivity. However, since no common recommendations are conveyed to the organizations responsible for the industry bargaining, for long time the social partnership structure fails from coordinating retaining policies throughout the collective bargaining structure.
This Chapter is organized as it follows. In Section 9.2 it is described how the social protection system attempts to convey directly retaining policies top-down taking advantage of the the vertical coordination of the partnership system. Section 9.3 is instead devoted to a more detailed description of the aspects that makes the vertical organization of social partners in Germany quite coordinated, but that compromise the coordination of the collective bargaining system.

In Section 9.4 the hypotheses are formulated. The results of the piecewise constant exponential model are shown and interpreted in Section 9.5 and the conclusion over the intermediate effectiveness of retaining policies in extending working life are discussed at the end.

### 9.2 Social protection’s attempts to convey top-down retaining policies

The social protection system conveys the EWL target into the strategy of the production system by endorsing both social partners and other local agencies. Moreover it sets financial incentives that bypass social partners and directly affect companies' HRM. Although this conveyance started as early as in 1989, it suffers a great limitation in the aftermath of the German Reunification in 1990, when, due to the economic shock, it needs to be interrupted until the second half of the same decade.

A list of the laws that the social protection systems have introduced to convey top-down the implementation of retaining policies to the partnership and the production system is provided in Table 9.1.

<table>
<thead>
<tr>
<th>Year</th>
<th>Law</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>Eingliederungszuschüsse, Artikel 88-92, 131 SGB III</td>
<td>1994 Expansion of wage subsidies for companies that hire older workers (55+) for a maximum duration of 60 months</td>
</tr>
<tr>
<td>1960’s</td>
<td>ABM SAM Arbeitsbeschaffungsmaßnahmen 630- DM gesetz</td>
<td>1960’s 630- DM law- ABS SAM job creation measure- provide older unemployed with publicly subsidized job in fields of public interests for maximum 3 years.</td>
</tr>
<tr>
<td>2002</td>
<td>INQA- Job-Aqtivgeset</td>
<td>2002 INQA- New quality of work – Expansion of wage subsidies for companies that hire older workers- the minimum age is lowered from 55 to 50 years and the maximum duration is extended to 60 months</td>
</tr>
<tr>
<td>2003-</td>
<td>Tezeit- und Befristungsgeset – Eingliederungszuschüsse Eingliederungsgutschein</td>
<td>2003- contribution exemptions for retain older workers – wage subsidies to hire older unemployed- more relaxed rules to employ older workers with fixed-term contracts</td>
</tr>
<tr>
<td>2003</td>
<td>Hartz I- Erstes Gesetz für moderne Dienstleistungen am Arbeitsmarkt</td>
<td>2003 Hartz I- First law for a modern service in the labour market. Introduces incentives to companies that hire older workers and to older workers that are in or at risk of unemployment (50+) that accept a lower paid job.</td>
</tr>
<tr>
<td>2004</td>
<td>Hartz III- Dritte Gesetz für moderne Dienstleistungen am Arbeitsmarkt</td>
<td>2004 Hartz III- Third law for a modern service in the labour market. The maximum duration of the wage subsidies for companies that hire older workers is reduced from 60 to 36 months. Moreover the obligation of companies to retain older workers after the expiry of the subsidy is abolished.</td>
</tr>
<tr>
<td>2005-</td>
<td>Perspektive 50plus- Beschäftigungspakte für ältere in den Regionen</td>
<td>2005- “Prospect 50-plus” regional employment pacts for older workers” by the Federal Ministry for labour and social affairs (BMAS)</td>
</tr>
<tr>
<td>2007</td>
<td>Reform der 58-Regel, nach §428 des SGB Ill</td>
<td>2007- Reform of 58-rule according to §428 of the Social Code III- The obligation for unemployed to search for a job as long as they withdraw the unemployment benefit is introduced also after the age of 58.</td>
</tr>
</tbody>
</table>
9.2 Social protection’s attempts to convey top-down retaining policies

<table>
<thead>
<tr>
<th>Time reconciliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989 Altersteilzeit (1)</td>
</tr>
<tr>
<td>1994- Altersteilzeit (2)</td>
</tr>
<tr>
<td>1996 Gesetz sur Förderung eines gleitendes Übergangs in den Ruhestand (3)</td>
</tr>
<tr>
<td>1998- Altersteilzeit (4)</td>
</tr>
<tr>
<td>1999- Zweites Gesetz zur Fortentwicklung der Altersteilzeit (5)</td>
</tr>
<tr>
<td>2009- Altersteilzeit Ablauf (6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Reconciliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996 Gesetz über die Sicherheit von Geräten</td>
</tr>
<tr>
<td>2000 Arbeitssicherheitsgesetz</td>
</tr>
<tr>
<td>They introduces the obligation to conduct a risk analysis and to employ a works physician in the company. They include in the definition of occupational safety and health the psychical as well as the physical well-being together with the social relationship.</td>
</tr>
<tr>
<td>2001 Socialgesetzbuch (SGB) Fünftes Buch (V) - Gesetzliche Krankenversicherung Artikel 3-20, SGB V</td>
</tr>
<tr>
<td>2002 INQA- Job-Aktivgesetze</td>
</tr>
<tr>
<td>2009</td>
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</tbody>
</table>

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<thead>
<tr>
<th>Age Equality</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002 INQA</td>
</tr>
<tr>
<td>2006 AGG Allgemeines Gleichbehandlungsgesetz</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Employability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002 INQA- Job-Aktivgesetze</td>
</tr>
<tr>
<td>2003 Hartz I- Erstes Gesetz für moderne Dienstleistungen am Arbeitsmarkt</td>
</tr>
<tr>
<td>2005 Perspektive 50plus- Beschäftigungspakete für ältere in den Regionen</td>
</tr>
<tr>
<td>2006 WeGebAU- Weiterbildung geringqualifizierter und beschäftigter älterer Arbeitnehmer im Unternehmen</td>
</tr>
</tbody>
</table>

(source: Eichhorst, 2011; Stette, 2011; Naegele & Bauknecht, 2011; Aleksandrowicz, 2014; Duell & Duell, 2002)

A first measure, introduced as early as in 1989, is aimed at enhancing part-time work in the late career (in the framework time reconciliation policies). Its aim is to delay the early entry into the unemployment pathway granted by the 58er and 59er rule by 5-years with a partial retirement

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48 As shown in Chapter 6, the unemployment scheme allowed older workers to withdraw a benefit up to a maximum duration equal first to 12 and then extended to 36 months in 1986. This provision, combined with the possibility for long-term older unemployed to withdraw their full-pension benefit at the age of 60 years, allowed them to effectively exit employment at the age of 59 years until 1986 (59er rule) and at the age of 57 years and 4 month (58er rule) afterwards.
scheme (Altersteilzeit- old-age part-time scheme, seen in Chapter 6), which provides financial incentives to both employees and companies (Teipen and Kohli, 2004; Eichhorst 2011). Older workers can benefit from the fact that the reduction of the working part-time implied a reduction less than proportional of their wage and do not affect the future pension income49. Companies instead can claim for subsidies to the unemployment insurance fund managed by the local public employment services (PES50) (OECD 2005)51.

This incentive promotes the companies' adoption of time reconciliation policies because it lower the labour cost of older workers if they work part-time with respect to full-time. However this scheme constrains companies to retain older employees for additional 5 years and the subsidies offered to companies did not overrule the opportunity cost of shedding older redundant workers full-time as soon as they become eligible to the unemployment pathway at the age of 57 years and 4 months.

This first attempts of the social protection system to convey the EWL target into the strategy of companies is bluntly interrupt only in the years following the economic reunification between West and Eastern Germany in 1990. As we have seen in Chapter 6, the reunification posed a great challenge for the entire German productive system. In fact if companies in the Eastern regions were suddenly exposed to the international competition, companies in the Western regions had to support the former by massively increasing their non-wage labour cost, both in terms of tax and contributory rates. As a result of this, German economy had to incur a massive process of industrial restructuring in which a large mass of workers were expelled from the productive system (Teipen and Kohli 2004)

Such a workforce' restructuring prevents the social protection system to pursue further the target of EWL. It requires instead the implementation of emergency measures that prioritize the least socially painful expulsions, by facilitating the exit of older workers nearly available to a pathway of exit. Because of that, the retrenchment of pathways of exit, as formulated in 1992, is diluted over time with a very long period of transitions, additional emergency pathway are opened for older workers expelled by Eastern companies and additional freedom is given to social partners to manage the old-age part-time scheme according to the performance in each industry (see Chapter 6 for more information).

At the same time, the social protection system manages to limit the resort to pathways of exit only to very few emergency years following the German reunification and continue their retrenchment, although progressive, afterwards. Social protections provides signals that redundant seniors will not provided with additional pathways but needs to be re-integrated. For that purpose financial incentives are offered to companies that recruit the increasing number of older unemployed who, because of their retrenchment, fail to fall into a pathway of exit. This is the case of hiring wage subsidies52, which

49 In more detailed, as explained in Chapter 6, older workers' wage during partial retirement scheme amounted to 70% of the full-time wage and with almost no consequences for the future pension benefit scheme. Often these amounts were event topped-up till 80-90% by the collective agreements, especially if negotiated in large sectors or companies (OECD 2005).
50 PES's are composed in equal number by representatives of both Government and social partners (Vogel 2012).
51 The PES reimbursed 20% of the wage provided to the older workers in partial retirement and 10% of the social contributions.
52 This wage subsidy targeted to unemployed older than 50 years who were nevertheless too young (less than 58 years old) to be eligible to stop searching for a job. It was included in a series of measures to enhance the recruitment of unemployed with serious severe employment impedance implemented between 1994 and 1998. Other measures were targeted to long-term unemployed (without a job for more than 1 year) and to unemployed that had to incur in special training curse to be re-employed (Wolff & Stephan, 2013).
replaces up to 50% of the wage of a newly hired worker aged 55 years or more up to 12 months\textsuperscript{53} (Eichhorst, 2011; Duell and Vogler-Ludwig 2012). The coexistence of public policies aimed at both excluding and reintegrate older workers that fell out the industrial restructuring process convey to the partnership and the production system an ambiguous message on what target their policies shall pursue.

As a result of that ambiguity, no resistance is opposed to the inappropriate use that social partners make of the incentives in the part-time old-age schemes, originally set to enhance the implementation of time reconciliation policies. In 1996 the social protection system agreed to allocate the same subsidies also to companies (covered by the unemployment insurance funds) that adopted the old-age part-time scheme \textit{vertically}, with the so-called \textit{Blockmodell} (see section 6.3 for a more detailed description). With this measure companies face the same financial incentives to either retain their older employees in a part-time schedule for 5 years or to shed them after only 2.5 years of full-time work. Since the horizontal old-age scheme imposes higher reorganizational costs and hinder the generational turnover and skills' rejuvenation of their workforce, companies will favor the implementation of the \textit{Blockmodell}. The social protection's decision of providing the same subsidy for both the part-time and the block model vanishes the incentives originally set to enhance time reconciliation policies (Eichhorst 2011).

In the late 1990's a second, more coherent attempts are made by the social protection system to convey the EWL target into the strategy of companies. The first message is conveyed in at the end of 1998, when a permanent trilateral body was instituted, the so-called “alliance for job, training and competitiveness” (\textit{Gemeinsame Erklärung des Bündnisses für Arbeit, Ausbildung und Wettbewerbsfähigkeit}), to elaborate a shared strategy to promote the future sustainability and competitiveness of the German socio-economic system. In that occasion the social protection system manages to engage the Confederal peak in a common declaration where EWL is unanimously agreed to be one of the fundamental outcomes that need to be achieved to address the present and future skills' shortages induced by the population ageing. In 2001 this statement is converted in common guidelines wherewith the Government's and the Confederations' representatives try to convey this message to their members. A first set of guidelines encourage the organizations responsible for the collective bargaining to abolish the \textit{Blockmodell} in the industry \textit{Altersteilzeit} scheme, in order to set incentives that truly enhance the dissemination of time reconciliation policies into the strategy of companies. The social protection system tries to foster the negotiation of these reforms by abolishing the public support that allowed to finance to the same extent the part-time and the block model. Although announced in 1999, this abolition de-facto is implemented in 2009, at the very end of the period of observation (Duell and Vogler-Ludwig, 2012; Wolf and Stephan 2013).

A second set of labour policies implemented monetary incentives to companies that retained older workers. The main target is to re-integrate the mass of seniors ejected out of productive system after the Reunification, who remained increasingly shut out the pathways of exit. This is the rationale behind the financial incentives to the recruit of older workers expand after 2002. In that year the Job-Aktivsgesets the extend the hiring wage subsidies also to companies that recruit unemployed aged 50

\textsuperscript{53} While enhancing the re-integration of seniors this measure is not really meant to retain older employees. In fact the subsidy is not allocated to older workers that was regularly employed by the claiming companies in the last four years (Wolff & Stephan, 2013).
The effectiveness of retaining policies in Germany

years or longer. The years after the Teilzeit- und Befristungsgesetz – Eingliederungszuschüsse (Part-time and temporary employment law - wage subsidies inclusion voucher) increases the wage subsidies, whose maximum duration is set first to 60 months and then to 36 months in 2004 (Hartz III law\textsuperscript{54}), and provides higher flexibility to companies that hire older unemployed. Those companies can in fact recruit older workers using fixed-term contracts for a longer time span than the maximum allowed for the rest of the workforce. These incentives are expanded in the same year by the so-called Hartz I law that derogated from the payment of unemployment contributions the employers that employ older workers that are currently unemployed or at risk of becoming. In case older workers faced insurmountable obstacles to be recruited then they were re-integrated in the labour market with job creation programs (Arbeitsbeschaffungsmaßnahmen 630-DM law- ABS SAM) that offer publicly subsidized job in fields of public interests for maximum 3 years (Wolff and Stephan 2013; Jacobi and Kluve 2006).

Despite this set of labour policies make the older workers cheaper to recruit than the rest of the workforce, they do not enhance companies to implement retaining policies, as I have defined them. This is carried out by a third set of measures which encourage them to retain older workers into employment with employability policies. These measure are first directly recommended in the tripartite statements included in the alliance for job and then are enhanced with monetary incentives that are provided either directly to companies or indirectly on the bases of regional pact stipulated between the government agencies and social partners\textsuperscript{55}. Direct incentives are financed by the Hartz I reform in 2003 only to companies that offer training courses to newly hired seniors and by the WeGebAU in 2006 to companies with less than 250 employees that re-train their older personnel (Weiterbildung geringqualifizierter und beschäftigter älterer Arbeitnehmer im Unternehmen- Training of low-skilled and older employees in the company). Indirect incentives are instead provided by two different targeted initiatives: INQA (the new quality of work) in 2002 and by the Perspektive 50+. While the first initiative provide funding to vocational training organized for older workers especially in small firms, the second is targeted on providing specialized training to older unemployed to maximize the re-employment perspective (OECD, 2005) (Duell and Vogler-Ludwig 2012).

Other general measures introduced by the social protection system to convey the EWL target into the strategy of companies endorse the partnership system by stipulating agreements with the employers and unions' Confederations. The first goal of these attempts is to raise the awareness of employers and to spread good-practices (the so-called Leuchtturm-Projeekte- Lighthouse projects) that can help companies to modernize their HRM policies to both to the increased turbulence of the labour market and to the demographic challenges of the ageing population process. However no incentives or constrains are set to enhance or bind employers to implement them (OECD, 2005).

The remaining policies' sets (health reconciliation and age equality) have been also promoted, but more indirectly, because as in Italy (see Chapter 10), the improvement of those dimensions of job quality is promoted for the overall workforce and miss a specific target on older workers. In 1996 and

\textsuperscript{54} This law in fact belong to the Gesetz für moderne Dienstleistungen am Arbeitsmarkt- law for a modern service in the labour market formulated on the bases of the guidelines provided by the Hartz Commission

\textsuperscript{55} Together with other organizations of the civil society that are important stakeholder in employment and demographic issues: churches, chambers of the commerce and craft, consultants and intermediaries, employment agencies, politicians, health insurance, scientific and university institutions etc (OECD, 2006).
in 2000 the Gesetz über die Sicherheit von Geräten and the Arbeitssicherheitsgesetz give a more systematic approach to the improvement of the occupational safety in the companies by obliging companies to run a risk analysis and by adopting a wider concept of health that include the psychological as well as the physical well-being together with the social relationship. Moreover financial incentives are provided both directly to companies that implement joint project that promote occupational health (2001- Sozialgesetzbuch (SGB) Fünftes Buch (V) - Gesetzliche Krankenversicherung Artikel 3-20, SGBV- Statutory Health Insurance articles 3-20, Social law book 5) and to companies that part of the joint initiatives organized in the INQA program (2002- New quality of work). Both these initiatives are aimed at improving the healthiness of the working conditions to reduce the occupational diseases and accidents, but miss the specific target of reconciling work with ageing (Eichhorst 2011).

In the same way, also age equality policies, here defined as measures that improve the support and the equal treatment on the workplace, are promoted also indirectly by the social protection system. The ban of discriminatory acts in employment practices is established quite late only in 2006. This ban increases the legal accountability of the employers, but has no effect on the atmosphere older workers experience at work. Moreover, despite the quality of the social relations in the workplace is promoted among the goals of the initiatives undertaken by the INQA program (2002) and by the law on occupational safety discussed just above (1996-2000), no target is specifically hold on older workers.

All in all, the social protection system to a great extent failed to directly promote companies to implement retaining policies. The main incentives are set to cut the labour costs of older unemployed and to promote their employability. On the contrary the main initiatives of the social protection system is to endorse social partners (either the peak or regional Confederations or the industry organization) in social pacts (with the various initiatives: Alliance for job; INQA; Perspective 50+ etc.) in order to to convince them to disseminate retaining policies throughout the collective bargaining system. However, as we will see in the next section in this chapter, the success of these attempts are endangered by the moderated coordination of the partnership system in Germany, which will be described in the next section.

9.3 Institutional affinities

According to the analytical framework described in Chapter 3, the moderate coordination of partnership system in Germany limits the top-down diffusion of the retaining policies for two main reasons. The first concerns the vertical structure of the partnership organizations, which fails from conveying a strategical address able to univocally coordinate the collective bargaining.

Similarly to the Netherlands, Germany has build during the 1950's and the 1960's a quite coordinated system of interests' representations. Unions and employers associations are articulated according to different dimensions: ideological, sectoral and territorial. As explained in Chapter 6, the different interests represented by the different organization are nevertheless integrated in a hierarchical confederal structure, where different ideological currents are conveyed into industry organizations, which are then grouped by region. At the peak two main umbrella organizations integrate and encompass the interests of employers associations and unions: BDA and DGB.
Because of their moderate and cooperative attitude, BDA and DGB are involved by the Government in rather steady Consultation processes. Therefore when in the late-1990's social partners faced for the first time the EWL re-conversion, they could not preserve their members, as explained in Chapter 6. On the contrary, once retrenchment policies were enacted, the EWL target penetrate also BDA and DGB strategy since it is in their interest to make EWL sustainable also for their members (both companies and older workers). Unlike in the Netherlands, they cannot convey retaining policies into their members strategies because the constitutional principle of *Tarifautonomie* prevented them from interfering with collective bargaining (Lehmbruch 2003). Therefore BDA and DGB do not provide a common platform steering the more decentralized organizations responsible of the collective bargaining. Unlike in the Netherlands, the German Confederations do not participate in a bilateral setting that foster a common understanding and *common recommendations over EWL*. Instead they provide their member organizations with unilateral strategical addresses, which are hard to translate into retaining policies when collective negotiations take place (Pulignano 2010). All in all, the lack of common recommendations of BDA and DGB hinder the inclusion of retaining policies into industry CLAs and thus their top-down conveyance through the partnership structure.

The second reason which hinder the conveyance of the EWL target in the companies' strategy is the moderate coordination of the collective bargaining system. Traditionally the collective bargaining in Germany are organized in a very coordinated structure, which mirrors the very coordinated structure of interests representations. The high coordination of the system was granted by two main aspects of its regulation. The first is the strict vertical and functional hierarchical structure of the collective negotiations that legally bind the lower negotiations and HRM to the agreements signed at more central levels. The negotiations takes place first at regional and industry level, which define the minimum standards and the topics that have to be treated in the decentralized level (Streeck and Hassel 2003b).

This standard can be improved flexibly at company-level, where agreements can be made also on topic not explicitly treated (such as occupational health and safety or anti-discrimination) or explicitly demanded by the industry-CLAs (such as the flexible organization of the working time). All in all, if retaining policies or targets are channelled through the collective bargaining system in Germany companies that are covered by the CLAs are legally bound to implement them in their HRM policies.

The second aspect that granted the collective bargaining system a high capacity to coordinate HRM policies in Germany is the fact that CLAs are compulsory for the great majority of the productive system. CLAs bind in fact all the companies that are members of a employers' organization that fall within BDA. Since BDA represents about 80% of the companies in Germany, collective bargaining even out the material working conditions in the far majority of the productive system, with the manufactory (and especially) the metalworking industry as a “pace-setter”. The high coordination of the collective bargaining system is also granted by the high coverage of the collective negotiations at company level. In fact, unlike Italy, the elections of the union' bodies is not *voluntaristic*, but is a legal duties for companies. In short if retaining policies are included into the “pace setter” industry, the collective bargaining system will have a strong capacity to spread those standards and to make them compulsory to the greatest part of the production system (Streeck and Hassel 2003b).

Such highly coordinated collective bargaining system was able to steadily reproduce itself by
9.3 Institutional affinities

adapting first to the economic expansion of the 1960's and 1970's and to the globalization turmoil of the 1980's. However at the beginning of the 1990's the economic re-unification undermined the adaptive capacity of the system, whose coordination started to progressively erode. The first aspect undermined was the coverage of collective bargaining, which diminished from 80 to 65% because an increasing amount of companies dropped their membership from BDA. The second aspect undermined was the legal status of regional-industry CLAs, which can be derogated by the companies negotiations in case of “hardship circumstances” with the so-called opening clauses. According to these clauses whenever the implementation of retaining policies established in a CLAs is expected to undermine the economic performance of the companies, these latter are legitimized to drop them and continue shedding older workers according to their economic convenience (Streeck and Hassel 2003b).

All in all, since employers have an increasing opportunity to defect from the binding power of the CLA's, by either stepping out from BDA’s membership or by making use of opening clauses, the collective bargaining capacity to convey top-down retaining policies has become rather limited.

This section was devoted to describe the two main aspects of the partnership's system in Germany that can hinder the conveyance of the EWL target from the social protection to the production system: the moderate coordination of the vertical structure of interests organization and the decreasing coordination of the collective bargaining system.

The next section discusses the specific mechanism by which the moderate coordination of the partnership structure has affected the conveyance of retaining policies in Germany from the social protection to the production system. Then working hypotheses are formulated over the effectiveness of retaining policies to extend working life for each set of the retaining policies and by industry.

9.4 Retaining policies' effectiveness: working hypotheses

As explained in the previous section, the social protection system succeeds in conveying the EWL target into the peak level of the social partnership system in the second half of the 1990's when the emergency due to the German reunification was withdrawn. Employers' and unions' Confederation (BDA and DGB) officially share the target in 1998 when in the Alliance for Job they participate to the formulation of policies aimed at improving the employment perspective of older workers.

The exchange of views and information in the Alliance for job process raises the awareness of BDA over the current and future demographic challenges and makes them particularly active in spreading the EWL target among its members. First it launches, together with the Bertelsmann stifung (Bertelsmann foundation), so-called “Pro-age project- facing the challenge of the demographic change” in partnership with the Dutch (AWVN), Irish (IBEC) and Danish (DA) employers' confederations in 2001. They share knowledge and resources to develop scientifically based recommendations over the HRM practices that are the most effective to preserve and foster older workers' productivity in consultation with policy makers, business representatives, and academic experts56. These practical recommendations are collected in “Success with Older Workers. A Good

56 The consortium of experts formed a consortium where they formulate proposals over the measure than can enhance the productivity of older workers. The Bertelsmann foundation has then carried out an first an international exploratory investigation over the legislative and collective bargaining frameworks that have enhanced the employment of older
The effectiveness of retaining policies in Germany

Practice Compendium" and conveys first the message that older workers are a competitive resources that companies can use to overcome the shortage of skills induced by the demographic change. The key to turn older workers from a burden to an opportunity is to implement HRM policies that support the work ability of older workers. The main focus of these recommendations is especially on spreading training techniques that maximize the learning of seniors (Don't leave them behind, and don't let them stand still!- here employability policies). Moreover great importance is given to measures that can improve the work atmosphere by enhancing the quality of the relationship of older workers with their bosses and colleagues (in the framework age equality policies). This can be carried out by offering older workers personal development planning (Make the most of interests and abilities! ) and by including them in team-work where they can convey their knowledge to younger colleagues and at the same time being supported by these latter (Take advantage of seniors' experienceDP)rofit from their know-how!). Last but not least, recommendations are focused on: adapting the workplace (Keep people able to work!- in the framework health reconciliation policies) and the time schedules (Design work hours that are age-appropriate!- in the framework time reconciliation policies) to older workers' needs.

The compendium is finally spread to all the Confederal members to enhance a process of soft policy dissemination. BDA goes even further and invite the Unions' Confederation to bargain common platforms that could steer their lower organizations to collectively bargain retaining policies in the rounds that took place in 2002. Their aim is to strengthen the process of policies' dissemination by binding companies to retain older workers longer.

This offer is however declined by the DGB, which as in the case of the Italian unions, hinders any limitation of older workers' freedom to enter a pathway of exit, which is already limited by the ongoing retrenchment of the pathways of exit. Because of this opposition retaining policies are coordinated by the collective bargaining system with a considerable delay with respect to the period of observation. The first CLA that includes retaining policies is the Chemistry CLA's renewed in 2006 and it is soon followed by the renewal of the CLA in the metal industry in 2008. Given the role of “pace-setter” of these two sectors in the collective bargaining, it is reasonable to expect that retaining policies will disseminate also into the remaining part of the productive system. This dissemination nevertheless overrules the period of observation.

The only exception is the old-age part-time scheme, whose implementation start to be managed by the collective bargaining system in 1996, when, DGB and BDA did not endorsed yet the EWL target. Because of that the bargaining parts first cooperate to distort the function of these schemes from an instrument to EWL into a further early retirement pathway, as was explained in Chapter 6. After 1998 the lack of common Confederal recommendations to include retaining policies into CLAs, provides no incentives to the collective bargaining to reconvert these schemes into time reconciliation policies until 2009, when the public financing is withdrawn.

All in all, the lack of bilateral institutional channels where the employers and unions' Confederations can develop a common understanding toward EWL and convey them to the lower workers. On the bases of these findings the foundations have provided policy makers and social partners with guidelines on how to foster policies that can extend working life. Secondly they carried an international surveys on companies in order to examine which HRM measures are the most effective in fostering the productivity and the participation of older workers (Maguire, 2003).
organizational level limits greatly the inclusion of retaining policies into CLAs. If the conveyance of the retaining policies by means of the collective bargaining is hindered by the obstructing strategy of the union Confederation, more successful is the vertical conveyance of the policies carried out by the employers' confederation to its members. Those awareness campaigns convey the message that retaining older workers is a competitive advantage, provided that the HRM implements personnel policies that maximize the productivity of older workers. The recommendations concern all sets of retaining policies here investigated, but especially employability and age equality. This conveyance took place that enhance a soft dissemination without setting legally binding constrains. The dissemination of the retaining policies in Germany is not as voluntaristic as in Italy, because it is coordinated by the BDA, which however can only enhance and not constrain companies to implement them. Because of that the success their soft dissemination critically depends on the membership' size of BDA and on whether this campaigns is favourably received by companies or not.

The extent to which the soft dissemination of retaining policies coordinated by the social protection and the employers' Confederation are expected to affect their effectiveness in EWL will be discussed in the next section.

9.4.1 Hypotheses by retaining policies

As a result of the very late inclusion of retaining policies into CLAs, their dissemination into companies' HRM practices is limited. As shown by Graph 9.1 the percentage of German companies that implement at least one retaining policies remains between 2002 and 2008 just under 20%\(^57\).

Nevertheless, the data can be easily misleading. In fact as shown in Graph 9.2 the implementation of retaining policies is strongly and positively correlated to the companies' size, meaning retaining policies, although moderately disseminated, can affect a substantive portion of the workforce. As a matter of fact the companies that implement at least one retaining policies employs in total 51% of the workforce.

\(^{57}\) This information are provided by the IAB-betriebspanel- IAB companies' panel- that from 2002 includes a section devoted to the implementation of specific measures for older workers (Bellmann et al., 2007)
The effectiveness of retaining policies in Germany

**Graph 9.1:** Dissemination of the different sets of retaining policies in German companies in 2002 and 2006. It is expressed as the percentage of companies that in 2002 and 2006 implement the following retaining policies.

![Graph 9.1: Dissemination of the different sets of retaining policies in German companies in 2002 and 2006.](image)


**Table 9.2:** Dissemination of the different sets of retaining policies in German companies by firm size in 2002 and 2006. It is expressed as the percentage of companies that in 2002 and 2006 that by firm size implement the following retaining policies.

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
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<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-4 employees</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5-19 employees</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>20-99 employees</td>
<td>26</td>
<td>23</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>100-499 employees</td>
<td>61</td>
<td>60</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>5</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>500 employees</td>
<td>86</td>
<td>85</td>
<td>13</td>
<td>19</td>
<td>13</td>
<td>12</td>
<td>33</td>
<td>34</td>
</tr>
</tbody>
</table>


**Legend of the retaining policies:**
A = Altersteilzeit (old-age part-time scheme)
B = Workplace equipped to the need of the elderly
C = Lower job requirement for older workers
D = Generationally-mixed teams
E = Inclusion of older workers in further training
F = Special training measures for older workers
G = Other measures
H = At least one retaining policy

Looking at the different sets of retaining policies (Graph 9.1), the most disseminated is the only set conveyed by the collective bargaining system: the old-age part-time scheme, which are implemented by about 11% of companies between 2002 and 2006. As shown in Graph 9.2 this figure reveal a great
9.4.1 Hypotheses by retaining policies

The disparity between the marginal dissemination in small companies (about 5% in average for the whole period) and the domination in big companies (between 60% and 80%), which brings about 40% of the workforce to be covered by those schemes overall the period (Aleksandrowicz 2014).

The extent to which these scheme promote time reconciliation is nevertheless questionable. It depends in fact on whether the scheme is applied with an horizontal part-time schedule rather than with a vertical one (Blockmodell). Since the social protection system fails to provide a higher incentives to the first than to the second, since 1996 social partners agreed to implement the blockmodell to a major extent because it has lower organizational costs for companies and allow older workers to exit earlier. Furthermore the reform of these scheme is not successfully enhanced by the Confederations, which are unable to successfully steer the collective bargaining toward the negotiation of time reconciliation policies.

Therefore the fact that about 12% of the companies implement old-age part-time scheme and 40% of the workforce are covered by them between 2002 and 2006 does not mean that time reconciliation policies are systematically implemented. In fact the majority of those scheme does not require to shorten the working schedule, but require to shorten the working life. Since time reconciliation policies are not systematically implemented in the old-age part-time scheme, it is hypothesized that older workers working part-time will NOT have a significantly lower likelihood than full-time workers to experience a work-retirement trajectory (HP 9.1).

Time reconciliation have been nevertheless systematically improved whenever part-time is not diffused throughout part-time old-age schemes. This is for instance the case of part-time work that is promoted to reintegrate women into employment after childbearing. As much as in adult life, part-time work help them to reconcile better work with caring duties also in older life, when the duties toward the children are substituted by other duties, such as caring for grandchildren or other frail relatives. Since time reconciliation policies are more systematically disseminated for women than for men, it is hypothesized that then working part-time will lower the likelihood to undertake a work-retirement trajectory significantly more for women than for men (HP 9.2).

The second most disseminated sets of retaining policies improves the employability of older workers, by including them in a training course. Despite the training measures specifically targeted on older workers are very marginal among either small and large-sized companies (less than 2% between 2002 and 2006), more diffused are measures that involve seniors in general training course. Despite the average dissemination of these measures is limited to the 6 % of companies, they affect in average more than 16% of the workforce thanks to the much higher diffusion that they have in the large rather (between 25% and 42%) than small-sized companies (less than 5%) between 2002 and 2006.

The dissemination of employability policies is the consequence on the one hand of the soft conveyance carried out by the BDA’s information campaign. This soft conveyance can especially explain the very systematic dissemination in the large companies, which are often more favourable than SMEs (small enterprises) to follow voluntary initiatives aimed at centrally coordinate working

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59 The information over the workforce coverage is available only for 2002. However since no major changes are shown in Graph 9.1 and 9.2 in the % of companies that implement retaining companies between 2002 and 2006, the choice is to assume, with all the limitation of the case, that also the % workforce covered by them remains comparable between 2002 and 2006. This assumption hold also for the remaining discussion in this section.
The effectiveness of retaining policies in Germany

This conveyance is moreover strengthened by the social protection system which provides financial incentives. These latter enhance the dissemination of these policies especially in medium companies, less receptive to the BDA’s awareness campaign. Because employability policies are disseminated systematically by the social protection system and is softly disseminated by BDA, it is hypothesized that older workers that experience skills’ development at work will have a significantly lower likelihood to enter a work-retirement trajectory than older workers that do not experience them (HP 9.3).

The remaining two set of retaining policies, health reconciliation and age equality, have been softly disseminated by the employers’ Confederation, but only indirectly backed-up by the social protection system. As for health reconciliation policies, although the social protection system provides a legal framework and incentive to respectively improve the occupational safety at work, these legal acts are not targeted at adapting the working conditions on older workers’ specific needs. Age equality is endorsed very late only in 2006, with an anti-discriminatory ban that has no direct effect on the quality of the treatment that older workers experience from their colleagues and bosses. Despite their dissemination remains voluntaristic, meaning that no legal constrains or financial incentives are set for their implementation, their diffusion was quite significant. As shown by Graph 9.1 and Table 9.2, between 2002 and 2006 the age-diverse teams are as diffused as the training measures for older workers both in terms of the percentage of companies that implement them and their coverage (16% of the workforce) and are predominantly concentrated in large companies. The success of the BDA’s soft dissemination can be explained by the high benefits of those teams in terms of intergenerational transmissions of knowledge and skills easily overrule the low organizational costs that their implementation involve. Because age equality policies are systematically diffused thanks to the BDA’s soft dissemination, it is hypothesized that older workers that experience a supportive atmosphere and a fair treatment at work will have a lower likelihood to enter a work-retirement trajectory than older workers that do not experience them (HP 9.4).

BDA’s soft dissemination has instead much fewer success in promoting health reconciliation policies. In fact as shown by Graph 9.1 and Table 9.2 between 2002 and 2006 only a marginal percent of companies of all size implement policies that lower the requirement for older workers and adapt the workplace to their need. The reason of this marginal diffusion is that health reconciliation policies involve higher implementation costs than age equality policies that are not easily overcome in the short-term by gains in productivity. As a result of this poor dissemination, a very limited portion of the workforce are exposed to health reconciliation policies (6%). Since health reconciliation policies are promoted only indirectly by the social protection system and and poorly disseminated by BDA, it is hypothesized that older workers that experience a low physical and mental strain at work will NOT have a lower likelihood to enter a work-retirement trajectory than older workers that do not experience them (HP 9.5).

This section was devoted to formulating the hypotheses concerning the extent the effectiveness of retaining policies in EWL was moderated by the few incentives provided by the social protection system.

60 This higher receptivity of large companies derives from the fact that they in general benefit more from a central coordination of working conditions than small-sized companies. While the former can obtain economies of scales when central initiatives coordinate HRM practices, the latter perceive these initiatives as a boundary that limit their flexibility and thus their competitiveness (Streeck and Hassel 2003b)
system and by the *soft conveyance of social partners*, which can only inform but not constrain the strategy of companies. In the next section the extent to which these hypotheses vary by industry is treated.

### 9.4.2 Hypotheses by industry

As shown earlier in this chapter, the top-down conveyance of the EWL target in Germany, enhances the dissemination of retaining policies, but sets no legal constrains for companies. The main incentives are mainly provided by the social partnership sphere and especially by the employers' Confederation, which engage a process of *soft dissemination* of both information and best practices. This *soft dissemination* is backed up by the social protection system, which provides a legal framework and offers direct compensation to companies that implement employability policies. In any case the top-down conveyance in Germany leaves the implementation of retaining policies to a some extent voluntaristic. In more detail, the *soft top-down conveyance* makes the implementation of retaining policies appealing for companies only under *certain conditions*. The first set of conditions is economic and occur when the companies experience a *workforce shortage* that can be compensated *via* a longer retainment of their personnel. The second set of conditions is organizational and increases the companies' advantages of conforming their HRM practices to centrally coordinated directives. Companies under those two sets of circumstances are more receptive to the social partnership's process of *soft dissemination* because they obtain from it direct benefits. Because of that two competing hypotheses can be formulated with regards to the significance of industry patterns in the effectiveness of retaining policies.

The set of economic circumstances supports the hypotheses that the effectiveness of retaining policies is inversely related to the extent to which the Globalization manages to counteract the effect of the demographic ageing on the workforce. As seen in Graph 1.8 in the introduction, Germany have been experiencing a rather steep ageing of the population since the late 1990's, which have progressively reduced the inflow of new generations in the workforce. Companies will experience this workforce's shortage as a skills' shortage only if their labour demands is not endangered by the increased international competition induced by the globalization. Furthermore, once they experience this skills' shortage, firms profit by retaining their older employees only if in their industry the technological change is moderate and does not make the skills' endowment of these latter unusable because obsolete. According to this argument, the dissemination of retaining policies will be systematic only in industries less exposed to the globalization forces, because they only in those industries companies have a strategical advantage from retaining older workers.

This argument is partially supported by the descriptive in Table 9.2, that show the percentage of companies implementing a key range of retaining policies by industry in 2002 and 2006. Policies that improve the health reconciliation, the age equality, and the employability of older workers scores in both years higher in the industries that are the most protected by the globalization forces: non-profit organization, public administration and, to a some extent construction. The only exception is here represented by the old-age part-time schemes, whose diffusion, as was discussed earlier, do not foster
The effectiveness of retaining policies in Germany

time reconciliation policies. Because of that, the first competing hypothesis is that the likelihood of entering a work-retirement trajectories of older workers experiencing a low physical and mental strain (HP 9.5a), a supportive atmosphere and a fair treatment (HP 9.7a), skills' development (HP 9.9a) at work is significantly lower in the industries with low exposure to globalization: construction, public administration, health, education and social work. In addition, since old-age part-time scheme do not promote time reconciliation policies, it is hypothesized that the likelihood of entering a work-retirement trajectories of older workers experiencing part-time in their last job NOT significantly lower in the industries with low exposure to globalization: construction, public administration, health, education and social work (HP 9.3a).

Table 9.3: Dissemination of the different sets of retaining policies in German companies by industry in 2002 and 2006. It is expressed as the percentage of companies that in 2002 and 2006 that in each industry implement the following retaining policies.

<table>
<thead>
<tr>
<th>Industry</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and forestry</td>
<td>3.9</td>
<td>–</td>
<td>0.4</td>
<td>–</td>
<td>5.1</td>
<td>–</td>
<td>5.7</td>
</tr>
<tr>
<td>Manufactory</td>
<td>11.1</td>
<td>8</td>
<td>2.1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>7.4</td>
</tr>
<tr>
<td>Construction</td>
<td>3.5</td>
<td>–</td>
<td>0.4</td>
<td>–</td>
<td>3.1</td>
<td>–</td>
<td>9</td>
</tr>
<tr>
<td>Trade and transportation &amp; news</td>
<td>8.2</td>
<td>6</td>
<td>0.9</td>
<td>1</td>
<td>2.1</td>
<td>2</td>
<td>4.8</td>
</tr>
<tr>
<td>Private service of which: Private</td>
<td>10.7</td>
<td>8</td>
<td>1.1</td>
<td>1</td>
<td>2.7</td>
<td>2</td>
<td>5.6</td>
</tr>
<tr>
<td>Business services</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Other services</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>5.5</td>
<td>8</td>
</tr>
<tr>
<td>Non-profit organization and public</td>
<td>41.9</td>
<td>59</td>
<td>7.1</td>
<td>9</td>
<td>2.2</td>
<td>4</td>
<td>7.6</td>
</tr>
<tr>
<td>administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Legend of the retaining policies:
A= Altersteilzeit (old-age part-time scheme)
B= Workplace equipped to the need of the elderly
C= Lower job requirement for older workers
D= Generationally-mixed teams
E= Inclusion of older workers in further training
F= Special training measures for older workers
G= Other measures
H= At least one retaining policy

The set of organizational circumstances supports the hypotheses that the effectiveness of retaining policies is directly related to the extent to which the business size makes companies more receptive to a central coordination of their HRM. In fact with the higher is the dimension of the personnel, the higher is the economy of scales that companies can obtains from a central coordination of their

61 In 2006 the classification does not include news (Bellmann et al., 2006).
management. Instead the smaller the dimensions the more the competitiveness of the firm relies on a flexible adaptation of HRM to the market circumstances. Since this flexibility is undermined by a central coordination of HRM, small-sized enterprises (SME) usually opposed to collective bargaining when it takes place above the company level.

At the bases of this hypotheses there is the argument that, since the business size affects the companies receptivity to the central coordination of HRM, it also affects their receptivity to the partnership's soft dissemination. In fact by comparing the percentage of companies that implement retaining policies between 2002 and 2006 by industry (Table 9.3) and by business size (Table 9.2), it is clear that the major gradient that discriminate over the dissemination of retaining policies is this latter and only to less extent the former. According to this argument the dissemination of retaining policies will be more systematic in industries that are dominated by large-size rather than by small-size companies after the soft dissemination takes place in 2001. According to OECD in 2003 large-size companies have dominated in mainly three industries in Germany: mainly manufacturing, mining & quarrying and to a lesser extent wholesale and retail trade, transportation and storage & horeca and Real estate renting and business activity.

Because of that it is hypothesized that the likelihood of entering a work-retirement trajectories of older workers experiencing a low physical and mental strain (HP 9.5b), a supportive atmosphere and a fair treatment (HP 9.7b), skills' development (HP 9.9b) in the last job is significantly lower in the industries where large-size companies are concentrated: manufacturing, mining & quarrying, wholesale and retail trade, transportation and storage & horeca, and real estate renting and business activity. Since old-age part-time schemes do not promote time reconciliation policies, it is hypothesized that the likelihood of entering a work-retirement trajectories of older workers experiencing part-time in their last job NOT significantly lower in the industries where large-size companies are concentrated: manufacturing, mining & quarrying, wholesale and retail trade, transportation and storage & horeca, and real estate renting and business activity (HP 9.3b).

Table 9.4 provides a summary of the hypotheses concerning the extent to which retaining policies are expected to extend working life in Italy, depending on the more or less successful top-down dissemination.

---

62 In fact the proportion of the workforce that in each industry is employed in large company (+50 employees) is in these three industries higher than 50%. This proportion is above 1/3 if we consider larger companies (+250 employees). These proportions remain rather stable after 2003 (source: OECD- business demographic information).
**Table 9.4: Summary of the top-down dissemination of retaining policies in Germany and hypotheses over their effectiveness.**

<table>
<thead>
<tr>
<th>Retaining policies</th>
<th>Top-down dissemination</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time reconciliation</strong></td>
<td>The dissemination is hindered by the collective bargaining after 1996 with the implementation of vertical part-time-blockmodell. The social protection system fails to bind companies to retain older workers by providing higher financial incentives if they implement the based on the “continuous working time model” (horizontal part-time) rather than on the “block model”. The employers’ association (BDA) softly convey time reconciliation policies to their members with information campaigns. Confederations fails to convey recommendations that either enhance or constrain the collective bargaining to include in CLA’s old-age part-time schemes based on “continuous working time model” rather than on the “block model”. Old-age part-time schemes are diffused mainly in the public sector, in the service sector and in the manufacture industry.</td>
<td><strong>HP 9.1:</strong> Since time reconciliation policies are not systematically implemented in the old-age part-time scheme, it is hypothesized that older workers working part-time will NOT have a significantly lower likelihood than full-time workers to experience a work-retirement trajectory. <strong>HP 9.2:</strong> Since time reconciliation policies are more systematically disseminated for women than for men, it is hypothesized that working part-time lowers the likelihood to undertake a work-retirement trajectory, significantly more for women than for men. <strong>BY INDUSTRY:</strong> Two competing hypotheses</td>
</tr>
<tr>
<td><strong>Health reconciliation</strong></td>
<td>Social protection’s improves the occupational safety at work are not specifically targeted on retaining older workers. The employers’ association (BDA) softly convey health reconciliation policies to their members with information campaigns. No policies aimed at improving health reconciliation are included in industry CLAs.</td>
<td><strong>HP 9.3a:</strong> The likelihood of entering a work-retirement trajectories of older workers experiencing part-time in their last job NOT significantly lower in the industries with low exposure to globalization: construction, public administration, health, education and social work. <strong>HP 9.3b:</strong> The likelihood of entering a work-retirement trajectories of older workers experiencing part-time in their last job is NOT significantly lower in the industries where large-size companies are concentrated: manufacturing, mining &amp; quarrying, wholesale and retail trade, transportation and storage &amp; horeca, and real estate renting and business activity.</td>
</tr>
<tr>
<td><strong>Age Equality</strong></td>
<td>The social protection system attempts only indirectly to improve age equality by abolishing age discrimination in 2006 in all aspects of the employment relation. The employers’ association (BDA) softly convey age equality policies to their members with information campaigns. No policies aimed at improving age equality are included in industry CLAs.</td>
<td><strong>HP 9.4:</strong> Since health reconciliation policies are promoted only indirectly by the social protection system and and poorly disseminated by BDA, it is hypothesized that older workers that experience a low physical and mental strain at work will NOT have a lower likelihood to enter a work-retirement trajectory than older workers that do not experience them. <strong>BY INDUSTRY:</strong> Two competing hypotheses</td>
</tr>
<tr>
<td><strong>Employability</strong></td>
<td>The social protection system succeeds in</td>
<td><strong>HP 9.5a:</strong> The likelihood of entering a work-retirement trajectories of older workers experiencing a low physical and mental strain at work is significantly lower in the industries with low exposure to globalization: construction, public administration, health, education and social work. <strong>HP 9.5b:</strong> The likelihood of entering a work-retirement trajectories of older workers experiencing a low physical and mental strain at work is significantly more for women than for men.</td>
</tr>
</tbody>
</table>

**HP 9.6:** Because age equality policies are systematically diffused by the BDA’s soft dissemination, it is hypothesized that older workers that experience a supportive atmosphere and a fair treatment at work will have a lower likelihood to enter a work-retirement trajectory than older workers that do not experience them. **BY INDUSTRY:** Two competing hypotheses

**HP 9.7a:** The likelihood of entering a work-retirement trajectories of older workers experiencing a supportive atmosphere and a fair treatment at work is significantly lower in the industries with low exposure to globalization: construction, public administration, health, education and social work **HP 9.7b:** The likelihood of entering a work-retirement trajectories of older workers experiencing a supportive atmosphere and a fair treatment at work is significantly lower in the industries where large-size companies are concentrated: manufacturing, mining & quarrying, wholesale and retail trade, transportation and storage & horeca, and real estate renting and business activity. **HP 9.8:** Because employability policies are disseminated systematically by
9.4.2 Hypotheses by industry

**Conveying employability policies to companies by providing direct financial incentives that co-fund job-related training.**

No policies aimed at improving health reconciliation are included in industry CLAs.

The employers' association (BDA) softly convey employability policies to their members with information campaigns.

The social protection system and is softly disseminated by BDA, it is hypothesized that older workers that experience skills' development at work will have a significantly lower likelihood to enter a work-retirement trajectory than older workers that do not experience them.

**BY INDUSTRY: Two competing hypotheses**

**HP 9.9a:** The likelihood of entering a work-retirement trajectories of older workers experiencing skills' development at work is significantly lower in the industries with low exposure to globalization: construction, public administration, health, education and social work

**HP 9.9b:** The likelihood of entering a work-retirement trajectories of older workers experiencing skills' development at work is significantly lower in the industries where large-size companies are concentrated: manufacturing, mining & quarrying, wholesale and retail trade, transportation and storage & horeca, and real estate renting and business activity

### 9.5 Findings

The hypotheses HP 9.1-9 are tested using a piecewise-constant exponential model (PCE). The sub-sample is restricted to the cohort born from 1945 onward, because it is investigated to which extend the entry in the work-retirement transition of the cohorts that reach the age of 50 years in the mid-1990's have been significantly affected by the implementation of retaining policies. The descriptive of the Sharelife sample that was used in this analysis are presented in Chapter 4.

Model 9.1 includes the controls (see the controls' estimations in appendix E) and the five job quality dimensions. Model 9.2 includes the interaction between gender and time reconciliation. The subsequent models include the interaction between each job quality dimension and the industry: model 9.3 includes interaction between industry and time reconciliation policies; model 9.4 includes interaction between industry and physical health reconciliation policies; model 9.5 includes interaction between industry and mental health reconciliation policies, model 9.6 includes interaction between industry and age equality policies, and model 9.7 includes interaction between industry and employability policies.

As it can be seen in model 9.1, the effectiveness of retaining policies in Germany is at first glance very poor. In fact none of the job quality dimension has any significant effect on the likelihood of undertaking work-retirement transition. As a consequence of its moderate coordination, social partnership fails to constrain companies to implement all sets of retaining policies and none of them is then systematically used by these latter to EWL.

According to the hypotheses HP 9.1 and HP 9.4 part-time and low physical and mental strain have no significant effect on the likelihood of undertaking work-retirement transition. This outcome is on the one hand due to the the fact that both the social protection and the partnership system failed to convey time reconciliation policies into the old-age part-time scheme. On the other hand it is due to marginal implementation of health reconciliation policies that companies undertook after they have been softly disseminated by BDA.

Against the hypotheses HP 9.8 and HP 9.6 a supportive atmosphere and a fair treatment and skills' development at work do not significantly lower the likelihood of undertaking a work-retirement transition.
trajectory. Although age equality policies and employability policies appeared to be systematically implemented by companies, they turned out to have no effect on the timing of older workers' exit because companies are not constrained to retain their older employees.

The estimations show in fact that companies retain older workers only under some conditions. According to the data these conditions are economics, since retaining some job quality dimensions (employability and age equality) proved to significantly delay older workers only in sheltered industries.
### Table 9.5: Piecewise-constant exponential model (PCE) estimating the effectiveness of retaining policies in extending working life in Germany.

<table>
<thead>
<tr>
<th></th>
<th>9.1</th>
<th>9.2</th>
<th>9.3</th>
<th>9.4</th>
<th>9.5</th>
<th>9.6</th>
<th>9.7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time reconciliation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical health reconciliation</td>
<td>0.987</td>
<td>2.715</td>
<td>2.312</td>
<td>2.319</td>
<td>2.349</td>
<td>2.955*</td>
<td>2.940*</td>
</tr>
<tr>
<td>Mental health reconciliation</td>
<td>0.850</td>
<td>0.840</td>
<td>0.838</td>
<td>0.818**</td>
<td>0.855</td>
<td>0.815</td>
<td>0.832</td>
</tr>
<tr>
<td>Age equality</td>
<td>1.252</td>
<td>1.287*</td>
<td>1.317*</td>
<td>1.251</td>
<td>1.221</td>
<td>1.412</td>
<td>1.265</td>
</tr>
<tr>
<td>Employability</td>
<td>1.173</td>
<td>1.186</td>
<td>1.192</td>
<td>1.196</td>
<td>1.233*</td>
<td>1.190</td>
<td>1.308</td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time reconciliation * woman</td>
<td>0.318*</td>
<td>0.339</td>
<td>0.375</td>
<td>0.353</td>
<td>0.257**</td>
<td>0.271*</td>
<td></td>
</tr>
</tbody>
</table>

| **Physical Health reconciliation** |      |      |      |      |      |      |      |
| Agriculture, forestry and fishery | 1.23e-05 |      |      |      |      |      |      |
| Manufacturing, mining & quarrying | Ref. |      |      |      |      |      |      |
| Construction                    | 2.09e-05 |      |      |      |      |      |      |
| Wholesale and retail trade, transportation and storage & horeca | 0.990 |      |      |      |      |      |      |
| Financial intermediation        | 1.781 |      |      |      |      |      |      |
| Real estate renting and business activity | 4.205 |      |      |      |      |      |      |
| Other community                 | 0.288 |      |      |      |      |      |      |
| Public Administration and defense | 1.058 |      |      |      |      |      |      |
| Education, health and social work | 3.041 |      |      |      |      |      |      |

| **Mental Health reconciliation** |      |      |      |      |      |      |      |
| Agriculture, forestry and fishery | 1.435 |      |      |      |      |      |      |
| Manufacturing, mining & quarrying | Ref. |      |      |      |      |      |      |
| Construction                      | 1.494 |      |      |      |      |      |      |
| Wholesale and retail trade, transportation and storage & horeca | 1.668* |      |      |      |      |      |      |
| Financial intermediation          | 2.852 |      |      |      |      |      |      |
| Real estate renting and business activity | 0.444 |      |      |      |      |      |      |
| Other community                   | 1.010 |      |      |      |      |      |      |
| Public Administration and defense | 1.081 |      |      |      |      |      |      |
| Education, health and social work | 2.372* |      |      |      |      |      |      |

| **Age equality** |      |      |      |      |      |      |      |
| Agriculture, forestry and fishery | 0.374* |      |      |      |      |      |      |
| Manufacturing, mining & quarrying | Ref. |      |      |      |      |      |      |
| Construction                      | 1.061 |      |      |      |      |      |      |
| Wholesale and retail trade, transportation and storage & horeca | 1.155 |      |      |      |      |      |      |
| Financial intermediation          | 1.975 |      |      |      |      |      |      |
| Real estate renting and business activity | 2.494 |      |      |      |      |      |      |
| Other community                   | 3.534* |      |      |      |      |      |      |
| Public Administration and defense | 0.795 |      |      |      |      |      |      |
| Education, health and social work | 0.310** |      |      |      |      |      |      |

| **Employability** |      |      |      |      |      |      |      |
| Agriculture, forestry and fishery | 1.054 |      |      |      |      |      |      |
| Manufacturing, mining & quarrying | 0.267** |      |      |      |      |      |      |
| Construction                      | 0.894 |      |      |      |      |      |      |
| Wholesale and retail trade, transportation and storage & horeca | 1.888 |      |      |      |      |      |      |
| Financial intermediation          | 5.029 |      |      |      |      |      |      |
| Real estate renting and business activity | 1.893 |      |      |      |      |      |      |
| Other community                   | 0.951 |      |      |      |      |      |      |
| Public Administration and defense | 0.567 |      |      |      |      |      |      |
| Education, health and social work |      |      |      |      |      |      |      |

| Observations                  | 1916 | 1915 | 1913 | 1912 | 1911 | 1910 | 1909 |
| Events                       | 133  | 133  | 133  | 133  | 133  | 133  | 133  |
| Subject                      | 565  | 565  | 565  | 565  | 565  | 565  | 565  |
| BIC                          | 826.75 | 831.23 | 881.57 | 876.03 | 872.64 | 860.41 | 860.81 |
192

9 The effectiveness of retaining policies in Germany

*** p<0.01, ** p<0.05, * p<0.1

Source: Sharelife 2008-2009

Dependent variable:
Work-retirement trajectory: time-varying categorical variable equal to: 0 if the respondent is working at the end of the person-period spell, 1 if the respondent left employment at the end of the person-period spell

Independent variables:
Time reconciliation: time-varying dummy equal to 1 if the respondent is working in a part-time job in the person-period spell
Physical health reconciliation: time-constant interval scale obtained by Factor Analysis (see chap.4) equal from 1 to 4. It measures measuring the self-perceived quality of the material working conditions in the last/current job by looking at how the job is physically demanding and the workspace comfortable
Mental health reconciliation: time-constant interval scale obtained by Factor Analysis (see chap.4) equal from 1 to 4. It measures the self-perceived emotional burden of the last/current job looking at the time pressure, the emotional burden, and conflicts that the work implies.
Age equality: time-constant interval scale obtained by Factor Analysis (see chap.4) equal from 1 to 4 measuring self-perceived recognition and support on the last job, the quality of the working atmosphere and the respondents' perception over how fairly they are treated by their bosses
Employability: time-constant interval scale equal from 1 to 4 measuring the extent to which the skills of respondents are developed in the last/current.
Industry: time-varying set of dummy variable over the industry where the respondent is working in the person-period spell.

For a more detailed description see Chapter 4.

9.6 Conclusion

In this chapter it was investigated to which extend the moderate coordination of the partnership system in Germany affects the effectiveness of retaining policies between 1995 and 2009. The main conclusion from the analysis is that, because of their moderate coordination, the institutional channels by which social partners can affect the conveyance of the EWL target from the social protection systems to the production system do not enhance the effectiveness of retaining policies, which result to be moderate. This the moderate vertical coordination of the social partners' organizations prevents from successfully conveying the EWL target into the collective bargaining system.

Also it can be concluded that the soft dissemination of retaining policies carried out by the BDA does not successfully boost the effectiveness of retaining policies. In fact companies make use of recommendations provided by BDA only when their economic conditions make the retaining of older workers profitable.

Finally, because their dissemination is voluntaristic, the effectiveness of retaining policies follows a marked industry patterns. It is in average higher in industries protected from the globalization forces, because they start experiencing the skill's shortage induced by the ongoing process of population ageing.
The effectiveness of retaining policies in Italy

10.1 Introduction

As shown in Chapter 7, the modest outcome of activation policies between the mid-1990's and 2009 (Chapter 1) can be partially explained as the result of the poor effectiveness of retrenchment policies. Due to their weak organizational articulation, unions and employers associations took part to concertation and administrative settings that allow them to preserve the expectations of their core members: male workers in the private industrial sector.

The next step is to investigate the extent to which the weak articulation prevented also to the collective bargaining system from conveying retaining policies into the HRM practices. The leading question of this chapter is: to what extent has the weak organizational articulation of unions and employers' associations influenced the effectiveness of retaining policies implemented between the mid-1990's until 2008-2009?

Regulated only in 1993 by the Protocol of July, 27th, the collective bargaining is on paper rather coordinated. Defining the minimum standards, the content, and the timing of the negotiations, industry is the pivotal level of the system. CLAs have a legal value and thus are able to coordinate HRM practices to bargained strategical goals. The strategical goals bargained at industry-level can be finally coordinated at central level by regular meetings where the government and Confederation bargain over the contents of the next CLAs' renewal (Regalia and Regini 2004).

However the effective institutionalization of this formal coordination is undermined by two main aspects. First the voluntaristic diffusion of unions' bargaining structures in small companies, undermine the enforcement of CLAs in a significant part of the Italian production system. Second the lack of procedures punishing the actors' contentiousness often blocks negotiations and delays agreements from central to company level, especially if controversial measures, as retaining policies, are concerned. This undermined the capacity of the Government to convey retaining policies in the strategies of bargaining organizations and therefore their downward implementation. This is because, being pathways of exit to a great extent preserved for their core members, unions and employers associations faced no incentives to implement retaining policies.

Since retaining policies were systematically excluded from the collective negotiations, companies are not legally compelled to implement them. In short their implementations occurred in Italy only on voluntaristic bases.

As phrased in HP 3.4, it is expected that the effectiveness of retaining policies to be low in Italy, unless they are conveyed by a different channels. This is the case for time reconciliation policies, whose implementation was conveyed by the government directly into companies' strategy with monetary incentives encouraging the use of progressive retirement scheme. Reducing the labour costs of older workers working part-time, these incentives encourage companies to retain them longer. Accordingly, I expect that the likelihood of older workers to undertake a work-retirement transition to lower if they work part-time rather than full-time in their late career.

As for the rest of retaining policies, the governments attempted to indirectly convey them with
labour policies that, nevertheless, often lacked a specific target on older workers. Since the implementation of this policies remains *voluntaristic*, older workers that experienced either physical or mental health reconciliation or age equality of employability policies in their last job are expected to not have a significantly lower likelihood to enter a work-retirement transition than older workers that did not experience them.

As for the distributional effects of retaining policies across industry two competing hypothesis are formulated. It can be expected that the companies always face no incentives to retain older workers and thus that policies effectiveness shows no significant industry pattern. Alternatively companies are expected to voluntarily implement retaining policies only if some external circumstances create a skills’ shortages that can be compensated by older workers. If this is the case older workers, who experienced either physical or mental health reconciliation or age equality of employability policies in their last job, are expected to have a significantly lower likelihood to enter a work-retirement transition only in sheltered and expanding sectors. As in Chapters 8 and 9, the hypotheses are tested using a piecewise-constant exponential model (PCEM).

This chapter is organized as follows. In Section 10.2 describes the Government's direct attempts to convey retaining policies into companies' strategy, by-passing the collective bargaining system system. Section 10.3 is devoted to a detailed description of the aspects making interests' representation and the system of collective bargaining poorly coordinated in Italy. In Section 10.4 the hypotheses are formulated. The results of the piecewise constant exponential model are shown and interpreted in Section 10.5 and the conclusion over the effectiveness of retaining policies in Italy is presented at the end of this chapter.

### 10.2 Government attempts to convey top-down retaining policies

As shown by, the governments' attempts to convey top-down retaining policies between the mid-1990's and the late-2000's was limited and ineffective. This is because it failed to set adequate incentives and sanctions to both social partners and companies. The only exception concerns the time reconciliation policies, which are successfully conveyed by incentives promoting the take up of partial retirement schemes (Mirabile 2004; Ciccarone, 2012) A lists of the labour policies used to convey top-down the implementation of retaining policies is provided in Table 10.1.

<table>
<thead>
<tr>
<th>Table 10.1: Social protections' law aimed at conveying top-down retaining policies in Italy.</th>
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<tbody>
<tr>
<td><strong>Time reconciliation</strong></td>
</tr>
<tr>
<td><strong>Legge 335/1995 Riforma Dini – Settore privato abolizione divieto di cumulo tra pensione e lavoro- introduzione pensionamento progressivo.</strong></td>
</tr>
<tr>
<td><strong>Legge 331/1997 Riforma del lavoro Treu- estensione del pensionamento progressivo al settore pubblico.</strong></td>
</tr>
<tr>
<td><strong>Legge di Bilancio 1998-1999-2000 incentivi fiscali per i lavoratori anziani che optano per il pensionamento progressivo</strong></td>
</tr>
<tr>
<td><strong>Legge 53/2000 incentivi finanziari sia per lavoratori anziani che per le loro imprese per promuovere il pensionamento progressivo and the turnover intergenerazionale; congedo per il diritto di cura</strong></td>
</tr>
</tbody>
</table>
The financial incentives used to promote time reconciliation policies benefited not only older workers in partial retirement, but more importantly, their employers. The first incentives are set in 1995, when the Dini's reform introduced partial retirement schemes in the private sector (Law 335/1995) (see Section 7.2). Two years before the entry in one the pension pathway, older workers were given the opportunity to shift their contract from full to part-time (not lower than 18 hours per week). Their wage gap with a partial retirement benefit with no loss in the future pension income stream. Since only the wage and not the contribution gaps were covered by public funds, partial retirement allowed employers to adjust more easily the personnel in time of recession, but no relevant saving on the non-wage labour costs. A similar but slightly more limited partial retirement scheme was implemented by the Treu Labour Reform (Law 331/1997). Civil servants eligible for the seniority pathways could postpone their stay by reducing their working time by maximum 50%, unless redundancies were experienced in the same occupational category (OECD 2004).

Further supply-incentives were introduced in the private sector by the financial laws implemented between 1998 and 2000. They progressively raised the relieves in the tax regime concerning the accumulation between work and pension income and improved the wage integration.

Employers' incentives increased only in 2000 when the financial law (law 388/2000) partially subsidized the contributions for older workers in partial retirement. Moreover the law 53/2000 increased the subsidies if companies in collaboration with unions foster the intergenerational turnover by replacing the working hours given up by employees in partial retirement with newly hired.\(^6\)

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<tbody>
<tr>
<td>Legge 243/2004</td>
<td>Law 243/2004 bonus to delay seniority pathway by 2 years valid only for older workers</td>
</tr>
<tr>
<td>Legge Finanziaria 296/2006 accordo sulla solidarietà fra le generazioni: favorire il turnover generazionale</td>
<td>Budget law 296/2006 agreement on the solidarity between the generations: generational turnover</td>
</tr>
<tr>
<td>Legge 81/2008 Atto unico per la promozione della sicurezza e la salute occupazionale</td>
<td>Law 81/2008 Single act for the safety and the occupational health</td>
</tr>
<tr>
<td>Legge 236/1993 Promozione di programmi di lifelong learning: riconoscimento ufficiale dei lavoratori anziani come target di questi programmi.</td>
<td>Law 236/1993 Promotion of lifelong learning programs: older workers are officially recognized as one of the targets of this program.</td>
</tr>
<tr>
<td>Legge 53/2000 introduce e finanzia congedi per partecipare a corsi di lifelong learning.</td>
<td>Law 53/2000 introduce and finance lifelong learning leaves</td>
</tr>
</tbody>
</table>

**Health Reconciliation**

**Age Equality**

**Employability**

Source: (Mirabile 2004; Ciccarone, 2012; Colombo 2013)

\(^6\) Despite these measures are not included in the definition of time reconciliation, it is interesting to add that this law introduce additional vacation days to promote the right to care. This measure can be an way alternative to part-time to provide a better reconciliation between work and private life to older workers, especially women, that have caring obligations toward a frail members of their household. However the actual number of vacation days they can benefit from is rather small (maximum 3 days in 1 year) with respect to International standards (for instance the seniority days in the
In short the Government successfully conveyed time reconciliation policies into companies' strategies especially after the 2000. The last two measures discussed above are of a great importance not only because they cut the main disincentives to older workers' retainment: the labour costs, but because they involved for the first time social partners.

Nonetheless this conveyance stopped in 2004, when the law 243/2004 abolished the partial retirement schemes and moved the incentives entirely to supply-side (pension bonus). According to the new rules older workers postponing their entry in a seniority pathway by two years, can receive the social security contribution directly in their wage. As shown by OECD (2004), the take up of the pension bonus was quite limited. This is because, while requiring the explicit consent of employers, the bonus provided no compensation for additional labour costs they had to incur. Due to the low take-up the pension bonus was substituted in 2006 by a solidarity agreement between the generations (budget law 296/2006) re-introducing incentives for intergenerational turnover. According to this measure, workers aged 55+ could shift their contract from to full to part-time to allow for newly hired under the age of 25 years (or under 30 if holding a university degree) (Mirabile, Carrera, and Montanari 2006).64

The demand incentives set to foster the implementation of time reconciliation policies are the only governments' attempts to convey retaining policies, which hold a specific target on older workers. On the contrary, the measures aimed at fostering other retaining policies aimed at improving the job quality of the whole workforce and not at retaining older workers. As a result those measures are mainly regulatory and provide companies with no incentives or obligations constraining their HRM policies toward retaining older workers.

The almost complete lack of measures conveying health reconciliation policies is often justified as a consequence of the high occupational safety granted to the whole workforce by the Italian legislation, which is deemed to be one of the most advanced in Europe. A very recent update of the legislation, whose implementation overrun the period of observation, is introduced in 2008 and 2009 (law 81/2008 and law 106/2009), transposed a European social pact on occupational safety and especially the stress at work65 (Mirabile 2004; Colombo 2013). Also in this case these measures had no specific targets on older workers.

The high standards in occupational safety do not provide relevant information about the standards in health reconciliation, because the two concepts overlap only partially. While the first concept deal with measures aimed at reducing accidents and professional diseases, the second specifically deal with measures that make working conditions not only safe but also suitable for older workers needs and preferences.

In all, since no direct constrains or benefits are set for social partners and companies, the system failed to convey top-down the health reconciliation policies. Their implementation is thus for companies wholly voluntary.

As in the Netherlands and in Germany, also in Italy age equality, here defined as the perceived support from bosses and colleagues and the equal treatment in the working environment, is only

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64 At the moment of the writing data over the implementation of these incentives are not yet available.
65 In short, this law introduces a single framework for a systematic prevention, reporting of occupational accidents in big medium and small companies in collaboration with social partners and bilateral bodies operating at the workplace level.
indirectly promoted with ban of age discrimination in employment practices. Although the principle of equality and equal treatment is formally included in the art. 3 and art. 37 of the Italian Constitutional law, the ban of discriminatory acts in reason of age is introduced only in 2003 with the Law 216/2003. This law transposed the European framework directive on equal treatment and employment and occupation (2000/78/EC), and updated the Italian legislation to the EU standards (Ciccarone 2012).

This conveyance is nonetheless indirect because it sanctions employers once the discriminatory act are brought to trials66, but does not affect the discriminatory attitudes towards older workers. Since the attitudes remains unchanged, HRM policies continued to discriminate senior employees (for instance excluding them from training and shedding them first in case of redundancy), and to promote the diffusion of discriminatory attitudes from bosses and colleagues. In short, the age discrimination ban did not convey effectively age equality in the companies.

Finally also the conveyance of the employability of older workers was pursued only indirectly in the more general European framework of lifelong learning. The first legal framework was established by the law 236/1993 and further developed by the law 53/2000. A joint financing system of lifelong projects is established between the state and regions, which access to European Social Funds (ESF). Financing can be claimed by single companies or by group of companies within the same sector or with similar needs for skills' reconversion, and often requires the agreement of social partners. An alternative financing system is created in sectors dominated by small-sized companies, hardly reachable by social partners. Here lifelong training is promoted by inter-professional joint funds, managed by bilateral bodies (the so-called enti bilaterali67) in the small trade, craftsmanship, services to the people and to the enterprises. Despite those integrated attempts of promoting lifelong learning in all the sectors of the Italian productive system, those attempts remain rather vague, because they are not targeted on older workers. No requirement or incentives are in fact set to compel or enhance companies to include older workers in the financed training plan68 (OECD 2004; Ciccarone 2012).

All in all, as I discussed above, with the exception of demand-side incentives promoting part-time in the late career, here called time reconciliation, no other measures were directly conveyed by the governments to convey retaining policies HRM strategies. They improved the general framework, which nevertheless kept the implementation of retaining policies voluntaristic for companies.

The next section is devoted to discuss the reasons why the weak organizational articulation of both unions and employers associations hindered the top-down conveyance of retaining policies through the collective bargaining system. In short this system, although able to strategically coordinate HRM policies, lack the central structures able to convey retaining policies from the governments' to the confederation's strategy. The lack of this structure made the inclusion of retaining policies in CLAs voluntaristic.

66 The law that ban age discrimination impose in fact to reverse the burden of the proof. Once the discriminatory act is reported to the public authorities, it is the duty of the employer to prove that the contrary is true.
67 The enti bilaterali are private institutions composed in equal number by representatives of employers and employees in sectors where the coverage of the collective bargaining is marginal due to the predominance of small-sized companies (such as construction or craft). Generally their main finalities are to recruit social contributions and allocate social benefits in case of unemployment and occupational disability and to manage funds for lifelong learning (Leonardi, 2004).
68 A partial exception is represented by the training plans targeted by public employment agencies which give a preference to the inclusion of older unemployed as a category experiencing serious obstacles to their re-integration. However these measure lie outside the focus of this research for two reasons. First it does not enhance companies to retain but to recruit older workers. Secondly it is implemented in 2009, when the period of observation stops.
10.3 Institutional affinities

As described in Chapters 1 and 3, in Italy both labour and capital interests' fragmentation undermined the development of a vertically organized structure. For employers this fragmentation is functional and reflects a productive system where few large companies in the industrial and service sectors are juxtaposed to a myriad or small and very small companies in craft, agriculture, and trade. Because of this functional differentiation, the vertical structures can not converge at the peak in a single confederation. The confederations themselves remain to a some extent industry-based: Confindustria, for industry, Confcommercio for trade and retail, Confartigianato for craft, and Confindustriasi for innovative service. The lead is taken by the confederation representing the most resourceful interests: Confindustria, which then shape the strategy pursued in the social dialogue on the interests prevailing among large industrial companies. Nevertheless minority currents speaking for small and medium companies became increasingly powerful in the last 15/20 years (Baccaro and Pulignano 2009).

Also fragmented, but ideologically, is the organization of the trade unions. Two main boundaries, partially religious and partly political, gave birth in the second post-war to three main associations: the Conferenza Generale del Lavoro (CGIL- General Labour Confederation) with a communist background, the Confederazione Italiana Sindacati dei Lavoratori (CISL- Italian Confederation of Trade Unions), with a cristian-democratic background, and the Unione Italiana dei Lavoratori (UIL- Italian Union of Workers), characterized by a social-democratic background. Also in this case, the ideological fragmentation led interests to converge vertically into three separated peak organizations. Unlike employers, the CGIL, CISL, and UIL take part to social dialogue separately. Not only they are separate in all the interactions they take part to: industry, territorial and company bargaining. This is because, unlike in Germany and in the Netherlands, in Italy none of the unions' currents can claim to be so encompassing as to be able to act on behalf of the whole workforce (Regalia and Regini 1998).

The scarce unilateral coordination of the unions (as apposed to the DBG in Germany or FVN in the Netherlands), preventing a fortiori a bilateral one (as opposed to the STvdA in the Netherlands69) is typical, as explained by Crouch (1993), of cases where in the early stage of the labour movement a culturally-dominant current (in this case catholic) excluded the participation of more radical one (in this case communist) . As a result of its early exclusion, CGIL developed a contentious attitude, which permeate the interactions with not only its opponents (employers' associations or the governments), but also with the CISL and UIL.

All in all, the limited representativity of Confindustria and the contentiousness of the unions made it difficult for the government to commit the bargaining organizations to implement retaining policies. This prevented the conveyance of these policies in a system where on paper industry bargaining have the capacity of coordinating HRM strategies.

69 As explained in Chapter 5 and 8 StvdA (Stichting van de Arbeid) is the bilateral foundation representing the interests of both employers and employees at national level. Besides taking part to the Consultative process with the Government and give a strategical address to their members (as BDA and DGB) they can steer directly the industry-level bargaining by signing agreements and common recommendations.
Likewise the social dialogue's practices (see Chapter 7), also collective bargaining was regulated only in 1993 with the July, 27th protocol. Before that the collective negotiations prioritized either the central or decentralized level, according to the contingent power balance between unions and employers associations. As explained by (Regalia and Regini 1998), the “dualism” of the collective bargaining in Italy followed historically two phases. In the post-war reconstruction large companies, organized in the Confederazione Industria organization, imposed the predominance of the central-industry level. The power balance shifted to employees at the end of the 1960’s, when, after a wave of generalized strikes (the Hot Autumn), they obtained to adjust their wage to the companies’ productivity. For this purpose a new unionised structures was created at the shop floor: Consigli di Fabbrica (Factory's Councils) and since 1970 Rappresentanze Sindacali Aziendali (RSA- Company's Union Representative Bodies created by Law 300/1970). These bodies represented the “most representative” unions in the firm (typically CGIL, CISL, and UIL) and signed agreements valid for the whole personnel (Baccaro and Pulignano 2009). The institutionalization of RSA made possible the second phase, where the rise of the international market competition pushed the bargaining to the shop floor. During this period, decentralized negotiation adapted the working conditions to the changing market demands and the industry negotiations extended minimum standards bargained at the company level for the whole workforce (Baccaro and Pulignano 2009; Regalia and Regini 2004).

This dualism is formally overcome in 1993, when the July protocol, gave a predominant role to the industry CLAs, which define every two years the inflation-linked wage rises and every four years the general rules on employment conditions. By defining both the competences and the minimum standards of the decentralized bargaining taking place at territory for small companies and enterprise level for larger companies, this system is formally highly coordinated. If retaining policies are included among the general employment conditions in industry CLAs, they have to be implemented by the decentralized negotiations according to the current circumstances in the territory or company and in turn they have to be adopted by HRM. The institutionalization of this formal organized decentralization is however undermined by two flaws in the implementation of the 1993 protocol (Regalia and Regini 2004; Negrelli and Pulignano 2008). These two flaws prevent the employment conditions included in industry CLAs from coordinating the HRM practices by limiting the spread of the territory or company negotiations.

First the voluntaristic diffusion of unions' bargaining structures in small companies, undermine the enforcement of industry CLAs in a significant part of the Italian production system. After 1993 those structure are called Rappresentanze sindacali unitarie (RSU- Unitary Representation Bodies). Unlike RSA, RSU includes representatives voted by both unionised and non-unionised personnel. Like RSA, their institution is not compulsory, but based on a voluntaristic acceptation of the companies' management. This limited the diffusion RSUs to companies, that for their large size, benefit from the coordination provided by the company bargaining. On the contrary, by excluding unions from the myriads of small companies, it reduced the facto the capacity of the bargaining system to coordinate HRM strategies, often based on employer's unilateral actions (Pulignano 2010; Bordogna and

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70 This level was favoured by employers because it allow them to set wages below the effective productivity growth and thus to profit from the economic expansion relatively more than the employees.

71 According to one of the few studies based on a representative sample of the private-sector enterprises, the company bargaining involved between 1995-1996 only 10% of the enterprises and covered about 39% of the employees. This
Pedersini 2001; Bordogna 1997; Bordogna 1999; Rossi and Sestito 2000).

Second until 2009\textsuperscript{22} the poor enforcement procedures allowed the increasingly sharper divisions mounting after mid-1990's between employers' organizations and unions and among CGIL, CISL, and UIL to stalemate both industry and decentralized bargaining. The enforcement procedures, by omitting procedural deadlines and by fostering interpretative differences, discouraged bargaining institutions from cooperating, especially at lower levels where the bargaining was voluntary. Therefore also the territorial bargaining, originally thought as a most effective level to involve lukewarm employers in small companies, failed to coordinate employment conditions in a large part of the productive system (Regalia and Regini 2004; Negrelli and Pulignano 2008).

All in all the poor vertical coordination of the interests' intermediation system made the conveyance of retaining policies voluntaristic first for unions and employers and then for companies for two reasons. First the scarce unilateral and thus bilateral coordination that both unions and employers can express prevent them from constraining the strategy of their bargaining associations and from affecting their agreements. Second the poor coordination of the collective bargaining system fails to constrain HRM practices, especially but not only among the small companies. In the next section hypotheses are formulate about the extent to which this voluntaristic conveyance affected the effectiveness of retaining policies and their distributional effects.

10.4 Working hypotheses

10.4.1 Hypotheses by retaining policies

As explained in the previous section, the poor vertical coordination of the interests' intermediation system prevented the governments from conveying retaining policies through the collective negotiations. Although the 1993 protocol pushed for a more regular meetings between the government and the social partners, those meetings were not institutionalized enough to generate a cooperative partnership. This prevented the Government from achieving consensus among unions and employers' confederations about the necessity of promoting the diffusion of retaining policies among companies, as in the Netherlands.

Unions' main concern is that the EWL re-conversion could not be sustained by the Italian productive system which would continue shedding older redundant workers. Their choice of preserving the generosity of pathways of exit has to be interpreted in this sense as a way of protecting those redundancies from more marginal spells of unemployment.

More recent opinions favoured the implementation, also through the collective negotiations, of a wide variety of retaining policies: such as part-time, specialized training, and organizational change to improve the working conditions of older workers, mentoring and so on. However no concrete actions

\textsuperscript{22} In January 2009 a new tripartite agreements updating the 1993 protocols included some procedural rules to moderate the contentiousness in the CLA's renewals. For instance: clear deadlines are set for the starting of the negotiations before the CLA expiry (6 month for industry and 2 months for decentralized level), by that time the counterparts are compelled to present their proposals, during the negotiations until the CLA expiry no-strike obligation applies (Pedersini 2011).
were undertaken to include these issues into collective agreements until 2009. This is because unions feared that including companies' obligations to retain older workers limited also the freedom of older workers to exit early. Despite these common platform, ideological differences made CISL and UIL's positions more moderate and CGIL's positions, more intransigent, on defending early exit rights (Mirabile, Carrera, and Montanari 2006).

The strategy pursued by employers' associations was also fragmented, especially after the fracture between big and small companies became more evident from the second part of the 1990's onward. Since small-sized companies were averse to any constrains to their entrepreneurial autonomy, their growing power undermined the capacity of the newly adopted bargaining system to coordinate working conditions, especially if pertaining to a non-wage sphere (Negrelli and Pulignano 2008).

All in all, the fragmented top-down diffusion of the EWL in both social partners' organizations hindered the inclusion of retainment policies in collective agreements. Neither employers and employees' representative accepted to voluntarily constrain their members' autonomy.

Furthermore, as mentioned in the previous paragraph, the inclusion of retaining policies in industry CLAs was also hindered since no procedures facilitated a compromise among strongly antagonistic positions. Moreover requiring the approval of all the bargaining parties, which severely prevents innovative measures, because often controversial, and make the system substantially "immobile" (Ichino, 2006). Because of that even if industry employers' representatives included retaining policies in the bargaining agenda, an agreement would be hardly reachable, because especially the most intransigent current of the union will not accept that the decision of EWL can be forced by employers and not voluntary chosen by older workers.

Because of the poor coordination of the bargaining system in Italy, the top-down dissemination of retaining policies is severely limited, unless it is promoted directly by the Government. This is the case of time reconciliation policies. As described in Section 10.2 the social protection system enhances companies to retain older workers by reducing their labour costs if they enter progressive retirement schemes. Therefore it can be argued that time reconciliation policies are conveyed into companies' HRM because they aligned the labour costs of older workers closer to their productivity.

Because of that older workers working part-time are expected to be significantly less likely than full-time workers to enter a work-retirement trajectory (HP 10.1). Since men are more likely than women to become eligible for progressive retirement, working part-time will lower the likelihood to undertake a work-retirement trajectory, significantly more for men than for women (HP 10.2).

On the contrary physical and mental health reconciliation age equality, and employability are conveyed only indirectly by the Government. Accordingly older workers experiencing a low physical and mental strain or a supportive atmosphere or a fair treatment, or skills' development in the last job are expected to NOT have a significantly lower likelihood to enter a work-retirement trajectory than older workers, who did not (HP 10.4 - HP 10.6 - HP 10.8).

The effectiveness of retaining policies is expected to be low because they were not conveyed by the bargaining system into HRM strategies. Since their implementation was not coordinated, policies may be expected to result non-significant across the whole economy. Alternatively other dynamics, both demographic and economics, could encourage companies to implement retaining policies in some industries more systematically than in others. In this case also the effectiveness of retaining policies is
expected to vary accordingly.

10.4.2 Hypotheses by industry

As shown earlier, the systematic exclusion of retaining policies in CLAs made their implementation voluntaristic for companies in Italy. The governments succeeded in conveying only time reconciliation policies with direct incentives that, although not legally binding, reduced the labour costs of older workers switching to part-time in their late career. Since part-time incentives are the same for the whole economy, NO significant industry pattern is expected in the likelihood of entering a work-retirement trajectory among older workers working part-time (HP 10.3).

As for the other sets of retaining policies two competing hypotheses can be formulated. The first hypothesis argue that the voluntaristic implementation of retaining policies does not generate any industry pattern in their effectiveness, because the aversion of companies toward retaining older workers is generalized. Because of that a low physical and mental strain or a supportive atmosphere and a fair treatment, or training at work are expected to NOT significantly lower the likelihood to access a work-retirement transition across the economy. (HP 10.5a- HP 10.7a- HP 10.9a).

The second hypothesis is that, although no legally constrained, companies implemented retaining policies only if they experience circumstances that made profitable to retain older workers, such as a skills' supply shortage. As we have seen in Section 3.2, Italy experiences a progressive curtailment of young cohorts that inflow into the labour market since the end of the 1980's.

In the industries exposed to the international competition older workers were still be redundant and thus companies still profit from shedding rather than retaining them. On the one hand the increased competitiveness accentuated the economic turmoil, which depressed the job demands. On the other hand the continuous technological progress made older workers' skills obsolete. These segments fall into the private sectors and include the core Italian industries based on low-skills manufacturing, services, and craft and knowledge-based industry in the tertiary sectors, such as financial intermediations and business activity. On the contrary companies in sheltered industries are expected to implement retaining policies to compensate the workforce shortage they experience.

Because of that the second competing hypothesis is: a low physical and mental strain at work or a supportive atmosphere or a fair treatment or skills' development at work are expected to significantly lower the likelihood to access a work-retirement transition only in the following industry: construction, public administration, health, education and social work. (HP 10.4b- HP 10.6b- HP 10.8b).

Table 10.2 provides a summary of the hypotheses concerning the extent to which retaining policies are expected to extend working life in Italy, depending on the more or less successful top-down dissemination.

Table 10.2: Summary of the top-down dissemination of retaining policies in Italy and hypotheses.

<table>
<thead>
<tr>
<th>Retaining policies</th>
<th>Top-down dissemination</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time reconciliation</td>
<td>Government bound company's strategy to retain older workers by working part-time in the last job is expected to lower significantly the</td>
<td>HP 10.1: Because of the direct incentives to progressive retirement,</td>
</tr>
</tbody>
</table>
### 10.4.2 Hypotheses by industry

<table>
<thead>
<tr>
<th>Physical and Mental Health reconciliation</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social protection's and partnership's attempts to improve the occupational safety at work are not specifically targeted on retaining older workers.</td>
<td><strong>HP 10.2:</strong> Since men are more likely than women to become eligible for progressive retirement, working part-time in the last job is expected to lower the likelihood to undertake a work-retirement trajectory, significantly more for men than for women.</td>
</tr>
<tr>
<td>No policies aimed at improving health reconciliation are included in industry CLAs.</td>
<td><strong>BY INDUSTRY:</strong></td>
</tr>
<tr>
<td>HP 10.3: Since part-time incentives are the same for the whole economy, NO significant industry patterns is expected in the likelihood of entering a work-retirement trajectory among older workers working part-time.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Age equality</th>
<th>Hypotheses</th>
</tr>
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<tbody>
<tr>
<td>The state attempts only indirectly to improve age equality by abolishing age discrimination in 2003 in all aspects of the employment relation.</td>
<td><strong>HP 10.4:</strong> Because health reconciliation is enhanced only indirectly, older workers experiencing a low physical and mental strain at work are expected to NOT have a significantly lower likelihood to enter a work-retirement trajectory than older workers, who did not.</td>
</tr>
<tr>
<td>No policies directly aimed at improving age equality are included in industry CLAs.</td>
<td><strong>BY INDUSTRY:</strong> Two competing hypotheses</td>
</tr>
<tr>
<td>HP 10.5a: A low physical and mental strain in the last job is expected to NOT significantly lower the likelihood to access a work-retirement transition across the economy.</td>
<td></td>
</tr>
<tr>
<td>HP 10.5b: A low physical and mental strain in the last job is expected to significantly lower the likelihood to access a work-retirement transition only in the following industry: construction, public administration, health, education and social work.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Employability</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation of lifelong learning but without any specific focus on older workers.</td>
<td><strong>HP 10.6:</strong> Because age equality is enhanced only indirectly, older workers that experiencing a supportive atmosphere and a fair treatment at work will NOT have a lower likelihood to enter a work-retirement trajectory than older workers that do not.</td>
</tr>
<tr>
<td>No policies directly aimed at improving employability are included in industry CLAs.</td>
<td><strong>BY INDUSTRY:</strong> Two competing hypotheses</td>
</tr>
<tr>
<td>HP 10.7a: A supportive atmosphere and a fair treatment at work in the last job is expected to NOT significantly lower the likelihood to access a work-retirement transition across the economy.</td>
<td></td>
</tr>
<tr>
<td>HP 10.7b: A supportive atmosphere and a fair treatment at work in the last job is expected to NOT significantly lower the likelihood to access a work-retirement transition only in the following industry: construction, public administration, health, education and social work.</td>
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</tr>
</tbody>
</table>

### 10.5 Findings

The hypotheses in Table 10.2 are tested by using a piecewise-constant exponential model (PCE). The sub-sample is restricted to the cohort born from 1945 onward, because it is investigated to which extent the entry in the work-retirement transition of the cohorts that reach the age of 50 years in the mid-
1990's have been significantly affected by the implementation of retaining policies. Since in Italy retaining policies, with the exception of time reconciliation policies have not been systematically implemented, it is hypothesized that they will not have a systematic effect on work-retirement trajectories. Therefore it is expected that the timing of exit of older workers that experienced a good job quality in their last career will not be significantly higher of the exit timing of older workers who did not experience them.

Estimations are expressed in hazard ratios in Table 10.3. The descriptive of the Sharelife sample I have used in this analysis are presented in Section 4.2.

Model 10.1 includes the controls (see the controls' estimations in Appendix F) and the five job quality dimensions. Model 10.2 includes the interaction between gender and time reconciliation, and the subsequent models include the interaction between each job quality dimension and the industry.

As it can be seen in model 10.1, the effectiveness of retaining policies is rather limited in Italy, because limited is the social partners' conveyance of retaining policies into companies' HRM. Only two of the five job quality dimensions lower the likelihood of older workers to undertake work-retirement trajectory. The first dimension is the part-time in the late career (time reconciliation). As hypothesized in HP 10.1, working part-time in the late career reduces significantly the likelihood of exiting employment. This is due to the monetary incentives that are directly offered by the social protection system to increase the companies' profitability to use time reconciliation policies within the scheme of progressive retirement. This argument is also supported by the finding that part-time reduces the exit likelihood of men far more than the likelihood of women, because the former are more likely than the latter to be eligible to progressive retirement scheme (model 10.2). Since the entry into progressive retirement requires a very long and stable career (about 35 years\textsuperscript{73}) and men have in average a much more stable career than women, companies profit comparatively more from retaining men than women working part-time. Moreover, as hypothesized in HP 10.2, model 10.3 shows that the effect of part-time on the timing of the employment exit does not significantly vary across industry, because the social protection's incentives is the same in the whole economy. All in all, time reconciliation policies are effective in extending working life because the social protection's system successfully enhance companies to implement them.

The second dimension that significantly delays the exit from employment is the low mental strain (or mental health reconciliation see model 10.1). This effect is partially not coherent with the hypothesis HP 10.3, because differently from time reconciliation policies, it can not be explained by incentives set either by the social protection or by the collective bargaining system. Although an increasingly higher concern is paid by the social protection system and the social partners toward the improvement of healthy working conditions, their attempts are very recent (2008-2009) and they do not directly bind or enhance companies to retain older workers\textsuperscript{74}.  

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\textsuperscript{73} The main eligibility condition to benefit from the progressive retirement scheme is to be entitled or almost entitled to the seniority pathway (35 years of contributions).

\textsuperscript{74} Between 2008 and 2009 a single act concerning occupational health and safety is introduced by the laws 81/2008 and 106/2009 update the previous legislation to the innovations introduced by the European Union and to the changes occurred in the labour market. It provides a unified framework that promote the prevention of occupational accidents and diseases by enhancing a more systematic information, and training of workers, a greater endorsement of social partners and a reinforced penalty system. Moreover social partners in 2008 sign inter-confederal agreement with which they adopt the indications included in a European framework agreement on work-related stress. They provide common guidelines to their associations responsible of the collective bargaining to introduces measures that at industry and company level can release the mental
Alternatively we may think that companies are enhanced to retain older workers experiencing a low mental strain at work because they in average perform better than older workers that suffer from a high level of stress. By increasing the wellbeing at work, a low mental strain increases not only older workers preference for work but also their productivity and indirectly reduced their labour costs, similarly to as a monetary incentives. The lower likelihood of older workers with a low level of mental strains to exit employment does not derive in this case from an top-down conveyance of mental health reconciliation policies, but it is the result of companies' strategy of profit maximization.

As for three remain job quality dimension, physical health reconciliation, age equality and employability, model 10.1 shows no significant effect on the likelihood of entering a work-retirement trajectory. As the hypotheses HP 10.3- HP 10.5- HP 10.7 predicted, since both the social protection and the partnership system fail to bind companies to retain older workers, HRM policies do not systematic improve their working conditions to extend working life. Because of that no significant difference in the timing of employment exit exists between older workers that experience better or worse working conditions.

The competing hypotheses concerning the industry differences in the implementation of retaining policies are tested in model 10.4-10.5-10.6-10.7. The first set of the competing hypothesis (a) expect no industry patterns in the effect of working conditions on the exit timing. The second set instead (b) predicts that working conditions will lower the likelihood of exiting employment only in industries less affected by the globalization forces, because only in these industries companies experience a shortage of the work supply that they have to compensate by retaining older workers. In the models I compare whether the effect of working conditions on timing of exit from employment significantly differ in each industry with respect to the effect they have in one of the industry challenged the most by the globalization: the manufactory.

Models 10.4, 10.5, 10.6, and 10.7 support to a greater extent the second set of hypotheses (b), than the first. As shown by the estimates of the interaction between the set of retaining policies and the industry, the likelihood of entering a work-retirement trajectories of older workers experiencing either a low mental strain at work (model 10.5) or a supportive atmosphere or a fair treatment (model 10.6) or skills' development at work (model 10.7) is significantly lower is industries protected from the high competitiveness and technological development induced by the globalization: construction and the public sector. Companies within these two industries experience circumstances, in this case a shortage of the work supply, which automatically bind them to substitute their shedding strategy with a retaining strategy. Since they can not recruit the workforce they need in the labour market, they need to encourage their older employees to work longer by implementing retaining policies. Furthermore the results gives us an important insight over which strategy is pursued by the different sectors to retain older workers. While the construction industry retained older workers implementing mental health reconciliation and age equality policies, the public sector implemented instead employability policies. None of them use physical health reconciliation policies, whose effectiveness remain non-significant in all the industries.
### Table 10.3: Piecewise-constant exponential model (PCE) estimating the effectiveness of retaining policies in extending working life in Italy.

<table>
<thead>
<tr>
<th>Source: Sharelife 2008-2009</th>
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</thead>
<tbody>
<tr>
<td>Age 49-54</td>
</tr>
<tr>
<td>Time reconciliation</td>
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<tr>
<td>Physical health reconciliation</td>
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<tr>
<td>Mental health reconciliation</td>
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<tr>
<td>Age equality</td>
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<tr>
<td>Employment</td>
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<tr>
<td>Time reconciliation * woman</td>
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<tr>
<td>Physical health reconciliation</td>
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<tr>
<td>Mental health reconciliation</td>
</tr>
<tr>
<td>Age equality</td>
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<tr>
<td>Employment</td>
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<tr>
<td>Interaction</td>
</tr>
<tr>
<td>Physical health reconciliation</td>
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<tr>
<td>Mental health reconciliation</td>
</tr>
<tr>
<td>Age equality</td>
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<tr>
<td>Employment</td>
</tr>
<tr>
<td>Events</td>
</tr>
</tbody>
</table>

#### Source: Sharelife 2008-2009
10.5 Findings

**Dependent variable:**

**Work-retirement trajectory:** time-varying categorical variable equal to: 0 if the respondent is working at the end of the person-period spell, 1 if the respondent left employment at the end of the person-period spell.

**Independent variables:**

- **Time reconciliation:** time-varying dummy equal to 1 if the respondent is working in a part-time job in the person-period spell
- **Physical health reconciliation:** time-constant interval scale obtained by Factor Analysis (see chap. 4) equal from 1 to 4. It measures the self-perceived quality of the material working conditions in the last/current job by looking at how the job is physically demanding and the workspace comfortable
- **Mental health reconciliation:** time-constant interval scale obtained by Factor Analysis (see chap. 4) equal from 1 to 4. It measures the self-perceived emotional burden of the last/current job looking at the time pressure, the emotional burden, and conflicts that the work implies.
- **Age equality:** time-constant interval scale obtained by Factor Analysis (see chap. 4) equal from 1 to 4 measuring self-perceived recognition and support on the last job, the quality of the working atmosphere and the respondents’ perception over how fairly they are treated by their bosses
- **Employability:** time-constant interval scale equal from 1 to 4 measuring the extent to which the skills of respondents are developed in the last/current.
- **Industry:** time-varying set of dummy variable over the industry where the respondent is working in the person-period spell.

For a more detailed description see Chapter 4.

All in all, the results show that the effectiveness of retaining policies showed to be poor in Italy. According to the hypotheses retaining policies are effective only when their implementation is successfully conveyed by the social protection system in the strategy of companies with financial incentives that reduce the labour cost of older workers, as in the case of time reconciliation policies. The effectiveness of the other retaining policies is compromised because their implementation is voluntaristic for companies. Since companies are not bound by the collective bargaining system to implement retaining policies, they implement them only when some circumstances, in this case a workforce shortage, require them to systematically retain older workers. Therefore only in those industries (here construction and the public sector) retaining policies prove to significantly extend working life.

10.6 Conclusion

In this chapter it was investigated the extent to which the weak organizational articulation of unions and employers' associations influenced the effectiveness of retaining policies implemented between the mid-1990's until 2008-2009. The data estimated by the CRM supported to a great extent the empirical implication derived from the HP 3.5. It hypothesized that the low articulation of interests' coalition, hindering the effectiveness of retrenchment policies, prevented the conveyance of retaining policies into confederal strategy and in turn downward. Due to this failed conveyance between the mid-1990's and 2009 no CLAs included retaining policies and thus their implementation was wholly voluntaristic for companies.

At aggregate level the weak articulation significantly proved to hinder the effectiveness of retaining policies. In fact only two out of five job quality dimensions were found to significantly delay the exit from work. The first is the time reconciliation. This is because policies promoting part-time in the late career were conveyed by direct incentives that by-passed the self-regulation mode allowing unions and employers' associations to hinder the effectiveness of these policies. Another empirical support to the success of this direct conveyance is the higher effectiveness of time reconciliation policies for men than for women. This is because men, having a more stable working career, are more likely than women to become eligible to partial retirement schemes, where direct incentives are are allocated.
The second is mental reconciliation. This was not predicted by the empirical expectation HP 10.6 because policies lowering the stress and pressure at work were not directly conveyed by the governments. It may be explained as a result of the behavioural effect of low stress at work, which boosting the productivity of older workers, promoted companies to retain them even if no external incentives constrain their HRM.

Concerning the distributional effect of retaining policies, data support more the empirical implications derived from HP10.9a than HP10.9b. The only exception concerned time reconciliation policies, because the direct incentives encouraged companies across the economy, and physical health reconciliation. For the rest retaining policies proved to be effective only in sheltered industries, where companies experienced a skills' shortage replaceable by older workers.

All in all, because of their weak articulation unions and employers' organizations proved to hinder the effectiveness of retaining policies. As a result they are effective only if they are directly conveyed by direct incentives of the governments or if they were part of the competitive strategies of companies.
11 Conclusions

This study was about the institutional conditions explaining the cross-national variation of activation policies' outcomes in the Netherlands, Germany, and Italy between the mid-1990's and 2009. The purpose of activation policies was to re-convert the existing retirement incentives at first in the welfare schemes that had institutionalized exit from work before statutory retirement age (pathways of exit). Although triggered by irresistible environmental pressures, activation policies could not be adopted unilaterally by governments. Facing strong opposition from both the workforce and their employers, these policies required the direct support of the organizations representing their interests. On the one hand their consensus was needed to avoid the blame raised by the retrenchment of pathways of exit to de-legitimize the process itself. On the other hand their commitment was required to prevent also HRM strategies from compensating the effect of retrenchment policies.

The institutional conditions that explained the outcomes of the EWL reconversion in the Netherlands, Germany, and Italy are found in the institutional affinities between protection productions and partnership. Since the protection regime here fostered similar expectations of the externalization coalition, the vertical coordination (here defined as organizational articulation) of the labour and capital interests assumed a particular relevance. This is because, defining the predominant traditions of the state-society partnership, the articulation of interests indicates the characteristics of the modes where the interactions for the adoption of activation policies take place.

The partnership tradition is also relevant because it helped identifying the conditions under which the actors interact and in turn their strategical priorities. In contentious partnership the state tends to interact only when it lacks the necessary legitimacy to act unilaterally, and is thus dominated by the policy interests of the counterparts. On the contrary, the more cooperative partnership the more state-society interactions are institutionalized and based on policy interests of the state. This is because the state can exclude in the shadow of its hierarchy the societal groups pursuing particular at the expenses of general interests.

The typical modes of social governance are: consultation, concertation, self-regulation, self-administration. Although they are not associated to any particular power balance between actors, in combination with the partnership tradition allowed to predict that the outcomes of the EWL re-conversion are directly associated to the organizational articulation of labour and capital' interests. Since the first step of the EWL re-conversion is the retrenchment of pathways of exit, the focus moved at national level where social partners take part in the policymaking.

11.1 Part 2: Effectiveness of retrenchment policies

The conditions under which the effectiveness of retrenchment policies was promoted or hindered was investigated in Part 2. The first instance where the externalization coalition shaped the EWL re-conversion was the national level, in the social governance modes where retrenchment policies are formulated and implemented. Using a Competing Risk Model, this effectiveness of retrenchment
policies was estimated as cohort effects on the likelihood of accessing work-retirement trajectories based on three main pathways of exit: unemployment, disability, and early retirement.

According to the empirical implications of HP 3.2, HP 3.3, and HP 3.4, estimations show that between the mid-1990's and 2009 retrenchment policies have been more effective in the Netherlands, less effective in Germany and the least effective in Italy. For the Netherlands (Chapter 5) the cohort effect showed that retrenchment policies are associated with a lower likelihood of entering two out of three pathways: the disability and pension. The same effect is not found for the unemployment pathway, which was retrenched only towards the end of the period of observation. At the same time, the fact that the cohort effect is not significantly positive was a hint that, most likely for its limited generosity, unemployment was not used as a functional alternative of the other two pathways.

A lower effectiveness was estimated for the retrenchment policies in Germany (Chapter 6). Here the cohort effect showed a significant negative association only with the likelihood of accessing pension pathway, which is moreover comparatively greater for women than for men. Cohorts effect is non-significant for the disability pathway. This is because its retrenchment dated back to 1984 and can not be detected in this model. Finally the most interesting case concerned the unemployment pathway. Here the cohort effect showed that overall the retrenchment, occurring in the second half of the 2000's, had no significant effect on the inflow across the whole economy. However the effect showed that unemployment access is significantly higher after the retrenchment of the pension pathway only for part-time workers. This meant that, differently from the Netherlands, unemployment was a functional alternative of pension, but only under the part-time retirement schemes.

In Italy (Chapter 7) the effectiveness was limited only in the pension pathway and only in some parts of the economy. With respect to the civil servants, the timing of entry grew significantly slower in the industries of the private sector under the protection of social partners. The negative cohort effect in disability pathway did not prove to be significant due to the very few transitions examined. At last the most interest cohort effect is estimated in the unemployment pathway. Overall it resulted that unemployment was increasingly used after the mid-1990's to shed redundancies before the eligibility to pension pathway. Nevertheless, due to the limited number of transitions, it could not be proven that this more frequent access was limited to the where CIG schemes were managed by social partners.

With regard to the research question:

RQ2: Under which institutional conditions has the involvement of unions and employers' associations in the formulation and implementation of retrenchment policies promoted their effectiveness in the Netherlands, Germany, and Italy between the mid-1990's and 2009?

Analysis has shown that the involvement of social partners in the policymaking of retrenchment policies implied always a political exchange that limited the effectiveness of retrenchment policies. Nevertheless, according to HP 3.2, this political exchange is rather limited in countries where the social partners are involved in modes approaching more the consultation than the concertation mode. This is because in consultation social partners pursue more power-maintaining over policy-oriented strategies and vice versa.

Accordingly, the political exchange in the Netherlands limited only the effectiveness to the safety
pathway that, for its marginal generosity, was not used as a functional alternative for the other two. On the contrary, in Italy the exchange required the transitional rules that hindered the effectiveness of retrenchment policies in a significant part of the economy.

In short, the institutional condition that prevented social partners from watering down the retrenchment proposed by governments is a organization of interests articulated enough to institutionalize a regular social dialogue. This is because interactions' iteration reduce for social partners the payoff of hindering the formulation of retrenchment policies at the expenses of their future engagement in the policymaking.

As hypothesized in HP 3.3, the second institutional condition supporting the effectiveness of retrenchment policies is a system of interests' intermediation so articulated as to be involved in implementation modes similar to self-regulation or self-administration. As shown in the Netherlands, the total internalization of VUT (early retirement schemes) costs discouraged social partners from causing a further increase of pay-roll taxes by preserving those schemes.

On the contrary, in Italy the effectiveness of retrenchment policies was apparently hindered by workplace representatives and the management of companies under CIG schemes. This is because they seemed to increasingly use those schemes to enhance the industrial re-structuring by shedding older workers with no additional costs. However the data limitation prevented to test this conjecture.

Instead, it was clearer that the bargaining organizations could hinder the effectiveness of unemployment's retrenchment, despite formally self-regulating the old-age part-time retirement schemes. Because of the institutionalization of the blokmodell scheme, based on vertical part-time, they could shed recipients much earlier than it was intended to.

The results also supported HP 3.4. Due to the high confederal-industry articulation, in the Netherlands organizations promote the shift toward pre-retirement schemes, first in the industries where their coordination capacity is higher and then elsewhere. In Germany the lower Confederal-industry articulation allowed the industry organizations to foster unintended effects.

In short, social partners promoted the effectiveness of retrenchment policies under interaction modes that limited either their power or the externalization of pathways' costs. This is because under these conditions opportunistic actions were either prevented or counterproductive for their members.

Although to a great extent findings are compatible with the empirical implications of the hypotheses formulated about the effectiveness of retrenchment policies, the research design does not allow to exclude alternative interpretations of the findings. If the role of social partners in affecting the retrenchment of the pension and disability pathway more straightforward, less clear is their role in the retrenchment of the unemployment pathway. Here the cohort effects are more likely to be explained by a unilateral action of the Government. This is especially true in Italy where in the mid-1990's an expansion of the unemployment pathway could be functional to prevent the economic restructuring to increase the already high youth unemployment and in turn widen the inders-outsiders cleavage.

Furthermore the findings obtained for Germany can be easily understood as a consequence of the economic shock that followed the economic unification. As it pointed out in the conclusions below more refined analyses need to be done in order to exclude these alternative explanations.
11.2 Part 3: Effectiveness of retaining policies

The organizational articulation of interests' associations did not only allow the social partners to affect the policymaking. Unions and employers associations coordinate top-down the incentives provided by the HRM policies through the collective bargaining system. Nevertheless collective agreements (CLAs) may convey two strategies, one opposite to the other. The first is to keep on shedding older workers with incentives able to compensate the retrenchment of the pathways of exit that the coalition could not hinder above. The second is to retain older employees with incentives able to support both their productivity and their work preferences.

Using a Piecewise-Constant Exponential Model, this effectiveness of retaining policies was estimated as the effect of five job quality dimensions in the last career on the timing of employment exit. The job quality dimensions were improved by five types of retaining policies: time reconciliation, physical and mental health reconciliation, age equality, and employability. The underlying assumption was here that only if the HRM strategies would aim at retaining older workers the effects of those dimension would significantly delay exit from work. The more HRM strategies tended to shed older workers the more the job quality's effect was assumed to be compensated by push incentives.

According to the empirical implications of HP 3.5 and HP 3.6, estimations show only partially that between the mid-1990's and 2009 retaining policies have been more effective in the Netherlands (Chapter 8), less effective in Italy (Chapter 10) and the least effective in Germany (Chapter 9). In the Netherlands improvements in job quality were to a greatest extent associated with a significant delay in the timing of exit from work. The only exceptions were the effect of the mental health reconciliation, shown not significant, and the time reconciliation for women, the only part associated to a lower exit age. The effect of retaining policies was stronger in industries where the policy dissemination in CLAs was higher.

In Germany improvements in job quality were generally associated to non significant effect on the timing of the exit from work. The only exception was time reconciliation, whose improvement only for women significantly delayed the timing of exit from work. The effect of retaining policies followed to some extent an industry pattern reflecting the dichotomy between sheltered and exposed industries.

Finally in Italy improvements in job quality were associated to a growing age of work exit only for time reconciliation and mental health reconciliation. As in Germany, job dimensions showed to some extent industry pattern reflecting the dichotomy between sheltered and exposed industries.

With regard to the research question:

RQ3: Under which institutional conditions have unions and employers' associations promoted the effectiveness of retaining policies in the Netherlands, Germany, and Italy between the mid-1990's and 2009?

Analysis has shown that unions and employers' organizations influenced the effectiveness of retaining policies, in some cases promoting it in other cases hindering it. This is because, depending on the articulation of the collective bargaining system, social partners were included in three nested self-regulation modes (national-sectoral-workplace collective bargaining) which promoted or hindered the
conveyance of retaining policies into the HRM strategy. Taken for granted that the collective bargaining system in the three cases under analysis is able to generate sectoral coordination of HRM practices, the key condition was here the articulation between the central and the industry levels. This articulation defined the extent to which the output of national bipartite or tripartite negotiations affect the strategy of the industry bargaining organizations to include retaining bargaining in CLAs.

At first according to HP 3.5 the effectiveness of retaining policies was promoted only if the retrenchment of pathways of exit internalized the costs of early exit. This is because the internalization compelled a shift in the Confederated strategy, which otherwise remained voluntaristic. Since in Italy social partners managed to preserve the pathways for their members, they faced no incentives to push retaining policies through HRM practices. This lack of obligations did not constrain companies to shift their shedding HRM practices unless environmental pressures made this shift part of their competitive strategy. All in all, the poor articulation of labour and capital interests made the conveyance of retaining policies wholly voluntaristic for both social partners and companies and in turn hindered their effectiveness.

The estimations supported also HP 3.6. Once the retrenchment of pathways of exit started to shift the Confederated strategy, the confederal-industry articulation affected the conveyance of retaining policies into the industry CLAs and thus into HRM practices. In the Netherlands the strong articulation of interests' organizations allowed the unions and employers' confederations to commit their members to include retaining policies in CLAs. This was thanks to the bipartite coordination granted by STvdA. By delivering common recommendations STvdA provided their members with the necessary incentives to discourage the opportunistic compensation of retrenchment policies and to improve the job aspects boosting the work preference and productivity of older workers. Because of this mutual conveyance a large part of the productive system was compelled to implement retaining policies and thus to promote their effectiveness. This mutual conveyance was instead prevented in Germany by the constitutional principle of Tarifautonomie (autonomy of collective bargaining). This principle, delegitimating any state and confederal attempts to interfere with collective bargaining, made the negotiation of retaining policies voluntary for industry organizations. The articulation of employers' interests is the only strong enough to unilaterally convey retaining policies into their members' HRM strategy with information campaigns. This is because BDA grew against the use of pathways of exit since the increasing cohorts of early retired would have raised the already consistent non-wage labour costs. This conveyance, despite raising awareness of the HRM practices able to boost the productivity in older age, did not promote the effectiveness of retaining policies for three reasons. First, BDA did not set any rewards or sanctions able to coordinate their members' HRM practices. Second, the membership's losses experienced by BDA from the late 1990's onward limited the part of the production system, especially among small companies, it could affect. Third, the chance of expanding old-age part-time retirement schemes hindered the conveyance of retaining policies into the unions' strategy, less concerned by the increments of payroll taxes.

To conclude, the institutional conditions under which unions and employers' associations promoted the effectiveness of retaining policies are two. First, the articulation of labour and capital interests had to be high enough to prevent them from hindering the effectiveness of retrenchment policies. Second, this articulation had to be institutionalized as a bipartitely coordinated collective bargaining system,
where retaining policies could be mutually conveyed by both union and employers' confederations.

11.3 Social stratification

The vertical articulation of the interests' organizations did not only affect the outcomes of activation policies, but also their distributional effect. Depending on how encompassing the interests they represented, unions and employers' associations were expected to minimize or intensify the distributional effects of activation policies across social groups, both intra and inter-generationally.

The estimation concerning both retrenchment and retaining policies in Germany, Italy, and the Netherlands showed that their outcome diverged not only in the magnitude, but also in the social stratification of their effect. As shown in the part of the empirical analysis, retrenchment policies displayed a significantly stratified effects only in countries where social partners hindered either their formulation or implementation, such as in Germany and Italy.

Partially against HP 3.7, data did not always depict the retrenchment's effectiveness to be significantly lower only among the core members of the externalization coalition. Because of the high horizontal coordination of the bargaining system, in Germany the unintended effects of the old-age part-time retirement schemes displayed no significant industry pattern. On the contrary, in Germany and in Italy the retrenchment of the pension pathway displayed distributional effects reflecting more clearly cleavages between core member and outsiders. In both countries the retrenchment of the pension pathway was much less effective for men than for women. Although women were more at the margin of unions' membership, this was due to the European directives on gender equality. Their reception required the governments to eliminate the more favourable eligibility conditions reserved for women, who then endured a sharper retrenchment than men. On the contrary, the significant industry pattern assumed in Italy by the cohort effect was a consequence of the generous transitional rules set for the coalition' core members. As a result of this exclusion, the age of the entry grew significantly slower in construction, manufacturing, and other community than in the rest of the economy. The effectiveness of the pension retirement followed the opposite pattern in the Netherlands. As explained earlier, they were significantly less effective only in the part of the economy where the unions and employers associations were too weak to coordinate the shift of VUT into pre-pension schemes.

The distributional effects estimated for retaining policies to a great extent partially HP 3.8. In the Netherlands among the retaining policies that proved to be effective, only time reconciliation and employability showed a significant industry pattern. The main pattern reflected a different dissemination of these policies by CLAs between the mid-1990's and 2009. In industries where those policies were less disseminated, those job quality aspects showed a much lower effect than elsewhere.

Finally, the distributional effect of a voluntaristic dissemination of retaining policies is, according to a HP 3.9b and HP 3.10b, to a some extent associated to a significant effect of job aspects only in parts of the economy sheltered from the international competition both in Italy and in Germany. In Italy this is not true for time and mental health reconciliation, which are associated to a significantly higher age of exit across the economy. In Germany this is not true for time reconciliation, whose effect is not significant across the economy, and physical reconciliation, whose pattern contradicted the implication of HP 3.9b.
With regard to the research question:

RQ4: **Under which institutional conditions have unions and employers' associations affected the distributional effects of activation policies in the Netherlands, Germany, and Italy between the mid-1990's and 2009?**

The analysis showed that the unions and employers' associations affected not only the magnitude but also the distribution of the activation policies effects in the Netherlands, Germany, and Italy between the mid-1990's and 2009. This was because depending on their organizational articulation they can distribute the effect of activation policies to the whole society or to some part of it.

Partially according to HP 3.7, an articulation allowing social partners to interfere the formulation or the implementation of retrenchment policies produced two distributional inequities. In Italy social partners created both intra and inter generational inequities, with transitional clauses concentrating the effect of retrenchment policies outside their core membership and on the future generations of older workers. In Germany social partners generated only inter-generational inequities since they delayed the formulation and the implementation of retrenchment policies with no significant pattern between insiders and outsiders. Against HP 3.7 the distributional effects of retrenchment policies were significant also in the Netherlands, where social partners are prevented from hindering their formulation and implementation. The distributional effect however showed that retrenchment policies is lower in industries where bargaining organizations are too weak to negotiate their implementation.

Against HP 3.8, even if mutually conveyed, unions and employers associations did not prove to promote the effectiveness of retaining policies in the whole economies. The distributional effects however reflect the dissemination of retaining policies carried out by CLAs and are much lower than elsewhere. Even if the articulation of interests' organizations is higher in Germany than in Italy, their distributional effects were not significantly different. From that it may be concluded that, according to HP 3.9b and HP 3.10b, when conveyed on an unilateral or voluntaristic bases, retaining policies are implemented only if required by the external circumstances.

### 11.4 Conclusion

This research investigated the institutional conditions explaining the cross-national variation of activation policies' outcomes in the Netherlands, Germany, and Italy between the mid-1990's and 2009. Although socially relevant and innovative (Section 2.7) this research suffered from various limitations.

First, comparing three cases that according to the Ebbinghaus's classification of affinities (Section 3.3) diverge mainly in the articulation of the labour and capital interests, it is implicitly assumed that the activation strategy is similar. Although the similar welfare regimes posed similar pressures to all three countries it is evident that even the governments followed three different strategies, more far-sighted in the Netherlands, less far-sighted in Germany, and most short-sighted in Italy.

Second, the data on the one hand provided the unique opportunity of comparing the effectiveness of activation policies in the three cases under analysis. On the other hand it showed both power, validity
and reliability problems, described in the conclusions of chapter 4, which to a some extent have affected the estimations. The cohort effect measures the extent to which the likelihood of inflowing into the three pathways of exit changed after their retrenchment. The measurement is to some extent arbitrary, because no certainty is given that within the younger cohort is fully exposed to retrenchment policies as if they exited from work before their implementation. If in the previous case the risk is to underestimate the effectiveness of the retrenchment, this measurement is instead likely to overestimate it if it is considered that insufficient attempts are made to control for additional secular trends that delayed the retirement patterns in the younger cohort. Trends which allowed a better preservation of health and productivity in older age concerns the life course exposure to better nourishment, working conditions, health care, education may have encouraged a longer working life. The underestimation of these trends are of concern here under two conditions. First those trends follow significantly different country-specific process and undermine the comparison of the activation policies' effectiveness. Second those trends affect not only the preferences of older workers but also the preferences of their employers. In this sense the slower educational expansion in Italy may work as an alternative explanation of the poor effectiveness of retaining measures. In other words the comparatively lower propensity of employers to retain older workers in Italy than in the Netherlands may be less due to the different coordination of the interests' system than to the fact that in average Dutch older workers are more educated and thus more productive than the Italian ones. The plausibility of this alternative explanation is however conditional to the extent to which productivity in older life can still be predicted by the educational endowment or experiences during the life course (such as training, working conditions, unemployment spells) play a bigger role here. More interesting is to connect the educational expansion and the propensity to technological innovation to a different occupational upgrade in the younger cohort which in turn led to significantly different retirement strategies for older workers and their employers in the Netherlands, Germany, and Italy.

Third, even under the institutional conditions that are assumed to have prevented social partners from hindering activation policies, their influence was not null. This is because social partners could affect the policymaking in more indirect ways. They could affect the strategies of political parties that traditionally represent their interests in the cabinet or in the opposition. Also in consultation modes their opposition, without blocking the Government proposal, could nevertheless delay it.

Fourth concerning the German case, the failure to distinguish between Western and Eastern regions is one if not to say the main substantial limitation of this study. This flaw prevented the exclusion of simpler and more obvious alternative arguments explaining the ineffectiveness of retrenchment policies along the 1990's. This argument is connected to the economic restructuring that followed the German unification and to the political use of early retirement programs to reduce the tensions between the Western and the Eastern labour markets. This external force altered the country comparison since it exerted a huge pressure to delay retrenchment even independently from the interferences of the externalization coalition that the Governments in Italy and the Netherlands do not experience. A better solution would have been to exclude Eastern Germany or at least control for this economic disparity.

Further research attempts should be devoted to solve the methodological and substantial limitations issued above. In particular further investigations should include an analysis of the HRM have used working conditions differently before and after the mid-1990’s. This would clarify the extent to which
the effect of job quality has significantly changed between the two cohorts and how this changed can be interpreted as a shift of HRM strategies. The assumption on which the empirical analysis of part 3 rely on, that is shedding HRM policies mask the effect of job quality, although plausible, needs to be empirically tested to better interpret the findings. Since a triple interaction between cohort job quality and industry is of challenging interpretation and require higher power, other solutions splitting the analysis by cohort opens up new methodological issues related to the comparison of the estimations.

Further research would benefit greatly from further data collection combining information about the work-retirement patterns and the pull and push incentives regulated by the state, social partners and companies. A great benchmark would be the IAB panel in Germany, which should be extended in other European countries also retrospectively.

With regard to the central research question:

_To what extent has the effectiveness of activation policies been affected by the organizational articulation of the externalizations coalition in the Netherlands, Germany, and Italy between the mid-1990's and 2009?_

This research showed that the organizational articulation of the externalization coalitions affected significantly the effectiveness of activation policies in the Netherlands, Germany, and Italy between the mid-1990's and 2009. Depending on their articulation, the structure of interests' organizations represented a sort of institutional infrastructure that enabled the governments to convey activation policies top-down. This infrastructure constrained first social partners and in turn companies to support their effectiveness. The articulation of this infrastructure, affecting the style of partnership and thus the strategies of relevant actors, explained to a great extent the divergent outcomes of the EWL re-conversion in the Netherlands, Germany, and Italy.

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Appendix A – Competing-risk models for The Netherlands

Table A.1: Competing risk models (CRM) estimating the effectiveness of retrenchment policies on the hazard of undertaking one of the four pathways of exit – The Netherlands (estimates are expressed in hazard rates).

<table>
<thead>
<tr>
<th>Cohort &gt;1944</th>
<th>(1) Unemployment</th>
<th>(2) Disability</th>
<th>(3) Early Retirement</th>
<th>(3.2) Other</th>
<th>(4) Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.486</td>
<td>0.596***</td>
<td>0.480***</td>
<td>0.305***</td>
<td>0.309***</td>
</tr>
</tbody>
</table>

Interaction: Cohort >1944*Industry (Ref: Construction* Cohort >1944)

| Cohort >1944* Agriculture forestry and fishing | 2.650 |
| Cohort >1944* Manufacturing mining & quarrying | 1.263 |
| Cohort >1944* Wholesale and retail trade, transportation and storage & horeca | 1.006 |
| Cohort >1944* Financial intermediation | 3.021* |
| Cohort >1944* Real estate, renting and business activity | 2.330 |
| Cohort >1944* Public administration and defense, education, health and social work | 1.754 |
| Cohort >1944* Other community | 2.550* |

Controlling variables:

Socio-demographic

| Gender (Ref: men) | 1.315 1.971*** 0.707*** 0.707*** 5.830*** |
| Illness (Ref: not ill) | 0.550 5.074*** 0.864 0.862 1.152 |
| Stress (Ref: not stress) | 2.051** 2.141*** 1.108 1.115 1.374 |
| Poor health (Ref: good health) | 1.332 2.361*** 0.721* 0.711* 1.036 |
| Part-time (Ref: full-time) | 0.979 0.892 0.848 0.842 1.310 |

Family situation: (Ref: Cohabiting and partner working)

| Not cohabiting | 4.262*** 2.046** 1.026 1.037 0.550** |
| Cohabiting and partner never worked | 1.217e-07*** 0.760 1.026 1.037 0.550** |
| Cohabiting and partner stopped working | 2.050 1.748* 1.425*** 1.450*** 1.345 |
| missing info over the partner | 2.327* 1.066 1.175 1.193 0.796 |

Social class: (Ref: Intermediate occupation)

| Higher salariat | 0.878 0.942 0.775* 0.761* 1.275 |
| Lower salariat | 0.688 1.072 0.743 0.723* 1.866 |
| Petit bourgeoisie or independents (+agriculture) | 0.451 0.922 0.625* 0.601* 1.629 |
| Lower grade service and manual workers | 0.360 3.245** 0.773* 0.767* 2.190** |
| Semi- and non-skilled workers | 1.162 2.471* 0.758 0.752 1.635 |

Industry: (Ref: Construction)

| Agriculture forestry and fishing | 1.121 0.531 0.773 0.641 2.876* |
| Manufacturing mining & quarrying | 4.292e+07*** 0.503 0.974 0.929 1.454 |
| Wholesale and retail trade, transportation and storage & horeca | 4.143e+07*** 0.494* 0.858 0.862 1.271 |
| Financial intermediation | 1.068e+07*** 0.340 0.924 0.730 1.797 |
| Real estate, renting and business activity | 0.873 0.707 0.475 0.388 2.323 |
| Public administration and defense, education, health and social work | 1.621e+07*** 0.496* 1.218 1.088 0.826 |
| Other community | 1.143e+07*** 0.764 0.788 0.631* 1.680 |

| Failures | 45 | 196 | 460 | 460 | 121 |
| Subjects | 1408 | 1408 | 1408 | 1408 | 1408 |
| Total Observations | 2399 | 2399 | 2399 | 2399 | 2399 |
| BIC | 737.01 | 1491.39 | 6140.05 | 6186.02 | 1716.39 |
Note: Short variables' description:

**Dependent variable:**

**Work-retirement trajectory:** time-varying categorical variable equal to: 0 if the respondent is working at the end of the person-period spell or exit employment at the statutory retirement age of 65 years, 1 if the respondent entered an unemployment pathway at the end of the person-period spell, 2 if the respondent entered a disability pathway at the end of the person-period spell, 3 if the respondent entered an early retirement pathway at the end of the person-period spell, and 4 if the respondent entered other pathways at the end of the person-period spell.

**Independent variables:**

- **Cohort>1944:** time-constant dummy variable equal to 1 if the respondent is born after 1944
- **Woman:** time-constant dummy variable equal to 1 if the respondent is a woman
- **Illness:** time-varying dummy equal to 1 if the respondent experience a serious illness (such as cancer, asthma etc.) in the person-period spell
- **Stress:** time-varying dummy equal to 1 if the respondent experience a serious situation of high stress in the person-period spell
- **Poor health:** time-varying dummy equal to 1 if the respondent perceive their health conditions as poor in the person-period spell
- **Part-time:** time-varying dummy equal to 1 if the respondent is working in a part-time job in the person-period spell
- **Family situation:** time-varying set of dummy variable combining information over the cohabiting status of the respondent with and the career of the partner in the person-period spell.
- **Social class:** time-varying set of dummy variable over the social class the individual belong to in the person-period spell
- **Industry:** time-varying set of dummy variable over the industry where the respondent is working in the person-period spell.

For a more detailed description see Chapter 4.

**Appendix B – Competing-risk models for Germany**

**Table B.1:** Competing risk models (CRM) estimating the effectiveness of retrenchment policies on the hazard of undertaking one of the four pathways of exit – Germany (estimates are expressed in hazard rates).

<table>
<thead>
<tr>
<th>Cohort &gt;=1945</th>
<th>1.1 unemployment</th>
<th>1.2 unemployment</th>
<th>1.3 unemployment</th>
<th>2.1 disability</th>
<th>3.1 pension</th>
<th>3.2 pension</th>
<th>4.0 other</th>
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<tbody>
<tr>
<td></td>
<td>0.950</td>
<td>0.772</td>
<td>0.921</td>
<td>0.631</td>
<td>0.398***</td>
<td>0.281**</td>
<td>0.703</td>
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<tr>
<td>Interaction: Industry*Cohort &gt;=1945</td>
<td>3.520</td>
<td>2.000</td>
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<tr>
<td>Cohort &gt;=1944 Agriculture forestry and fishing</td>
<td>0.704</td>
<td>2.042</td>
<td></td>
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<tr>
<td>Cohort &gt;=1944 Manufacturing mining &amp; quarrying</td>
<td>ref</td>
<td>ref</td>
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<td></td>
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</tr>
<tr>
<td>Cohort &gt;=1944 Construction</td>
<td>0.951</td>
<td>1.421</td>
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<td>Cohort &gt;=1944 Wholesale and retail trade, transportation and storage &amp; homes</td>
<td>1.758</td>
<td>0.857</td>
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<td>Cohort &gt;=1944 Financial intermediation</td>
<td>0.371</td>
<td>3.408</td>
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<td>Cohort &gt;=1944 Real estate, renting and business activity</td>
<td>0.295</td>
<td>2.705</td>
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<td>Cohort &gt;=1944 Public administration and defense, education, health and social work</td>
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<td>0.314</td>
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<td>Cohort &gt;=1944 Other community</td>
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<tr>
<td>Interaction: Cohort &gt;=1945 *women</td>
<td>3.520***</td>
<td>3.528**</td>
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<tr>
<td>Interaction: Cohort &gt;=1945 *part-time</td>
<td>0.456*</td>
<td>0.610</td>
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<td>Controls:</td>
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<td>Socio-demographic characteristics:</td>
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<td>Woman (Ref: Man)</td>
<td>1.652***</td>
<td>1.676***</td>
<td>1.606**</td>
<td>0.960</td>
<td>1.012</td>
<td>1.002</td>
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<td>Illness (Ref: not ill)</td>
<td>0.840</td>
<td>0.826</td>
<td>0.884</td>
<td>4.706***</td>
<td>1.134</td>
<td>1.112</td>
<td>1.823</td>
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<td>1.311</td>
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<td>1.537</td>
<td>0.977</td>
<td>0.971</td>
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<td>Poor health (Ref: good health)</td>
<td>1.329</td>
<td>1.354</td>
<td>1.375</td>
<td>3.862***</td>
<td>1.325</td>
<td>1.323</td>
<td>0.670</td>
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<td>Part-time (Ref: Full-time)</td>
<td>0.967**</td>
<td>0.934***</td>
<td>0.934***</td>
<td>1.593</td>
<td>0.803</td>
<td>0.791</td>
<td>2.385***</td>
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<td>Cohabiting and partner is working</td>
<td>0.918</td>
<td>0.905</td>
<td>0.889</td>
<td>3.715***</td>
<td>1.061</td>
<td>1.057</td>
<td>0.829</td>
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<tr>
<td>Not cohabited</td>
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<td>0.574</td>
<td>0.554</td>
<td>0.494</td>
<td>1.771**</td>
<td>1.722**</td>
<td>1.714**</td>
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<td>Cohabiting and partner never worked</td>
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<td>ref</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
</tr>
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<td>Cohabiting and partner stopped working</td>
<td>1.965**</td>
<td>1.929**</td>
<td>1.900**</td>
<td>2.286**</td>
<td>1.31**</td>
<td>1.305**</td>
<td>0.861</td>
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<td>Missing Information over the partners</td>
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<td>1.389</td>
<td>1.379</td>
<td>0.654</td>
<td>0.892</td>
<td>0.896</td>
<td>1.403</td>
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<td>Higher salariat</td>
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<td>Lower salariat</td>
<td>1.704</td>
<td>1.698</td>
<td>1.778*</td>
<td>0.578</td>
<td>0.841</td>
<td>0.825</td>
<td>1.050</td>
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<td>Intermediate Occupation</td>
<td>1.087</td>
<td>1.067</td>
<td>1.137</td>
<td>4.006*</td>
<td>1.165</td>
<td>1.153</td>
<td>1.093</td>
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<td>Farm bourgeoisie or independents (+agriculture)</td>
<td>0.403</td>
<td>0.397</td>
<td>0.407</td>
<td>3.450</td>
<td>0.884</td>
<td>0.900</td>
<td>0.968</td>
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<td>Lower grade service and manual workers</td>
<td>1.249</td>
<td>1.222</td>
<td>1.297</td>
<td>3.988*</td>
<td>1.211</td>
<td>1.199</td>
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<td>Semi- and non-skilled workers</td>
<td>2.236**</td>
<td>2.196**</td>
<td>2.327**</td>
<td>7.16**</td>
<td>0.881</td>
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<td>Industry</td>
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<tr>
<td>Agriculture forestry and fishing</td>
<td>0.557</td>
<td>0.542</td>
<td>0.358</td>
<td>0.538</td>
<td>1.704**</td>
<td>1.566</td>
<td>0.520</td>
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<tr>
<td>Manufacturing mining &amp; quarrying</td>
<td>1.331</td>
<td>1.287</td>
<td>1.414</td>
<td>0.397*</td>
<td>1.276</td>
<td>1.183</td>
<td>0.828</td>
</tr>
<tr>
<td>Construction</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
<td>ref</td>
</tr>
<tr>
<td>Wholesale and retail trade, transportation and storage &amp; homes</td>
<td>1.176</td>
<td>1.173</td>
<td>1.199</td>
<td>0.391**</td>
<td>1.203</td>
<td>1.155</td>
<td>0.834</td>
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<tr>
<td>Financial intermediation</td>
<td>0.536</td>
<td>0.518</td>
<td>0.449</td>
<td>0.159*</td>
<td>1.528*</td>
<td>1.512*</td>
<td>0.750</td>
</tr>
<tr>
<td>Real estate, renting and business activity</td>
<td>1.133</td>
<td>1.144</td>
<td>1.972</td>
<td>0.717</td>
<td>0.585</td>
<td>0.394</td>
<td>1.466</td>
</tr>
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<td>Public administration and defense,</td>
<td>0.332**</td>
<td>0.326**</td>
<td>0.428</td>
<td>0.204**</td>
<td>1.238</td>
<td>1.127</td>
<td>0.618</td>
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<tr>
<td>Other community</td>
<td>0.894</td>
<td>0.910</td>
<td>0.925</td>
<td>0.335**</td>
<td>1.134</td>
<td>1.239</td>
<td>0.502</td>
</tr>
<tr>
<td>Education, health and social work</td>
<td>0.562</td>
<td>0.539</td>
<td>0.858</td>
<td>0.608</td>
<td>1.339</td>
<td>1.343</td>
<td>0.400</td>
</tr>
</tbody>
</table>

**Notes:**
- *** p<0.01, ** p<0.05, * p<0.1
- BIC
- 2580.33 2580.78 2611.24 3966.1 9406.59 9426.28 13455.35
- Number of events
- Subjects
- Reservations
- 1380 1380 1380 1380 1380 1380 1380
- 2469 2469 2469 2469 2469 2469 2469
244 Appendix B – Competing-risk models for Germany

Note: Short variables' description:

**Dependent variable:**

*Work-retirement trajectory:* time-varying categorical variable equal to: 0 if the respondent is working at the end of the person-period spell or exit employment at the statutory retirement age of 65 years, 1 if the respondent entered a unemployment pathway at the end of the person-period spell, 2 if the respondent entered a disability pathway at the end of the person-period spell, 3 if the respondent entered a early retirement pathway at the end of the person-period spell, and 4 if the respondent entered other pathways at the end of the person-period spell.

**Independent variables:**

*Cohort >1944:* time-constant dummy variable equal to 1 if the respondent is born after 1944

*Woman:* time-constant dummy variable equal to 1 if the respondent is a woman

*Illness:* time-varying dummy equal to 1 if the respondent experience a serious illness (such as cancer, asthma etc.) in the person-period spell

*Stress:* time-varying dummy equal to 1 if the respondent experience a serious situation of high stress in the person-period spell

*Poor health:* time-varying dummy equal to 1 if the respondent perceive their health conditions as poor in the person-period spell

*Part-time:* time-varying dummy equal to 1 if the respondent is working in a part-time job in the person-period spell

*Family situation:* time-varying set of dummy variable combining information over the cohabiting status of the respondent with and the career of the partner in the person-period spell

*Social class:* time-varying set of dummy variable over the social class the individual belong to in the person-period spell

*Industry:* time-varying set of dummy variable over the industry where the respondent is working in the person-period spell.

For a more detailed description see Chapter 4.

## Appendix C – Competing-risk models for Italy

### Table C.1: Competing risk models (CRM) estimating the effectiveness of retrenchment policies on the hazard of undertaking one of the four pathways of exit – Italy (estimates are expressed in hazard rates).

<table>
<thead>
<tr>
<th>Cohort &gt;=1945</th>
<th>1.1 Unemployment</th>
<th>1.2 Unemployment</th>
<th>2 Disability</th>
<th>3.1 Pension</th>
<th>3.2 Pension</th>
<th>3.3 Pension</th>
<th>3.4 Pension</th>
<th>4 Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort:1944* Agriculture forestry and fishing</td>
<td>2.95e-06***</td>
<td>0.930</td>
<td>0.933</td>
<td>1.047</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort:1944* Manufacturing mining &amp; quarrying</td>
<td>1.861</td>
<td>1.476</td>
<td>1.489</td>
<td>1.531*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohort:1944* Construction</td>
<td>3.712e+06***</td>
<td>1.849*</td>
<td>1.886*</td>
<td>2.077**</td>
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<td></td>
</tr>
<tr>
<td>Cohort:1944* Wholesale and retail trade, transportation and storage &amp; horeca</td>
<td>1.517</td>
<td>0.746</td>
<td>0.751</td>
<td>0.842</td>
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<tr>
<td>Cohort:1944* Financial intermediation</td>
<td>1.184</td>
<td>2.666</td>
<td>2.655</td>
<td>2.685</td>
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<tr>
<td>Cohort:1944* real estate, renting and business activity</td>
<td>0.918</td>
<td>3.51e+06***</td>
<td>3.57e+06***</td>
<td>4.14e+06***</td>
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</tr>
<tr>
<td>Cohort:1944* Public administration and defense, education, health and social work</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Cohort:1944* other community</td>
<td>6.291</td>
<td>1.268</td>
<td>1.605*</td>
<td>1.695*</td>
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<td></td>
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<tr>
<td>Interaction: *Public administration etc. *Cohort:1945 *women</td>
<td>0.441*</td>
<td>0.430*</td>
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<tr>
<td>Interaction: Self-employed*Cohort:1945</td>
<td>0.677</td>
<td></td>
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<td>Controls:</td>
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<td>Socio-demographic characteristics:</td>
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<tr>
<td>Woman (Ref: Man)</td>
<td>0.709</td>
<td>0.710</td>
<td>1.267</td>
<td>0.708***</td>
<td>0.713***</td>
<td>0.746***</td>
<td>0.749***</td>
<td>4.530***</td>
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<td>Illness (Ref: not ill)</td>
<td>1.001</td>
<td>0.969</td>
<td>0.436</td>
<td>1.362*</td>
<td>1.348*</td>
<td>1.335*</td>
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<td>Stress (Ref. Not-stress)</td>
<td>1.022</td>
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<td>0.645</td>
<td>1.283***</td>
<td>1.274*</td>
<td>1.270*</td>
<td>1.259*</td>
<td>1.004</td>
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<td>Poor health (Ref: good health)</td>
<td>4.264***</td>
<td>4.457***</td>
<td>8.302***</td>
<td>0.952</td>
<td>0.962</td>
<td>0.953</td>
<td>0.952</td>
<td>1.780**</td>
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<td>Part-time (Ref: Full-time)</td>
<td>1.577</td>
<td>1.562</td>
<td>5.91e-08***</td>
<td>0.320***</td>
<td>0.322***</td>
<td>0.327***</td>
<td>0.329***</td>
<td>1.137</td>
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<td>Family situation:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cohabiting and partner is working</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not cohabited</td>
<td>3.071***</td>
<td>3.061***</td>
<td>2.282</td>
<td>1.077</td>
<td>1.066</td>
<td>1.063</td>
<td>1.063</td>
<td>0.932</td>
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<td>Cohabiting and partner never worked</td>
<td>1.981</td>
<td>1.949</td>
<td>2.364</td>
<td>1.103</td>
<td>1.087</td>
<td>1.096</td>
<td>1.101</td>
<td>0.559*</td>
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<tr>
<td>Cohabiting and partner stopped working</td>
<td>1.105</td>
<td>1.106</td>
<td>0.570</td>
<td>1.453***</td>
<td>1.428***</td>
<td>1.415***</td>
<td>1.435***</td>
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<td>Missing Information over the partners</td>
<td>0.307</td>
<td>0.307</td>
<td>0.544</td>
<td>1.364**</td>
<td>1.365**</td>
<td>1.377**</td>
<td>1.380**</td>
<td>0.825</td>
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<td>Social class</td>
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<td>Higher salariat</td>
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<td>Ref</td>
<td>Ref</td>
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<td>1.062</td>
<td>1.064</td>
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<td>1.232</td>
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<td>1.236</td>
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<td>1.324</td>
<td>2.942e+07***</td>
<td>2.313**</td>
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<td>0.979</td>
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<td>1.269*</td>
<td>1.115</td>
<td>1.117</td>
<td>1.107</td>
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<td>0.597***</td>
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<td>1.90e+05**</td>
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<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
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<td>0.823</td>
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<td>0.280***</td>
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<td>9259.34</td>
<td>9265.09</td>
<td>2686.23</td>
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</table>
Appendix C – Competing-risk models for Italy

Note: Short variables’ description:

**Dependent variable:**

**Work-retirement trajectory:** time-varying categorical variable equal to: 0 if the respondent is working at the end of the person-period spell or exit employment at the statutory retirement age of 65 years, 1 if the respondent entered an unemployment pathway at the end of the person-period spell, 2 if the respondent entered a disability pathway at the end of the person-period spell, 3 if the respondent entered a early retirement pathway at the end of the person-period spell, and 4 if the respondent entered other pathways at the end of the person-period spell.

**Independent variables:**

- **Cohort>1944:** time-constant dummy variable equal to 1 if the respondent is born after 1944
- **Woman:** time-constant dummy variable equal to 1 if the respondent is a woman
- **Illness:** time-varying dummy equal to 1 if the respondent experience a serious illness (such as cancer, asthma etc.) in the person-period spell
- **Stress:** time-varying dummy equal to 1 if the respondent experience a serious situation of high stress in the person-period spell
- **Poor health:** time-varying dummy equal to 1 if the respondent perceive their health conditions as poor in the person-period spell
- **Part-time:** time-varying dummy equal to 1 if the respondent is working in a part-time job in the person-period spell
- **Family situation:** time-varying set of dummy variable combining information over the cohabiting status of the respondent with and the career of the partner in the person-period spell.
- **Social class:** time-varying set of dummy variable over the social class the individual belong to in the person-period spell
- **Industry:** time-varying set of dummy variable over the industry where the respondent is working in the person-period spell.

For a more detailed description see Chapter 4.

### Table D.1: Piecewise-constant exponential model (PCE) estimating the effectiveness of retaining policies in extending working life in the Netherlands for controls.

<table>
<thead>
<tr>
<th>Age 49-54</th>
<th>8.1</th>
<th>8.2</th>
<th>8.3</th>
<th>8.4</th>
<th>8.5</th>
<th>8.6</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>0.0497***</td>
<td>0.0173***</td>
<td>0.147</td>
<td>0.0788</td>
<td>0.118</td>
<td>0.00211***</td>
</tr>
<tr>
<td>Age 55-59</td>
<td>0.116***</td>
<td>0.0412***</td>
<td>0.348</td>
<td>0.184</td>
<td>0.276</td>
<td>0.00508***</td>
</tr>
<tr>
<td>Age 60-65</td>
<td>0.510</td>
<td>0.183*</td>
<td>1.540</td>
<td>0.816</td>
<td>1.216</td>
<td>0.0230**</td>
</tr>
</tbody>
</table>

**Socio-demographic characteristics:**

| Gender (Ref: man) | 1.128 | 1.089 | 1.124 | 1.114 | 1.112 | 1.141 |
| Illness (Ref: not ill) | 2.374*** | 2.512*** | 2.426*** | 2.427*** | 2.489*** | 2.574*** |
| Stress (Ref: not stress) | 1.868*** | 1.812*** | 1.872*** | 1.863*** | 1.877*** | 1.827*** |
| Poor health (Ref: good health) | 1.313 | 1.270 | 1.358 | 1.284 | 1.299 | 1.283 |

**Family situation:**

| Not cohabiting | 0.850 | 0.885 | 0.867 | 0.839 | 0.866 | 0.853 |
| Cohabiting and the partner never worked | 3.676** | 3.788** | 3.432** | 3.531** | 3.725** | 3.376** |
| Cohabiting and the partner stopped working | 1.588*** | 1.625*** | 1.544** | 1.596*** | 1.596*** | 1.547*** |
| Missing info on the partner | 0.896 | 0.865 | 0.891 | 0.900 | 0.881 | 0.931 |

**Social class:**

| Higher salariat | 0.711 | 0.658 | 0.550 | 0.670 | 0.723 | 0.589 |
| Lower salariat | 0.828 | 0.819 | 0.662 | 0.776 | 0.867 | 0.663 |
| Petty bourgeoisie or self-employed (incl. Agriculture) | 0.881 | 0.774 | 0.660 | 0.820 | 0.893 | 0.708 |
| Lower grade service and manual workers | 0.804 | 0.742 | 0.613 | 0.778 | 0.831 | 0.690 |
| Semi- and non skilled workers | 0.651 | 0.653 | 0.541 | 0.635 | 0.628 | 0.580 |

**Industry:**

| Manufacturing, mining & quarrying | 0.826 | 2.097 | 0.190 | 0.305 | 0.281 | 8.412 |
| Construction | 0.764 | 2.223 | 0.592 | 0.297 | 1.458 | 53.15** |
| Wholesale and retail trade, transportation and storage & horeca | 0.703 | 2.505 | 0.358 | 0.427 | 0.225 | 17.99* |
| Financial intermediation | 0.863 | 2.383 | 0.239 | 0.572 | 0.222 | 102.7** |
| Real estate renting and business activity | 0.878 | 1.837 | 0.103 | 0.895 | 0.135 | 83.12 |
| Public Administration and defence, education, health and social work | 0.708 | 2.222 | 0.311 | 0.530 | 0.312 | 32.48** |
| Other community | 0.875 | 2.456 | 1.504 | 0.768 | 0.294 | 23.29** |

| Failures | 218 | 218 | 218 | 218 | 218 | 218 |
| Subjects | 809 | 809 | 809 | 809 | 809 | 809 |
| BIC | 1033.42 | 1068.58 | 1077.92 | 1084.40 | 1084.54 | 1073.54 |
| Total observations | 2,239 | 2,239 | 2,239 | 2,239 | 2,239 | 2,239 |

*** p<0.01, ** p<0.05, * p<0.1

Source: Sharelife 2008-2009 release 3.1, 2010
Appendix D – Piecewise-constant exponential model for The Netherlands

**Note:** Short variables' description:

**Dependent variable:**

- **Work-retirement trajectory:** time-varying categorical variable equal to: 0 if the respondent is working at the end of the person-period spell, 1 if the respondent left employment at the end of the person-period spell.

**Independent variables:**

- **Time reconciliation:** time-varying dummy equal to 1 if the respondent is working in a part-time job in the person-period spell.
- **Physical health reconciliation:** time-constant interval scale obtained by Factor Analysis (see chap. 4) equal from 1 to 4. It measures the self-perceived quality of the material working conditions in the last/current job by looking at how the job is physically demanding and the workspace comfortable.
- **Mental health reconciliation:** time-constant interval scale obtained by Factor Analysis (see chap. 4) equal from 1 to 4. It measures the self-perceived emotional burden of the last/current job looking at the time pressure, the emotional burden, and conflicts that the work implies.
- **Age equality:** time-constant interval scale obtained by Factor Analysis (see chap. 4) equal from 1 to 4 measuring self-perceived recognition and support on the last job, the quality of the working atmosphere and the respondents' perception over how fairly they are treated by their bosses.
- **Employability:** time-constant interval scale equal from 1 to 4 measuring the extent to which the skills of respondents are developed in the last/current.
- **Gender:** time-constant dummy variable equal to 1 if the respondent is a woman.
- **Illness:** time-varying dummy equal to 1 if the respondent experience a serious illness (such as cancer, asthma etc.) in the person-period spell.
- **Stress:** time-varying dummy equal to 1 if the respondent experience a serious situation of high stress in the person-period spell.
- **Poor health:** time-varying dummy equal to 1 if the respondent perceive their health conditions as poor in the person-period spell.
- **Family situation:** time-varying set of dummy variable combining information over the cohabiting status of the respondent with and the career of the partner in the person-period spell.
- **Social class:** time-varying set of dummy variable over the social class the individual belong to in the person-period spell.
- **Industry:** time-varying set of dummy variable over the industry where the respondent is working in the person-period spell.

For a more detailed description see Chapter 4.
### Table E.1: Piecewise-constant exponential model (PCE) estimating the effectiveness of retaining policies in extending working life in Germany for controls.

<table>
<thead>
<tr>
<th></th>
<th>9.1</th>
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<tbody>
<tr>
<td><strong>Age 49-54</strong></td>
<td>0.00317***</td>
<td>0.00284***</td>
<td>0.00266***</td>
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<td>0.00212***</td>
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<td><strong>Age 55-59</strong></td>
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<td>0.00662***</td>
<td>0.00530***</td>
<td>0.00913***</td>
<td>0.00357***</td>
<td>0.00425***</td>
<td>0.00430***</td>
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<tr>
<td><strong>Age 60-65</strong></td>
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<td>0.0181***</td>
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<td>1.222</td>
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<td>Higher Salariat</td>
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<td>Lower grade service and manual workers</td>
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**Note:** Short variables' description:

**Dependent variable:**

- **Work-retirement trajectory:** time-varying categorical variable equal to: 0 if the respondent is working at the end of the person-period spell, 1 if the respondent left employment at the end of the person-period spell

**Independent variables:**

- **Gender:** time-constant dummy variable equal to 1 if the respondent is a woman
- **Illness:** time-varying dummy equal to 1 if the respondent experience a serious illness (such as cancer, asthma etc.) in the person-period spell
- **Stress:** time-varying dummy equal to 1 if the respondent experience a serious situation of high stress in the person-period spell
- **Poor health:** time-varying dummy equal to 1 if the respondent perceive their health conditions as poor in the person-period spell
- **Family situation:** time-varying set of dummy variable combining information over the cohabiting status of the respondent with and the career of the partner in the person-period spell
- **Industry:** time-varying set of dummy variable over the industry where the respondent is working in the person-period spell

For a more detailed description see Chapter 4.
Appendix E – Piecewise-constant exponential model for Germany
### Appendix F – Piecewise-constant exponential model for Italy

#### Table F.1: Piecewise-constant exponential model (PCE) estimating the effectiveness of retaining policies in extending working life in Italy for controls.

<table>
<thead>
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<th>10.1</th>
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<td>Not cohabiting</td>
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<td>Cohabitating and partner never worked</td>
<td>0.750</td>
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<td>Higher Salariat</td>
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<td>0.775</td>
<td>0.770</td>
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<td>0.822</td>
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<td>Lower Salariat</td>
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<td>0.972</td>
<td>0.954</td>
<td>1.002</td>
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<td>1.030</td>
<td>0.935</td>
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<td>Petty bourgeoisie and self-employed (incl. Agriculture)</td>
<td>0.724</td>
<td>0.762</td>
<td>0.736</td>
<td>0.778</td>
<td>0.833</td>
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<td>Lower grade service and manual workers</td>
<td>0.737</td>
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<td>Semi- and non skilled workers</td>
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<td>0.461**</td>
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<td>Manufacturing, mining &amp; quarrying</td>
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<td>Construction</td>
<td>0.619*</td>
<td>0.614*</td>
<td>0.589**</td>
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<td>1.969</td>
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<td>Wholesale and retail trade, transportation and storage &amp; horeca</td>
<td>0.574***</td>
<td>0.562***</td>
<td>0.517***</td>
<td>0.367***</td>
<td>0.443**</td>
<td>0.700</td>
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<td>Financial intermediation</td>
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<td>1.629</td>
<td>1.589</td>
<td>0.711</td>
<td>1.447</td>
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<td>4.523*</td>
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<td>3.91a-06</td>
<td>6.87a-06</td>
<td>7.56a-06</td>
<td>3.84a-06</td>
<td>5.57a-06</td>
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<td>0.444***</td>
<td>0.429***</td>
<td>0.379***</td>
<td>0.454**</td>
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<td>Other community</td>
<td>0.790</td>
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<td>0.785</td>
<td>0.688</td>
<td>0.862</td>
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<td>Illness</td>
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<td>1.209</td>
<td>1.181</td>
<td>1.254</td>
<td>1.262</td>
<td>1.237</td>
<td>1.210</td>
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<td>Stress</td>
<td>1.583***</td>
<td>1.578***</td>
<td>1.574***</td>
<td>1.558**</td>
<td>1.591***</td>
<td>1.619***</td>
<td>1.531***</td>
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<td>Poor health</td>
<td>2.049***</td>
<td>2.108***</td>
<td>2.128***</td>
<td>2.081***</td>
<td>2.172**</td>
<td>2.159***</td>
<td>2.154***</td>
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<td>Women</td>
<td>0.921</td>
<td>0.858</td>
<td>0.848</td>
<td>0.854</td>
<td>0.847</td>
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<td>0.885</td>
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<td>BIC</td>
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Source: Sharelife 2008-2009

**Note:** Short variables' description:

- **Dependent variable:** Work-retirement trajectory: time-varying categorical variable equal to: 0 if the respondent is working at the end of the person-period spell, 1 if the respondent left employment at the end of the person-period spell

- **Independent variables:**
  - **Gender:** time-constant dummy variable equal to 1 if the respondent is a woman
  - **Illness:** time-varying dummy equal to 1 if the respondent experience a serious illness (such as cancer, asthma etc.) in the person-period spell
  - **Stress:** time-varying dummy equal to 1 if the respondent experience a serious situation of high stress in the person-period spell
  - **Family situation:** time-varying set of dummy variable combining information about the cohabiting status of the respondent and the career of the partner in the person-period spell
  - **Social class:** time-varying set of dummy variable over the social class the individual belong to in the person-period spell
  - **Industry:** time-varying set of dummy variable over the industry where the respondent is working in the person-period spell

For a more detailed description see Chapter 4.
## List of abbreviations

<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Original name</th>
<th>English translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOW</td>
<td>Algemene Ouderdomswet</td>
<td>General Old-age Act</td>
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<tr>
<td>BDA</td>
<td>Bundesvereinigung der Deutschen Arbeitgeberverbände</td>
<td>Confederation of German Employers' Associations</td>
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<tr>
<td>CCME</td>
<td>Centrally-Coordinated Market Economies</td>
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<tr>
<td>CGIL</td>
<td>Confederazione Generale Italiana dei Lavoratori</td>
<td>General Italian confederation of workers</td>
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<td>CIF</td>
<td>Cumulative Incidence Function</td>
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<td>CIG</td>
<td>Cassa Integrazione Guagagni</td>
<td>Earning support funds</td>
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<td>CISL</td>
<td>Confederazione Italiana dei Sindacati dei Lavoratori</td>
<td>Italian Confederation of the unions</td>
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<td>CLA</td>
<td>Collective Labour Agreements</td>
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<td>CNEL</td>
<td>Consiglio Nazionale Economia Lavoro</td>
<td>National council for economics and work</td>
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<td>Confindustria</td>
<td>Confederazione degli imprenditori dell'industria</td>
<td>Confederation of employers in the manufacturing industry</td>
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<tr>
<td>Confartigianato</td>
<td>Confederazione degli imprenditori dell' artigianato</td>
<td>Confederation of employers in the craft industry</td>
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<td>Concommercio</td>
<td>Confederazione degli imprenditori del commercio</td>
<td>Confederation of employers in the trade industry</td>
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<td>CR model</td>
<td>Competing Risk model</td>
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<td>DGB</td>
<td>Deutsche Gewerkschaftsbund</td>
<td>Confederation of the German trade unions</td>
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<td>Event History Analysis</td>
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<td>ESEC</td>
<td>European Socio-Economic Classification</td>
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<td>EWL</td>
<td>Extending Working Life</td>
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<td>FA</td>
<td>Factor Analysis</td>
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<td>Hypothesis {}</td>
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<td>HRM</td>
<td>Human Resource Management</td>
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<td>ILM</td>
<td>Internal Labour Market</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<td>IPF</td>
<td>Iterative Principal Factor</td>
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<td>KM-estimators</td>
<td>Kaplan-Meier estimators</td>
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<td>Life History Calendars</td>
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<td>MSSD</td>
<td>Most similar systems designed</td>
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<td>NA</td>
<td>Non agreement</td>
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<td>OMC</td>
<td>Open Method of Coordination</td>
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<td>OP</td>
<td>Option Value</td>
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<td>PCE model</td>
<td>Piecewise-Constant exponential model</td>
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<td>Piccola Industria</td>
<td>Associazione degli imprenditori della piccola impresa</td>
<td>Association of employers of small companies</td>
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<td>SCME</td>
<td>Sector-Coordinated Market Economies</td>
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<td>SER</td>
<td>Sociaal Economische Raad</td>
<td>Social and Economic Council</td>
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<td>SMOE</td>
<td>Specific Measures for Older Employees</td>
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<td>Abbr.</td>
<td>Description</td>
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<td>SQ</td>
<td>Status quo</td>
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<td>STvdA</td>
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<td>StCME</td>
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<td>Act on reducing disability claims</td>
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<td>Act on reducing sickness absence</td>
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<td>Italian union of workers</td>
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About the author

Silvia Rossetti (b. 1983) is a Ph.D. candidate at the department of Political and Social Sciences of the European University Institute in Florence (Italy). In 2005 she obtained her bachelor's degree (B.A., 110/110) in Organization and Human Resources, Faculty of Political Science, University of Milan with the thesis: Il dibattito sulla contrattazione collettiva dopo il Protocollo del Luglio 1993, con particolare attenzione alle posizioni della CGIL, supervised by Prof. Ida Regalia. In 2007 she obtained a master's degree (M.Sc., cum laude) in International Comparative Social Policy Analysis from the Faculty of Sociology of the Catholic University of Leuven (IMPALLA program at CEPS-INSTEAD, Luxembourg) with the thesis: Do flexible employment conditions have an impact on older workers transitions to early retirement? A comparative investigation of the effect of “Bridge jobs” on bad transitions in Denmark, France, Ireland and Italy, supervised by Prof. Maurizio Ferrera and reviewed by Prof. Jos Berghman. In 2008 she obtained a master's degree (M.A., cum laude) in Labour Studies from the University of Milan, Faculty of Political Science with the thesis: Weak bridges and bad transitions. Work-retirement trajectories in Italy in a comparative perspective, supervised by Prof. Maurizio Ferrera and reviewed by Prof. Ida Regalia.

Silvia Rossetti has published various papers at international conferences and workshops, she was involved in the Flexicurity Research Program for which she stayed at the University of Tilburg, Tilburg (The Netherlands) for two months in 2009. In 2010 she stayed for one month at the Amsterdam Institute for Advanced Labour Studies (AIAS) of the University of Amsterdam (The Netherlands) to investigate the DUCADAM dataset (Dutch Collective Labour Agreements Database). Since August 2013 she is a visiting scholar at the Department of Sociology of Public Governance, Institute for Innovation and Governance Studies of the University of Twente, Enschede (The Netherlands).