

**The Role of Employability in the Labour
Market Transitions of Older Workers: A
Cross-National Study in Europe**

Brian Beach
St Cross College

Thesis for the Degree of Doctor of Philosophy in
Sociology

ABSTRACT

In light of current population dynamics across Europe, employability has been highlighted in policy circles as a way to enhance the employment situation for older people and to extend working lives. This research examines the concept of employability in the context of older workers (aged 50-64) in a number of European countries. The definition of employability is elaborated through prior research to develop a conceptual framework for analysis. This multidimensional framework is then applied using multiple waves of the English Longitudinal Study of Ageing (ELSA) and the Survey of Health, Ageing, and Retirement in Europe (SHARE). The analysis identifies the associations of indicators representing the dimensions of employability on labour market status through a cross-sectional approach, before expanding to explore their relationship with labour market transitions in and out of employment. This is first done using English data before introducing macroeconomic variables in a multilevel model of 13 European countries to incorporate the cultural and contextual factors that may impact trends in labour market outcomes of older workers. Overall, the findings suggest that, while some of the conceptual dimensions of employability are associated with labour market outcomes, many of these relationships relate to broader socio-economic factors as well as the contextual environment in which older workers find themselves. In other words, for policy approaches to improve employment in later life, a focus on the concept of employability may be a less effective approach than concentrating on more specific factors that shape the structure of opportunities for older workers.

ACKNOWLEDGEMENTS

My journey through this doctorate and all of the research work that has gone into it would not have been possible without the support from so many people. First off, I must extend my immense gratitude to all those at the Oxford Institute of Population Ageing who helped me in this process, providing support, feedback, and encouragement along the way. Special thanks go to: Sarah Harper for bringing me into the fold in the first place; Andreas Hoff for getting the ball rolling as my first supervisor; Kenneth Howse & Kate Hamblin for their contributions and feedback during confirmation of status; Debbie Alder & Angelika Kaiser for overall administrative support through the years; Stephen McNair & Kate Hamblin for an engaging viva and the constructive feedback; and last – and most certainly not least – my supervisor, George Leeson, for everything he has done to support me on my journey and in this research.

I would also extend my gratitude to Anne Millard in Sociology and Ian Pugh at St Cross College for dealing with me and the seemingly unending stream of forms that needed to be processed.

On a personal note, I would also like to give particular thanks to the darling Dr Liz – I don't know what I would have done without your fantastic stories and companionship in the UK! To Mike for helping me in so many ways to start my UK journey. To David and Dan – what transformations we've all undergone! To Steve for all his help over the years and being such an inimitable quiz partner, to Fro for reminding me the value in quiet, and to Julian for helping me settle in London and being part of the family.

Table of Contents

Chapter 1: Ageing Workers in the European Union	7
1.1 Ageing and Extending Working Lives in the EU	8
1.2 Differences in Employment Rates of Older People across the EU	11
Chapter 2: Older Workers and Labour Markets in Europe	21
2.1 The Factors Affecting Older Workers	22
2.1.1 Stereotypes & Discrimination	22
2.1.2 Productivity & Job Performance	29
2.1.3 Working Conditions: Health, Safety, & Work Organisation.....	33
2.1.4 Care Commitments	36
2.2 The Intervening Role of Policy	38
2.2.1 Employment Protection Legislation.....	38
2.2.2 Lifelong Learning	40
2.2.3 Active Labour Market Policy	43
2.2.4 Institutional Factors Influencing Early Retirement	45
Chapter 3: Employability: The Conceptual Framework.....	51
3.1 A European Policy Concept: Flexicurity	51
3.2 Employability in Policy and Academic Discourse	55
3.3 Theoretical Approaches to Measures of Employability	57
3.4 The Related Idea of Work Ability	64
3.5 Research Questions and the Conceptual Framework	69
Chapter 4: Resources and Employability: Older Workers in England.....	75
4.1 Measuring Health in Employment Studies	75
4.2 Human Capital: Education and Training	81
4.3 Theories on Social Capital: Ties and Networks	85
4.4 Data and Methodology	92
4.4.1 Labour Market Status	93
4.4.2 Health.....	94
4.4.3 Human Capital.....	97
4.4.4 Social Capital	100
4.4.5 Demographic Controls	101

4.4.6 Multinomial Logistic Regression	102
4.5 Cross-sectional Results	104
4.6 Interpreting the Influence of Individual Resources on Labour Market Status for Older Workers in England	109
Chapter 5: Disposition and Older Workers in England: Expanding the Analysis	119
5.1 Understanding Identity, Adaptability, and Flexibility in an Employability Context	120
5.2 Previous Theory on Dispositional Employability	127
5.3 The Impact of Care on Work	132
5.4 Operationalising Dispositional Dimensions of Employability	137
5.5 Cross-sectional Results	141
5.6 The Impact of Disposition on Labour Market Status for Older Workers in England: An Improved Framework for Understanding Employability?	152
Chapter 6: Employability and Labour Market Transitions of Older Workers in England	157
6.1 Patterns of Labour Market Behaviour	158
6.2 Exploring the Factors Impacting Transitions into Retirement	162
6.3 A Note on Partnerships	166
6.4 Methodological Considerations in Looking at Labour Market Transitions	169
6.4.1 Fixed and Random Effects	169
6.4.2 The Modelling Approach	171
6.5 Results: Transitions from Employment to Being Out of Work	173
6.6 Results: Transitions Back into Employment	180
6.7 Rethinking How Employability Relates to Labour Market Transitions	183
Chapter 7: Employability and Older Workers in Europe: Exploring Institutional Context	189
7.1 Individual-level Measures and Differences with ELSA Variables	191
7.2 Employability and Labour Market Status in Europe	196
7.2.1 Retired compared to Employed	196
7.2.2 Unemployed compared to Employed	200
7.3 Reflections on Employability and Labour Market Status in Europe	205
7.4 Labour Market Transitions and Employability: Incorporating Macro-level Measures	209

7.5 Methodological Considerations in Looking at the Macro-level Context	212
7.6 Transitions out of Employment	214
7.7 Transitions into Employment.....	220
7.8 Labour Market Transitions, Employability, and Policy and Cultural Contexts	222
Chapter 8: Implications: Rethinking the Role of Employability for Older Workers	229
8.1 Comparing the Results on Employability and Labour Market Status	229
8.2 Comparing the Results on Employability and Labour Market Transitions	235
8.3 The Importance of Health	242
8.4 The Question of Skills and Training.....	245
8.5 The Potential Contradictions of Disposition	248
8.6 The Structure of Opportunities: Older versus Younger Workers	250
Chapter 9: Conclusion	253
9.1 Individuals, Governments, and Businesses: Different Roles to Play	255
9.2 Retention versus Recruitment: Different Focal Needs	259
9.3 Limitations of the Current Research and Paths for Future Work.....	262
References.....	269
Appendix 1: Full Regression Results from Chapter 4	285
Appendix 2: Full Regression Results from Chapter 5	295
Appendix 3: Values of Macro-level Variables Used in Chapter 7	317

List of Tables

Table 1: Primary Findings in Research Literature on Age Stereotypes.....	24
Table 2: Ten Dimensions of Job Performance	31
Table 3: Recoding for Self-Reported Health Variable	96
Table 4: Table of Significant Associations from Multinomial Regression Results (base=Employed).....	105
Table 5: Dispositional Measures from McArdle et al. (2007)	123
Table 6: Dispositional Employability Measures from Fugate & Kinicki (2008)	129
Table 7: Quality of Life (CASP-19) Indicators from ELSA.....	139
Table 8: Significant Associations from Multinomial Regression Results with Dispositional Dimensions (base=Employed).....	142
Table 9: Prevalence of Different Labour Market Pathways.....	160
Table 10: Logistic Regression Results for Transitions out of Employment.....	174
Table 11: Logistic Regression Results for Transitions into Employment	181
Table 12: Countries Included in SHARE by Wave.....	194
Table 13: SHARE and ELSA Quality of Life Measures and Their Links to Employability ..	195
Table 14: Partial Multinomial Regression Results: Retired Compared to Employed	198
Table 15: Partial Multinomial Regression Results: Unemployed Compared to Employed	204
Table 16: Regression Results for Labour Market Transitions	219

List of Figures

Figure 1: Labour Force Participation Rates by Gender for People Aged 55-64 in 2012	12
Figure 2: Employability as an Aggregate Multidimensional Construct.....	59
Figure 3: Conceptual Model of Career Mobility (Forrier et al. 2009)	61
Figure 4: Conceptual Framework of Employability and Labour Market Outcomes	72

Chapter 1: Ageing Workers in the European Union

The phenomenon of population ageing is dramatically reshaping the demographic structure of societies around the world. In industrialised nations, these changes will have a particular impact on the relationship between social protection systems and the labour market. Increases in the old-age dependency ratio (the ratio of the number of older dependents to working age people) provide an illustration of the economic impact of the ageing phenomenon by relating labour force participation rates and dependency among different age groups. Increases in longevity further exacerbate the situation, as people today are living longer, healthier lives. However, these longer lives, coupled with improvements in health at older ages, mean the reality of retirement in the 21st century is much different than when many public pension programmes were created.

A number of factors are promoting a re-examination of the relationship between older individuals and the labour market. A primary concern is the effect of population ageing on the sustainability of current financing arrangements for public policy programmes. For example, many pension policies in Europe have been built on a substantive pool of workers making contributions paid out to a smaller group of pensioners. The demographic dynamic today means that the former group is getting proportionally smaller while the latter gets bigger. Although recent years have seen some reforms away from this pay-as-you-go system, pension programmes continue to put a strain on the public purse. Government leaders thus need to ensure that public policy has an appropriate degree of long-term strategy behind it.

The change brought about by increases in longevity also means that population ageing can provide more years for people to live their lives and engage in various activities. Principles of social inclusion and participation are fundamental to the social agenda of the European Union (EU), and the concept of active ageing has long been seen as a way to address the opportunities and challenges of population ageing. Indeed, older individuals provide a valuable resource given their potential contributions to society. Staying engaged in the labour market can tackle economic and financial issues, but it will also promote social inclusion and autonomy, which can have additional benefits such as improved mental and physical health.

Promoting the labour market participation of older workers can thus serve to address concerns over public finances in addition to the issue of wellbeing for older members of society. Still, there are two aspects that must be addressed with respect to the convergence of age and employment. One is the idea of extending working life beyond the traditional retirement age. The second is to foster full employment up to statutory retirement age and quell historic trends of early exit; it is this second aspect on which this research focuses.

1.1 Ageing and Extending Working Lives in the EU

The concerns around an ageing population have received growing attention in European policy circles in recent years, as researchers and policymakers alike have become more aware of the realities of and implications from changing demographics. As part of this increased awareness, a consensus has emerged that, in order to tackle this phenomenon, a new approach to working life is needed. This new approach should foster the development of the EU as a knowledge-based economy fit for the 21st century

through innovative approaches to labour market policy combined with a commitment to social cohesion and inclusion. A crucial component to achieving this will be promoting the value of older workers and the extension of working life, particularly by reducing exit prior to traditional or statutory retirement age.

As in many countries around the world, the European population is growing and it is growing older. The overall population of the EU-28 is projected to keep growing until 2050, after which there will be a small decline until stabilising around 520 million close to 2070 (Creighton 2014). Due to continued improvements in health and longevity, this population growth will be characterised by an increased proportion of the population that will be older. For example, the percentage of people aged 65+ is projected to increase from 16.0% in 2010 to 29.3% in 2060, while the percentage of those aged 80+ will also grow markedly from 4.1% in 2010 to 11.5% in 2060 (Creighton 2014).

This ageing profile of the overall population presents the primary motivating factor behind policymakers' desire to promote extended working lives. The proportion of adults of working age (16-64) has been declining while the proportion who are older has increased, and governments now recognise that there will be long-term impacts on the labour supply due to the growing old-age dependency ratio (Eurofound 2012). These changes are also occurring alongside changes to the generosity of many public pension programmes and a gradual increase in the eligibility age for such pensions in a number of member states. However, the future financial sustainability of social security programmes for older people will come under great strain if the pool of working people who generate the tax revenue for such programmes grow proportionally smaller to the group of older people who receive such benefits.

The Lisbon Strategy for Growth and Jobs was a driving force in responding to the policy questions of how the EU could and should respond to the structural challenges it faces, including population ageing. First launched in 2000 then again in 2005 following a review, the Lisbon Strategy aimed to foster the dynamism and competitiveness of the EU's knowledge-based economy, focusing on sustainable economic growth, more and better jobs, and greater social cohesion. It combined a market-oriented approach with the principles of the European Social Model, driving economic reforms to ensure welfare sustainability.

Two quantifiable goals related to older workers were built on the Lisbon Strategy: the so-called Stockholm and Barcelona targets. The Stockholm target in 2001 set the ambitious goal of raising employment rates among older workers (aged 55-64) to 50% by 2010. This target was not achieved across the EU-28 until 2013 when it reached 50.2%, having increased from 38.4% in 2002 (Eurostat-c). However, this success has not been across the board, as 2013 rates range from 33.5% in Slovenia to 73.6% in Sweden. The Barcelona target of 2002 set the goal of adding five years to the average age at which workers exit the labour market. This target was also missed, as in the period 2001-2010, the average age of labour market withdrawal among the EU-27 had only increased by an estimated 1.6 years, from 59.9 to 61.5 (Eurostat-a). In fact, it is only estimated to increase to age 64 across the EU by 2060 (European Commission (EC) 2012). The economic crisis begun in 2008 certainly generated greater difficulty for a number of member states to achieve these targets; still, the Draft Joint Employment Report 2009/2010 from the Commission to the European Council indicated that the challenge for older workers due to the crisis was found more in re-employment efforts and less in the risk of job loss (EC 2009).

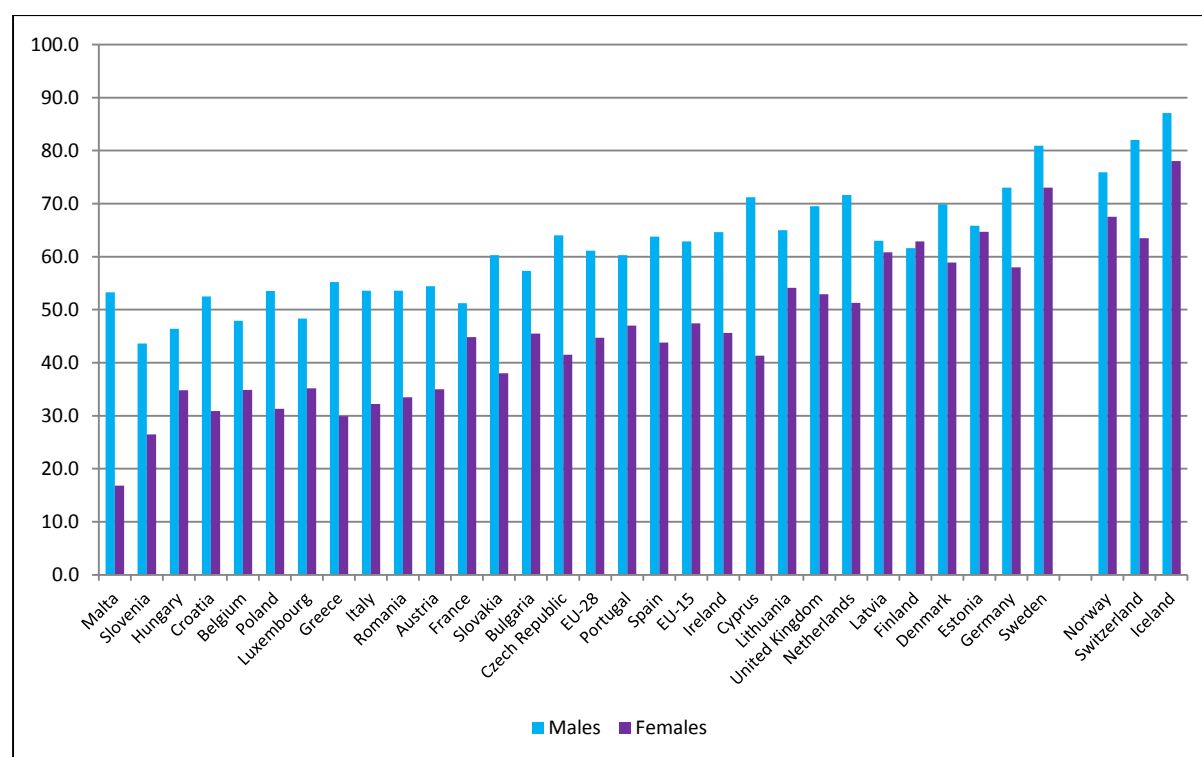
The Commission has since replaced the Lisbon Strategy and associated targets with its EU 2020 growth strategy. As part of this strategy to develop a smart, sustainable, and inclusive economy delivering high levels of employment, productivity, and social cohesion, it introduced a new target to achieve a 75% employment rate for workers aged 20-64 by 2020. As of 2013, the rate across the EU-28 came to 68.4%, 0.1% down from 2010. Achieving this target will be helped by the Agenda for New Skills and Jobs, an initiative that will promote the flexicurity approach, skills development, improved working conditions, and greater job creation (see ec.europa.eu).

1.2 Differences in Employment Rates of Older People across the EU

Since the mid-1990s the labour force participation of older workers has begun to increase with some countries seeing dramatic increases in the proportion of older people in employment. Some of the most dramatic growth can be found in countries who have recently joined the EU and where previously the participation levels of older workers were very low.

Despite increases in the levels of employment of older workers, progress in reversing the long-term decline in participation of older workers has been slow. Across Europe, just under one in three of those aged 60-64 are in employment, and there are still countries where fewer than 40% of people aged 55-64 are in employment (Slovenia, Malta, Greece, Croatia, Hungary, Belgium and Poland in 2012) (Eurofound 2012; Eurostat-b). In Belgium, France, Slovenia, Greece, Luxembourg, Poland, Croatia and Hungary, fewer than half of older men were in employment in 2012.

Figure 1: Labour Force Participation Rates by Gender for People Aged 55-64 in 2012



Given these national differences in the employment rates of older workers, in European policy circles, the concept of employability has been promoted as a focus for increasing the labour force participation (LFP) of older workers (e.g. European Commission 2007b). Without a doubt, understanding the elements that contribute to an individual's ability to find and retain employment will significantly enhance efforts to achieve full employment. Given the attention policymakers have placed on the employability concept as a way to address growing policy concerns over population ageing, it seems reasonable that research is done to understand what the idea of employability means with respect to older individuals and how it impacts their relationship to the labour market. With greater understanding and insights into these ideas, policies can be better tailored to increase the efficiency and efficacy of their goals.

The initial goal of this research is to help explain the factors that promote the LFP of older workers through the conceptual lens of employability. The research explores

the extent to which the concept of employability is related to older individuals' positions in the labour market and how it may facilitate transitions into employment among older workers within different European nations. In particular, the research focuses on different dimensions related to employability and how they contribute to early labour market exit as well as successful transitions back into employment among older individuals, along with how these factors operate at various individual and institutional levels.

More specifically, by developing a multidimensional conceptual framework for the concept of employability, the research in this thesis addresses three main research questions:

- How are the dimensions of employability associated with labour market status among older workers?
- To what degree do the dimensions of employability relate to labour market transitions of older workers?
- Are different elements related to the institutional or cultural context associated with labour market outcomes among older workers? If so, how does this impact the role of employability on labour market outcomes for older workers?

The demographic shifts that result from population ageing mean that it is crucial for societies to identify better ways to take advantage of the experience, expertise, and productive potential of people in later life. Many governments are interested in how to promote extended working lives, with people continuing to work beyond traditional retirement age. Yet insights are also needed in how to promote full employment amongst people in the phase of life just prior to traditional retirement age, who all too often end up out of the labour market earlier than desired. Understanding the issues

around employability in later life may provide important clues in how to enhance the labour market opportunities of people as they age, clarifying the different roles that individuals, institutions, and society at large can play to improve outcomes.

In this context, this research makes a number of original contributions to knowledge in this area. First, it looks at employability in a detailed, measurable way using a multidimensional framework developed from previous theory and research; this allows a more refined examination of the concept, deepening awareness of how various components relate to people being employable, supported by empirical evidence. Second, it looks specifically at employability in the context of older workers, which is important given the existing body of literature demonstrating that this particular group faces unique challenges when it comes to employment issues; in other words, this research helps identify what makes older workers employable. In addition, this research fills earlier gaps in the existing literature by incorporating multinational and longitudinal perspectives into the approach, which offer insights into the role of cultural and institutional factors as well as analysis of transitions into and out of employment. Overall, these contributions lend the research to offer a more informed viewpoint on the kinds of policy measures that might influence people's participation in work in later life, which could allow more refined policy recommendations to be developed.

The rest of this thesis is structured as follows. The next chapter provides a review of the background literature on the subjects of older workers and their interactions with the labour market. It presents previous research on the factors affecting older workers, including: stereotypes and discrimination; productivity and job performance; working conditions, organisational health and safety; and care commitments. The chapter then discusses how policy has an intervening role in the labour market behaviour of older

workers. In this respect, policy can hinder or help older individuals remain in the labour market. There is wide variation across Europe in these policies: employment protection legislation; the promotion of lifelong learning; and active labour market policies. The final part of the chapter also discusses how the policy environment itself can be conducive to early exit from the labour market, and how retirement decisions result from a range of factors.

The focus of Chapter 3 is to outline the conceptual framework of employability explored in the analyses. Following the previous chapter's discussion on policy factors, it starts by briefly highlighting some major themes that have appeared in recent EU policy discourse regarding older workers and the labour market. In this context, the terms 'flexicurity' and 'employability' draw particular interest. The chapter then goes on to demonstrate the wide range of definitions and application of the employability concept in previous empirical research, raising the question of what the term actually entails. The 'work ability' concept is outlined, given its high empirical evidence supporting the employment of older workers, along with its conceptual similarity to employability. The chapter then draws on the conceptual elements consistent across previous studies of employability, informed by the work ability concept, to develop a new conceptual framework consisting of six dimensions of employability: health; human capital; social capital; identity; adaptability; and flexibility. In combination with the lessons from the previous chapter regarding policy, the framework also incorporates the influences from a range of macro-level factors associated with social and political environments. The chapter concludes by presenting the main research questions of this study.

To begin answering the research questions, Chapter 4 provides the first empirical exploration of the employability framework. Given the complexity of the framework, the

six dimensions were separated into resources and dispositions. This chapter provides further literature on the relationships between each resource dimension (health, human capital, and social capital) with employment, exploring the justification for why these dimensions should impact labour market status. The analysis is conducted on cross-sectional waves of panel data from the English Longitudinal Study of Ageing (ELSA). An interesting finding from the initial and partial evaluation of the framework suggests that the overarching emphasis in policy circles on human capital aspects (e.g. skills and training) as important for employability may be misguided, in that there was little to suggest any differences between employed and unemployed older workers.

Chapter 5 continues the application of the employability conceptual framework in the cross-sectional analysis of ELSA. It introduces the remaining dimensions, associated with dispositions or internally generated qualities. The chapter begins by explaining the dimensions of identity and adaptability as they have been explored in other literature, their relevance for employability, and the challenges associated with their definitions and measurement for empirical purposes using large-scale survey data. The discussion then transitions to an emerging extension of the employability research at the foundation of the current framework: the concept of dispositional employability. The framework dimension of flexibility is considered with respect to difficulties combining care responsibilities and work. Issues related to the representation of these concepts using the data in ELSA are then discussed. Measurement concerns notwithstanding, the primary picture to emerge from the results suggests tenuous relationships between the dimensions and labour market status. This raises initial doubts as to the effectiveness of current approaches to enhancing employability as a way to enhance the employment and labour market participation of older workers.

The analysis done in these two chapters only looked at the relationship between the employability dimensions and labour market status. To understand how these factors may relate to older people's mobility in the labour market, Chapter 6 provides the first insight in the role of the employability dimensions in the labour market transitions of older workers. Indeed, much of the underlying theory behind employability functions less in relation to labour market status, but more in how change can occur. The chapter presents the various pathways across labour market status among respondents across the five waves of ELSA data, highlighting the relative infrequency of changes other than complete exit to inactivity. The majority of these respondents, aged prior to State Pension Age, represent a form of early retirement. The chapter then develops separate models for the genders to examine the relationship between employability measures and both transitions out of employment and back into employment. The findings provide limited support for particular elements of employability to facilitate transitions back into work. However, the evidence is stronger that exit from and re-entry to employment are mitigated by functional capacity and other personal limitations.

The analyses in the previous chapters explored the employability framework in a constant contextual setting using a single country, England. Given the theoretical importance of cultural and economic factors on employment outcomes, Chapter 7 introduces these diverse elements. Using data from the Survey of Health, Ageing, and Retirement in Europe (SHARE), macro-level indicators are introduced into the analysis, providing both controls for cultural and contextual differences, but also the opportunity to examine how particular factors may impact labour market outcomes. While similar individual elements related to employability are associated with labour market status

and transitions into and out of employment as those in the English data, the findings also provide evidence that macro-level factors play a role as well. In particular, rates of lifelong learning, active labour market policy, prevalence of flexible working hours, level of perceived age discrimination, and the official retirement age all demonstrated associations with transitions out of work. In contrast, for transitions back into work, the only macro-level factors to appear significant were the effective retirement age and the net replacement rate from public pensions, suggesting that policy related to retirement standards may have a disincentivising effect on older people's return to work.

Chapter 8 serves to bring the findings from the previous chapters together to understand the role of employability on the labour market behaviour of older workers. It highlights the importance of health and physical capacity for older people to remain in work, both in terms of their own health but also the health of others, as informal care can limit one's ability to stay in work. It also raises the question on whether an emphasis on skills and qualifications is an appropriate perspective in effecting greater labour market participation among older people. The chapter discusses how older people differ from younger workers due to having retirement as a possible destination for labour market status, contrasting the notion of NEETs (not in employment, education or training), and how this may reflect the limited ability for employability to improve labour market outcomes among older workers. A final theme in the chapter addresses how institutional arrangements impact older workers, particularly in terms of early exit, and how both policymakers and employers can play a role to facilitate longer working lives among older people.

Chapter 9 reviews the findings from the entire thesis and underscores the underlying narrative argument that employability as a concept has limited use in

policymaking when it comes to older workers and extending working lives, based on an understanding of employability as an outcome-based measure. This chapter also notes the various limitations to the present study and the measures used, along with the possible directions for future research.

Chapter 2: Older Workers and Labour Markets in Europe

European societies have entered the 21st century facing a variety of changes to the organisation of work, welfare, and relationships. Policy-makers, scholars, and researchers have all contributed to generate awareness of the need to adjust current approaches to changing demographic realities. A greater number of older adults (over 55) are living longer, healthier lives with the potential for continued contributions in work and their communities beyond current standard retirement age. This point is particularly relevant in light of the fact that the proportion of “prime-age” workers (25-54) is decreasing compared to those of other ages. The sustainability of European welfare systems will be threatened by the pressures from pension systems as unprecedented numbers of adults move into retirement at a time when those working (and consequently making contributions to the financing of social protection systems) are becoming smaller in relative size.

The improvements in longevity and health for older adults, combined with the concerns over welfare sustainability, have led to debate over the need to extend working life and raise labour force participation (LFP) rates among older people in the European Union. In the context of the current research, this chapter starts the journey by examining the current research on older workers and the factors affecting their engagement (or lack thereof) in the labour force. It then explores the institutional contexts relevant to older people in Europe and their prospects for employment, in addition to factors that relate to early retirement.

2.1 The Factors Affecting Older Workers

The following section reviews the primary factors affecting older workers and their relationship to the labour market. It starts by looking at how attitudes related to age can impact opportunities, as age-based stereotypes can lead to discrimination that can hinder an older individual's aspirations to continue work. Some of these attitudes can hinge on arguments related to understandable business concerns such as worker productivity and job performance, but it is critical to identify the degree to which these arguments are sound or misinformed. Working conditions are also relevant to the prospects of continued work for older people. Health and safety concerns directly shape an individual's capacity to work into old age, and the desire to extend working life depends on changing work organisation and increased flexibility. The need to balance work with family and care commitments is a particular case highlighting the importance of increasing work flexibility for older workers.

2.1.1 Stereotypes & Discrimination

The EU social agenda seeks to reduce social exclusion and foster greater equality for citizens. In the labour market, workers require settings in which they are treated fairly and appropriately in order to make the best contribution possible. For older workers, age-based attitudes and stereotypes can create unwelcoming environments or lead to discriminatory treatment that reduces their willingness and capacity to fully contribute to the workplace.

Surveys have been done to explore the perceptions of employers and employees with respect to age. One study by Van Dalen et al. (2009) shows that stereotypes are held regarding older workers as well as younger workers. Flexibility, physical and mental

aptitude, an open attitude toward learning, and technological prowess are recognized in younger workers, while older workers are admired for firm loyalty, reliability, and skills in social interaction. Other research has highlighted the stereotypes that employers hold regarding their older employees in particular. Some of these perceptions are of a positive nature, with older workers characterised as more reliable, flexible, and less accident-prone (Taylor & Walker 1998a). Positive stereotypes have also been noted in the literature, such as trustworthiness, firm loyalty, higher job commitment, and lower absenteeism (Roscigno et al. 2007; Posthuma & Campion 2009).

Negative stereotypes of older workers are more concerning, however, as they have the potential to lead to discriminatory actions by management that would have a detrimental impact on an individual's life. Many studies have described the various negative perceptions employers attribute to older workers. Among these are that older workers are too cautious, resent taking orders from younger workers, are unable to do heavy physical work, and are just biding their time until retirement (Taylor & Walker 1998a; Walker 2005). In addition, negative stereotypes are also applied toward older workers with respect to productivity and training (Taylor & Walker 1998a; Walker 2005; Posthuma & Campion 2009). Older workers are thought to have lower job performance than younger workers, perhaps due to reduced physical or mental capacity or outdated skills. It is also assumed that older workers are uninterested in training and learning new skills, and that an investment of this sort by the employer will yield lower returns than on a younger employee due to reduced tenure.

Cited earlier, Posthuma & Campion (2009) conducted an extensive review of the literature on age-based stereotypes, covering 117 articles and books, and identified 14 primary findings related to the attitudes that exist and the evidence to support or refute

them; six of the findings identify prevalent age-related stereotypes, while eight provide evidence either to refute certain stereotypes or to demonstrate how these stereotypes impact older people's experiences in the labour market. Table 1 lists their primary

Table 1: Primary Findings in Research Literature on Age Stereotypes

Prevalent Age-related Stereotypes
1. Poor Performance: Older workers have lower ability, less motivation, and are less productive than younger workers.
2. Resistance to Change: Older workers are less flexible, less adaptable, harder to train, and more resistant to change. They will consequently provide less return on investments like training.
3. Lower Ability to Learn: Older workers have a lower capacity to learn and lower potential for development.
4. Shorter Tenure: Older workers have shorter job tenure than younger workers and will provide less time to provide returns on training investments.
5. More Costly: Older workers are more costly to a firm due to higher wages, more benefits, and proximity to retirement.
6. More Dependable: Older workers are more dependable, stable, honest, trustworthy, loyal, committed to the job, and less likely to miss work or turnover quickly.
Evidence on the Impact of Age-related Stereotypes
7. Refuting Poor Performance: There is little evidence that job performance declines with age. It often improves, but when it goes down, the decline tends to be small.
8. Refuting Poor Performance: Individual skill and health is more important to job performance than age, and there are greater differences within age groups than between them.
9. Refuting Shorter Tenure: Older workers usually do not give lower returns on investments because they are less likely to quit, and the payback from investments tends to come in the short term.
10. Employment-related decisions can be influenced by age-based stereotypes, in areas such as lower interview assessments and performance appraisals.
11. Stereotypes about older workers are held by older workers themselves and can impact decisions. The effects diminish only when they identify with an in-group of older workers.
12. Job-relevant information can reduce the effects of age-based stereotypes.
13. Age stereotypes can influence recruitment decisions because some jobs are perceived to be appropriate for employees of a certain age.
14. Certain industries exhibit greater levels of age-based stereotypes, including finance, insurance, retail, and computing/information technology.

Source: Posthuma & Campion (2009)

findings. As they illustrate, these stereotypes have consequent effects on older workers, including fewer opportunities for training and promotion, lower evaluations of job applications and work performance of older individuals, and lower retention.

With respect to the idea of extending working life, the question of job retention is critical. Posthuma & Campion (2009) note that stereotypes can lead to older workers being made redundant more often, and analyses have shown higher vulnerability to age discrimination for workers approaching age 50 and standard retirement age, with the most likely consequence of expulsion from the workforce (Roscigno et al. 2007). The position of older workers is persistently threatened by exclusionary policies, particularly during economic downturns and other pressures, even among companies noted for 'best practices' in age management (Taylor 2007). In addition, a discriminatory work environment stemming from age-based stereotypes can deter older workers from choosing to stay in the workforce (Brooke & Taylor 2005).

The inherent problem is not related to the existence of stereotypes per se, but to the discrimination that can result from them. For example, previous research has identified that, while both negative and positive stereotypes of older workers do exist, the negative stereotypes remain more robust than positive ones (Krings et al. 2011). More specifically, older workers were perceived as warmer but less competent than younger workers, but were still discriminated against even when the job required warmth-related qualities. Furthermore, management decisions that are shaped by age-based stereotypes can affect older workers in a number of ways. They can lead to skills becoming obsolete, a sense of career immobility or plateau, less value placed on work, and lower self-esteem (Kooij et al. 2008).

As highlighted by Villosio et al. (2008) in their report for the European Foundation for the Improvement of Living and Working Conditions, the manifestation of age discrimination against older workers can be explicit or implicit. Explicit forms include the exclusion of older workers from training programmes, promotions, or other work-related benefits, placing age restrictions in recruitment advertisements, or refusing to hire applicants above a certain age. Discrimination can be implicit in the form of limitations on job responsibilities and duties, encouraging early retirement, or reducing incentives to stay on beyond the standard retirement age. These actions foster the stereotypical perception that older workers are the most dispensable segment of the workforce.

Walker (2005) points out that much age discrimination is hidden and indirect, occluding attempts to provide evidence for its existence and pervasiveness. Some accuse older workers of using it as a cop-out or excuse for what may in fact be justifiable treatment. Discrimination is also affected by numerous factors like background and education, putting limits on the use of employers' perceptions to measure it (Harper et al. 2006). Still, older workers do represent a smaller proportion of new hires taken on by firms, and an OECD analysis has revealed this preferential hiring practice as a factor in higher levels of long-term unemployment among older people (OECD 1998).

While a certain degree of discrimination may occur inexplicitly without drawing much attention, data from the European Working Conditions Survey (EWCS) nonetheless suggest that there is only a limited degree of age discrimination taking place across age groups in the period 1995-2005 (Villosio et al. 2008). What it does confirm, however, is that workers over 55 experience higher levels than workers in the groups aged 25-34, 35-44, and 45-54. One limitation of this data is that it gathers

information on discrimination only in the context of the workplace and not in aspects of recruitment. Older workers are highly susceptible to the discriminatory consequences of age-based stereotypes during the job application process, which should be kept in mind when reviewing measures of age discrimination.

In a 2005 study, the Chartered Institute of Personnel and Development (CIPD) highlighted the fact that recruitment is the biggest area of concern regarding age discrimination. The study also found that redundancy decisions for workers over the age of 55 are still predominantly made on the basis of age. Respondents, which included managers and personnel officers, indicated that retaining older workers was driven more by the desire to retain knowledge and expertise rather than an economic cost factor, and 85% said older workers do not cost more money (another stereotype often found in the literature). Investing in the updating of skills and qualifications among older workers was considered worthwhile by 93% of respondents. Advocating for this kind of investment by employers could be supported by the fact that employees expressed the desire for greater flexibility in their working and pension arrangements as they approach retirement age, indicating a general willingness to stay in the workforce (and hence provide return on the investment). Career advice is thus important for older workers, particularly given the discrepancy between personal expectations of retiring by the age of 65 and perceptions that most other people will retire later than 65. Moreover, survey respondents indicated an awareness that career expectations do not diminish with age, supporting the move for greater career planning.

Results from research by Duncan & Loretto (2004) show workers over the age of 45 as more prone to negative age discrimination than workers aged 25-45 from the perspective of the employees. Older workers perceived discrimination more in terms of

training opportunities rather than pay or benefits. The research also highlighted a gendered dimension of ageist attitudes. There were similarities between the genders in their experiences of discrimination, but the disadvantage of being considered 'too old' had a greater impact on women. Thus, being female appears to intensify the experience of ageist attitudes. As a consequence, addressing age discrimination via mechanisms such as legislation should not occur within a gender-neutral framework; rather, the authors suggest an incorporated approach to equality that considers age and gender along with other characteristics at risk of discrimination, like ethnicity and disability. Moreover, attention to tackle issues of discrimination with respect to one group can have a spillover effect, improving the situation for another at-risk group (Posthuma & Campion 2009).

The size of the firm has also been noted as a potentially significant factor in older workers' experiences in the workplace (Harper et al. 2006). Negative stereotypes and attitudes were found to a higher degree among employers of small firms. Larger firms appeared more flexible with respect to age among employees and potential recruits, reflected in older age profiles. For the present research, it is important to note the younger age profiles among large companies in Europe, as do Harper et al. (2006). While Europe faces the challenges of ageing populations (in terms of both labour supply and social provision), the culture of early retirement continues to impact employers' attitudes toward older workers and the subsequent level of their engagement in the workplace.

Discrimination against older workers is entrenched in the policies, culture, and practices of many organisations, and age has been found to play a role in all aspects of employment, including recruitment, pay, professional development, and decision

around redundancy (Metcalf & Meadows 2010). Both employers and employees can carry stereotypes about the older worker, be unaware of the issue of discrimination, and hesitant to accept policies to better integrate older people into the workforce (Taylor & Walker 1998b). Of major concern here is the relationship between employment prospects and the qualifications and work capacity of the individual. Factors like age-based stereotypes, which are unrelated to actual abilities of an individual worker, should not form the basis for management and hiring decisions of older people (Taylor & Walker 1998a; Brooke & Taylor 2005).

2.1.2 Productivity & Job Performance

Some of the stereotypes of older workers mentioned above can be understood to relate to concerns over worker efficiency and how older employees perform their jobs. Van Dalen et al. (2009) disagree with other scholars who view population ageing as associated with a negative effect on productivity or economic growth, arguing that the aggregate nature of macroeconomic studies on the topic leaves the picture unclear. Despite acknowledgement of comparative advantages between different age groups of workers reflected in the origins of the stereotypes listed above, the prevailing view is that older workers are less productive. This perception has also been linked to a reluctance on the part of employers to hire older workers (cf. Daniel & Heywood 2007; Heywood et al. 2010; Deelen et al. 2014; Heyma et al. 2014).

Studies on age and productivity have yielded mixed results (Ng & Feldman 2008). In a literature review on the topic of age and productivity, Skirbekk (2003) discusses the interconnected role of physical and mental abilities with experience and education in determining a worker's productivity potential. Cognitive abilities begin to decline at some point as individuals age, with some studies suggesting this occurs as early as the

20s (Avolio & Waldman 1994). However, research has shown that cognitive training in reasoning, memory, and speed can stave off this decline or even reverse it (Ball et al. 2002). In contrast to these abilities, there are other aspects of cognitive performance that do not seem to show gradual impairment with age. These relate to verbal communication and interactive skills.

Börsch-Supan et al. (2006) note the challenge in measuring age-related productivity due to the difficulty in establishing clear measures for productivity. Studies in occupational medicine, cognitive psychology, and gerontology have looked at muscle strength, sight, retentiveness, and other measurable indicators to discern how skills and capacities change over the lifecycle. There are indications that mental and physical abilities decline after the age of 25, but a comprehensive measure of productivity, particularly when looking at older workers, must go beyond these components and take account of the effect of experience.

A number of factors related to experience are found in the literature on age-related productivity (Skirbekk 2003). Experience can counteract the effects of cognitive decline on productivity. Tenure contributes to a mastery of firm-specific knowledge and can allow the creation of mental shortcuts to accomplish tasks and improve efficiency. However, older individuals learn at a slower pace than their younger counterparts, particularly when the material is substantively different from what they already know. As technological change impacts the workplace, job complexity increases, and workers face new problems, the benefits of experience become less relevant. After a point, experience no longer compensates for the effect of cognitive decline on job performance.

Most studies of age-related productivity have focused on core activities (Ng & Feldman 2008). A proper evaluation of job performance and productivity as related to age must also go beyond the performance of core tasks to incorporate other job-related behaviour. Ng & Feldman (2008) conducted a meta-analysis of 380 empirical studies to explore ten dimensions of job performance. The dimensions of their analysis and the findings with respect to age are summarised in Table 2.

Table 2: Ten Dimensions of Job Performance

Performance Dimension	Relationship to Age
Core Task Performance	Largely Unrelated
Creativity	Not Significant
Performance in Training Programmes	Negative (Weak)
Organisational Citizenship Behaviours	Positive
Safety Performance	Positive for Self-Rated Compliance; Negative for Objective & Self-Rated Frequency of Injuries
General Counterproductive Work Behaviours	Negative
Workplace Aggression	Negative
On-the-job Substance Abuse	Negative
Tardiness	Negative (Strong)
Absenteeism	Negative for Objective and Non-sickness Measures; Positive (Very Weak) for Sickness Absence

Source: Ng & Feldman (2008)

They found that older workers appear to do better on a number of non-core job performance measures. Older workers show greater citizenship and safety-related behaviours and less general counterproductive behaviours, workplace aggression, on-the-job substance abuse, tardiness, and voluntary absenteeism. The research also found no significant relationship between age and performance of core job tasks or creativity, and age had a slightly negative relationship with performance on training programmes.

The authors note a number of factors that could confound the interpretation of this negative relationship, including the use of post-training scores and primarily technology-based training programmes. However, in later research, these authors examined the evidence related to six common age-based stereotypes, only finding empirical evidence for the stereotype that older workers are less willing to participate in career development and training activities (Ng & Feldman 2012).

Firm characteristics also impact the potential to determine actual job performance (Skirbekk 2003). Börsch-Supan et al. (2006) discuss four approaches to measuring productivity in existing literature on the subject, pointing out their strengths and weaknesses. As a consequence, they develop a new approach, looking at productivity at the level of work teams. Their study looked at a single car-assembly plant, thus their results are limited in the degree to which they can be generalised to a broader perspective. Nonetheless, their findings indicate that work teams perform worse (i.e., they make more errors) if they have a higher mix of older and younger workers. However, the productivity profile was unaffected by age in the sense that teams of older workers performed just as well as teams of younger workers. This and other research has suggested that older workers are just as efficient as their younger counterparts, and that much of the perceived difference is related to employers' negative stereotypes (Walker 2005).

Future issues concerning the productivity of older workers could be mitigated by meaningful investment in human capital and lifelong learning, including for workers in their 40s and 50s (Van Dalen et al. 2009). Jorgensen & Taylor (2008) also note the potential to offset productivity declines through investment in human capital. As policy-making seeks to integrate an idea of age management with work, an ongoing effort to

revitalise and modernise workers' skills is key and will also align workers' competencies with labour market demands. Access to such training is crucial, but research indicates there are challenges on two fronts. Some groups of older workers (e.g. temporary or part-time employees) tend to receive fewer opportunities, as employers' stereotypes reinforce lingering questions about investing in skills development for older workers, especially when the return on investment is perceived as potentially marginal.

The Van Dalen et al. (2009) study shows that stereotypical views on the variation in productivity of younger and older workers are remarkably similar between employers and employees themselves. Thus claims of age discrimination and employers' perceptions as the principal barrier to equal employment opportunities among older people must be modified to incorporate the impact of employees' attitudes on the differential treatment in the labour market. For example, some older workers themselves can be ambivalent about taking up training opportunities, consider retraining unnecessary due to their age, or that they are too old to be rehired when unemployed (Phillipson & Smith 2005; Taylor 2008). Still, it was previously noted that stereotypes of older workers include the belief they are resistant to change and unable to learn. Individual needs assessments, conducted fairly and without the influence of age-based assumptions, are therefore critical to ensuring the full integration of older workers into any lifelong learning programmes (Frerichs & Taylor 2005).

2.1.3 Working Conditions: Health, Safety, & Work Organisation

The work environments in which older workers find themselves further shapes their capacity to remain engaged in the labour force. The physical changes associated with ageing can impact a worker's ability to perform. Working conditions, particularly

with respect to health, safety, and work organisation, are key components in adapting the labour market to enable older individuals to continue work.

The notion of health and safety is also important, and a mindful work design is key to providing older workers with greater possibilities to stay in the labour force (Walker 2005). Such efforts could include preventative measures aimed to reduce the risks of injuries and accidents or adaptations to the physical decline experienced by older workers (e.g. reducing the amount of time required to stand for long periods). Research from Finland on the concept of work ability, discussed later in this chapter, highlights the importance of reducing physical workload with respect to age-related fitness, adjusting work-rest schedules to mitigate the effects of fatigue, and decreasing repetitive movements (Ilmarinen & Rantanen 1999). Still, there is little evidence that employers have made efforts to redesign jobs to improve the environment for older workers (Taylor & Walker 1998b).

In addition to concerns over the physical environment and the demands placed on older workers, improving their working conditions should include aspects related to working time. Ghosheh et al. (2006) suggest that these measures could include: reducing the hours of work done in a day or over the course of a week; increasing annual paid leave with tenure (though there is reason to doubt any direct association this has with age); decreasing the amount of non-standard shift work done; and providing flexible work arrangements (such as part-time employment, gradual retirement, or flexible schedules).

Flexibility in the organisation of work may lend itself to a greater number of older workers remaining in the labour force or taking employment with a firm that offers it. Older workers want flexibility as they approach retirement, which can be accomplished

through gradual retirement programmes, flexible retirement age, training via community programmes, or short-term work placements (Walker 2005).

In their study on different types of work organisation, Lorenz & Valeyre (2004) found that older workers and workers with higher seniority tend to be characterised more with what they term the 'learning' form of work organisation. This type of arrangement involves 'strong learning dynamics and high problem-solving activity' with a relatively high degree of employee autonomy (Lorenz & Valeyre 2004: 2). There is a high degree of task complexity as well as continuous learning as workers adapt to the problems they face in their individual work situations. The authors find that these kinds of firms are more inclined to link pay with company performance and have higher rates of expenditure on training programmes.

The structure of management and supervision also impacts older workers' experiences. There may be stark differences between a formal non-discrimination policy in a firm and the actual behavioural outcomes of line managers. This point is significant as many firms move personnel management responsibilities to line managers. In cases where senior management has been successfully influential on the organisational culture of a firm, older workers have experienced improved opportunities in employment and promotion (Taylor & Walker 1998b).

A recent review of relevant research on how work factors play a role in early retirement concluded that psychosocial elements play an important role in the likelihood of retiring on disability (Pohrt & Hasselhorn 2015). The evidence that high job demands, on the other hand, was mixed, with an association found in some studies but not others. With respect to early retirement unrelated to disability, the overall evidence is again inconclusive as far as job control and physical workload are concerned. Further

work is needed to more clearly identify the impact of such work factors on transitions into retirement, and further factors related to psychosocial demands need to be introduced into such research.

2.1.4 Care Commitments

Obligations to provide care also play a role in the potential labour market engagement of older workers. Many people who provide informal care to older family members are in the age group 52-64 (Jivraj & Nazroo 2012), and the likelihood of care provision increases with age (Laczko & Noden 1992; Evandrou & Glaser 2003). In addition, the majority of formal caregivers are aged 45+ and female (Simonazzi 2009).

There is a significant gender dimension to care provision, as women carry a significant burden of the responsibility for providing care, particularly unpaid (Hoskins 1993; Lewis 2001; Bettio & Plantenga 2004). With respect to childcare, this often means interruptions in a woman's work history, with consequent effects on her pension contribution record and position to retire later in life. While this could promote an extended work life, difficulty in combining work and care tends to mean individuals with care responsibilities move out of the labour market. For many women in particular, this means there is a combined effect of a 'wage penalty' prior to retirement and a 'pension penalty' afterward (Evandrou & Glaser 2003). And while caregivers tend to be retired or economically inactive women, it is unclear if care pushes them to retirement or if retirement makes care provision easier (Evandrou & Glaser 2003).

Case studies of carers in Finland and Italy by Zechner (2005) found that few respondents altered their employment situation when care was required for older relatives, though some reduced work for childcare purposes. The study by Evandrou & Glaser (2003) found indications that, in the cases where the onset of care commitments

reduced one's level of activity in the labour market, the decline did not always reverse once those responsibilities ended. While the results are only suggestive, this notion fits with the understanding of the increased difficulty in labour market re-entry for older individuals. The importance of flexibility in working arrangements is therefore critical to allow older workers to remain engaged, while policies should also address the need to enhance the individual's lifelong relationship to the labour market along with the ability to enter and exit it over the life course (Lewis 2001; Evandrou & Glaser 2003; Giullari & Lewis 2005). Overall, effective support for those providing informal care to family members includes respite care, day-care centres, paid care leave, flexible working hours, (Hoff et al. 2014).

The question of the conflict between care commitments and work is most relevant in circumstances where the care provided is informal and unpaid (often given by family), and more on this will be discussed in Chapter 5. Still, it is important to consider the formal sector of care work and how its shape impacts care provision. While older care workers are subject to the same issues facing other older workers (as discussed throughout this section), understanding the realities of the care sectors in different countries can provide insight on the extent to which care obligations can affect workers.

The number of formal care workers and the extent of a labour shortage in the care workforce are shaped by national policy (Simonazzi 2009). A shift toward more home and community based care and greater use of private services characterises recent trends in care. Other research has also shown the impact that different welfare states have on the resources available to dual carers (looking after children and older relatives) (Zechner 2005).

2.2 The Intervening Role of Policy

While a range of factors like those discussed above relate to individuals' circumstances and impact their capacity to engage in work, the structure of the labour market in which people find themselves can also play a role in shaping their decisions and opportunities. This section examines these structural factors, such as how policies around dismissals can have an impact on the labour market status of older individuals. Policies around dismissals, adult education and training, labour market activation, and retirement can all impact the relationship older people have with work. As the modern workplace has undergone substantial transformations in recent years, particularly with respect to technological advancements, skills and qualifications are in perpetual need of updating through an approach of lifelong learning and the provision of appropriate training programmes to employees of all ages. Active labour market policies offer an opportunity to promote these concepts, but only when their application and uptake applies to older and younger employees equally. Finally, a constellation of factors exist that can impact older people's opportunity or need to exit the labour market early.

2.2.1 Employment Protection Legislation

One important factor influencing labour market status is employment protection legislation (EPL). EPL emerged in different European countries to provide security to workers against unjust dismissal. One study reviewed the extent to which job protection expanded in a number of European countries through the post-war period and into the 1980s (Lazear 1990). The research addresses the theoretical notion that contractual agreements can offset the effects of severance pay on labour markets. Still, the evidence illustrates the fact that employment protections that affect labour costs in this manner

reduce the size of the labour force. Employees with jobs are more likely to retain them, but firms are less likely to take on more workers in this environment. This further exacerbates the insider-outsider dilemma, protecting workers in the labour force while marginalizing job seekers through reduced opportunities.

As the regulations associated with EPL have restricted firms' ability to manage their labour force, it has intensified the diversification of work. In particular, temporary job contracts became more attractive to firms. When a company needed more workers, EPL generated disincentives to take on more permanent employees who would then be eligible for severance pay if the company later needed to downsize. Employees hired via temporary contracts were already limited in the time they would be working. Firms could then hire other workers on temporary job contracts if needed. In some cases, the contracts could be renewed if desired, but more often the nature of the contract prohibited renewals. As a result, temporary workers, at the end of their tenure, generally returned to the pool of the unemployed.

With respect to older people, the net effect of EPL is mixed. Older employees certainly benefit from the provisions that reinforce their insider position to continue work, enhanced by the potential to avoid age-based discriminatory dismissal. However, evidence already shows that older people who are unemployed have a more difficult time finding work than their younger counterparts. The overall effect of EPL on older people is thus dependent on their position in or out of the workforce. Temporary employment opportunities, while potentially available, do little to improve the longer-term prospects for unemployed older people.

EPL can also be understood to place constraints on firms through requirements for consultation with trade unions and worker representatives prior to dismissals. In

addition, greater bargaining power held by workers can lead to greater levels of employment protection (Saint-Paul 2002). This is due to the relationship between bargaining power and the outcomes in terms of wages. During economic shocks, increases in the costs of production translate to higher labour costs. Minimum wages and regulations on labour management (such as predetermined notification periods for dismissals or generally lower capacity to shed workers) reduce the flexibility firms have to adapt to these increasing costs. Restrictions on the capacity for cost management will reduce innovation and firm productivity, stifling economic growth. Thus, collective bargaining arrangements are seen to impact the functions of the labour market and employment levels.

Little research has actually been done to evaluate the impact of EPL on retirement transitions (Mairhuber 2015). Some research has found that strict EPL leads to higher levels of involuntary retirement, as companies looking to shed labour opt for early retirement packages rather than redundancies (Dorn & Sousa-Poza 2010), while other research has found no such association (Fischer & Sousa-Poza 2007). More research is therefore needed in order to develop a clearer conclusion on the relationship between EPL and retirement.

2.2.2 Lifelong Learning

Another factor important for older people in the context of work is access to lifelong learning. Depending on the subjective frame, lifelong learning is conceptualised as something for older adults or as something that happens to people after graduate studies and labour market entry. The recent approach for the debate on education and older adults has shifted toward a learning focus rather than a focus on education in later life (Glendenning 2001). Age is certainly a factor to consider for those designing lifelong

learning policies, but there is greater impetus to move toward an approach that enhances lifelong benefits for members of the new knowledge society.

Nonetheless, lifelong learning does have particular and unique relevance for older people. Participation in lifelong learning declines with age in each member state of the European Union (Descy 2006). However, higher age is not necessarily the single causal factor for lower rates of participation in lifelong learning; other variables including educational attainment, interest in education, the learning context or type of instruction, and employers' attitudes toward training older workers may also be important factors (Descy 2006). The human capacity for learning does not end at any particular point in the life course, but remains throughout the years.

The underlying theories related to education and learning suggest that old age should be seen as a time of change rather than a period of stagnation in life (Luppi 2009). Important personal developments occur at numerous and various times in one's life. Lifelong learning has the potential to enhance the ability of older workers to make easier transitions between different stages of life (Salling Oleson 2006). With continuous, lifelong development, the benefits of lifelong learning and education should be obvious.

As discussed by Luppi (2009), the lifelong learning approach attempts to shift adult education from a strictly leisure activity to one that is recognised as a bona fide learning initiative. The first suggestion for this approach is to give validity to informal contexts for their ability to serve as educational environments. Second, a subject-centred process is of special importance, rather than focusing on the end product or specific outcomes. There should also be recognition of the model of continuous development, in that individual experiences are highly varied and that older people

continue to maintain a capacity to learn. The fourth suggestion is to use lifelong learning as an instrument of citizenship, in order to spread the benefits of learning programmes to communities and greater society.

Resonant with these points, Nyhan (2006) argues that a more active approach to lifelong learning would necessitate more informal training, incorporating learning in all aspects of life, valuing experience and informal learning, and the adaptation of work environments to mitigate any stress that could emerge from the pressures to learn. Accomplishing these goals depends on a concerted, community-wide effort, and the promotion of lifelong learning among older workers relies on the integrated support of stakeholders across society (Nyhan 2006). In much of the discussion, lifelong learning is primarily seen as an individual's responsibility, in order to increase marketability; however, the individual's role must also be balanced with efforts on the organisational and societal levels (Tikkanen 2006).

For the individuals pursuing adult education in later life, research findings indicate a perceived sense of freedom (Luppi 2009). The prevalence of this leisure-centred motivation for lifelong learning was also associated with high motivation and commitment to the process. The study's respondents also showed more interest in the learning aspect than in having an outlet for social interaction. However, other research has suggested that older people used learning opportunities primarily as a way to boost social capital and networks, as opposed to developing skills and qualifications specifically for economic purposes of labour market engagement (Davies & Hughes 2009). Nonetheless, as Luppi (2009) points out, the motivation to learn is certainly positive, but one should not overlook the importance of the social context of the learning experience.

While some adults may engage in lifelong learning strictly for the educational component of the experience, there are two elements relating to the social setting of particular importance to older individuals (Davies & Hughes 2009). Older age is a period of unique life transitions. Retirement may be perceived as a well-deserved period of rest following work, but the exit from the workforce itself can be problematic for people with respect to social connections. The community of the workplace often provides a great proportion of one's opportunities for social interaction. With labour market exit into retirement, this social capital decreases. Moreover, older age is also a period where the spectre of death becomes more salient, and a period of life in which one is more likely to lose friends and loved ones to illness. This can have notable emotional consequences on top of its diminishing effects on social capital. To an extent, lifelong learning environments can provide substitutes for these lost social connections.

The second social relevance of lifelong learning relates to the technological changes in recent decades that have substantially transformed modern communication (Davies & Hughes 2009). As people of all ages move more and more to using mobile phones, email, and even Facebook to stay in touch, technological skills will become ever more relevant to maintain social networks. A human capital perspective on lifelong learning indicates the rationale for using lifelong learning to enhance older people's skills in technology, but consideration of social capital such as this extends the argument beyond economic concerns alone.

2.2.3 Active Labour Market Policy

Training is an obvious part of the lifelong learning approach discussed in the previous section. It also is an important component of active labour market policies (ALMP or activation policies), which aim to promote employment and work

engagement. Activation policies constitute a significant aspect of current debate on the labour market and must be included in any research looking at employment issues. For example, the European Commission previously emphasised the pursuit of ALMP targeting the long-term unemployed, with a participation rate benchmark of 25% by 2010 (CEC 2007b).

ALMP can come in a number of forms, all of which seek to enhance the ability of the (typically unemployed) worker to engage purposefully in the labour market. The goal of ALMP is to make the transition between jobs easier and the duration of unemployment shorter. Public employment centres can offer resources and counsel for job searches and relevant job-acquisition skills such as interview preparation and CV drafting. Action plans can also be developed, through which an individual worker obtains the relevant training, guidance, and assistance suited to the particular case and set of personal objectives.

Irene Dingeldey (2007) makes a unique distinction of two conceptual dimensions of active labour market policy: 'workfare' versus 'enabling state' approaches. Workfare approaches involve shifts from unconditional (passive) transfers to benefit programmes linked to work. This intends to foster individual obligations in return for social rights vis-à-vis welfare (cf. Torfing 1999). These 'welfare to work' programmes increase pressure for the unemployed to engage the labour market.

Similarly, enabling state approaches work on changing the public-private mix to encourage individual responsibility. The difference, however, involves the role of the welfare state to enable citizens to engage productively with the labour market regardless of inequalities that may exist; in other words, to enhance employability. This can be accomplished through a number of policy measures intended to improve human

capital, including training and education programmes. In this respect, the theme of lifelong learning reappears.

Current research suggests that there have been shifts in policy to recognise the needs of unemployed older people. However, training and job-placement programmes often do not proportionately include older individuals (Frerichs & Taylor 2005). Moreover, the notions of lifelong learning and training across age groups tend to be underdeveloped in the policy sphere. A further complication is that, even when such policy measures have been implemented, they often fail to serve high-risk subgroups of the older unemployed, such as those with low skill levels or disabilities. In addition, when policies are designed with individual responsibility as a focus, they ignore “the social habits of life’s circumstances, culturally embedded roles and the limited fields of opportunity available” (Jorgensen & Taylor 2008).

2.2.4 Institutional Factors Influencing Early Retirement

When exploring the concept of employment among older people, a primary concept of interest relates to the movement of older people into and out of the labour market; generally speaking, this is most relevant with respect to retirement. In many industrialised countries since the 1970s, older workers have retreated from the labour force at progressively earlier times, before standard state pension age. This early exit manifests in different ways across advanced economies, with institutional factors playing an important role (Ebbinghaus 2006).

Previous studies on early exit from work typically approach the issue from either the supply-side or demand-side perspective of labour (Ebbinghaus 2006). These focus on either aspects of social protection in the case of the former, or on production factors

related to how firms manage their workforces for the latter. These are often discussed in a framework considering *push* and *pull* factors.

Pull factors can be thought of as economic incentives in the form of public pensions or implicit taxes on work, which make labour market exit an attractive option as older workers weigh the costs and benefits between staying in work to earn money and leaving to enjoy leisure time in retirement (Radl 2013). The social protection system of a particular welfare regime can work to draw older individuals out of the labour market by creating various incentives to exit or to opt to remain out of the labour market in cases of redundancy or displacement (Ebbinghaus 2006). In this perspective, early exit is determined by the interplay between expected earnings and future pension entitlements.

Much of the decline in employment rates of older workers that began in the 1970s have been attributed to this perspective, as a number of countries started providing early retirement schemes – either explicitly or as de facto early retirement via disability, with generally high benefit levels (Blöndal & Scarpetta 1999). Recent research has shown that reforms to such alternative pathways through disability insurance can discourage early retirement (Euwals et al. 2012). Unemployment benefits can also create a bridge to retirement, especially when the benefit outweighs perceived potential gains by re-entering the labour market (cf. Guillemard & van Gunsteren 1991). In other words, these factors affect labour supply by influencing workers' desire to engage in work.

On the other hand, push factors entail constraints that limit the demand for labour. Many of these are driven by firms, whose personnel policy will affect retention, training, and dismissal of older workers (Ebbinghaus 2006). The degree to which

technology is integral to production will also impact the age structure of the workforce, as will shareholder expectations and globalisation or international competition (Blau & Shvydko 2007). Employment protection legislation (EPL), discussed above, serves to prevent arbitrary dismissal and limits employers' ability to shed older workers; however, early retirement benefits offer a socially acceptable way around these provisions (cf. Naschold & de Vroom 1994).

However, similar to employment protection legislation, collective bargaining arrangements can have a limiting effect on firms' abilities to shed workers. Consequently, partnership factors must be included to gain a full picture of the dynamics behind early exit decisions (Ebbinghaus 2006). The relations between government, employers, and trade unions continuously shape policy related to labour markets and social benefits. Furthermore, these partnership arrangements direct the reactions to the push and pull factors mentioned above, given the constraints and opportunities they establish. This occurs not only at the national level, but also at a firm level between management, workers, and their representatives. Thus, a comprehensive understanding of older people's orientation to the labour market "must take into account the varying institutional configurations of welfare regimes, production systems, and labour relations" (Ebbinghaus 2006: 14-15).

It should also be recognised that individual circumstances can generate a push to early retirement, in particular ill health and informal care responsibilities (cf. Bound et al. 1999; Evandrou & Glaser 2003; Vickerstaff & Cox 2005). Moreover, previous evidence suggests that much of the economic inactivity among older people is involuntary, driven by disabilities or redundancies (cf. Szinovacz & Davey 2005; Riach & Loretto 2009). In other words, this perspective suggests that most older people out of the labour market

have been pushed out due to a lack of viable alternatives, rather than having made a decision based on favourable pull factors related to financial circumstances (Radl 2013).

Of course, not all older workers are the same, and the idea of social stratification has also been argued to play a moderating role in the interplay between push and pull factors (Radl 2013). From this perspective, people in different socio-economic positions will experience a different set of factors that impact the labour market opportunities available to them. For example, only healthy workers with a job (or clear opportunity to get one) have the option to stay in work, while only people with sufficient financial circumstances can afford to retire early. As social class impacts health, job characteristics, and the risk of job loss, it also plays a role in framing labour market exit among older workers.

There is also an important gender dimension to labour market exit. The intersection of gender, class, and age is an important component for employment in later life (cf. Duncan & Loretto 2004). As women have historically had more fragmented work histories than men, this could impact savings, pension accrual, and consequently retirement opportunities. At the same time, in some European countries like the UK, the state pension age has been lower for women than for men, compounding earlier retirement but less financial preparation for it (cf. Noone et al. 2010). Partnerships can also have an important impact on retirement decisions; more will be discussed on this in Chapter 6.

These different strands to explain labour market exit among older workers demonstrates the complexity in understanding labour market engagement in later life. Retirement is often considered a choice or decision that people make, roughly in line with the supply-side argument of pull factors. On the other hand, most exits from the

labour market among older workers are involuntary, as workers are pushed out by the onset of poor health or disability or by redundancies and other approaches by employers to shed workers. In addition, research has identified that most people are disengaged from active planning regarding pensions and work in later life, being more reactive to the opportunities that present themselves rather than seeking them out (Weyman et al. 2012). Overall, however, push and pull factors are shaped by a range of other characteristics such as class and gender, and these elements all combine to shape the opportunities and potential pathways to work or retirement that older people have.

This chapter has provided an overview of the existing research on older workers and their interaction with the labour market. In particular, it highlights the ways that different factors can play a role in shaping opportunities, identifying the range of complexities that provide incentives and disincentives to working in later life. Given that the extension of working life has become a higher priority in the European policy context in recent years, it is important to identify strategies to help overcome the disincentives and barriers that may exist for these workers. The next chapter starts by highlighting some of the recent themes around the labour market in EU policy discourse, identifying the concept of employability and its relevance for the research here.

Chapter 3: Employability: The Conceptual Framework

A general consensus has emerged in Europe that a new approach to working life is needed in order to tackle the realities of demographic change. This new approach intends to foster the development of the EU as a knowledge-based economy fit for the 21st century through innovative approaches to labour market policy combined with a commitment to social cohesion and inclusion. Much of the discussion around a new policy approach has centred on the concept of flexicurity and its utility in adapting modern and diverse labour markets.

This chapter begins with a discussion on the topic of flexicurity, a concept related to the organisation of employment opportunities that is of significant interest in the European policy context. This conversation raises the idea of employment security within the flexicurity framework, which appears related to another idea in policy discourse aimed to help workers: employability. This concept serves as the central point of interest for the present research, and the rest of the chapter is devoted to outlining how it has been examined in previous research, followed by how these previous approaches can inform a conceptual framework of employability for the context here.

3.1 A European Policy Concept: Flexicurity

In the 21st century, enterprises rely to a certain degree on the ability to adapt their workforces to economic shifts in order to remain competitive and innovative in a globalised marketplace. However, extensive flexibility in hiring and dismissal capabilities can have adverse social consequences, such as increasing labour market segmentation. At the same time, the notion of job security has shifted in the European debate to have a greater focus on employment security. Today, many people change jobs at some point

across their lives, and this trend shows little sign of reversing in the future.

Consequently, the best bet to gain a sense of security as a worker is through skills-development and greater employee marketability.

Flexicurity can broadly be understood as the mix between flexibility (for labour markets, work organisation, and labour relations) and security (in both one's job and potential employment prospects). The policy configurations observed in countries like Denmark and the Netherlands, where flexicurity has its origins, have been seen to promote low unemployment along with high levels of social protection. In the debate, they have garnered attention at the EU level for their ability to harmonise market-oriented labour needs with European ideas of social equality and justice. The notion of flexicurity is not that flexible labour markets and substantial security arrangements simply co-exist; rather, it is that these two approaches are developed in a coordinated, intentional way to enhance the efficacy of both in tandem (Wilthagen and Tros 2004). This has certainly been the approach in countries like the Netherlands, whereas in Denmark, the evolution of flexicurity occurred more gradually over time, underpinned by an emphasis on the 'golden triangle' of labour market flexibility, social security, and active labour market policy (Madsen 2002).

Scholars have made attempts to delineate a precise definition of flexicurity, which remains elusive (Wilthagen & Tros 2004; Zhou 2007; Tros & Wilthagen 2013; see also Gazier 2002). The research does however identify different forms of flexibility and security that must be considered in thinking about the trade-offs that lead to flexicurity. With respect to flexibility, there are four kinds that play a role (Wilthagen & Tros 2004):

- External numerical flexibility, or the degree to which firms can hire and fire staff;

- Internal numerical flexibility, such as working hours or working part-time;
- Functional flexibility, where work organisation and job tasks can vary; and
- Flexible pay based on things like performance.

With respect to the security side of flexicurity, there are also four components:

- Job security, linked to a specific job and specific employer;
- Employment security, or the sense of being able to secure work even with a different employer;
- Income security, or feeling financially secure in a period of joblessness; and
- Combination security, where paid work is easily combined with other social obligations and responsibilities.

These different elements of both flexibility and security demonstrate the importance in the flexicurity concept of taking both workers' and employers' needs into consideration in developing policy to affect the labour market.

Despite the lack of consensus on a precise definition for flexicurity in the scholarly literature, the European Commission has described its perspective on the topic, defining clear pathways and priority components.¹ The Commission's approach reflects the notion that flexicurity is less of a determinable, clear policy or group of particular policies, but more of a broad policy approach, within which several policy components interact. The Commission drew up four pathways they believed flexicurity should follow: tackling contractual segmentation; developing flexicurity within the enterprise and offering transition security; tackling skills and opportunity gaps among the workforce; and improving opportunities for benefit recipients and informally

¹ See Keune and Jepsen (2007) for a detailed discussion on the Commission's interpretation of flexicurity.

employed workers (CEC 2007a). All pathways should furthermore integrate the following four components: flexible and reliable contractual arrangements; comprehensive lifelong learning strategies; effective active labour market policies; and modern social security systems (CEC 2007a). The importance of these four components is reflected in the previous chapter in the structure of the policy elements that impact older workers.

Indeed, the aspect of flexibility is crucial to enhancing labour force participation of older people. And while the flexibility component of flexicurity looks closely at how to enhance firms' ability to modify their workforce, it also incorporates the recognition that flexibility is important to individual workers as well. Flexible work options can benefit the individual worker through the creation of an enabling environment for combining work and later life. Gradual retirement can ease the transition to full retirement, as an individual scales down his or her workload and begins receiving partial pension benefits, while continuing to provide and share the experience gained over the course of the job. A shift to a more standardised concept of part-time employment is sometimes better, while flexible work schedules may be used to retain full-time status while the workweek is adjusted from the stereotypical 9 to 5, Monday through Friday. Moreover, greater availability of flexible work options may help to increase the overall proportion of older people who delay full retirement, easing the immediate strain on the state purse (Loretto et al. 2005).

Nonetheless, the pathways available to an individual to continue working or to enter retirement (gradual or full) are significantly related to social class (Phillipson & Smith 2005). Thus, while flexible options for work and retirement may help individuals address disadvantages experienced due to caring responsibilities or health concerns, the same options may not exist across social classes. This could result in a reinforcement of

existing class divisions and exacerbate the challenges associated with ageing in the workforce. This potential consequence highlights the importance of integrating flexibility with forms of security in the flexicurity approach.

As such, the flexicurity approach can have significant importance to older workers by enhancing their access to the labour market and by deconstructing some of the barriers they face. The fact that transitions between different jobs is only becoming more frequent raises an important question around how to improve a worker's security that work will be available and accessible across the life course. In this respect, within the notion of security, the flexicurity approach has extended to have a greater focus on employment security rather than job security. In other words, policy should target helping individuals have the necessary attributes to ensure that employment options will be available, rather than focusing on a guarantee that one will keep a specific job. Consequently, the best bet to gain a sense of security as a worker should be through skills development and greater employee marketability.

3.2 Employability in Policy and Academic Discourse

This shift to empowering workers with the qualities that will enhance their employment opportunities rather than inflexible guarantees of staying in a particular job has led to a greater emphasis on the individual's responsibility for their interactions with the labour market (Green et al. 2013). This diverges from the focus in the flexicurity approach on how policy and relevant institutions have a role to play in enhancing labour market opportunities and full employment. Moreover, this shift has also led to a greater focus on the concept of employability as a way to understand how individuals can improve their ability to access employment. As greater flexibility leads to lower job

security, success in employment has shifted to the individual in terms of fostering one's own employability (Clarke & Patrickson 2008); employability has essentially replaced job security (Pruijt & Derogee 2010). This is of particular importance in the context of flexicurity, as employability directly relates to the employment security component. However, unlike job security, where requirements related to dismissals can be regulated by the state, developing individuals' employment security – or indeed employability – is more of a challenge from a policy perspective.

In European policy circles, the concept of employability has for some time been promoted as a focus for increasing the labour force participation (LFP) of older workers (e.g. European Commission 2007b). The European Employment Strategy from 1997 included employability as one of its four pillars, and revisions to the strategy in 2003 kept it as an important goal (Green et al. 2013). Employability also underpinned the employment targets set out in the Lisbon Strategy mentioned in Chapter 1. The concept appears to have received less formal focus in the Europe 2020 Strategy (EC 2010); where the idea has been mentioned in recent European policy conversations, it has often been directly linked to younger people and the idea of higher education and digital literacy (e.g. as a cluster in the Erasmus Mundus Programme).

Without a doubt, understanding the elements that contribute to an individual's ability to find and retain employment will significantly enhance efforts to achieve full employment and encourage labour force participation. However the concept of employability has changed in multiple ways over time (cf. Green et al. 2013, McQuaid & Lindsay 2005). Definitions have included a focus on disadvantaged groups and directly supply-side definitions that considered workers' characteristics and deficiencies. Over time, these perspectives have been expanded to incorporate elements from the other

contexts in which people find themselves, such as the labour market, to represent more of an interactive nature (Green et al. 2013; cf. Evans et al. 1999, Hillage & Pollard 1998).

Given how employability as a term has come to the attention policymakers place on the concept as a way to address growing policy concerns over employment and ageing, it seems only reasonable that research is done to understand what the idea of employability means with respect to older individuals and how it impacts their relationship to the labour market. Given the contrast between flexicurity and employability in terms of the focus on state versus individual responsibility, research on how to improve employability – and subsequently employment security, in the flexicurity terminology – would help the state play a more supportive role in pursuing full employment and a robust, modern labour market. With greater understanding and insights into these ideas, policies can be better tailored to increase the efficiency and efficacy of their goals.

However, to develop better policy around how employability can facilitate positive labour market outcomes, a clearer idea of what employability is and how it can be measured is necessary. This raises a number of questions. What does the concept of ‘employability’ actually entail, and does this apply to older workers? Can employability be applied to help increase employment among older workers? And what kinds of external factors have an interactive effect with individual characteristics to promote employment among older workers?

3.3 Theoretical Approaches to Measures of Employability

As mentioned above, the concept of employability has held different definitions through time and has evolved in a number of ways. It is thus essentially to examine the

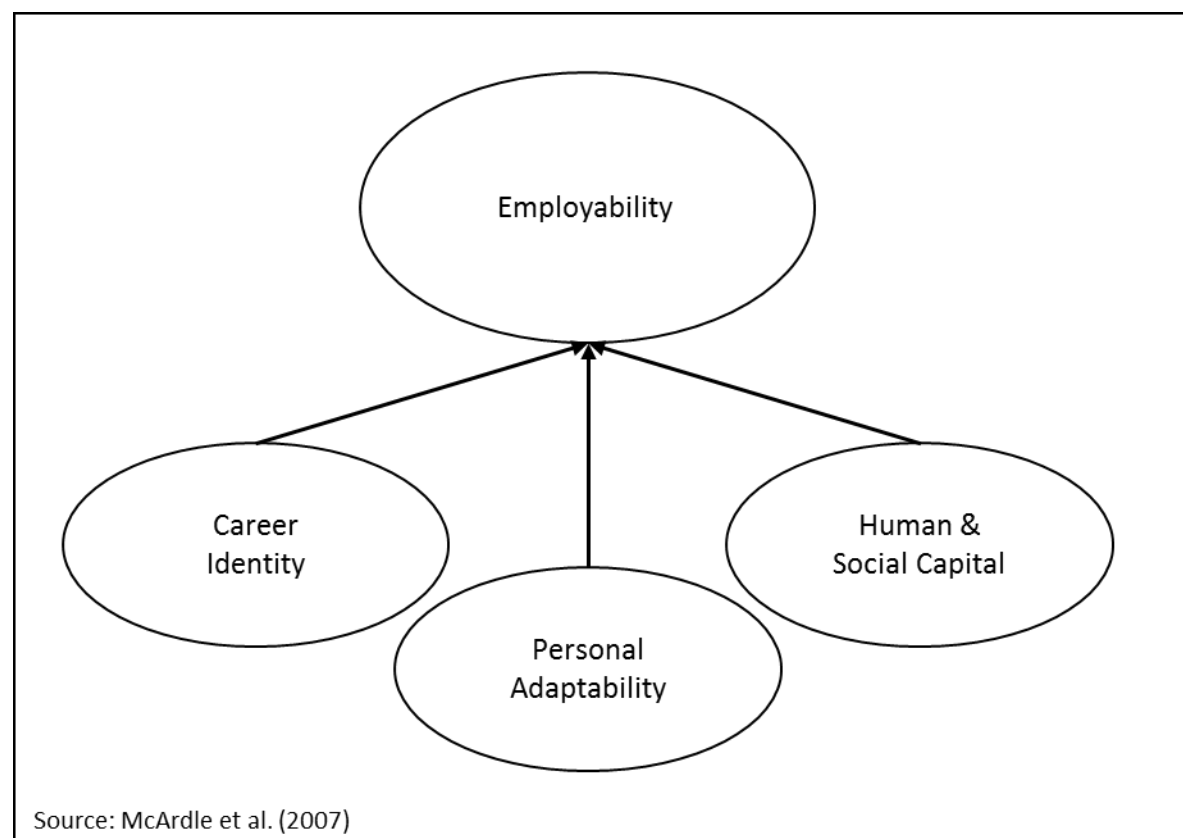
prevailing strategies applied to study employability in order to develop a clearer picture of what the concept actually entails. This section discusses the existing literature on employability, outlining some of the predominant conceptualisations.

In general, employability is understood at the individual level as the characteristics that make a person marketable, or that which helps people find and retain employment (cf. Andrew 2009; Clarke & Patrickson 2008; McQuaid & Lindsay 2005). However, the research literature on the concept includes various definitions for and approaches to employability. Fugate et al. (2004) defined employability as a multidimensional construct incorporating human and social capital, career identity, and personal adaptability. Their construct focuses on individual-centred factors that relate to how one proactively and adaptively interacts with work. Human and social capital, understood in terms of education, experience, and networking, greatly influence employment opportunities by determining one's ability to fulfil job expectations or identify job openings. Career identity relates to how individuals define themselves in various work contexts, shaping personal aspirations and goals. The personal adaptability component highlights the importance of adjusting to different circumstances or work situations to enhance one's attractiveness as an employee. Their research discussed the linkages between the three components and also asserted that employability, understood in these terms, benefits employees in transition by enhancing re-employment outcomes and improving the quality of re-employment.

McArdle et al. (2007) tested this psychosocial construct of employability with an unemployed sample. In the first study to operationalise the dimensions of employability explained by Fugate et al. (2004), they created a proxy for adaptability using multiple-question scales measuring proactive personality and boundaryless mindset (i.e., attitude

towards working across organisational boundaries). They used an identity awareness scale and a career self-efficacy scale to assess career identity. Education level and responses to two networking questions were used to measure human and social capital. They found that this construct of employability was significantly related to re-employment, indicating that employability can assist the unemployed in finding work. Nonetheless, they called for the development of an inventory to measure the employability construct, rather than relying on existing scales, as well as for further research to investigate the quality of work found in re-employment.

Figure 2: Employability as an Aggregate Multidimensional Construct



Van der Heijde & Van der Heijden (2006) took a different approach to conceptualising employability, applying five dimensions. These included occupational expertise; anticipation and optimization (similar to personal adaptability or proactive personality used in the studies above); personal flexibility (also similar to adaptability,

with the difference that this dimension emphasises adaptation to things not of one's choosing or out of one's control); corporate sense (e.g. building organisational networks or a sense of shared responsibility); and balance (e.g. dealing with conflicting interests, such as work-life balance). The employability measurement instrument they developed incorporated employee and supervisor responses and offers insights useful for personnel management. The key idea here is how to maximise career outcomes.

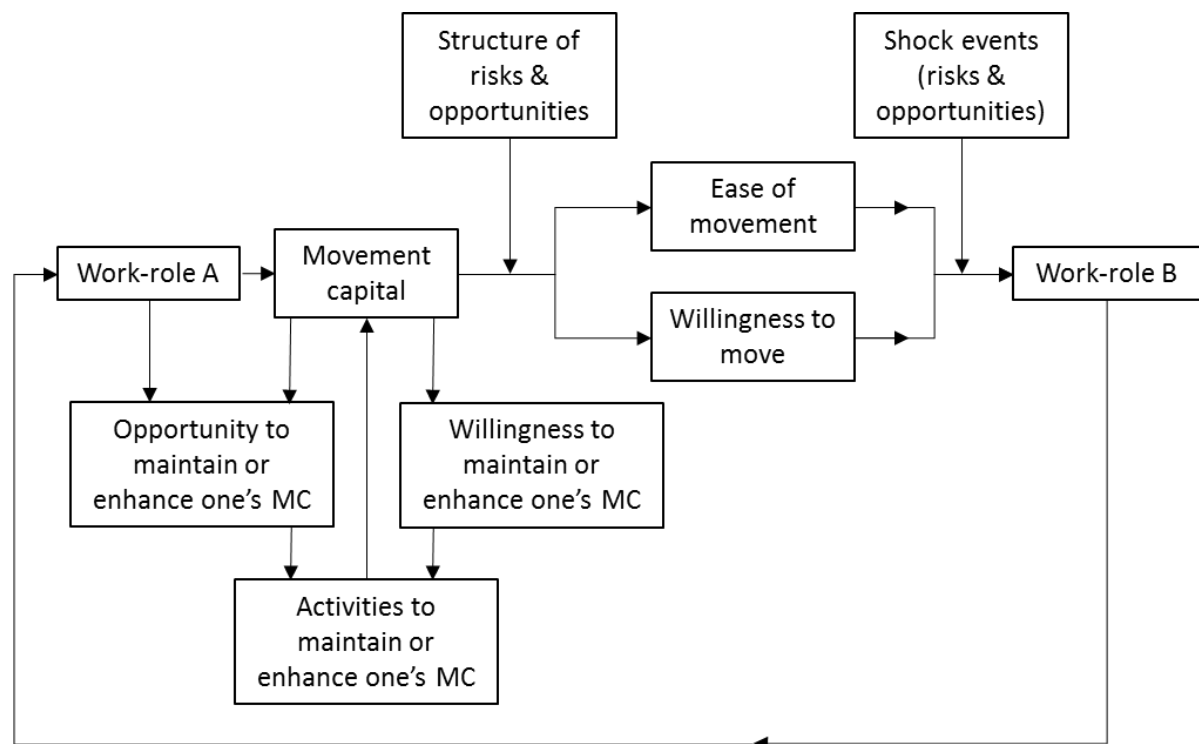
Other researchers looking at employability have emphasised the need to look beyond individual agency. For example, Forrier & Sels (2003) developed an elaborate model to understand the multiple factors that impact an individual's prospect for employment, as well as how these factors interact. Simply described, the Employability Process Model (2003) connects labour market position, the concept of 'movement capital', and contextual factors with transitions that can occur regarding the labour market. They argue that their model offers an outline of the entire employability process, thereby allowing a comprehensive understanding of the interventions necessary to successfully promote employability for any group of interest. Moreover, Forrier & Sels (2003) argue, similarly to other scholars, that their model allows one to look beyond the individual level and supply-side aspects of the labour market by incorporating the impact of other players on an individual's employment opportunities.

In an update to this model, Forrier et al. (2009) clarify the use of the word employability given its diverse treatment in the literature, which has yet to yield a unified understanding of the concept. They restrict their terminology to the term 'movement capital' and explain how it is has been informed by the studies on employability by Fugate et al. (2004) and McArdle et al. (2007). They delineate four

components to movement capital: human capital, social capital, self-awareness, and adaptability.

The updated model by Forrier et al. (2009) seeks to address both the agency and structural components impacting career transitions. They argue that recent career research has placed disproportionate emphasis on the individual and the idea of free choice. Consequently, they discuss the impact of the structure of risks and opportunities, which they define as labour market demand and four mechanisms affecting the match between labour supply and demand: labour market segmentation; labour costs; values and norms; and institutional incentives and barriers.

Figure 3: Conceptual Model of Career Mobility (Forrier et al. 2009)



This structure of risks and opportunities then interacts with the movement capital of any given person to influence labour market transitions. Three constructs are used to understand this interaction: (perceived) ease of movement, willingness to move,

and shock events. By looking at these three concepts together, the authors argue one can derive the reasons for career transitions.

The model draws on the transitional labour market theory of Schmid (2000), and Forrier & Sels (2003) note the importance of conducting research on employability that explores labour market transitions other than those to and between jobs; other researchers, including Fugate et al. (2004) have also urged further research in employability in other such transitions. Moreover, Forrier et al. (2009) note that further research should be done to explore the degree to which enhancing one's movement capital actually helps overcome career barriers.

Others have also called for a broad conceptualisation of employability in order to address the multidimensional barriers to employment. McQuaid & Lindsay (2005) argued that a robust understanding of the employability concept must include individual factors, personal circumstance, and external factors. From their point of view, policy solutions need to incorporate the factors that impact both those in and out of work. Andrew (2009) has emphasised the impact on employability of the barriers and structural inequalities workers face, particularly with respect to gender, arguing that policy approaches to employability must take into account society-level phenomena rather than focusing on individual agency.

Brown et al. (2003) emphasised this point in discussing how social institutions, market realities, and government constraints affect employment outcomes. This results in the possibility of being employable but unemployed, what they term the 'duality of employability', as a worker's ability to find employment is shaped by the labour market itself. This results in a division of the employability concept into absolute and relative terms. Absolute employability relates to the skills, knowledge, and qualifications of an

individual to perform any given job. However, the position of workers with a given set of skills depends of the labour market and what jobs are available; thus, there is a relative aspect to employability. If there are no positions on offer that require a certain set of qualifications, a worker with those skills has no place. In other words, one can have high employability but still be without work.

For those already in work, Berntson et al. (2010) found that the level of employability, defined as the subjective perception of finding new employment, affects an individual's response to job insecurity. It should be noted that this subjective approach, however, does not consider employability in the multidimensional framework applied in the work discussed above. Still, other research such as that by De Cuyper et al. (2008) found that job insecurity appeared to mediate the relationship between employability and well-being. Both these studies were cross-sectional in nature, thus limiting the ability to draw causal inferences. As such, there is a call for further research to explore employability using longitudinal data, as well as among diverse samples of individuals and institutional contexts. Van der Heijden et al. (2009) also call for longitudinal studies to address causality, as well as further research in diverse occupational sectors and national contexts.

The shift in Europe from a 'full employment' orientation to one focused on 'full employability' demonstrates the importance of understanding the employability concept and the degree to which it actually promotes employment. Clarke & Patrickson (2008) emphasise this point and discuss the example of age, noting organisational attitudes and discriminatory stereotypes. When considering age, employer-related factors have a significant impact on the association between employment and employability.

The volume of previous work on the employability concept highlights the important role of individual factors (e.g. movement capital in Forrier et al. (2009)) as well as the fact that different environmental or contextual factors play a significant role in how such a multidimensional construct would manifest with respect to employment outcomes. There is also particular reason to think about this constellation of factors with respect to age, especially as some of the alternative approaches to employability not discussed here have been developed specifically in the context of younger people and the relationship between higher education, graduate studies, and entry to the labour market ('graduate employability'; e.g. Cranmer 2006, Dacre Pool & Sewell 2007). However, there are particular issues that older workers face in the labour market, as noted in the previous chapter. The next section discusses an idea conceptually similar to employability – work ability – that has emerged to relate capacity with employment, a significant concern later in life.

3.4 The Related Idea of Work Ability

The research on the concept of work ability provides valuable information on the factors that contribute to individuals' continued productive engagement with the labour market (cf. Ilmarinen 1999; Ilmarinen & Rantanen 1999; Ilmarinen 2001; Tuomi et al. 2001; Ilmarinen 2006). Factors like health, physical ability, skills, knowledge, values, and motivation interact with the environment, tasks, demands, and organisation of work at different levels to shape an individual's capacity to remain economically productive. Through the research, a questionnaire has been developed to determine the Work Ability Index (WAI) of individual workers. The WAI is measured in seven dimensions:

- Current work ability compared to lifetime best;

- Work ability in relation to the physical and mental demands of the job;
- Number of current diseases diagnosed by a physician;
- Estimated work impairment due to disease;
- Sick leave during the past 12 months;
- Own prognosis of work ability two years from now; and
- Mental resources, e.g. how often able to enjoy daily activities.

The sum of the ratings on these dimensions makes up the index, and the cumulative score then places an individual into one of four categories – poor, moderate, good, and excellent – indicating the degree to which a worker can be expected to maintain the same work ability for the short-term future. The WAI has demonstrated powerful predictive value for an individual's chances of remaining in work over time (Ilmarinen & Rantanen 1999; see also Alavinia et al. (2009)).

Ilmarinen (2006) metaphorically describes work ability as a house with four floors. The first level, health and functional capacity, is fundamentally important given the effects poor health and disability have on any individual's ability to work. This factor is critically significant with respect to older workers, given the long-term health effects of poor working conditions in certain occupations as well as age-related physical changes. The second level relates to professional knowledge and competence, as workers must have the relevant skills and qualifications necessary to perform their jobs. For older workers, this supports the notion of a lifelong learning approach and less discrimination in training opportunities in order to ensure skills are kept up to date. The third level covers values, attitudes, and motivation and includes balancing work with personal resources and life. This aspect would cover job commitment as well as the desires and needs among older workers to incorporate leisure, care commitments, and

family obligations with work. This relates directly to the fourth level composed of work and its related factors, including management, job design, and work organisation, such as flexible work arrangements.

The work ability concept links personal resources and aspects of work, two dynamic, shifting aspects of life. As a result, individual work ability also changes over time (Ilmarinen 2001). However, as Ilmarinen (2001) points out, demands in the modern workplace are rapidly changing often at a pace with which personal resources cannot keep up. The underdevelopment of personal resources among individuals over the age of 55 has contributed to their disproportionate exit from the labour market; the inability to adapt to new work demands has been a main driver of this phenomenon. Consequently, managers and those responsible for overseeing changes and adaptation in the workplace should take a more active role to ensure workers retain the capacity to contribute (Ilmarinen 2001).

Promoting or preserving work ability among older workers rests on action in four dimensions: physical environment, psychosocial environment, health, and skills (Ilmarinen & Rantanen 1999). Adjustments to the physical work environment relates to ergonomic design, particularly in three areas: reducing physical workload with respect to fitness, adjusting work-rest schedules based on age-related needs, and decreasing repetitive work. The psychosocial work environment must take into account the need for better age management (e.g. positive attitudes toward age, teamwork) and increasing flexibility in work schedules to account for individual life circumstances. Health and lifestyle promotion requires occupational health services to assist older workers to adopt healthy choices, with the goal to promote regular exercise, nutrition, and mental wellbeing. The final component refers to updating professional skills and

knowledge, with recognition that different age groups have different learning needs.

Promoting work ability among older workers requires action on the individual levels of health and skills, but the effects of action in these areas will be substantially diminished without concurrent improvements in the physical and psychosocial work environments.

Ilmarinen (2001) has also discussed the interaction of work ability with the notion of employability as requisite to moderate employment among older workers. In his definition, employability relates to the society-level structures and policies that impact employment levels. Aspects on the individual level can certainly affect the ability to work, while social institutions affect the ability to become employed. In this framework, promoting work ability and developing employability are the two processes affecting the employment rate of older workers.

Similar to the institutional characteristic of employability put forward by Ilmarinen (2001), Nielsen (1999) described the distinction between work ability and employability as the difference between the way individual resources contribute to doing a job and how they are applied within a labour market. Camerino et al. (2003) also explained the relationship between the two concepts, noting work ability as a 'personal characteristic' that forms part of the wider employability concept. Overall, the primary distinction between the two concepts rests in the level on which the ideas are applied, with work ability relating more to individual factors and employability incorporating characteristics from the meso- and macro-level.

However, in many policy and informal contexts, the term employability is generally applied in a way that emphasises the individual, similar to the employment security component of flexicurity discussed earlier. And while work ability underscores the importance of an individual's capacity to work by emphasising mental and physical

health, employability – in policy and academic contexts – generally highlights skills, competences, and other psychosocial attributes. Fundamentally, however, for older workers, all these factors are theoretically important as they manoeuvre the labour market. Yet as the elements of both concepts are seen to impact labour market participation, the nature of how they can be used to improve such outcomes is different; within the work ability context, the idea of preservation is more prevalent, whereas employability is seen more as something to be developed or enhanced. In other words, people start with work ability, which can decline over time, while people must initially and then continue to develop their employability.

At the same time, work ability and employability often receive attention in different sectors of the research literature, and the contention in this research is that they attempt to explain the same concept in essence – the characteristics that contribute to helping people find or retain employment – albeit key distinctions are the foundational component of work ability that explicitly considers health and physical capacity as well as the idea that work ability is something that tends to decline later in life (that is, without intervention) while employability is something that is developed across the life course (through action and intervention). Overall, however, the factors addressed in the work ability concept are explored in the other studies of employability. Considering this, the current study will opt to use the label ‘employability’ for four primary reasons. First, the term carries a slightly more intuitive meaning, supported by its (though somewhat vague) use in the policy arena. Second, this research seeks to incorporate national context into the study of factors promoting employment, and society-level structures in the work ability literature have been associated with the term employability. Third, the range of individual characteristics examined in this research

appear more concretely in the existing employability literature, e.g. motivation and other psychosocial characteristics. Finally, the work ability concept emerged alongside the development of the Work Ability Index, as a specific battery of questions; given this research will not employ this specific index, it seems misleading to use the term.

Issues of terminology notwithstanding, the individual/agent component of employability is important, and further research is crucial to understand the relative importance of individual, organisational, and institutional factors affecting the employment of older workers. The rest of this chapter proceeds to identify the conceptual framework for employability that will be used and to outline the primary research questions to which the information in the previous chapters has led.

3.5 Research Questions and the Conceptual Framework

While the employability concept has been promoted as a way to address workers' difficulties in remaining actively employed, the basis on which this is argued tends to be mostly theoretical. For example, workers do need updated skills to participate in the modern labour market, but skills training is no guarantee of subsequent employment. As mentioned earlier (e.g. Brown et al. 2003), workers can be employable but unemployed. In addition, earlier empirical work on employability has been rather limited in its scope with respect to occupational sectors and the diversity of respondents and outcomes (De Cuyper et al. 2008; van der Heijden et al. 2009). There has also been little work in a multinational or longitudinal context.

The extension of the employability concept in much of the above research into a psychosocial construct was intended to expand from a simplistic, tautological approach in which employed people are by definition employable (McArdle et al. 2007). This

allows a more thorough approach to understanding the personal factors that relate to the concept among those who are not employed and can be helpful for unemployed people to recognise areas to address when out of work that might help them return to employment. However, in order to be a useful concept for either such individuals or for policymaking, employability needs to be understood in the context of employment outcomes. In other words, if the objective of promoting employability is to improve employment opportunities, a better understanding of how different factors related to employability contribute to successful employment is necessary.

In this context, however, it is important not to define employability by labour market status, but to understand it with a conceptual framework defined by earlier research and subsequently identify how such a framework relates to employment outcomes. Consequently, the primary objective of this research is to address this puzzle between how employability can be assessed and how such measures relate to outcomes in the labour market. The rest of this section outlines how the research will provide such insight through the adoption of a conceptual framework for employability based on the psycho-social approaches outlined above and applying this framework in analyses to examine how these dimensions of employability relate to labour market status and transitions in and out of employment.

Taken together, the varying approaches to analysing employability (and work ability) in the literature discussed share a number of common themes. These emergent dimensions of the employability construct can be used to clarify a conceptual framework available for this research. In addition, to account for the effect of macro-level factors on the employment prospects and outcomes of older workers, variables related to organisational and institutional characteristics will be included.

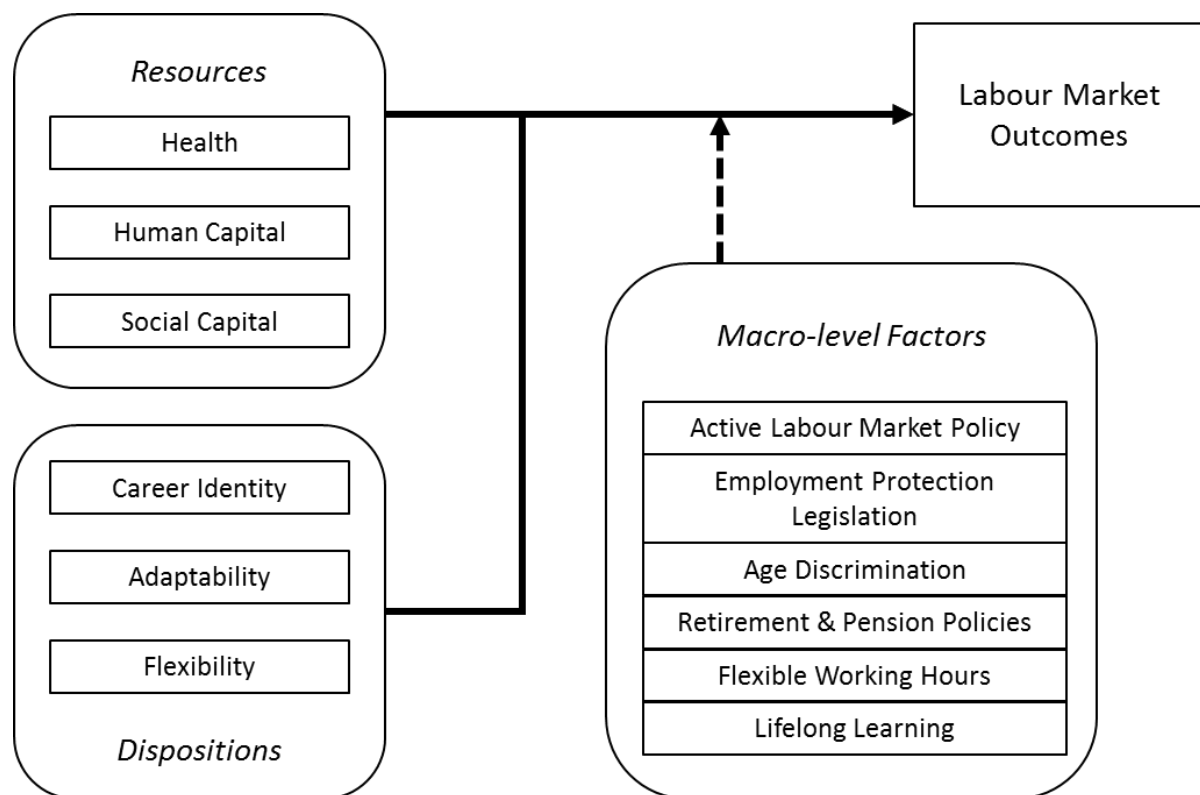
The framework adopted here collects the aspects from earlier research into six dimensions of employability: health, human capital, social capital, career identity, adaptability, and flexibility. These dimensions initially draw from the framework developed by Fugate et al. (2004) and tested by McArdle et al. (2007), specifically with respect to the adaptability and career identity dimensions. The third dimension of the original framework is here divided into separated dimension of human capital and social capital. Health is included as a further dimension given the foundational importance of health and physical capacity for older workers in the work ability concept; in the context of the current research, it is likely that health will play a pivotal role in older people's ability to seek, find, and retain employment. The inclusion of the sixth dimension, flexibility, is informed primarily from the approach in Van der Heijde & Van der Heijden (2006), but it also relates the component of ease of movement in the model of movement capital by Forrier et al. (2009).

These dimensions are further grouped into two categories based on the nature of their measurement and their underlying characterisations. Health, human capital, and social capital are considered resources given that these dimensions relate to components of employability on which an individual can draw in order to enhance or improve one's position in the labour market. Career identity and adaptability are categorised as dispositions, given their relationship to psychosocial qualities when it comes to interactions in the labour market; flexibility is also in this group, since its impact is likely to manifest in a disposition to work or not.

Also adopting a similar approach to the framework in Forrier et al. (2009), the idea of the structure of risks and opportunities was introduced into the present framework in the sense of macro-level factors. This also allows the research contribute

to the field by incorporating a multinational approach. Given their particular impact on older workers with respect to the labour market, the institutional measures that have been included in the conceptual framework include: active labour market policy, employment protection legislation, prevalence of age discrimination, retirement age, prevalence of flexible working hours, and prevalence of lifelong learning.

Figure 4: Conceptual Framework of Employability and Labour Market Outcomes



Using this framework, this research seeks to develop insights into the application of the employability concept for older workers. It also aims to formulate an understanding of how employability might improve policy efforts to extend working lives. In this context, this project will contribute to filling the gaps in the existing literature by studying the role of employability on the employment of older workers and incorporating multinational and longitudinal perspective into the approach.

The main research questions are:

- How are the dimensions of employability associated with labour market status among older workers?
- To what degree do the dimensions of employability relate to labour market transitions of older workers?
- Are different elements related to the institutional or cultural context associated with labour market outcomes among older workers? If so, how does this impact the role of employability on labour market outcomes for older workers?

The central hypothesis underlying these questions is that employability will be associated with successful labour market outcomes among older workers. In terms of the first two research questions, hypotheses can be developed for testing that predict that each dimension of the framework will be associated with successful labour market outcomes. A further hypothesis for the third question is that factors from the political and national context will play a role in impacting successful labour market outcomes for older workers, which will mitigate the impact of employability on successful labour market outcomes. A successful labour market outcome in the context of these hypotheses will depend on the methodology frame, i.e. successful labour market outcome reflects employment when examining labour market status and re-employment when looking at transitions. The research questions will be addressed in different stages using available secondary data sources covering England and a number of European countries.

Further details on the measures and methodologies applied will be presented in the relevant subsequent chapters. It should be noted that the approach applied here does not seek to develop a new index to measure employability; although this would be

a useful exercise for research on the subject, limitations in the data used here prevent development and testing of a robust index. Rather, the objective of this research is to explore how these different conceptual dimensions are associated with labour market outcomes in the context of older workers, to better understand how aspects of employability may contribute to effective policy-making aiming to increase the labour force participation of older people.

The next chapter begins the exploration of the employability framework by looking first at the relationship between the resource dimensions and labour market status in England. Chapter 5 extends this analysis to incorporate the dispositional elements following a thorough discussion on the challenges of measuring these dimensions with the given data. The next chapter continues the analytical journey by looking at how the measures relate to transitions into and out of employment among the English sample, separated by gender and limited to the group aged over 50 but under the State Pension Age. The final component of the methodological approach comprises Chapter 7, which applies both the cross-sectional and longitudinal lines of enquiry to European data, incorporating the variation in cultural, social, and political context.

Chapter 4: Resources and Employability: Older Workers in England

The previous chapter explored the conceptual elements of employability found in the literature to date, developing a new conceptual framework for analysing this concept with respect to older workers. This chapter begins the empirical phase of this research by presenting findings from logistic regression analyses on four cross-sectional samples of older individuals in England, taken from the English Longitudinal Study of Ageing (ELSA). This chapter is concerned with the resource-oriented dimensions of the employability framework, namely health, human capital, and social capital. These topics have been addressed in various aspects of research on employment. The following three sections provide in-depth discussions on the prevalent issues that emerge from extant literature. The chapter then moves on to elaborate the data and methodology, including the operationalisation of variables for analysis. The results are then presented, and the chapter concludes with a discussion on the emerging themes.

4.1 Measuring Health in Employment Studies

The relationship between health and the labour force participation of older workers has received ample attention in the literature. For example, studies have explored how health limits one's ability to work, how unemployment may impact health, and how health is related to the retirement decision. In pursuing these various avenues, the research has highlighted particular concerns associated with modelling this relationship. The question of endogeneity is an important one, and any attempt to explore the effect of health on labour market status must consider the potential impact of an association in the reverse direction. There are also issues raised by the spectre of

measurement bias, with major implications for the choice of how to measure health. Self-reported measures have demonstrated a certain degree of reliability in particular contexts, while some researchers have explored the use of objective assessments. Various efforts have been made to reduce the different sources of bias by combining self-reported and objective measures.

Scholars have explored a number of approaches to understand the differences in using subjective versus objective health measures.² Bound (1991) discusses the various reasons one could expect self-reported evaluations of health to be spurious in work-related analyses. First, there is no clear reason to believe that different individuals make their assessments in comparable ways. One person may describe as 'good' what another considers as 'fair'. In addition, responses may be associated with the labour market outcomes they seek to describe. This question of endogeneity has received substantial attention in the literature, as discussed below. There is also the concept of justification bias, i.e. that poor health is a socially acceptable reason for being out of the labour force. This can result in inaccurate reporting if an individual out of the labour market perceives his or her health as worse than it actually is in order to rationalise labour force inactivity. Moreover, some early retirement arrangements involve a requirement of incapacity for work, consequently incentivising individuals to be seen as disabled in order to qualify for the programme. These issues raise concerns over different kinds of bias being introduced into analytical models.

Earlier attempts to understand the relationship between subjective and objective health measures found evidence of high correlation between self-reported health and

² Currie & Madrian (1999) provide an extensive review of the relevant research.

medical evaluations (e.g. Nagi 1969; Maddox & Douglass 1973; LaRue et al. 1979; Ferraro 1980; Mossey & Shapiro 1982). These studies argue that self-reported measures are reliable indicators of true health. Crossley & Kennedy (2002) explored the reliability of self-assessed health by analysing data from the 1995 Australian National Health Survey. In the survey, a subsample of respondents answered the health question twice: before and after the health and well-being section of the questionnaire. In addition, some respondents also completed a short form health status questionnaire, allowing comparison of responses in a verbal (interview) setting to written ones. They found evidence to support the idea that the placement of the self-perceived health question, as well as the manner in which it is asked, impact an individual's response. Moreover, of particular relevance to this research, they found that people over the age of 50 had greater difficulty than younger individuals in assessing their own health. The main implications from these findings relate to measurement error, response unreliability, and heteroskedasticity, meaning that estimation models using self-reported health as a variable would yield inconsistent results.

Other authors have suggested that objective indicators, such as the presence of specific conditions or disabilities, medical assessments or diagnoses, and mortality data, remove different sources of bias and are better suited for analyses (e.g. Parsons 1982; Anderson & Burkhauser 1984; Stern 1989). Bound (1991) argues that neither of these approaches fully solves the bias problem, particularly for research into labour market participation. The information in objective health measures does not necessarily relate to one's ability to work, thus as proxies they can yield substantial bias. With self-reported health, measurement error can lead to lower estimates of the effect of health on labour market status, while the issue of endogeneity can cause an overestimation.

Consequently, the possibility that these two biases could cancel each other out could mean that self-reported health measures are better than objective ones in analyses of labour market behaviour (Bound 1991; Currie & Madrian 1999).

Another issue is the fact that many of the indicators that collect information regarding health conditions are themselves self-reported. Various studies have attempted to test the accuracy of self-reported conditions using medical records and other official assessments. Baker et al. (2004) compared specific self-reported ailments contained in the 1996/97 Canadian National Population Health Survey with medical records from the Ontario Health Insurance Plan. They looked for differences between self-reports and diagnoses from the medical records. In addition, they compared workers and non-workers in order to explore the justification bias and endogeneity. Their findings suggest that self-reported objective indicators suffer from both measurement error and endogeneity issues, just like a self-reported general health measure.

Benítez-Silva et al. (2004) also attempted to use official records to examine the bias in self-reported disability in the United States. They used data from three waves of the Health and Retirement Study on responses to a question asking if the respondent had any impairment or health problem that limited their ability to work entirely. To estimate the bias, they compared these responses to records from the Social Security Administration (SSA) and its decision to award disability benefits. The underlying logic is that if individuals exaggerate the presence of disability, the proportion of individuals reporting a disability would be larger than that of those who receive benefits. In contrast to the conclusions of Baker et al. (1991), their findings suggest that there is no difference between self-reported disability and the SSA's decision to award benefits,

implying that self-reported disability does not suffer from a bias issue. However, their use of the SSA's legal definition, as they note, serves as a subjective, albeit socially constructed, measure; in essence, it does not represent 'true disability'. As a consequence, any bias resulting from self-reporting disability may also have influenced the SSA's determination of disability.

Another method to compensate for bias in estimating the relationship between health and labour market status is to instrument self-reported health with objective indicators into a single health index. Bound et al. (1999) used a latent variable model to develop such an index using exogenous factors and objective health indicators. They then used these measures in a longitudinal analysis to understand the effect of health 'shocks' over time on different labour market outcomes. Using lagged and twice-lagged health based on three waves of data, their findings suggest a dynamic relationship between health and labour market outcome, in that recent declines in health affect labour market exit greater than declines that occurred further in the past. Disney et al. (2006) also applied this index and approach to a British sample, with similar conclusions.

Stern (1989) also used an instrumental variables approach to clarify the endogeneity concerns regarding questions on health and work-limiting disability. He used objective measures compared to two self-reported questions on general health and on work limitations caused by health. The results suggest that each provides a good proxy for the effect of disability on labour force participation, and that the question on limitations is either exogenous or biased toward zero. Dwyer & Mitchell (1999) also used an instrumental approach to evaluate the relationship of these two questions and labour force participation, with similar results. In particular, they found little evidence that either question suffered from endogeneity or justification bias. In contrast to these

conclusions, Kerkhofs & Lindeboom (1995) found that labour market status had a significant distorting effect on self-reported health as well as objective measures, though this was strongest for those out of the labour force on disability.

However, it can also be argued that some objective health measures do not impact labour market status. Some chronic conditions like diabetes are manageable, allowing individuals to continue work with little to no effect on capacity. In describing health as a multi-dimensional concept, Kalwij & Vermeulen (2008) note this and argue that an instrumental approach may not be as appropriate as one that considers endogeneity of self-reported health on labour market behaviour as an omitted variables problem. If the objective variables used to instrument self-reported health are themselves endogenous to labour market status, then they are not suitable for addressing the endogeneity of self-reported health. Using the first wave of the Survey of Health, Ageing, and Retirement in Europe (SHARE), they find that in some countries the inclusion of objective indicators adds little to the analysis that self-reported health offers, while in others the best models included self-reported health and objective measures. Additionally, they found that marginal effects of other socio-demographic variables did not seem to be much affected by endogeneity of self-reported health or the inclusion or exclusion of objective indicators.

No clear consensus on the best way to model health in studies of labour market behaviour has been established. The issues of endogeneity and other biases in estimations are important for researchers to consider throughout the modelling processes. These concerns will be further addressed with respect to the current study later in the methodology section.

4.2 Human Capital: Education and Training

The second important dimension of employability in the conceptual framework used here is human capital. The underlying concept of human capital concerns investments in personal resources with measures of economic performance and activity. Much of the literature on human capital has included economic studies relating education and training with individual earnings and productivity. With respect to the previous section on health, some scholars have argued that health itself, as a personal resource contributing to one's ability to engage in labour activity, constitutes one element of human capital (cf. Jones & Long 1979; Madden 2004). Just as a firm's investment in technology can enhance its long-term economic performance, protecting one's health can improve long-term economic gains. There is merit to this argument, and it resonates with the reasoning in this research to incorporate health in the analysis of employability. Nonetheless, this research will consider health as a dimension distinct from human capital.

As mentioned, education and training are considered the most important elements of human capital (Becker 1994). However, scholars have noted that the concept of natural or innate ability should also be considered in developing a full understanding of human capital (cf. Blundell et al. 1999). Outcomes from investments in education or training will depend on an individual's starting point, and research has explored the extent to which early childhood factors or parental education level affect an individual's human capital outcomes. The quality of schooling can also create variation in human capital accumulation for individuals with the same innate ability. Other experiences may have shaped other aspects, such as work ethic, self-confidence,

or communication skills, and economists have noted the importance of these unobserved skills and the difficulty in establishing reliable measures of them. In this sense, human capital takes on a life-course perspective.

Educational attainment is an easily observable measure to include in studies exploring human capital. In general, it represents the level of the accumulation of knowledge and qualifications. However, when estimating the effect of education on an outcome such as earnings, the issue remains of whether or not the difference is actually the result of greater education. If unobservable abilities influence the outcome, estimates of the effect of education will be too high, incorporating this contribution. This is referred to as the 'ability bias', and applies to measures of training as well (Blundell et al. 1999).

Moreover, there is evidence that the three components of human capital – early ability, education, and training – are interrelated. For example, individuals with higher levels of educational attainment tend to participate in training more often. Those who have undertaken training, either with a current or former employer, also tend to engage in further training. This suggests a self-reinforcing impact of human capital, in that higher levels provide incentives and opportunities for further enhancement (cf. Blundell et al. 1999). In addition, a life-course perspective on human capital suggests that concepts like early ability will impact ultimate educational attainment; in other words, the measure of education will incorporate the influence from early ability.

Training is an important aspect of human capital in that it is considered to provide an individual with the opportunity to develop and update skills and competencies. Aspects of the modern labour market, such as the implementation and diffusion of new technologies, emphasise the importance of keeping up with changing

job demands. This notion is of particular relevance in research on older individuals in the labour market, given that older workers today would not have gained skills like computer literacy in standard formal education. However, many datasets that ask about training do not provide further information on the type of training that is undertaken. This raises concerns with respect to interpretation of analytical results, as the returns from training investments could be misleading if the training carried no conceptual relevance to the individual's specific job responsibilities.

This and similar concerns have led to the study of generic versus (firm-) specific skills. Generic skills are considered to be the kinds of competencies that would apply to any labour setting, whereas specific skills are only applicable in a particular firm.³ The theoretical importance of this distinction relates to the tendency of an employer to invest in training programmes for workers. From an economic perspective, an employer would be more inclined to provide training in firm-specific skills, as these would not be transferable. An employee would then have greater incentive to remain with the firm, rather than to seek returns on the investment in the form of higher wages, for example, with another organisation (cf. Becker 1964; Williamson 1973; Snell et al. 1996; Lepak & Snell 2002).

Given the importance of training in generic and specific skills as well as the notion of a cumulative effect of human capital, the notion of work experience also becomes important in examining the relationship of human capital and employment. This is best understood in the framework of job tenure. The longer individuals spend in one job, the more likely they are to develop, maintain, or enhance both general and

³ Conceptually, there is reason to believe that some specific skills would only serve particular job roles or would be beneficial within a certain industry, but the literature overwhelmingly defines specific skills as relating to one firm.

specific skills. Moreover, the total number of years in work across the life course could also theoretically boost human capital in this way. Some skills may be developed within the working environment without specific training. In contrast, periods of unemployment would therefore have a detrimental effect on existing knowledge and skills through lack of use. With respect to older workers, Hurd (1996) argues that the expected shorter job tenure of those closer to retirement age reduces a firm's incentive to provide training, as there is a perceived lower return on the investment.

While job tenure or work experience could theoretically be associated with labour market outcomes, empirical evidence suggests the relationship may be ambiguous. Judge et al. (1994) found that job and occupational tenure predicted promotions but did not predict increases in pay. However, the relationship was negative for job tenure but positive for occupational tenure, likely reflecting the concepts of career plateau and more time in a career offering more opportunities for promotions, respectively.⁴ In addition, high job tenure may reflect low levels of human capital, as workers remain in the same job due to a lower likelihood of finding work elsewhere (Berntson et al. 2006).

Other research has highlighted the complexity of how human capital can impact labour market outcomes. For example, Lepak & Snell (2002) found evidence that the kind of employment (e.g., knowledge-based versus contract work) was associated with variations in human capital, measured in terms of value and uniqueness with two indices intended to account for firm-specific characteristics. King et al. (2005) found that occupation-specific human capital (among IT professionals) was less important in

⁴ It is important to note in this context, however, that the sample of analysis was limited to executive-level workers. Thus, the negative relationship between job tenure and promotion may not exist for those with more scope for upward mobility.

providing access to job vacancies than history with a recruitment agency. Developing certain skills could have a beneficial impact, but need to be embedded through work-based experience. Their findings suggest that the role of gatekeepers or intermediaries plays a significant role in labour market opportunities. Moreover, they argued that the notion of career serves to connect cognitive and behavioural elements with social structure. The idea that social connections are important in managing job transitions, and hence impacting labour market status, is a prevalent theme of the next section.

4.3 Theories on Social Capital: Ties and Networks

Like the concepts discussed in the previous sections, social capital has an important theoretical role to play with regard to the labour market behaviour of older workers. Like health and human capital in the present framework, social capital can be perceived as a resource available to individuals, endowing them with particular advantages in a modern competitive labour market. Social capital has appeared in the literature in a variety of shapes and conceptualisations, with some of the earliest contributions accredited to Loury (1976), Bourdieu (1986), and Coleman (1988).⁵ Other researchers have since attempted to refine the concept and develop validated measures for it, as discussed below. What is universal, however, is the underlying notion that social capital relates to relationships and social ties, and that these connections can impact life, decisions, and opportunities in various ways.

By their nature, social relationships and networks exist within a group of individuals. Various scholars have discussed how social capital can rest in a collective, such as a company, business department, or local organisation (e.g. Putnam & Leonardi

⁵ Portes (1998) provides an excellent and comprehensive discussion on the emergence of social capital in modern sociology.

1993; Fernandez et al. 2000). In this sense, there exist both internal ties among members of the group and external ties connecting members to non-members. The utility of each depends on the nature of what is desired or needed. Nonetheless, the social capital of a collective relates directly to the connections held by individuals in the group. Moreover, the individual perspective of social capital is more pertinent to this research, in line with the economist's perspective on capital. That is, the primary concern here is the way in which social capital, conceptualised as a resource, can contribute to an individual's achievement of certain goals.⁶

There is debate on whether social capital indeed reflects a form of capital in the conventional economic sense. Adler & Kwon (2002) give a thorough critique of the reasons for and against the adoption of the terminology. They conclude that social capital does belong to the family of resources called capital in economic literature. It resembles other common concepts of capital in certain respects, although retaining a number of unique characteristics. Nonetheless, applications of the term “capital” across the literature demonstrate a range of resources and metaphorical uses; social capital represents just another member of this family.

The research on social capital from this perspective has highlighted a number of theoretical components, dimensions, and methods of measurement. Adler & Kwon (2002) provide one attempt at developing a conceptual framework for social capital that addressed the divergent streams scholars had followed, integrating across disciplinary domains. Their analysis begins by identifying three dimensions of social structure: market relations, hierarchical relations, and social relations. Market relations are

⁶ Coleman (1988) noted the danger of overemphasising individual agency in issues where social structures are important, arguing that actions, goals, and interests are not perfectly independent of others' influence.

associated with the exchange of products, services, goods, or money, while hierarchical relations involve the exchange of an obedience to authority for some kind of material or spiritual security. The dimension of social relations, in comparison, is concerned with the exchange of gifts and favours and underpins the notion of social capital.

As Adler & Kwon (2002) point out, a number of definitions for social capital abound. An important way these definitions vary relates to the emphasis on the nature of the social relations. In the literature, this has often been analysed in terms of bonding and bridging as different types of social capital. Generally speaking, bonding social capital refers to relationships between individuals who hold similar identities, usually expressed through trusting, cooperative ties. Bridging social capital, in contrast, relates to more distant connections, although the relationships tend to be characterised by essentially equal levels of status and power (Szreter & Woolcock 2004). The role served by this bridging provides the mechanism through which individuals can “get ahead” in the labour market (Woolcock & Narayan 2000). A third type, linking social capital, was introduced by Szreter & Woolcock (2004) in order to represent the kinds of relationship that exist between individuals of different social or power status. Moreover, their conceptualisation makes explicit the idea of institutionalised authority structures as part of one’s social environment.

Cornwell (2011) explored the role of bridging potential as a form of social capital among older adults for enhancing independence and control. He found that older women had greater bridging potential in their social networks compared to men, and that this extended beyond family ties. Moreover, this greater bridging potential was not at the cost of other types of social capital; they were just as likely as men to have strong ties within their networks. This is an important point with respect to the balance

between independence and social support at older ages. Bridging potential may afford a greater diversity of relational resources, enhancing independence and control over one's life, but strong, dense network ties are necessary for dependable social support. Citing Coleman (1988), Cornwell notes that the benefits of bridging ties may rely on other forms of social capital related to embeddedness.

This concept of embeddedness in social networks is often attributed to Granovetter (1985) and his development of "strength of weak ties" theory. Granovetter (1983) argued that bridging social capital, often in the sense of weak ties, offers individuals better access to and a greater diversity of information, increasing the likelihood of knowledge that is particularly useful. Other influential scholarship on social capital has developed work expanding on Granovetter's embeddedness concept (Lin 1999b). The intersection of structure and action is at the heart of social capital, which can best be understood through three components: embeddedness in the social structure; opportunity or accessibility to social resources; and the purposeful use of such resources (Lin 1999a). According to social resources theory, individuals draw on their social resources to achieve goals, particularly with respect to finding work (Lin 1982). Lin (1999b) demonstrated the importance of social resources theory for employment, verifying how social capital can enhance occupational status as well as earnings, independent of other factors such as family background and education. Podolny & Baron (1997) also argued that network structure plays an important role in individual outcomes, including in the labour market.

Allen (2000) explored the depth and size of social networks and their impact on the decision to become self-employed. Allen (2000) found that the likelihood of self-employment increased among men with larger family networks as well as a greater

number of failed entrepreneurs within the network. This contributes to the argument that the information obtained from another's experiences does benefit an individual. Allen (2000) noted that researchers addressing social networks commonly emphasise the size of the network, the composition of it (generally as family compared to non-kin), and the frequency or regularity of contact among members. Through these relationships, networks can provide emotional and material support.

One approach in the analysis of social networks was the development of the Berkman-Syme Social Network Index (SNI) (Berkman & Syme 1979). Their study looked at the relationship between social ties and changes in mortality across a nine-year period for a random sample of 6928 adults in Almeida County, California. They found a significant association independent of other health-related factors and behaviours. The analysis identified four aspects of social ties that impacted mortality: marriage, close relatives and family, church or religious organisational membership, and any other group membership. Each of these sources of social ties had an independent effect on mortality. The SNI was created to assess the cumulative effect of these relationships, and incorporates the relative importance by giving less weight to church and group memberships. The index identifies four categories that range from low to high.

The Berkman-Syme SNI has been used in various studies since its development, most notably in the field of social epidemiology (e.g. Cannuscio et al. 2004; Seeman et al. 1987). It has also been incorporated into the Irish Longitudinal Study on Ageing (TILDA). It is important to note, however, that the Berkman-Syme SNI more accurately can be said to measure the concept of social connectedness, thus aiding explorations of the effects of social isolation. Conceptually, the idea is closely related to social capital, but subtle differences based on the theoretical development of social capital discussed

earlier mean that analyses aiming to study social capital must be cautious in interpreting the meaning of the Berkman-Syme SNI as a measure. In addition, much of the recent literature on social capital and health has included measures related to trust and reciprocity, characteristics not found in the Berkman-Syme SNI (Kawachi et al. 2004).

The Lubben Social Network Scale is another instrument to measure social relations, based on the Berkman-Syme SNI (Lubben 1988). In particular, it has been used to assess social isolation among older people. The original scale included 10 items, although Lubben et al. (2006) demonstrated that an abbreviated 6-item version had high internal consistency and proved an effective instrument for assessing the risk of social isolation. The 6-item questionnaire looked at kin and non-kin relationships and asked questions about the number of relatives or friends they see at least once a month, the number to whom they feel close, and the number with whom they feel at ease discussing private matters. In terms of the social capital dimensions prevalent in the theories discussed here, this measure captures aspects of network size, composition, frequency of contact, and trust.

While social ties themselves may provide certain advantages in the labour market, there is reason to believe the nature of the connections available would offer more benefit for labour market outcomes. Montgomery (1991) highlighted previous research showing the importance of employee referrals in the hiring process and develops a formal model for this process. He noted the importance of friends and relatives in finding a job, as approximately half of employed workers in the studies had found work this way. His model explains how workers with connections to others in high-paying positions fare better than those with poorer social ties. In another piece of scholarship (Montgomery 1992), he concluded that network structure, rather than ties,

should be studied more closely with respect to labour market outcomes. Reingold (1999) also conducted empirical work that demonstrated that the size of social network was less important in the informal job-search process than the proportion of employed ties. This study employed social network questions related to friends, daily social support, and crisis support. In the context of the present research, it is also notable that his findings do not appear to show that older workers were more likely to find work through a personal contact. The theoretical argument for why this would be true relates to the opportunities over the life course to develop a larger collection of personal contacts; the idea that network size does not enhance the job search process suggests that this finding is accurate.

Stone & Hughes (2002) conducted an extensive review of analytical approaches to social capital and the various conceptual frameworks that have been applied to it. They examined core dimensions of the social capital concept in the form of informal, generalised, and institutional network types. They conclude that these norms and characteristics are reliable and valid, but also that the core elements relate to norms of trust and reciprocity and to network size. They also identified a high degree of validity and a reasonable degree of reliability among different measures for social capital adopted in different analytical contexts, suggesting that the nature of the research at hand can inform which type of measure to use. This raises the question of a cohesive conceptual measure for social capital, although their work affirms the multidimensional nature of the concept in terms of norms, networks, and network characteristics. Fundamentally, the intended goal of a particular piece of research plays a crucial role in developing measures of social capital.

The discussion above demonstrates the great variation in analytical approaches to social capital. Networks do matter, but how one goes about measuring them and the information they can provide has been undertaken in many ways. Size cannot be ignored, but prior evidence suggests that the nature of connections should also be given considerable thought. Moreover, as in any piece of research, the measures developed for analysis must be interpreted with respect to the limitations they present. The discussion now turns to the methodological foundation for the current research.

4.4 Data and Methodology

The data examined in this chapter are taken from the English Longitudinal Study of Ageing (ELSA). ELSA is a survey of people over the age of 50 living in private households in England. The original sample was derived from participants in the Health Survey of England (HSE), making ELSA a nationally representative survey. The study has a longitudinal panel design conducted every two years. This study examines the data from the first five waves, corresponding to the years 2002, 2004, 2006, 2008, and 2010.⁷ The original wave in 2002 included 18,813 individuals from 11,578 households. Refreshment samples were included in 2006 and 2008, derived from HSE participants who had previously been too young to join ELSA. The data specify core members for each household; the samples here are limited to core members as per the ELSA User Guide recommendations.

In addition to the computer-assisted personal interview (CAPI) that collected the bulk of data, ELSA includes a self-completion questionnaire that respondents are asked to complete and return. A number of the variables of interest in this study were

⁷ It should be noted that the analysis was originally conducted only on the first four waves of data. Later in the timeline of this research, Wave 5 data were made available, so have been added into the discussion.

collected via the self-completion questionnaire. For each wave of data, weights specific to the core members whose self-completion questionnaires were successfully received are provided with the ELSA dataset and used in this study. They are derived from the cross-sectional weights in order to adjust for differential non-response.

It should be noted at this point that a number of factors contributed to the selection of ELSA as the dataset for this research. Primary among them is the fact that ELSA has a sister study in the Survey of Health, Ageing, and Retirement in Europe (SHARE), examined in Chapter 7. This comparability allowed virtually identical analytical approaches to examining the research questions in different national settings, and this variation was a key area of interest. In addition, ELSA and SHARE are large, nationally representative datasets for the populations aged 50+, providing detailed information on the population of interest here (older workers). Concerns did arise through the research process around the suitability of some of the indicators available in these datasets, for example, in how well measures of social capital, training, and even health captured the concepts of interest; this notion becomes even more relevant with respect to the dispositional elements featured in the next chapter. However, early efforts to examine other datasets, such as the Labour Force Survey, met with various challenges or could not provide the same level of detail on key items, and the author was recommended to use ELSA and SHARE since they cover the target population and were readily accessible.

4.4.1 Labour Market Status

This chapter explores the effect of certain resource-based dimensions of the employability conceptual framework on the labour market status of older individuals. As employability has been promoted to expand labour force participation rates of older workers in the EU, it is important to look at these dimensions not just for labour market

participants, but also for those outside the labour force. This may provide insight on elements related to the labour force exit behaviour of older individuals and the role that employability may have on mitigating this exodus.

The dependent variable for analysis is labour market status. It was derived from the indicator **wpdes**, which asked respondents to select the category they would say best described their current situation. Response options included retired, employed, self-employed, unemployed, permanently sick or disabled, looking after home or family, and other (specify), with coding in the questionnaire for the spontaneously provided response of semi-retired. The variable was recoded to combine the employed and self-employed categories into one employed category, and spontaneous responses of semi-retired were added to the retired category. With relatively few responses of “other”, along with the difficulty in interpreting meaningful results for this category, these respondents were dropped from the analysis.

4.4.2 Health

A number of health-related variables are available in ELSA. For this study, five variables were considered for inclusion in the analysis: self-perceived health, self-reported health problems that limit paid work, the presence of chronic illness or disability, limitations in activities of daily living (ADL), and limitations in instrumental activities of daily living (IADL). Examination of the correlation matrix for these variables demonstrated a high level of correlation among them, thus only the measures of self-perceived health and self-reported health problems that limit paid work were used in the final analysis.

As discussed earlier in the chapter, a body of research exists debating the advantages and disadvantages of using subjective or self-reported indicators to model

health. This consideration played an important role in the decision to use the general health measure as opposed to the variables indicating chronic disease. Coding for the self-perceived health indicator drew on three variables from the dataset, **hehelf**, **hehelfb**, and **hegenh**. The first of these, **hehelf**, provides responses to the question “Would you say your health is...?” with possible answers of “excellent”, “very good”, “good”, “fair”, and “poor”, for all but the third wave. In the first wave, respondents were divided into two groups, in which approximately half of respondents were asked the question at the beginning of the health section, while the rest received this question at the end. The second variable, **hehelfb**, provides the responses for this second group. In the third wave, **hegenh** offers information on self-perceived health using a different set of answer categories: “very good”, “good”, “fair”, “bad”, and “very bad”. This question was asked to Wave 1 respondents as well, but the coding for this analysis draws only on the previously mentioned variables.

It should be noted that Bowling & Windsor (2008) examined the effects of position within the questionnaire and of wording for self-assessed health in the first wave of ELSA, concluding that placement of the question at the end of the health section resulted in more optimistic responses, albeit with a small effect size. They also found more optimism bias among responses to the question scaled using “excellent”, but no suboptimal bias for the scale that included more choices on the negative end of the spectrum. At the same time, ceiling effects were lower for the scale starting with “excellent”. Thus, the evidence for an effect of the variation in wording remains mixed.

To address these concerns and to ease analysis, these variables were used to create a dichotomous indicator for self-perceived health. For the first scale, responses from “excellent” to “good” were coded as 0, “fair” and “poor” coded as 1. For the

second scale, “very good” and “good” were coded as 0, with “fair” to “very bad” coded as 1. The actual question wordings and recoding groupings can be reviewed in Table 3.

Table 3: Recoding for Self-Reported Health Variable

Variable	Wave	Question Wording	Responses	"Poor Health"
hehelp	1,2,4,5	Would you say your health is...?	excellent very good good	0
hehelpb		How is your health in general? Would you say it was _?	fair poor	1
hegenh	1,3	How is your health in general? Would you say it was _?	very good good	0
			fair bad very bad	1

The decision to group “fair” responses with a negative assessment of health was based on the distribution of responses across categories. For discussion purposes throughout this research, this variable will be understood to measure poor self-perceived health, though the variation in this nomenclature from the actual responses in the original data should be noted.

Despite concerns of collinearity, the measure of self-reported health problems that limit paid work was also included given its relevance for discerning possible differences between a generalised sense of poor health and a more nuanced understanding of the nature of the poor health.⁸ The conceptual framework for this study draws on the work ability model, the questionnaire for which asks respondents to estimate their own work impairment due to disease. This variable was derived from

⁸ Individuals reporting health problems that limit paid work as well as fair, good, very good, or excellent health represent approximately 11-13% of respondents in Waves 2-4, and up to 17% in Wave 5.

helwk⁹ and recoded to create a standard binary variable representing reported health issues that affect work. Unfortunately, this question was not asked in Wave 1.

4.4.3 Human Capital

Measures of human capital are important in any research exploring employment. In particular, a great deal of emphasis regarding the employability of workers has been placed on the benefit of qualifications and re-skilling (e.g. Van der Heijde & Van der Heijden 2006; Lee et al. 2009). Two variables were derived based on the data in ELSA: one identifying the highest attained level of educational qualification and another indicating whether the respondent had participated in a formal training or educational course in the previous year.

A number of indicators in the dataset were required to construct the education variable. Information regarding Waves 1 and 2 was straightforward, taken from ELSA variables **edqual** and **w2edqual** respectively. For respondents in Waves 3 and 4 for whom ELSA had already asked this question, the respondent was asked if he or she had obtained any further qualifications since the last interview. However, due to a feed forward error, this information was not collected for Wave 3 (Nunn et al. n.d.). To compensate for this gap in data, a number of other indicators identifying qualifications were strategically used to replace the missing data, as described below.¹⁰ The Wave 5 data provided the variable **w5edqual**, equivalent to those from Waves 1 and 2.

⁹ The question was worded “Do you have any health problem or disability that limits the kind or amount of paid work you could do, should you want to?” with responses Yes or No.

¹⁰ While the current chapter examines the data cross-sectionally, Chapter 6 will conduct a longitudinal analysis; thus, any changes in a respondent’s highest educational qualification will be of particular interest. As a consequence, coding for Waves 3 and 4 avoided simply using lagged values from earlier waves.

The original variables measured educational qualifications in seven categories, indicating a spectrum of educational levels bookended by a degree-level education and no qualification. These middle categories were combined into one category, “some educational qualification”, for the variable of interest. In order to extrapolate the most accurate values for respondents in Waves 3 and 4, missing values were first replaced using previous reports of degree-level education, since this value could not decrease. In a different set of variables, respondents in Waves 3 and 4 had been asked to identify any qualifications they held. For those who identified qualifications that fit the English National Vocational Qualification (NVQ) levels of 4 and 5 (noted in the coding for degree-level education in the original education variables), missing values were recoded for Waves 3 and 4. The next step involved using reports of some education in previous waves to recode for missing values in Wave 3 and then Wave 4. Then, missing values were recoded based on reports of specific qualifications lower than the NVQ levels 4 and 5. For those reporting no qualification in previous waves, missing values in Waves 3 and 4 were then recoded to reflect no qualification. This makes the assumption that any acquisition of a qualification after Wave 2 would be reflected in the responses used up to this point to recode the education variable. Finally, values for Wave 4 respondents who reported obtaining a qualification since the previous interview and also reported no qualification were recoded to some education. No reports of an increase in qualification were recoded to degree-level, following the assumption that degree-level qualifications and NVQ levels of 4 or 5 would have already been recoded for Wave 4 based on the set of variables mentioned previously. This final recoding was then used to generate dummy indicators for the regression analysis, with degree-level education as the reference group.

The final recoded distributions for responses in Wave 3 and 4 resemble those for Waves 1 and 2, with some notable differences. First, the percentage of respondents in Wave 3 who report no qualification is smaller than that in Wave 2, while the percentage reporting degree-level education is higher. These variations could reflect differences in subjective reporting. For example, a respondent at Wave 2 could have answered “no qualification”, while at Wave 3 indicated having a qualification; the subject may not have considered this qualification to fall into any of the categorical options presented at Wave 2. This concept also applies to subjective differences regarding what classifies as a degree-level education. Second, a number of respondents in Wave 4 retain missing values; they are members of the refreshment sample, and Wave 4 is their first appearance in ELSA. It is unclear from the ELSA User Guides why this information is not available for the majority of the Wave 4 refreshment sample.

As for the indicator related to training, multiple variables also had to be used to construct it. The majority of respondents answered whether or not they had taken a formal training or education course in the past year, named **wpedc**. The response of no was recoded from 2 to 0 in order to have a standard binary variable. Answers to a slightly different question (if this had occurred in the previous month) were used to fill the relatively small number of missing values. For Waves 3-5, the variable **wpacted** was useful, while for Waves 1 and 2, responses of a formal training/education course to the question of activities in the previous month were used (**wpact1** through **wpact6**).

Although the exact definitions of the variables used to construct the measure of participation in training differ, the values reflecting a month versus annual timeframe are a small percentage of the sample. Throughout this research, this variable will be understood to reflect participation in training in the previous year.

4.4.4 Social Capital

The variation in approaches to social capital discussed in the previous section as well as the variables available in the dataset have shaped the choices of parameters to include in the current analysis in order to address the effect of social connections on labour market status. The measures developed for analysis look at marital status, close family contacts, friendships, and organisational membership.

The indicator for marital status was derived from the variable **dimar**; the scale for responses changed at Wave 3 with the inclusion of the category of civil partnership. From an original scale of six (seven in Waves 3-5) categories, with four spontaneous responses, a final variable was created for categories of “single”, “married or legally partnered”, and “separated, divorced, or widowed”. This categorisation captures the presence of formal relationships as well as identifying individuals who have been in such a situation in the past. Dummy variables were generated for use in the logistic regression analysis, and the category of “married or legally partnered” was used as the reference group.

To represent close family relationships, a variable was created from **scchdm** and **scfamm**. The first of these variables, **scchdm**, asked respondents with how many of their children they had a close relationship. The second variable, **scfamm**, asked for the same assessment regarding family members; it was preceded by the question, **scfam**: “Do you have any other immediate family, for example, any brothers or sisters, parents, cousins or grandchildren?” As **scfamm** followed **scchdm** in the questionnaire, children should not have been included in the number given regarding family members. Responses for both variables were continuous, numerical values. Missing values were also recoded to 0

for respondents who reported no children or no immediate family in the lead-in questions, and the sum of responses to both variables yielded the final output variable.

Friendships followed a similar development to that of the close family relationships indicator. The original variable of **scfrdm** asked for the number of friends with whom the respondent considered having a close relationship. Again, missing values were recoded to 0 if the respondent earlier reported having no friends.

To include organisational memberships, an indicator was created based on responses to the question, “Are you a member of any of these organisations, clubs, or societies?” Respondents could tick all possible options that applied. In the dataset, each possible response was coded into a binary variable; **scorg1** through **scorg8** were used for Wave 1, **scorg01** through **scorg08** were used for the other waves, and **scorg9** and **scorg09** (“No, I am not a member of any organisations, clubs or societies”) were used to code for no organisational membership. Ideally, this research would have considered the number of organisational memberships held by respondents, but the design of this question does not offer a straightforward and accurate way to measure this. In Wave 2, the variable **organis** provided the number of organisations to which a respondent was a member, based on the variables mentioned above. This approach is potentially misleading, however. For example, the category of “social clubs” cannot indicate if the respondent has more than one social club membership. Consequently, using reports of membership in any of these groups led to the creation of a binary variable to represent any organisational membership.

4.4.5 Demographic Controls

Control variables were included in the analysis to take into account differences based on demographic traits. Gender was incorporated using a straightforward binary

coding based on the variable **disex**, recoded to have female represented by the value 1. Age was derived from the variable **indager**, and the sample here was restricted to those aged 50-64 in each wave. To account for socio-economic status, three variables were considered for inclusion in the analysis, related to income, non-pension wealth, and occupational category. Occupational category was recoded from a number of variables representing different classification coding arrangements within the National Statistics Socio-economic Classification (NS-SEC) framework; however, due to extensive missing values and subsequent analytical complications, this variable was not included in the ultimate models presented here. Non-pension wealth was considered given its ability to capture a measure of financial status that would not bias retirement as a labour market status. There was an apprehension to use a basic income variable, as ostensibly individuals out of the labour market would have limited sources of income. Upon investigation of these two variables, the results did not vary remarkably depending on which was selected. The income variable, as a measure more commonly seen in social scientific research, was selected for inclusion in the analyses presented here. The variable **yq5_bu**, a measure of total equivalised income quintiles, was recoded and dummy variables were used in the regressions. The first income quintile represents the poorest individuals and was selected as the reference group.

4.4.6 Multinomial Logistic Regression

Considering the variables available in the dataset, as discussed above, as well as the present interest in understanding more about the role of resources – as conceptual dimensions of employability – in the labour market status of older workers, the analysis follows a number of exploratory and empirical stages. It employs multinomial logistic regression to account for the different categories of reported labour market status. The

analysis is applied to five waves of cross-sectional data. Analysing the cross-sections provide multiple occasions, albeit with similar samples, on which to measure the variables of interest; significant differences between waves will raise important questions and direct further investigation. Particular characteristics that differentiate the samples in the five waves will be outlined in the discussion section later. Despite certain limitations, the availability of the data as well as the fact that the dataset will be explored in longitudinal analyses in later chapters compelled the inclusion of all five waves here. Nonetheless, the analysis was also run on the sample pooling the five waves of data, unweighted but clustered by respondent.

Furthermore, the approach is a simultaneous method, which includes all variables of interest at once. Hierarchical and stepwise approaches were considered and explored, but the primary interest here is to test hypotheses that the conceptual dimensions of employability related to resources affect labour market status, given the measures available. To this end, the statistical significance of a particular variable offers similar insight as non-significance of another. Moreover, this stage of the research does not seek to optimise the predictive model, as subsequent chapters will incorporate further dimensions of data to consider the dispositional elements of employability and macroeconomic factors.

In addition, the nature of the data and analysis provides different options for how to present the findings. One could look at differences between the categorical responses of the dependent variable for each wave in sequence. However, this approach would place greater emphasis on the variation that distinguishes respondents in different categories of labour market status, replicated in five waves. In contrast, the topic of interest in the current analysis is the degree to which different theoretical

dimensions of employability affect labour market status, given various limitations in the data available. A better approach, therefore, is to look at how the dimensions of employability affect each labour market status across waves, in order to better assess a general sense of stability of these effects over time and for slightly different samples. Interpretation in this sense must consider period effects that may impact differences in results along with other patterns that affect labour market behaviour.

An underlying assumption in this analysis is that individuals with higher employability will more likely be employed. This is built upon another assumption, namely that individuals given free choice will choose to engage in economically productive activity. While a separate debate regarding this assumption could be undertaken, the general orientation of policy tends towards this perspective; given the primary objective of this research to enhance an understanding of how employability can be used to develop policy improving labour market outcomes, this assumption will be carried forward here. These questions will arise later, from Chapter 6 onwards, as considerations regarding the retirement decision and labour market exit will play an important role in understanding labour market transitions.

4.5 Cross-sectional Results

The results are presented in full in Appendix 1. The regression table is organised by variable, with dependent variable categories in rows and the different waves listed along the columns. The reference category for the dependent variable of labour market status is employed. The table presents results with coefficient estimates, robust standard errors, as well as relative risk ratios (the exponential transformation of the coefficient, the equivalent of odds ratios for multinomial logistic regression). Summary

statistics including sample size, Pseudo R^2 , Wald χ^2 , and degrees of freedom are listed at the bottom of the table for each wave. To ease presentation of the results in the body of the text here, Table 4 below presents a summary of significant associations and the direction of the associations.

Table 4: Table of Significant Associations from Multinomial Regression Results (base=Employed)

	W1	W2	W3	W4	W5	W1-5
Poor Self-Perceived Health						
Retired	++					
Unemployed			+	+		+
Sick/Disabled	++	++	++	++		++
Home/Family	++				++	
Health Limitations Affecting Work						
Retired	<i>variable not available</i>	++	++	++	++	++
Unemployed		+	++	+		++
Sick/Disabled		++	++	++	++	++
Home/Family		++	++	++	++	++
Educational Qualifications: Some						
Retired	-		--	-	-	--
Sick/Disabled	+					
Educational Qualifications: None						
Retired	--	--	--		-	--
Sick/Disabled	+		+	+		
Home/Family						+
Training Undertaken in Past Year						
Retired	--	--	--	--	--	--
Sick/Disabled	--	--	-	-	--	--
Home/Family	--	--	--	-	--	--
Marital Status: Single						
Retired	+					
Sick/Disabled		+				
Home/Family	--	--	-			
Marital Status: Div/Sep/Wid						
Retired	--				-	--
Sick/Disabled					--	
Home/Family	--	--	--	--		-
Number of Close Relatives						
Retired	-					
Unemployed				-		-
Sick/Disabled		-				
Number of Close Friends						

	W1	W2	W3	W4	W5	W1-5
Organisational Membership						
Retired	+	+	+			++
Age						
Retired	++	++	++	++	++	++
Unemployed						+
Sick/Disabled	++		+		+	
Home/Family	++	++	+			++
Gender (Female)						
Retired	++	++	++	++	++	++
Unemployed	--				-	-
Sick/Disabled					++	
Home/Family	++	++	++	++		++
Income Quintile 2						
Retired	--	--	-	-		--
Unemployed	--	--	--			--
Sick/Disabled		--	-		-	
Home/Family	--	-	--	-		--
Income Quintile 3	<i>-- for all waves and categories</i>					
Income Quintile 4	<i>-- for all waves and categories</i>					
Income Quintile 5	<i>-- for all waves and categories</i>					
<i>N</i>	4579	3016	3130	2671	2396	10387

Note: Single marks (+ or -) represent $p < 0.05$ significance and double marks (++ or --) reflect $p < 0.001$. Shaded boxes reflect no significant associations. Base categories were: Degree-level for Educational Qualifications; Married for Marital Status; and Quintile 1 (poorest) for Income.

With respect to the health dimension of employability, the measure of work-related health limitations demonstrates strong statistical significance for all categories of the dependent variable. Individuals reporting the incidence of a health condition that limits paid work are more likely to be in any labour market category than to be employed in all three waves for which this measure is available. The measure of self-reported poor health has a strong association in the first wave, but with the introduction of the work limitations variable from Wave 2 onwards, the association decreases or disappears. An exception is among the unemployed in Waves 3 and 4; in these samples, individuals with poor health are over twice as likely as those reporting good health to be unemployed rather than employed.

The variables related to measures of human capital also demonstrate some interesting significant associations. Here, the associations vary depending on the category of labour market status. The most interesting result is that none of these measures appear to differentiate the unemployed from the employed. In terms of educational qualifications, having a degree is associated with a greater likelihood of being retired than employed. Compared with a degree, a lack of educational qualifications is associated with a higher chance of reporting permanent sickness or disability rather than employment, except in Wave 2. The experience of training also demonstrated a significant association. In this case, training was associated with a lower likelihood of reporting labour market categories of retired, sick or disabled, or caring for home or family. Unemployment exhibited no association with training.

The social capital variables yielded much less than the other variables of interest in terms of consistent significant associations. Few variables (in only particular categories of the dependent variable) displayed significant associations across all five waves of data; in fact, all but one of these associations were significant at the $p < 0.10$ level in Wave 4. With respect to marital status, being single or in the divorced, separated, or widowed category resulted in a lower likelihood to report caring for home or family than being employed. There are other associations at the $p < 0.10$ and $p < 0.05$ levels for marital status variables in different waves that can be reviewed in the table. For example, being married rather than single was associated with a lower likelihood to report being retired ($p < 0.05$), but a higher likelihood than those who were divorced, separated, or widowed ($p < 0.001$) in Wave 1. A period effect could be a possible explanation for observing significance in this wave only.

The variables associated with the number of close friends and close relatives also did not demonstrate associations in all dependent variable categories or in all waves. The number of close friends showed no statistically significant associations. The number of close relatives demonstrated scattered associations, which tentatively suggest that kinship ties are slightly associated with a lower likelihood of being retired or unemployed. On the other hand, organisational membership was associated with a higher likelihood of reporting retirement rather than employment, albeit at the $p < 0.10$ level in Wave 4.

The demographic control variables also demonstrated some strong associations. In terms of age and gender, some sensible patterns emerged. Higher ages appear associated with a greater likelihood of reporting any labour market status other than employment. However, this associations was not statistically significant for unemployment except at the $p < 0.10$ level in Wave 3. Moreover, retirement was the only category where the association was present across all five waves. The results for gender indicate that being female is associated with higher likelihood of reporting retirement and – with a large association – caring for home or family. Income also played an important role in the results, with high levels of significance for nearly all categories in every wave. More specifically, the overall message suggests that those in a higher income quintile compared to the lowest quintile are less likely to report any labour status other than employment. In other words, the lowest income quintile is more likely to report retirement, unemployment, sickness or disability, or family or home care.¹¹

¹¹ Using the highest income quintile as the reference group in the regression reduced the significance of the other higher quintiles. In other words, the differences between higher income quintiles have less impact than the differences with the lower quintiles.

4.6 Interpreting the Influence of Individual Resources on Labour Market Status for Older Workers in England

The results presented here address the primary objective of this chapter to explore the role of resources on labour market status within the conceptual framework of employability. More specifically, the results address how the three dimensions of employability that can be classified as resources – health, human capital, and social capital – are related to labour market status, providing initial insights into answering the first research question presented in the previous chapter. In terms of testable hypotheses, the results here can be interpreted as testing:

- Poorer levels in the health dimension will be negatively associated with an employed labour market status.
- Higher levels in the human capital dimension will be positively associated with an employed labour market status.
- Higher levels in the social capital dimension will be positively associated with an employed labour market status.

It is important to remember that the terms related to health, human capital, and social capital reflect distinct dimensions of the employability framework. In addition, this work operates with the interest in understanding how higher employability will be reflected in actual employment in order to know how employability might be a useful policy tool. This idea is dangerously close to being tautological, in the way that other research has defined employable people as those who are employed (cf. McArdle et al. 2007). Research on employability such as Fugate et al. (2004) and McArdle et al. (2007) has addressed this concern by using a psychosocial construct of employability that is

detached from actual employment status. The perspective in this research acknowledges these conceptual frameworks and applies them to a specific group of people (older workers) to explore how the concept relates to employment status. In other words, the findings help clarify the picture of how different elements theoretically associated with the idea of employability impact actual labour market outcomes. The objective is not to establish a new empirical approach to studying employability, but to ascertain how it and its component dimensions relate to one's position in the labour market. With this knowledge, policy can better be shaped to produce the desired outcomes related to increasing the labour force participation of older workers.

The first hypothesis holds true, in that individuals who report an employed labour market status appear less likely to report poor health or health-related limitations affecting paid work. While this finding on its own is not new knowledge, it does underscore the importance of incorporating health into understanding how older workers can remain in the labour market. The findings here do however provide further insight into the relationship between health and work, as the inclusion of the health-limiting variable greatly reduced or eliminated the association of self-reported general health status. This suggests that labour market status is related to health inasmuch that the health concerns impact one's capacity to perform work. General health status has less of an association on its own; this implies that efforts to mitigate health-related labour market exits should emphasise the kinds of ailments that directly impact the ability to do work. For example, occupational health and safety should be seen as a priority, as workplace accidents can have particularly negative consequences reducing an individual's capacity to remain economically active. In contrast, factors that negatively impact general health, e.g. obesity, would not have a significant relationship

to one's position in the labour market. Measures to improve health in a general sense, such as through diet or lifestyle behaviour modification, certainly provide benefits in a broader public health sense, but would have less impact on labour market behaviour according to the findings here.

The second hypothesis, related to human capital, also received support in the analysis. However, the broad picture suggests that human capital indicators are related more to differences in employment and labour market exit; there was no support that these variables significantly impacted differences on status for those considered active labour market participants (employed or unemployed). The benefits of education and training improve the likelihood of being employed rather than out of the labour force, but the causal effect cannot be elucidated from these results alone. Indeed, there would be reason to believe that being out of the labour market would reduce one's likelihood of undertaking training. Training that occurs on the job or is required by an employer would obviously not be available to those outside the labour market. The unemployed would also not have access to this, but their expressed interest in finding work would be a compelling factor to update skills or gain new and marketable qualifications through education or training. This could be the underlying factor as to why there is no difference between the employed and unemployed in terms of recent training experiences. This does, however, raise the question of whether training is thus an effective tool for helping unemployed older people return to work; this will be discussed further in later chapters.

In terms of overall educational qualifications, possession of a degree is associated with a higher likelihood of reporting retirement rather than employment. This finding suggests that degree-holders may be in a better position for early

retirement. One possible explanation for this is that higher accrued pensions through higher relative earnings may enable this group to follow this path. The direction of causation cannot be unequivocally determined given the nature of this analysis, but it seems likely that the majority of educational attainment (in particular, the attainment of a degree) would precede labour market behaviour among older workers. The other significant finding, that having no educational attainment compared to having a degree increases the likelihood of reporting permanent sickness or disability, may reflect the perceived disutility of pursuing formal education requirements given permanent labour market exit. It may also reflect the possibility that the nature of permanent sickness or disability precludes one from pursuing educational endeavours. This possible explanation may be supported by the fact that the same finding appeared significant in Wave 1 for those with some educational qualifications but not significant in Waves 2-5. This may suggest that the reason for a significant association between educational qualifications and labour market status for this group operates in such a way as to distinguish between any education and no education.

The importance of these findings with respect to human capital relate strongly to the policy orientation regarding employability that served as a major motivational factor for this research. There is conceptual consensus that workers struggling to find a strong foothold in employment should undertake skills training or education in order to improve their employability. This is often considered with respect to older workers and the increased prevalence of technology use in most occupations. As discussed in the previous chapter, the notion of employability has taken on different definitions within the research and policy fields. This chapter is the first step to evaluate empirically the different components of employability among older workers, in order to understand

how the conceptual elements relate to actual labour market behaviour. It is important to understand not only the multi-dimensional nature of employability, but to assess how these dimensions actually improve labour market outcomes vis-à-vis employment. At an individual level, consider a person who improves their employability by learning a new skill or gaining a new certification. If this person still struggles to find work, it no longer seems valid to suggest that increasing one's human capital in this way is an effective strategy for improving employment opportunities. From the public policy perspective, the payoff for investing in training programmes often results from reductions in unemployment or labour market exit (generally onto some form of public assistance scheme, like an early retirement arrangement or by claiming disability benefits). However, if these programmes demonstrate no noticeable improvement in public assistance enrolment, they will merely serve to exacerbate budgetary issues through their added cost.

In contrast to the first two hypotheses, the third, related to social capital, does not find strong support in the regression results. While marital status displayed various associations with different categories of labour market status, the overall picture does not provide any clear insight into how partnership influences labour market behaviour. Furthermore, there is research linking retirement to the labour market decisions of one's partner (e.g. Hurd 1990; Blau 1998), as well as a logical conceptual link that partnership would enhance one's likelihood to be looking after home or family, supported by the findings here. That is, household dynamics associated with being married theoretically enhance one partner's ability to stay out of the labour market while the other works.

The finding that organisational membership is associated with a higher likelihood to be retired rather than employed also challenges this hypothesis. However, it is plausible to consider that this result may reflect the consequences of variation in lifestyle. People in retirement may have more time to engage in activities with various organisations, and these activities may serve as a substitute for the engagement found in employment.

It is important to note that there are particular limitations in the results with respect to assessing social capital and labour market status. First, many of the theoretical arguments for social capital to have an association with occupational status relate to the job-search process. The cross-sectional nature of these data does not provide the means to explore this consideration within the analytical framework of this chapter. In addition, the measures of social capital used here capture network size and composition in the sense of kin and non-kin relationships. These variables relate to close relationships, but do not identify institutional or industrial relationships that could be perceived to offer more in the sense of occupational opportunities. These limitations may be responsible for the fact that the results fail to provide evidence that social capital is related to labour market status. However, research does exist to suggest that older workers in particular do not benefit from network size in terms of labour market opportunities, due in part to the accumulation of contacts across the life course (Reingold 1999).

The other variables in the dataset also partly defined the shape of the analysis. Concerns over subjective bias in self-reported measures of health could have been addressed using instrumental or omitted variable approaches, but the result demonstrating a stronger association from health-related limitations over general health

indicates that the subjective perception related to health may have an important impact on labour market behaviour. In other words, an individual's perception that their health impacts the ability to work will drive their actions, and the analysis would want to incorporate this aspect regardless of any subjective bias. The stated broad objective here, of identifying how employability can inform policy to improve the labour force participation of older workers, requires that employability be understood with respect to an individual's own perceptions when these perceptions can modify behaviour.

With respect to the human capital variables, it would have been better if further information had been available regarding the training that had been undertaken. The variable here captures any training or education with no indication if such activity was related to the individual's current job or an attempt to gain further qualifications to improve marketability. This distinction would be important in understanding just how training relates to labour market status. Nonetheless, the results are rather intuitive in that those out of the labour market were less likely to have experienced training.

Other limitations in the data mean that the results must be interpreted with consideration for the sample in each wave. The five waves represent different cross-sectional snapshots, but the samples vary in particular ways. As noted earlier, the sample in the first wave was derived from the Health Survey of England (HSE) and is nationally representative of the population aged 50 and over. The second wave sample differs from the first in that members who reached age 65 at some point between the two waves would have been excluded, and there would be no members aged 50 or 51. Refreshment samples in Waves 3 and 4 helped address this issue; however, in Wave 4, the refreshment sample does not include measures of educational qualifications used in the rest of the analysis, so had to be omitted from the regression sample. Essentially,

this means that Waves 2 and 4 (as well as Wave 5) represent the samples of the prior wave with shifts due to natural ageing. All samples were restricted to respondents who had completed the self-completion questionnaire, reducing sample size. Weights based on these respondents were used in order to compensate for distortions due to non-response.

As with many studies of this nature, a number of the issues discussed above could be alleviated with a new survey designed specifically to capture the data of interest. Indeed, avenues for future research should include questionnaires specifically defined to capture better measures, particularly with respect to training, skills, and social network characteristics. Nonetheless, the ELSA dataset offers a number of benefits by providing a vast amount of data and allowing for longitudinal analysis. Moreover, ELSA is comparable to the Survey of Health, Ageing, and Retirement in Europe (SHARE), which will allow for a cross-national exploration of the issues of interest here, expanded to consider macro-economic factors that may impact the labour market behaviour of older workers. It would prove unfeasible in the current research context to develop and conduct an original survey that could explore these analytical interests.

As discussed in the previous chapter developing the conceptual framework of employability, previous research has explored the concept through various dimensions that have here been divided into two categories: resources and dispositions. The current chapter has explored the role of resource-oriented dimensions of employability in the labour market status of older workers. The analysis found that employed people are less likely to report poor health or health-related limitations affecting paid work and that education and training can improve the likelihood of being employed rather than out of the labour force. This supports the notion that the employability dimensions of health

and human capital are relevant for the labour market outcomes among older workers. However, the analysis found no clear support that the social capital dimension had an impact. These findings provide insight into how personal resources, understood as characteristics that can readily be modified and which provide a use or benefit, relate to one's position with respect to the labour market. The next chapter expands the analysis presented here to incorporate dispositional elements of employability, i.e. characteristics and qualities that affect one's tendency to act, such as psychosocial traits (e.g. attitudes or motivation) or personal commitments like care responsibilities.

Chapter 5: Disposition and Older Workers in England: Expanding the Analysis

The previous chapter presented a model to explore resource-based dimensions of the employability framework that underpins the current research. It found evidence to support the idea that the health and human capital dimensions of the employability framework are associated with the labour market outcomes of older workers, while the social capital dimension was not. This chapter turns to introduce the other dimensions, which address dispositional qualities. Understanding events through the life course includes the concept of personal agency and its relation to personal identity. Bynner et al. (2000) highlighted this and the way in which both personal resources (e.g. human and social capital) and dispositions (e.g. sense of control, motivation, aspiration) affect personal agency in gaining and maintaining employment.

The chapter presents an expanded discussion on the underlying dispositional dimensions of identity, adaptability, and flexibility. It then introduces research on the more specified development of dispositional employability. In addition to the assessments of dispositional qualities in previous research, care responsibilities are discussed as an important hindrance on remaining active in the labour market, limiting one's flexibility to work. The variables and methodology are then outlined, cross-sectional results are reported, and the chapter concludes with a reflection on the analytical framework of employability.

5.1 Understanding Identity, Adaptability, and Flexibility in an Employability Context

The ideas presented in this chapter relate to the employability dimensions of identity, adaptability, and flexibility discussed in the conceptual framework of this research in Chapter 3. It is important now to revisit the topics discussed there and to expand the approaches taken in previous research in order to untangle the complexity of both the ideas at play as well as the issues related to their measurement.

The dimensions of identity, adaptability, and flexibility adopted in the conceptual framework used here emerge from the approaches taken by Fugate et al. (2004) and McArdle et al. (2007). Fugate et al. (2004) expanded the work on person-centred active adaptation and proactivity examined by Ashford & Taylor (1990), asserting that employability was a psychosocial construct reflecting work specific (pro)active adaptability composed of three dimensions: career identity, personal adaptability, and social and human capital.

Fugate et al. (2004) described career identity as representative of career experiences and aspirations, shaped by elements like goals, personality, and values. They related it to other constructs such as role identity, occupational identity, and organisational identity due to similarities with respect to personal self-definitions in specific work contexts. Career identity serves as the cognitive and affective foundation for employability by allowing one to determine career-related possibilities given one's own set of characteristics, such as skills, knowledge, and goals. In other words, an individual's sense of who they want to be with respect to work will shape the trajectories they pursue; if the desired self requires one to undertake training or gain

knowledge in order to achieve a certain occupational position, this will drive the worker to pursue such goals. On the other hand, the sense of self that is associated with career identity can steer individuals away from behaviour that would result in undesired occupational roles. In this way, career identity strongly relates to motivational aspects of employability. Prior work on career identity supports this assertion, as much of it has conceptualised career identity as one element of career motivation (cf. Noe et al. 1990; Meijers 1998).

Personal adaptability is associated with differences that are associated with activity and behaviour, related to the concept of active orientation (Fugate et al. 2004). An active orientation allows individuals to modify their situations to fit their needs, motivated at least in part by the career identity concept. The distinction between career identity and personal adaptability in Fugate et al.'s (2004) framework becomes clearer when one considers their argument that the two concepts have a strong reciprocal relationship. Career identity provides the idea of "whom", while personal adaptability offers means to achieve that desire. The relationship can become self-fulfilling, however; if one adopts a career identity that defines him or her as adaptable, then the person may engage in behaviours consistent with this desired self.

Through an exploration of existing literature, Fugate et al. (2004) identified five elements relevant to personal adaptability: optimism, propensity to learn, openness, internal focus of control, and generalised self-efficacy. As they noted, the importance for understanding employability rests in these concepts being internally generated (dispositions) and externally focussed. Optimism enables individuals to respond to changes and help identify opportunities in the workplace. A propensity to learn influences individuals to gather relevant information on the situation at work, helping

them initiate beneficial change and meet new demands. Openness to change and new experiences also leads to greater adaptability in response to situations at work. An internal focus of control – a belief in the ability to influence events in one’s life – improves work-role transitions. The final element, generalised self-efficacy, reflects the ability to respond to different situations and manage various challenges. In this way, it augments adaptive response and determination in the face of adversity.

McArdle et al. (2007) offered the first empirical evaluation of this multidimensional conceptualisation of employability, drawing on existing scales. Adaptability was approximated using measures of proactive personality and boundaryless mindset, while career identity was assessed with an identity awareness scale and a career self-efficacy scale. The items included in these scales are listed in Table 5 below. Their study explored this framework of employability with respect to self-esteem, job search during unemployment, and obtaining re-employment in a sample of 416 unemployed people, along with a second analysis of 126 members of the original sample in a follow-up survey six months later. Among the results, they found employability to be significantly related to re-employment. Their findings support the use of the psychosocial employability construct from Fugate et al. (2004), demonstrating that employability can be assessed in contexts outside employment.

The concept of adaptability has also emerged in other literature exploring the sphere of work in the idea of career adaptability.¹² The term emerged through work by Super and colleagues (e.g. Super & Knasel 1981) to emphasise the interplay between individual and environment in describing attitudes and skills with respect to working life.

¹² However, some studies use the terms “adaptability” and “career adaptability” rather interchangeably in the citations used to develop their conceptual frameworks (e.g. Creed et al. 2009).

Table 5: Dispositional Measures from McArdle et al. (2007)

Employability Dimension	Questionnaire Items
Career Identity	from Kossek et al (1998) Career Self-Efficacy Scale When I make plans for my career, I am confident I can make them work. If I can't do a job the first time, I keep trying until I can. When I set important career goals for myself, I rarely achieve them. I avoid facing career difficulties. When I have something unpleasant to do that will help my career, I stick with it until I am finished. When I decide to do something about my career, I go right to work on it. When trying to learn something new on my job, I soon give up if I am not initially successful. I avoid trying to learn new things that look too difficult for me. I feel insecure about my ability to get where I want in this company. I rely on myself to accomplish my career goals. I do not seem capable of dealing with most problems that come up in my career.
	from Stumpf et al (1983) Career Exploration Survey <i>Self-Exploration</i> --To what extent have you done the following in the past 3 months? Reflected on how my past integrates with my future career. Focused my thoughts on me as a person. Contemplated my past. Been retrospective in thinking about my career. Understood a new relevance of past behavior for my future career. <i>Intended-Systematic Exploration</i> --To what extent have you behaved in the following ways over the last 3 months? Experimented with different career activities. Sought opportunities to demonstrate skills. Tried specific work roles just to see if I liked them.
Adaptability	Bateman & Crant (1993) Proactive Personality Scale* I am constantly on the lookout for new ways to improve my life. I feel driven to make a difference in my community, and maybe the world. I tend to let others take the initiative to start new projects. Wherever I have been, I have been a powerful force for constructive change. I enjoy facing and overcoming obstacles to my ideas. Nothing is more exciting than seeing my ideas turn into reality. If I see something I don't like, I fix it. No matter what the odds, if I believe in something I will make it happen. I love being a champion for my ideas, even against others' opposition. I excel at identifying opportunities. I am always looking for better ways to do things. If I believe in an idea, no obstacle will prevent me from making it happen. I love to challenge the status quo. When I have a problem, I tackle it head-on. I am great at turning problems into opportunities. I can spot a good opportunity long before others can. If I see someone in trouble, I help out in any way I can.

	<i>Briscoe et al. (2006) Boundaryless Mindset Scale</i> I enjoy working with people outside of my organization. I enjoy jobs that require me to interact with people in many different organizations. I enjoy job assignments that require me to work outside of the organization. I like tasks at work that require me to work beyond my own department. I would enjoy working on projects with people from across many organizations. I have sought opportunities in the past that allow me to work outside the organization. I am energized in new experiences and situations. I seek job assignments that allow me to learn something new.
--	--

* McArdle et al. (2007) refer to this as a 10-item scale, though the scale used in their citation includes 17 items. The reasons for this discrepancy, or the particular items used in their research, are not clear.

Extending this work, Savickas (1997) presented it as a central construct of adult career development, defining it in terms of a willingness to cope with the predictable and unpredictable aspects of work roles and environments. Rottinghaus et al. (2005) explained it as affecting the way one regards the ability to respond to changing career plans. Overall, these definitions propose that career adaptability is part of a self-regulatory process that involves the interaction of individuals and their environment (Creed et al. 2009).

In this context, career adaptability has been operationalised in various ways, adopting different dimensions for the construct and using different measurement scales. Savickas (2002; 2005) developed a model based on four dimensions within his career construction theory: concern (over one's future), control, curiosity, and confidence. Other researchers have adopted this conceptual framework in operationalising career adaptability, employing various existing measurement scales. Creed et al. (2009) looked at the concept in terms of career planning, exploration of career and exploration of self, decision-making, and self-regulation. Koen et al. (2010) explored the role of career adaptability in job search strategies and quality of reemployment, assessing the idea in terms of planning, decision-making, exploration, and confidence.

Rottinghaus et al. (2005) developed the Career Futures Inventory (CFI), relating the concept to ideas such as extraversion, conscientiousness, positive affect, and skills confidence. This measure has been used to explore the relationships between career adaptability and career optimism, a sense of control, self-esteem, and social support among undergraduate students, finding evidence that a sense of control plays an important role in subjective perception of career adaptability as well as a mediating role between career adaptability and the other concepts in the study (Duffy 2010). In later work, Rottinghaus et al. (2012) revised the CFI using two samples of university students. The new 28-item CFI-R contains five subscales: career agency, negative career outlook, occupational awareness, support, and work-life balance. The authors asserted that the revised scale improves on its predecessor by including elements related to control, self-efficacy, and self-awareness.

Just as career identity has been argued to reflect the motivational aspect of employability, some research has linked career adaptability to motivation. Hirschi (2009) developed a model of career adaptability based on Motivational System Theory (MST) by Martin Ford. This study explored four categories of variables based on MST: emotions, capability beliefs, context beliefs, and goals. It looked at young students aged from 12 to 16, conducting surveys at the beginning and the end of the eighth grade. The four dimensions were regressed against an aggregate measure of career adaptability based on the model by Savickas (1997), which was consequently regressed against a sense of power or control and life satisfaction. The four dimensions based on MST demonstrated significant correlation with aggregate career adaptability, and the dimensions measuring emotions and context beliefs (here assessed as perceived social

support) showed strong predictive power for an increase in aggregate adaptability over time.

Other research has explored the associations between proactivity as a disposition and aspects of personality. Thomas et al. (2010) conducted a comparative meta-analysis to explore proactive constructs, including proactive personality, and various organisational, individual, and personality variables. Of particular interest for the current research is the relationship between proactive personality and the Five-Factor Model of personality. The Five-Factor Model theorises five dimensions of personality across which individuals vary: conscientiousness, emotional stability, extraversion, openness, and agreeableness (cf. Digman 1990; McCrae & Costa 2008). Proactive personality was shown to correlate positively with each of the five dimensions except for agreeableness (Thomas et al. 2010). These findings demonstrate a generalisable relationship between proactive personality and four of the five factors of personality, although the authors noted that follow-up studies suggested that proactive personality might hold value as a distinct measure in predicting overall job performance.

In reviewing the different studies above, a number of similar concepts have been examined in various ways with an assortment of operationalisations and measurement scales. Nonetheless, recurring themes emerge; assessing the dispositional qualities of individuals with respect to work involves elements of personality, control, and motivation. Moreover, some research has explored career dynamics in similar ways to the research above without explicit use of the terms career identity or adaptability. Kanfer et al. (2001) conducted a meta-analysis to explore the role of personality and motivational traits on job search and employment outcomes. Their conceptual framework considered six categories of antecedents based on theories related to

motivation, personality, and job performance: personality traits, generalised expectancies, self-evaluations, motives, social context, and biographical variables. Personality traits included measures such as extroversion and openness to experience. Expectancies related to control and optimism, while self-evaluation included self-esteem. Perceived financial need was a component of motives, along with employment commitment, or the level of importance put on being employed. In various ways, these categories reflect dimensions of the framework adopted in the present research, using measures that relate to the concepts of identity, adaptability, and flexibility.

Taking into consideration the myriad approaches discussed in the studies above, one recognises the recurrent challenge of operationalising ideas in social scientific research. Methods for developing construct validity exist, but sometimes the data at one's disposal requires ingenuity and creative thinking in order to construct empirical analyses with respect to the research questions at hand. The implications of this fact will be revisited in the section on the operationalisation of variables for this chapter. The following section describes the notion of dispositional employability developed by Fugate & Kinicki (2008), which emphasises explicitly the importance of considering disposition in employability research.

5.2 Previous Theory on Dispositional Employability

Following on the work by Fugate et al. (2004) and McArdle et al. (2007), Fugate & Kinicki (2008) highlighted the importance of considering disposition in research on employability. They noted two key reasons for developing a dispositional approach to employability. First, the dynamic nature of the modern labour market, with high levels of uncertainty related to frequent and intense change, results in a situation where

workers' adaptability plays a key role in their careers. Second, the various approaches to employability that appear in the literature often fall into supply side and demand side perspectives, conceptualising employability in terms of either individual attributes or contextual factors independent of the individual, respectively. These approaches have resulted in criticisms that the field lacks precision and clarity. Moreover, the dispositional approach they adopted addresses a further gap in the supply side studies by going beyond the person-job fit perspective that assumes that knowledge, skills, and abilities (KSAs) for a job are clearly determinable.

Fugate & Kinicki (2008) developed dispositional employability as a multidimensional construct related to active adaptation at work. In this way, it represents a second-order factor comprised of independent latent dimensions. This study refined the work in Fugate et al. (2004) that explored employability as a form of work-related active adaptability shaped by career identity, personal adaptability, and social and human capital. Five dimensions were selected: openness to changes at work, work and career resilience, work and career proactivity, career motivation, and work identity. Openness to change enables one to better respond to dynamic work environments and to identify new opportunities. Resilience relates to optimism and the way that this outlook positively influences expectations, response to challenges, and the pursuit of goals. Work and career proactivity generally relates to acquiring information within an occupational context, improving recognition and achievement of different opportunities. Career motivation relates to elements of control and learning, in that workers with high motivation successfully work through challenges and frustrations and better plan for the future and new demands. Finally, work identity relates to individuals' personal view of themselves, which influences behaviour, goals, and aspirations. The

study developed a 25-item measure supported by the results of three independent analyses, which can be found in Table 6.

Table 6: Dispositional Employability Measures from Fugate & Kinicki (2008)

Dimension of Dispositional Employability	Questionnaire Item
Openness to changes at work	I feel changes at work generally have positive implications. I feel that I am generally accepting of changes at work. I would consider myself open to changes at work. I can handle job and organizational changes effectively. I am able to adapt to changing circumstances at work.
Work and career proactivity	I stay abreast of developments in my company. I stay abreast of developments in my industry. I stay abreast of developments relating to my type of job.
Career motivation	I have participated in training or schooling that will help me reach my career goals. I have a specific plan for achieving my career goals. I have sought job assignments that will help me obtain my career goals.
Work and career resilience	I am optimistic about my future career opportunities. I feel I am a valuable employee at work. I have control over my career opportunities. My past career experiences have been generally positive. I take a positive attitude towards my work.
Work identity	I define myself by the work that I do. I am involved in my work. It is important to me that others think highly of my job. It is important to me that I am successful in my job. The type of work I do is important to me. It is important to me that I am acknowledged for my successes in the job.
Optimism at work	In uncertain times at work, I usually expect the best. I always look on the bright side of things at work. I am a believer that 'every cloud has a silver lining' at work.

There is extensive interrelatedness among these dimensions, given their individual contributions to the dispositional conceptualisation of employability. An important point to note, however, is how this approach differs from others that explore ideas of proactivity, adaptability, and employability. Other research has considered

these topics with respect to actual behaviours of individuals, i.e. what they actually do within their career. In contrast, this approach considers that dispositional employability, in identifying underlying qualities and traits, applies to a broader context inasmuch as it is retained by an individual regardless of a particular job or occupational role. In essence, this approach captures the kinds of characteristics that are important for helping individuals navigate an ever-changing and dynamic labour market.

Other research has highlighted the idea of employability orientation, which refers to the degree to which workers are open to personal development and adaptation to new roles and job requirements and the development of flexible skills (van Dam 2004; Nauta et al. 2009). However, this concept differs from others such as career motivation or commitment by placing the emphasis on the benefits for the organisation rather than the individual (van Dam 2004). There are reasons to believe that organisational employability and individual employability may be related, given empirical evidence that attitudes towards the former are related to those of the latter (van Dam 2003).

Nauta et al. (2009) also explored employability from an organisational perspective, in terms of organisations' functional flexibility and ability to adapt to changing demands by improving workers' employability orientation. The study examined key concepts of career satisfaction and role breadth self-efficacy, the extent to which someone feels confident to engage proactively beyond traditional roles (cf. Parker 1998). They found that career satisfaction was negatively related to employability orientation, which implies that satisfaction may generate complacency among workers and decrease their likelihood to make changes in their current roles. However, greater role breadth self-efficacy was strongly and positively associated with employability

orientation, demonstrating greater openness to change. Overall, these findings suggest that organisations can play a role in increasing workers' confidence to stimulate an engagement in diversified activities, increasing employability. The measure of employability orientations was limited in that it only captured the idea of career potential. Nonetheless, the results indicate that understanding employability at an individual level requires consideration of psychosocial characteristics related to dispositional qualities.

Another terminological stream related to disposition discusses the concept of soft skills. Soft skills go beyond the idea of knowledge to encompass traits associated with personality and attitude (Moss & Tilly 1996; Nickson et al. 2012). In fact, there is evidence to suggest that these soft skills are more important to employers than qualifications. Nickson et al. (2012) explored the recruitment criteria deemed important by employers in the fashion retail industry. Attitude and appearance featured prominently, as could be expected given an image-focused retail environment. However, the findings demonstrated how any efforts to help individuals find work through training schemes might need to reconsider the emphasis generally placed on qualifications and similar skills. In fact, the further evolution of service-oriented economies in much of the developed world highlights the need to better understand the skills necessary for front-line service jobs. In addition, there are particular implications with respect to older workers, given the consequences of age-based discrimination and stereotyping.

Another study found increasing importance for soft skills in considering employability (Nilsson 2010). Through a longitudinal qualitative study of recent graduate students from Master's engineering degrees in information technology in Sweden, this study found that, while education and technical vocational skills ("hard skills") were

perceived as a component of employability, the development of soft skills carried substantial importance. For these respondents, soft skills reflected social and cultural capital, motivation, enthusiasm, and self-esteem. In this way, employability is seen as driven by individual agency and self-efficacy.

The above discussion on dispositional employability and related concepts highlights the conceptual elements related to attitudes that affect labour market behaviour. In addition to internally generated dispositions, the degree of flexibility one has due to external pressures and obligations may also play a role in determining labour market behaviour. The next section discusses a specific instance of this: care responsibilities. The challenges of combining paid work and care responsibilities resulting from the intersection of these two roles could limit one's ability to engage in one or the other. This would have particular consequences for an individual's overall employability.

5.3 The Impact of Care on Work

This chapter has so far discussed the two dimensions of the employability framework used in this research that relate to people's internal dispositions: career identity and adaptability. The final dimension, flexibility, is also related to disposition but is distinct from the other two in that it is based on how external factors and/or barriers influence one's position with respect to employment opportunities. Where adaptability emphasises personal characteristics that influence responses to change, flexibility encompasses aspects of individuals' lives that shape possible responses. A primary example of this, significant in the context of older workers, are informal care responsibilities. Put another way, having informal care responsibilities can influence the

degree of flexibility that older workers have with respect to continuing employment or pursuing new job opportunities.

A clearer understanding of the interaction between informal care and work will be crucial to addressing future workforce issues; population ageing not only influences the future labour supply and age-structure of the workforce, but will also impact the demand for informal care. For example, from 2001 to 2015, there was an estimated 17.7% increase in the number of unpaid carers in England, resulting in an estimated 5.7 million people providing unpaid care in 2015; moreover, their contributions have been estimated to represent an economic value of over £108 billion (Buckner & Yeandle 2015). With respect to older people providing informal care, estimates from the 2011 Census suggest that 57.6% of unpaid care providers in England are aged 50+, while over a third (35.6%) are aged 50-64 (ONS 2013). Clearly, informal care is a fundamental consideration for people as they age, which can influence their ability to work as different responsibilities in this context arise. Moreover, as the numbers will only grow larger over time, this will remain a significant and growing area of interest for efforts to promote the labour force participation of older workers.

In addressing the implications of an individual's efforts to combine care and paid work, there are particular caveats one must consider. In this context, care provision is on an informal basis and traditionally conducted by women.¹³ The gendered aspect of care compounds the comparative challenges that women face in the labour market (cf. Arber & Ginn 1995; Carmichael & Charles 2003; Evandrou & Glaser 2003). This carries various implications for interpreting labour market behaviour in terms of the dispositional ideas

¹³ While women are widely considered as the main providers of informal care, Carmichael & Charles (2003) do point out that a notable proportion of men engage in care.

of career identity and adaptability being explored in the current chapter. In addition, much of the research on the work-care nexus has been conducted qualitatively through interviews of various samples. This presents limitations with respect to broader generalisation. However, a deeper investigation of several studies can present emergent themes consistent across diverse samples.

The fundamental theme related to the intersection of care and work is the conclusion that combining the two is a challenge, reflecting efforts to find an effective work-life balance. Yet a number of significant issues affect people's ability to strike an effective balance. For example, the provision of social support services, such as day centres or home help assistance, influences individuals' ability to effectively manage care with work (Arksey & Glendenning 2008). The degree of flexibility in working life necessary to provide the required care also restricts individuals' capacity to take on further responsibilities at work (Carmichael et al. 2008). It also influences some decisions on which jobs to pursue; some carers have reported taking lower-paying jobs or opting for part-time positions in order to have a better fit with their care responsibilities. At the same time, acknowledgement from others (particularly co-workers and managers) can enhance one's ability to successfully balance care and work, especially when this manifests as flexibility to conduct the necessary duties of both roles (Eldh & Carlsson 2011).

In addition to considerations on striking a balance between care and work, there are particular factors that influence people's desire to work when they have care responsibilities (Arksey & Glendenning 2008; Carmichael et al. 2008). Current or anticipated financial need can motivate carers to continue paid work, while restrictions on social benefits for carers when they work can deter them from engaging in paid

activities. Individuals' own perceptions around the importance of work or the compatibility of work and care also play a role in motivating individuals to combine work and care. In addition, access to flexible hours and unpaid family leave demonstrate significant impact on improving the chances for a carer to remain employed and maintain working hours (Pavalko & Henderson 2006). There is also evidence that positive experiences in care provision can have a beneficial impact on working life, at least in terms of lower perceptions of work-related strain (Trukeschitz et al. 2013).

Nonetheless, care responsibilities do appear to limit people's ability to successfully remain in the labour market. The duration of a caring episode has been found to impact work, in that as the period of caring continues, combining work and care becomes more challenging (Carmichael et al. 2008). In addition, care responsibilities were reported to diminish one's ability for desired career development. Other research has also found that the intensity of informal care provision impacts older individuals' likelihood of remaining in work over time, with both men and women aged 50-SPA in England less likely to remain in work if they were providing 10 or more hours of care (King & Pickard 2013).

The relationship between informal care and employment is not clear, however, in the sense that evidence suggests that employment status can also influence the decision to provide care, just as care influences the decision to work. There is evidence that individuals out of paid employment or with low wages are more likely to provide care, particularly if the care requires substantial time or co-residence (Carmichael et al. 2010). In fact, not accounting for the endogenous relationship between care and work results in overestimation of the impact of informal care on the labour market decisions of carers (Heitmueller 2007). This association between informal care and a reduced

likelihood of employment has also been found in different parts of Europe, emphasising the importance of cultural norms and labour market conditions (Bolin et al. 2008).

With respect to older workers, the population subgroup of interest in the current research, one must consider the likelihood that care responsibilities would relate to caring for an older parent. Many of the people aged 50-64 who provide informal care give such care to their parents. Earlier research has calculated probabilities that people of different age, gender, and marital status will provide care to a parent and used this information to develop projections for how the prevalence of such care will change in the future. This work estimates that from 2005 to 2041 in England, the number of people aged 45-64 who provide care to parents for more than 20 hours a week will rise from 255,000 to 330,000, an increase of 30% (Pickard 2008). In addition, when looking at the relative ratio of care providers to care recipients, it is estimated that the demand for informal care by parents from their children will exceed the available supply of such care by 2017, with the gap growing over time.

This has important implications for both working age adults as well as their parents needing care; the expected increase from 2005 to 2041 in the proportion of people aged 30-64 providing intense care to parents is 25.0%, but if it were to keep up with demand, it would have to increase by 87.1%. One question is of course from where this care will come, but the growing demand also raises questions about people's ability to continue working with the added pressure to give such care. It therefore seems obvious that finding and promoting effective solutions to the challenges around combining care and work in later life are not only important to older workers today, but will be increasingly crucial in the coming decades if better employment outcomes in later life are to be had.

Overall, there is broad support in the literature for a relationship between care responsibilities and labour market behaviour, and it is clear that flexibility with respect to work can facilitate a more effective combination of care and work. Furthermore, in the current context, this is important with respect to the flexibility dimension of the conceptual framework for employability. The current study seeks to assess the role of employability in labour market outcomes for older workers, i.e. employability is understood in an outcome-based sense. The ability to find and retain work is shaped by a number of qualities beyond the skills- and qualifications-based notions of employability found in certain contexts, and this has been highlighted in this chapter regarding the dispositional elements of employability, which flexibility, though externally rather than internally generated, can be considered.

The previous sections have outlined the conceptual components of identity, adaptability, and flexibility as explored in previous literature on employability. Particular themes have emerged, such as motivation, openness, control, and self-efficacy. The chapter now turns to describe the methodology and data used for analysis and how these constituent elements may be examined given the available indicators.

5.4 Operationalising Dispositional Dimensions of Employability

The methodology applied in this chapter expands the approach taken in the previous one. There, multinomial logistic regression was conducted on five waves of data from the English Longitudinal Study of Ageing (ELSA) to assess the impact of resource-oriented characteristics on the labour market status of older workers. This chapter continues this exploration by expanding the conceptual framework of

employability through the introduction of elements related to disposition in order to identify their impact on labour market status.

The data available in ELSA do not provide indicators that perfectly correspond to those featured in previous research on the dispositional dimensions of employability. Indeed, much of the previous research has employed multiple-item questionnaires uniquely designed to assess their potential to capture the concepts at hand, e.g. work identity. This limits the ability here to incorporate measures that have the high construct validity seen in previous research. Despite this limitation, the analysis will draw on items from the self-completion questionnaire that relate to measures of quality of life. ELSA uses the CASP-19 schedule to assess quality of life.

The CASP-19 questionnaire covers four main areas associated with developing a full understanding of subjective perceptions of quality of life: control, autonomy, self-realisation, and pleasure. The full questionnaire can be found in Table 7.¹⁴ A number of the items share conceptual links with questions used in previous research, particularly with respect to concepts like autonomy, self-efficacy, optimism, and motivation. For clarification purposes, Table 7 provides links between the quality of life indicators from ELSA and questionnaire items used in previous research on disposition and employability, along with a column designating ‘nicknames’ for the indicators to provide a simplified nomenclature for the indicators. Only a subset of the CASP-19 items were explored and introduced to the model, based on these conceptual links. It is important to note that the question related to control originally asked about feelings that things were out of control; this has been reversed coded so that the base category represents

¹⁴ The table does not display questions in the order they are asked. That information can be identified by the last letter of the variable name; alphabetical order reflects questionnaire order.

the greatest sense of control. Throughout the analytical process, the results were examined to assess the influence of each CASP-19 item. The model presented in this chapter includes only the items that have particular theoretical importance or demonstrated a notable effect on the model, assessed through an increase in Pseudo R².

Table 7: Quality of Life (CASP-19) Indicators from ELSA

ELSA Variable	CASP Questionnaire Item	Conceptual Link	Nickname
scqolb	I feel that what happens to me is out of my control	Control	No-control
scqolc	I feel free to plan for the future	Self-efficacy	Future-plan
scqole	I can do the things that I want to do	Self-efficacy	Can-do
scqolo	I feel full of energy these days	Motivation	Energy
scqolp	I choose to do things that I have never done before	Openness	New-things
scqolr	I feel that life is full of opportunities	Resilience/Optimism	Opportunities
scqols	I feel that the future looks good for me	Optimism	Optimism
scqolm	I enjoy being in the company of others	Openness (Boundary-less Mindset)	Sociability
scqolf	Family responsibilities prevent me from doing what I want to do	Flexibility	Family-duty
scqoli	Shortage of money stops me from doing the things I want to do	Flexibility	Finance-limits
<i>scqolj</i>	<i>I look forward to each day</i>	<i>Motivation/Optimism</i>	<i>Look-forward</i>
<i>scqolk</i>	<i>I feel that my life has meaning</i>	<i>Resilience</i>	<i>Meaning</i>
<i>scqoll</i>	<i>I enjoy the things that I do</i>	<i>Optimism</i>	<i>Enjoy</i>
<i>scqoln</i>	<i>On balance, I look back on my life with a sense of happiness</i>	<i>Resilience</i>	<i>Happiness</i>
<i>scqola</i>	<i>My age prevents me from doing the things I would like to</i>	<i>-Not explored-</i>	<i>Age-limits</i>
<i>scqold</i>	<i>I feel left out of things</i>	<i>-Not explored-</i>	<i>Left-out</i>
<i>scqolg</i>	<i>I feel that I can please myself what I do</i>	<i>-Not explored-</i>	<i>Pleasure</i>
<i>scqolh</i>	<i>My health stops me from doing things I want to do</i>	<i>-Not explored-</i>	<i>Health-limits</i>
<i>scqolq</i>	<i>I feel satisfied with the way my life has turned out</i>	<i>-Not explored-</i>	<i>Life-satisfaction</i>

Note: Italicised rows represent variables omitted from the final model or not explored in the analysis.

The approach by Fugate & Kinicki (2008) considered adaptability with respect to concepts like control and autonomy. These ideas are also found in surveys on well-being. De Cuyper et al. (2008) examined the relationship between employability and well-being and the importance of the former in periods of high job insecurity. The findings suggest that employability and well-being are positively related; however, in

this study, employability was measured as a subjective assessment conceptually related to perceived job mobility rather than the multidimensional construct found in much of the recent research and used in this study. Nonetheless, there is value in the conceptual link with well-being. A number of survey items used to measure well-being relate to the notions associated with the employability dimensions of identity, adaptability, and flexibility.

An important distinction should be made related to the use of the CASP-19 measures as opposed to those found in previous work. These measures do not enquire specifically with respect to the respondent's work, but ask about life in general. Ideally, the measures used to understand a concept like adaptability and how it relates to one's employability would aim to assess adaptability within an employment and work context. The studies highlighted earlier have made significant advances in developing robust survey tools for examining these ideas; unfortunately, these smaller questionnaires have yet to make it into the large-scale longitudinal studies on ageing.¹⁵ Nonetheless, it is reasonable to believe that the important elements related to disposition, i.e. the underlying qualities and traits, will broadly extend from the work sphere to the life sphere. In addition, the purposes of this research is to develop a better understanding of what concepts should be targeted to enhance employability outcomes; work-life balance, and therefore overall quality of life, plays an important part in labour market behaviour.

Along with the quality of life indicators as proxy measures for the identity, adaptability, and flexibility dimensions of the employability conceptual framework, a

¹⁵ The ELSA self-completion questionnaire does include a number of items related to quality of work; unfortunately for the purposes of the cross-sectional analysis, these items were only asked to employed respondents.

variable was included to indicate if the respondent reported care responsibilities. The provision of care can involve a great amount of time as well as sudden interruptions, thus limiting one's flexibility to perform paid work. This may have important implications for one's labour market behaviour, in addition to health and financial circumstances. This indicator was created from **spcaa** for Wave 1 and **ercaa** for Waves 2-5.¹⁶ Missing values in later waves were replaced based on earlier responses under the assumption that "not applicable" missing values indicated no change in carer status. Additional missing values in Waves 3-5 were replaced based on responses to the variable **wpact***, "Did you do any of these activities during the last month?" indicating response 4, "Cared for someone".

5.5 Cross-sectional Results

Due to the size of the full tables showing the regression results, they are presented in Appendix 2. As with the results for Chapter 4, the regression table is organised by variable, with dependent variable categories in rows and different waves listed in columns. Coefficient estimates, robust standard errors, and relative risk ratios (RRRs) are identified by wave, with summary statistics at the bottom of the table. The dependent variable represents labour market status with employment as the reference category. Table 8 provides a summary of the significant associations along with the direction of association; for simplicity, the table includes only associations significant at the $p < 0.05$ and $p < 0.001$ levels, although the discussion below does mention results significant at the $p < 0.1$ level at times.

¹⁶ For both variables, the question was worded: "Did you look after anyone in the past week (including your partner or other people in your household)? By 'look after' we mean the active provision of care."

Table 8: Significant Associations from Multinomial Regression Results with Dispositional Dimensions (base=Employed)

		W1	W2	W3	W4	W5	W1-5
Poor Self-Perceived Health							
	Retired	++					+
	Unemployed			+	+		+
	Sick/Disabled	++	++	++	++	++	++
	Home/Family	++					
Health Limitations Affecting Work							
	Retired		++	++	++	++	++
	Unemployed	<i>variable not available</i>	+	++			++
	Sick/Disabled		++	++	++	++	++
	Home/Family		++	++	++	++	++
Educational Qualifications (base=Degree)							
Some	Retired	-		--	-	-	--
	Sick/Disabled	+					
None	Retired	--	-	--		-	-
	Sick/Disabled				+		
	Home/Family						+
Training Undertaken in Past Year							
	Retired	--	--	--	--	--	--
	Sick/Disabled	--	--	-	-	-	--
	Home/Family	--	--	--	-	--	--
Marital Status (base=Married)							
Single	Retired	+					
	Home/Family	-	-		-		
Div/Sep/Wid	Retired	-				-	-
	Home/Family	--	--	--	--	--	--
Number of Close Relatives							
	Retired	-					
	Unemployed			-	-		-
	Sick/Disabled		+		+		
Number of Close Friends							
Organisational Membership							
	Retired	+	+				+
	Sick/Disabled		+				
Provides Care							
	Retired	++	+	--	+	++	++
	Unemployed	+					
	Sick/Disabled						+
	Home/Family	++	++	++	++	++	++

		W1	W2	W3	W4	W5	W1-5
No-control (base=Never)							
Not often	Retired		++	++			
	Unemployed					-	
	Sick/Disabled					-	
	Home/Family	+	+				
Sometimes	Sick/Disabled					-	
	Home/Family	+					
Often	Retired		+				
	Sick/Disabled	++	+			-	-
Future-plan (base=Often)							
Sometimes	Retired	--		--	-	-	--
Not Often	Retired		-	-		-	--
	Sick/Disabled					--	
Never							
Can-do							
Sometimes	Sick/Disabled	+					
	Home/Family			-			
Not Often	Unemployed					-	
	Sick/Disabled	+	++				+
Never	Retired				-		
	Sick/Disabled		+				+
	Home/Family			-			
Energy							
Sometimes	Sick/Disabled	++	+				
Not Often	Sick/Disabled	++	+	+			
Never	Retired	+			+		
	Unemployed		--	-			
	Sick/Disabled	++	+				+
New-things							
Sometimes	Sick/Disabled		+				
	Home/Family				+		
Not Often							
Never	Sick/Disabled	+	+				
	Home/Family				+		+
Opportunities							
Sometimes	Home/Family						-
Not Often	Retired	+					
	Home/Family						-
Never	Unemployed		--				
	Sick/Disabled		+				

		W1	W2	W3	W4	W5	W1-5
Optimism							
Sometimes	Retired			-			-
	Sick/Disabled			-			
	Home/Family	-					
Not Often	Retired						-
	Unemployed		+				
Never	Retired		-				-
	Unemployed		--				
Sociability							
Sometimes	Home/Family				+		+
Not Often	Unemployed	+					
	Sick/Disabled			+			
	Home/Family				+	+	++
Never	Retired					--	
	Unemployed		--	--	--	--	--
	Sick/Disabled				--		
	Home/Family			--			
Family-duty							
Sometimes	Retired		+				
	Sick/Disabled		+				
	Home/Family	-					
Not Often	Retired		+				
	Home/Family	-					-
Never	Sick/Disabled		+		+		+
	Home/Family	--					-
Finance-limits							
Sometimes	Unemployed	-				-	-
	Sick/Disabled		-				
Not Often	Retired	++	+		+	+	++
	Unemployed	-			-		-
Never	Retired	++	++	++	++	+	++
	Unemployed					-	--
	Sick/Disabled				+		+
	Home/Family	+		+			++
Age							
	Retired	++	++	++	++	++	++
	Unemployed						++
	Sick/Disabled	++		+			
	Home/Family	++	++			+	++

	W1	W2	W3	W4	W5	W1-5
Gender (Female)						
Retired	++	++	++	++	++	++
Unemployed	--				-	-
Home/Family	++	++	++	++	++	++
Income Quintile 2						
Retired	--	--	-	-	-	--
Unemployed	--	--	--			--
Sick/Disabled		-				
Home/Family	--	-	--	-	-	-
Income Quintile 3						
Retired	--	--	--	--	--	--
Unemployed	--	--	--	-	-	--
Sick/Disabled	--	--	--	-	-	--
Home/Family	--	--	--	--	--	--
Income Quintile 4						
Retired	--	--	--	--	--	--
Unemployed	--	--	--	--	--	--
Sick/Disabled	--	--	--	--	-	--
Home/Family	--	--	--	--	--	--
Income Quintile 5	<i>-- for all waves and categories</i>					
<i>N</i>	4440	2900	3082	2635	2359	10172

Note: Single marks (+ or -) represent $p < 0.05$ significance and double marks (++) or (--) reflect $p < 0.001$. Shaded boxes reflect no significant associations.

In evaluating the results, a natural departure point is to compare the changes amongst the variables included in Chapter 4: resource-based indicators and controls. Very few aspects have any change in significance levels, and coefficients are only slightly altered across these variables. Most of the differences appear in the social capital dimension, primarily impacting those reporting being permanently sick/disabled or looking after home/family. Given the primary objectives of the research here, the main outcome categories of interest are retired and unemployed, so these differences will not be discussed in further detail. However, some differences to note occur in Wave 3, where the association with organisational membership for the retired disappeared and a negative associated of the number of closer relatives for the unemployed appeared.

Nonetheless, the primary contribution of the analysis in this chapter relates to the introduction of the elements related to disposition. The indicator related to carer status is presented in the table first for improved clarity, since it is a binary variable and the others are four-category Likert-scale measures. Care responsibilities demonstrate a strong relationship with labour market status, decreasing the likelihood of being employed in each labour market category in at least one wave, although the association for the permanently sick or disabled category in Wave 2 is only at the $p < 0.1$ level. In addition, the association on the unemployed category in Wave 4, also at the $p < 0.1$ level, carries the opposite sign than would be expected; in other words, people who provide care are less likely to be unemployed rather than employed compared to those who do not have care responsibilities. One possible explanation for this is that individuals who do provide care are not actively seeking work and consequently do not report an unemployed status. There may also be a synergy between the ability to provide care and the ability to work. Alternatively, as was discussed in Chapter 4, there could be statistical distribution issues related to non-response and missing values related to the Wave 4 sample, despite the use of probability weights in the analysis.

Moving on to the quality of life proxies for the other conceptual dimensions of employability, the reverse-coded item **no-control** demonstrates some interesting patterns. For example, those with a lower sense of control through reports of “Not often” and “Often” compared to the base category of “Never” have a greater likelihood of being retired compared to employed in Waves 2, as well as Wave 3 for “Not often”. Those reporting “Not often” and “Sometimes” show some statistically significant likelihood of looking after home or family rather than being employed, except in Wave 4 and mostly at the $p < 0.1$ level. Unsurprisingly, those who report “Often” feeling a lack of

control compared to “Never” feeling so are much more likely to report being permanently sick or disabled rather than employed in Wave 1 & 2; however, they are less likely to do so in Wave 5. In fact, in Wave 5, all responses other than the base of “Never” are negatively associated with being sick/disabled rather than employed.

With respect to the ability to plan for the **future**, this indicator only has some negative associations with the likelihood of being retired compared to being employed, as well as with being sick/disabled for Wave 5. Reporting “Sometimes” rather than the base category of “Often” feeling able to plan for the future suggests one is less likely to report being retired than being employed across all five waves, albeit at different significance levels (Wave 2 $p < 0.1$). In addition, reports of “Not often” demonstrate significance in this association in Waves 2, 3, & 5. This suggests a relationship between a sense of ability to proactively plan and being retired. The importance of planning in the decision to retire will be explored further in the next chapter. At the same time, however, there were no significant associations differentiated the extreme responses of “Never” compared to “Often”.

A **can-do** attitude, as reflected in responses to the question on the sense that one can do most things they want, exhibits an interesting range of associations. To varying degrees and in different waves, the overarching picture suggests that a lower level of **can-do** increases the likelihood that one is permanently sick or disabled rather than employed, but decreases the likelihood of looking after home or family. This could be related to the limitations inherently associated with sickness and disability, while looking after home and family may allow greater flexibility in pursuing one’s interests. There were also suggestions in Waves 4 & 5 that lower levels on this indicator might be

associated with a lower likelihood of being either unemployed or retired compared to being employed.

Of all the quality of life indicators included in the present model, the measure related to levels of **energy** is the least related, in a conceptual sense, to the dimensions of employability. Level of energy is not explicitly referenced in the measures used in previous research to assess the ideas of career identity or adaptability, except in the question, “I am energized in new opportunities and situations,” included in the Boundaryless Mindset scale used by Briscoe et al. (2006). Nonetheless, its link to motivation and proactivity plus its effect on Pseudo R^2 led to its inclusion in the model. These factors should be considered in evaluating its overall association with labour market status. Other than the fact that lower levels of energy increase the likelihood of reporting permanent sickness or disability in Waves 1-3, statistically significant associations vary considerably. The results can be reviewed in the table, although it may be of interest to note the associations in Waves 2 & 3 with respect to the unemployed. Those who report “Never” feeling full of energy are much less likely to report being unemployed than employed compared to the base group of “Often” feeling full of energy. On one hand, this could reflect the potential in the unemployed group, suggesting that in the appropriate situation they could contribute a great deal. However, the great variation in magnitude with respect to the reported coefficients and robust standard errors could indicate some numerical issue inflating the true associations.¹⁷

The desire or willingness to explore **new things** carries great conceptual importance with respect to the employability dimensions of identity, adaptability, and

¹⁷It should be noted that the number of responses of ‘Never’ by the unemployed across all waves is very low for this and subsequent variables demonstrating such large coefficients. There are no zero cells, but the results in these instances must be considered with caution.

flexibility. It serves here as a proxy measure for a sense of openness, an important element in work-related adaptability. Strikingly, the indicator contributes a modest amount to the Pseudo R^2 and demonstrates few meaningful associations consistently across the five waves of data. The implications of this result will be explored further in the discussion section that follows.

The next indicator in the model identifies the feeling that life is full of **opportunities**. This measure relates to adaptability through the notion of resilience; the ability to identify opportunities allows one to better respond to changes and challenges in the workplace. Some interesting associations appear in the model, albeit without a great deal of consistency across waves and mostly at the $p < 0.1$ significance level. Comparing retired individuals to the employed, a lower sense of opportunity (reporting “Not often” compared to “Often”) corresponds to a higher likelihood of being retired in Wave 1 (and Wave 3 at the $p < 0.1$ level). This could relate to the dispositional quality limiting one’s ability to identify employment opportunities, resulting in labour market exit. On the other hand, the experience in retirement could have a limiting impact on available opportunities. For example, one’s range of activities could be reduced by one’s financial situation in retirement. With respect to the unemployed, reporting “Sometimes” rather than “Often” feeling that life is full of opportunities is weakly associated with a higher likelihood of being unemployed rather than employed in Wave 1. In the Wave 2 data, reporting “Never” compared to “Often” demonstrates a strong statistically significant association reducing the likelihood of being unemployed. This could suggest that the unemployment experience allows a wide range of opportunities and that employment may entail responsibilities that reduce one’s ability to identify

opportunities. However, the large coefficient and small standard error suggest that this result is spurious and should be considered with caution.

This numerical concern also appears in the next indicator, **optimism**, which identifies outlook on the future. Among the unemployed in Wave 2, each category demonstrates a statistically significant relationship. For “Sometimes” (at the $p < 0.1$ level) and “Not often”, each predicts a higher likelihood of being unemployed rather than employed. In contrast, the “Never” category relates to a lower likelihood of being unemployed. This result reverses the trend across the categories of this variable, and the large coefficient and small standard error further suggest that this result is tenuous. Despite the potential numerical problems, one possible interpretation is that lower levels of optimism increase the likelihood of reporting unemployment, but individuals who have the most pessimistic view of the future have withdrawn from the labour force. Conceptually, this could be linked to the idea that unemployment requires that one is actively looking for work; a severely negative outlook on the future may discourage individuals from engaging in a job search. Results for other categories of labour market status vary widely across waves.¹⁸

The indicator **sociability**, which measures the degree to which a respondent reports enjoying the company of others, demonstrates some variable patterns of significance, along with the same potentially spurious results for those saying they “Never” enjoy the company of others compared to those who “Often” do. Of note is the labour market category where people are looking after home or family; individuals who “Sometimes” enjoy the company of others are more likely than those who “Often” do to

¹⁸ One interesting finding of note is that in the results pooling Waves 1-5, which are included in the table for illustrative purposes but not discussed overtly in the results, each (lower) level of optimism was associated with a negative likelihood of being retired rather than employed.

be looking after home or family instead of in employment in Wave 4 (and Waves 1 & 3 at the $p<0.1$ level). This association also appears among responses of “Not often” compared to “Often” in Waves 3-5. Those responding “Not often” are also more likely to be unemployed rather than employed compared to those responding “Often” in Wave 1. The likelihood of being on permanent disability or sickness rather than in employment is also higher for those responding “Not Often” in Wave 3, but lower for those responding “Never” in Wave 4. Despite the aforementioned concerns over large coefficients, the strongest pattern to emerge is the lower likelihood of reporting unemployment rather than employment for those reporting “Never” for Waves 2-5.

The next variable in the table, **family-duty**, measures the response to the subjective perception that family responsibilities prevent one from engaging in chosen activity. It is important to note here that, in contrast to the previous measures, responses of “Never” indicate the greatest degree of freedom from responsibility, linked to flexibility in the multidimensional framework of the current study. All but one of the significant associations occur in Waves 1 and 2. A greater sense of flexibility is associated with an increased likelihood of being retired rather than employed in Wave 2 and being on permanent sickness or disability in Waves 2 and 4. Predictably, reporting less responsibility to family is associated with a lower likelihood of reporting looking after home or family in Wave 1.

The final indicator to address in the model operates conceptually like the previous one on family responsibilities, but measures the sense that **financial limitations** prevent one from doing what one wishes. In Wave 1 across all response categories, greater flexibility in financial terms is associated with a lower likelihood of being unemployed rather than employed ($p<0.1$ for “Never”). This association also appears in

Waves 4 & 5, though at the $p < 0.1$ level for “Not often” at Wave 5 and “Never” at Wave 4. For those who report “Not often” or “Never” compared to “Often” feeling hindered by financial resources, there is an increased likelihood of being retired rather than employed across all five waves. Those who “Never” feel limited by finances compared to “Often” feeling so are also more likely to be looking after family rather than employed in Waves 1 and 3.

5.6 The Impact of Disposition on Labour Market Status for Older Workers in England: An Improved Framework for Understanding Employability?

The main objective of this chapter is to introduce dispositional elements into the analysis of employability among older workers in England in order to assess the impact of the conceptual dimensions of identity, adaptability, and flexibility. Just as Chapter 4 highlighted the testable hypotheses related to the employability dimensions of interest and the first research questions around the relationship of employability and labour market status, the dispositional dimensions analysed here examine three hypotheses:

- Higher levels of the identity-related disposition will be positively associated with an employed labour market status.
- Higher levels of the adaptability-related disposition will be positively associated with an employed labour market status.
- Higher levels of the flexibility-related disposition will be positively associated with an employed labour market status.

The primary motivation of this research is to understand how employability and its component dimensions relate to one’s position in the labour market. It is important to reiterate that the findings here are not intended to establish a new empirical

approach through the development of a new collection of indicators to measure employability, but to understand how the component dimensions relate to one's position in the labour market using available data. In building on the work in the previous chapter, this discussion provides the complete picture with respect to employability and labour market status.

To assess the hypotheses listed above, the proxy measures used in the analysis must be associated with one of the conceptual dimensions of the employability framework based on their conceptual links and the presence of these links in the previous employability research discussed earlier. The indicators **No-control**, **Future-plan**, and **Can-do** most closely resemble the concept of career identity. These variables reflect notions of control and self-efficacy, which are reflected in the identity frameworks used to assess employability in prior research.

Overall, there is general support for the first hypothesis. All three indicators demonstrate some significance in that more positive assessments are associated with a greater likelihood of an employed labour market status compared to some of the other categories of the dependent variable. One exception is for the variable **Can-do**, where lower levels of the variable are associated with a lower likelihood of looking after home or family. This could be explained by the possibility of greater freedom in the ability to do what one wants when one is not constrained by a work schedule. The association with permanent sickness and disability is likely due to the limiting effect of the illness or physical condition on self-efficacy. These explanations are all the more reasonable given there is no significant association comparing employment to either retirement or unemployment, except in Wave 4 for the reported category of "Never" for retirement and in Wave 5 for "Not often" and unemployment. The association, where individuals

with the lowest reported level of **Can-do** are much less likely to be retired than employed, may reflect freedom in retirement to do desired activity.

The quality of life indicators of **Energy, New-things, Opportunities, Optimism, and Sociability** are more closely linked to the dimension of adaptability, given their associations with the concepts of motivation, openness, and resilience. These concepts relate to the degree to which an individual will take action and the manner in which this action will manifest. Overall, these indicators provide weak support for the research hypothesis.

Part of the issue with respect to the findings on these indicators is that they are measures of quality of life. Unsurprisingly, respondents who are on permanent sickness or disability are associated with lower levels of these indicators. There are some indicators that support the hypothesis with respect to the retired, but a causal link cannot be established from the current analytical approach. While lower adaptability may result in labour market exit, it is equally likely that lower reported levels on these adaptability-related measures may result from circumstances associated with the decision to retire.

No clear significant correlations of interest emerged with respect to the variable **New-things**, and this lack of significance is important. Of all the measures used in the analysis, this indicator is most closely related to the fundamental concepts underpinning the adaptability dimension. A willingness to try new things is crucial to adaptive responses in the workplace. On one hand, the lack of significance here may reflect the fact that the indicator is not a complete assessment of the adaptability concept; other, more specific survey items may be required to identify a significant association. On the other hand, it may be that a willingness to try new things is in fact not an important

predictor of labour market status; the excitement for novel experiences may extend far outside the realm of work.

The measures to assess flexibility provide mixed support for the corresponding hypothesis. Care responsibilities support it across the labour market categories, as being a carer significantly reduces the likelihood of being employed. Additional family responsibilities were associated for the most part with a higher likelihood of being in employment in contrast to other labour market categories, an association in the opposite direction from the hypothesis. With respect to flexibility in terms of financial capability, greater financial security is associated with a higher likelihood of being retired rather than employed, but a lower likelihood of being unemployed. These results could very well reflect how labour market status impacts financial resources; retirement for the sample would involve pension and other financial arrangements, and unemployment would entail a noticeable reduction in income.

The overall picture, therefore, is that the dispositional elements presented here display some associations with labour market status, but the nature of their associations does not align clearly with the theoretical understanding with respect to employability. Although the introduction of the dispositional dimensions did not substantively affect the relationships identified in the previous chapter related to health, human capital, and social capital, these new dimensions of identity, adaptability, and flexibility are not definitively associated with an increase in the likelihood of reporting a labour market status of employment, at least in the current study design. The limitations to the research described in Chapter 4 are equally applicable here. Additional limitations exist with respect to the use of the quality of life indicators to approximate the dispositional dimensions presented in previous research. To be sure, the present study lacks the level

of depth and detail implemented in earlier studies; this may have a significant limiting impact on the model's power to identify the relationships between these theoretical components and labour market status.

A fundamental point of interest in this exploration of employability has been to understand differences between employed and unemployed older workers. European policy-makers seek to encourage individuals to work later in life, and ways of assisting prolonged labour force participation are sought. Employability can play an important role in achieving this, but only if it is understood in an accurate and meaningful way. Part of the challenge in extending working lives is that retirement is a part of the modern life course, representing a possible and socially understood option; it is a 'natural' path for labour market exit available to older people. Consequently, analysis on labour market issues regarding older workers is more complex than studies on other age groups that consider how to enhance employment outcomes. These considerations related to labour market exit among older workers and the decision to retire constitute a primary theme of the next chapter, which extends the analysis of the employability framework conducted so far into a longitudinal dimension, exploring the relationships between the employability dimensions and transitions into and out of employment. Examining changes over time and labour market transitions may provide further clues into how employability can enhance employment opportunities for older workers and achieve policy goals of extending working lives.

Chapter 6: Employability and Labour Market Transitions of Older Workers in England

The previous two chapters have examined the associations between different conceptual dimensions of employability and the labour market status of individuals. Overall, some relationships appear, some of which are well known from previous research and some of which serve the analytical purposes of the current research. At the same time, some measures that could have been expected to demonstrate a relationship with labour market status did not do so in part or at all. The findings so far suggest a clear and influential association for health and human capital with respect to labour market outcomes in later, while the impact of the other employability dimensions – social capital, identity, adaptability, and flexibility – is less clear or non-existent. However, the static picture of how these conceptualised dimensions of employability relate to employment provides only part of the picture, as employed people can have different levels of employability, while people out of the labour market or unemployed may find themselves in those situations regardless of their employability.

To expand and deepen this exploration of employability as it relates to employment outcomes, this chapter turns to examine transitions in labour market status using the five waves of available data. The first section presents some descriptive findings related to the different pathways of labour market behaviour across the sample period. The next section offers a brief discussion on previous research findings specific to the notion of retirement transitions and decisions, as some of the issues are slightly different from those relevant to labour market status alone. The chapter then turns to

the methodological considerations in longitudinal studies and the approach taken here. The results of the different models examined are then explained, and the chapter concludes with a discussion of the implications of the findings on current understanding and application of the employability concept.

6.1 Patterns of Labour Market Behaviour

This section describes the various pathways in labour market status that respondents experienced across the five waves of ELSA. The analysis is restricted to respondents who participated in all five waves of data collection and for whom there is no missing value for labour market status at any wave. In addition, the data were examined in two samples, one in which all respondents were under the age of 65 at Wave 1 and another for those under age 65 at Wave 5. To reduce the number of possible pathways to a more manageable total, labour market status was coded for those reporting employment (self- or otherwise), unemployment, or a status that meant they were out of the labour market (i.e. retired, permanently sick or disabled, or looking after home/family).

The different labour market pathways were first generated by hand through recoding the data, and results were verified using available sequence analysis commands in the Stata statistical software package. Overall, the analysis found that, of the 243 possible different pathways (3 possible outcomes across 5 waves), 71 pathways had at least one person reporting such an experience in labour market status over time for those under 65 at Wave 1, and 63 pathways were applicable for those under 65 at Wave 5.

The descriptive analysis begins by examining the sample restricted by age at Wave 1, made up of 3,139 respondents. Two pathways explain over half of all respondents: out of the labour market for all five waves and employed for all five waves. Nearly a third of the sample (32.72%) was out of the labour market across all waves, while almost a quarter (24.21%) was employed across all waves. The different pathways that represent employment followed by labour market exit at a later wave (and remaining out of the labour market through Wave 5) represent a further 29.92% of the sample, with each pattern representing in the range between 5.70% and 8.54% of the sample.

Each of the other possible pathways that appear constitutes less than 1% of the total sample. Some of the more prominent among these represent something of an episodic labour market entry or exit, such as being employed for all but one or two waves or having only one wave of employment. Moreover, patterns that demonstrate a shift from employment to unemployment and then to labour market exit show up here, supporting the idea that older workers who become unemployed more often leave the labour market rather than find re-employment. Among the sample of 3,139, only 42 respondents (1.34%) in 14 applicable pathways reported employment in a wave following one in which they reported unemployment.

The relative weight of the pathways involving employment followed by labour market exit reflects the impact of age over time. The average age of respondents for each pathway increases the earlier that labour market exit occurs. For example, those employed only in Wave 1 were on average 58.3 years old at Wave 1. In contrast, those who remained employed in the first four waves were aged 54.9 on average at Wave 1. The average age for this group at Wave 5 was 63.2, suggesting premature labour market

exit has occurred, with particular impact on policy measures to extend working life.

Arguably, differences in retirement trajectories by gender could be affecting the average age. Upon closer inspection, the difference between genders in average age at Wave 5 for this labour market pathway was a year (63.7 for men and 62.7 for women). Given differences in State Pension Age (SPA) in England, the average age of women at this time suggests average labour market exit more or less in line with SPA, but an early exit for men.

Table 9: Prevalence of Different Labour Market Pathways

	<65 at W1		<65 at W5	
	Freq.	%	Freq.	%
Out of LM W1-W5	1,027	32.72	267	16.72
Employed W1-W5	760	24.21	640	40.08
Exit at W2	268	8.54	76	4.76
Exit at W5	256	8.16	165	10.33
Exit at W4	236	7.52	128	8.02
Exit at W3	179	5.7	72	4.51
Subtotal	2,726	86.85	1,348	84.42
<i>N</i>	3,139		1,597	

Turning to the sample of 1,597 restricted by age at Wave 5, the predominant patterns of labour market interaction mirror those for the other age-restricted sample, though with differing proportions. Here, the most common pattern is employment across all five waves (40.08%), while labour market exit across all five waves represents just 16.72% of the sample. The pathways relating to employment followed by permanent labour market exit account for 27.62% of the sample, ranging from 4.51% to 10.33% (the latter corresponding to those out of the labour market in Wave 5 only). Again, the other patterns account for 1% or less of the sample, except for the pattern

represented by being out of the labour market at Wave 1 but employed in the other four at 1.38% of the sample. Only 34 of the 1,597 respondents in this sample found employment after reporting unemployment in a previous wave.

Given that this sample is restricted to those below age 65 at Wave 5, it is of interest to examine the average age of the sample by labour market patterns, specifically to examine the average age at the time of labour market exit. The average age for the predominant patterns at Wave 5 ranges from 61.1 for those still employed to 62.24 (exit at Wave 4). However, there is noticeable variation from this age when looking at the average age of the sample at the wave of labour market exit. For example, the average age for those who remain employed up to but excluding Wave 5 is 61.41; with a gender breakdown of 61.35 for women and 61.49 for men, this shows there is substantial early labour market exit for men under 65. The average age of exit declines among the sample when looking at exit in earlier waves, with those exiting at Wave 2 aged 56.3 years on average (56.1 for women, 56.5 for men). It should be noted, however, that the average age of exit in a given wave – where employment was reported in the previous wave – ranges from 59.6 in Wave 2 to 60.8 in Wave 4 when consider all available respondents under the age of 65 at that given wave.

As noted earlier, the variable used to assess labour market pathways was recoded to group all aspects of labour market exit. However, the nature of absence from the labour market is of conceptual importance. Among the sample restricted by age at Wave 1, the vast majority (>80% in each wave) report retirement as their labour market status in the wave in which they exit the labour market. Of notable exception are those who remain out of the labour market across all waves; at Wave 1, just under half (45.50%) indicate either permanent sickness/disability or looking after home or family.

These trends are different in Waves 1 and 2 for the sample restricted by age at Wave 5. For those out of the labour market from Wave 1, most report permanent sickness/disability, and retirement is reported less than looking after home or family (105, 71, and 91, respectively (39.33%, 26.59%, and 34.08%)). In Wave 2, a majority reports retirement (61.84%), but this proportion is much lower than in other waves (>83%).

Looking at the different pathways that people follow with respect to the labour market provides insights into the degree to which labour market behaviour in later life is a dynamic process. As the descriptive analysis shows, there is little change across time in labour market status for older people. Early exit from the labour market becomes a relatively stable experience, with few exits prior to state pension age following by re-entry into employment. This suggests particular challenges – either in barriers or in people’s own attitudes – to re-employment for older people. Increasing the labour force participation of older workers must consider how these challenges manifest and can be changed so that new employment opportunities manifest. At the same time, policy perspectives should also consider how the retention of older workers can make a difference in order to prevent early exit that can lead to permanent labour market withdrawal into retirement. The next section goes into the idea of these transitions to retirement to discuss how various factors play a role in both voluntary and involuntary transitions into retirement.

6.2 Exploring the Factors Impacting Transitions into Retirement

In the previous chapters, the analysis has been restricted to an examination of the employability dimensions through various indicator variables and their relationship

to labour market status. In this section, the analysis turns to an application of the employability conceptual framework to the notion of labour market transitions.

A number of factors are associated with the transition into retirement. These factors have previously been grouped into four categories: personal factors, family-related factors, work and organisation-related factors, and socio-economic factors (Büsch et al. 2010; Wang & Shultz 2010). Personal factors relate to individual attributes such as demographic characteristics, health, skills, and general attitudes or values. Family factors relate to an individual's family situation, including marriage or partnership status, care needs, and aspects of the labour market participation of a partner or spouse. Work and organisation-related factors refer to job characteristics, attitudes toward work, and flexible working options, for example, while socio-economic factors generally refer to more macro-economic conditions along with government policies and programmes. The meso- and macro-level factors represented in these last two categories will be considered in the analyses of the next chapter; the current discussion will focus primarily on elements of the personal and family factors, with some elements of individuals' work characteristics.

Many of the factors addressed here have been discussed in earlier chapters, as their influence on retirement decisions is related to general labour market status. But it is worth briefly outlining some of the primary findings that identify the factors that influence transitions into retirement in order to better inform the analysis and discussion later.

As retirement is conventionally a phase that occurs in later life, as could be expected, age plays an important role in the labour market exit of older workers. Not only does growing older lead one closer to traditional retirement age, but other factors

become more prevalent that have a bearing on transitions out of the labour market, such as ill health. Gender differences exist as well, not only with respect to variations in official or state pension age, but also in terms of the kinds of labour market exit experienced by genders at different (older) ages. Dahl et al. (2003) found among a sample of older workers in Norway that age was associated with early labour market exit, both into retirement and disability, with a marginally stronger effect among men. Women in this sample were more likely to end up in disability than unemployed, with the opposite occurring for men. Dentinger & Clarkberg (2002) also found that age and birth cohort had strong significant effects on the chance of retiring for both genders, along with responsibilities of providing informal care.

Educational level has also shown a relationship to retirement. Kalwij & Vermeulen (2008) found that higher education levels were associated with greater labour force participation in most of the European countries included in their study. Higher levels of education have also been shown to decrease the likelihood of transitioning from wage employment to retirement in the US and to increase the likelihood of transitions into self-employment (Zissimopoulos & Karoly 2007). Similarly, Pienta & Hayward (2002) found that more years of schooling were associated with an expectation of delayed retirement, although the effect was attenuated for wives once spousal characteristics were taken into account.

Health has been extensively studied as a predictor of transitions into retirement, labour market exit, and expectations of retirement (e.g. Bound et al. 1999; Mein et al. 2000; Szinovacz & Davey 2005; van Solinge & Henkens 2007). Poor health results in early retirement, while those in good health tend to retire later (Heyma 2004). However, deteriorating health, rather than poor health outright, may play a more important role

in the push to retirement (Bound et al. 1999). At the same time, poor or deteriorating health may actually result in later retirement, as one's expectations of higher care costs may lead them to remain in work to accrue sufficient finances (Dwyer & Mitchell 1999).

The relevance of financial resources has repeatedly arisen in this discussion, and like health it can have an effect on retirement transitions in two directions. Those who have more financial resources and greater financial security may be more likely to retire early given their ability to maintain their standard of living (Schils 2008). Similarly, those with material concerns appear less likely to take early retirement (Mein et al. 2000). However, retirement may entail certain changes or costs that promote continued employment. This double effect can also play out in significant ways with respect to one's partner's finances. Just as in the individual perspective, well-off couples may be drawn to early retirement due to their financial security and ability to sustain their standard of living (Henkens 1999). At the same time, higher income for one partner may decrease the likelihood of that partner retiring, while receipt of pension income by one's spouse may increase the likelihood of early retirement (Dahl et al. 2003; Jiménez-Martín et al. 1999). Access to sickness or unemployment benefits by one partner may also encourage labour market exit earlier than for the working partner (Danø et al. 2005). Overall, the picture on the impact of finances – including those of one's spouse – remains unclear, although evidence suggests that it is couples' rather than individuals' income that impacts risk of retirement (Szinovacz & Deviney 2000).

Another element that can influence exits from the labour market for older workers is activity status, or whether they work in part-time or full-time employment. Schils (2008) argued that greater working hours resulted in a greater attachment to the labour market and would reduce the likelihood of retirement. Denaeghel et al. (2011)

also found that working full time greatly reduced the likelihood for men (in dual-earning households) to retire. In exploring the role of spousal activity status, they found no evidence that the number of working hours of the spouse played a role in the retirement decisions of men or women.

The need to provide informal care, as mentioned in the previous chapter, has demonstrated an association with labour market activity and exit. The gender difference is particularly salient when considering the influence of one's spouse on a decision to retire. Men tend to postpone retirement, while women are much more likely to exit the labour market when faced with informal care responsibilities for their spouse or multiple people (Dentinger & Clarkberg 2002). Beehr et al. (2000) found that needing to care for someone positively related to a later expected age of retirement; through further analysis, they indicated that much of this care was likely related to care for a spouse. This finding may demonstrate a difference between younger and older respondents, rather than indicating that a need to care is predictive of later retirement. Put another way, those identifying a need to provide care may be an older subsample overall, and they may be better informed about their personal circumstances and potentially limited options for early retirement.

6.3 A Note on Partnerships

However, one element of importance that has not been included so far is the role that partnerships play, particularly in affecting moves into retirement. Previous literature has explored the influence of partnerships with respect to the age gap between spouses, differences in educational level, the need to provide care for a spouse or partner, and the level of activity (working hours). In addition, these factors have been

found to affect men and women in different ways. For example, Moen et al. (2006) also found that retirement among women seems to be more influenced by their partners than among men. As a consequence, understanding transitions into retirement requires a perspective that considers households and the impact of gender (Loretto & Vickerstaff 2013).

The age of one's spouse may also play a significant role in retirement, due to the desire among couples to enter this phase of life together. Married men and women are more likely to retire around the same time when there is a smaller difference in their ages (Johnson 2004). This likely relates to the different structures and incentives that exist at different points in older age. Yet, some studies have found no significant effect of age differences between spouses on retirement behaviour (Pienta & Hayward 2002; Dahl et al. 2003). Despite finding no significant association between retirement and age differences between spouses, having a spouse in receipt of a pension has been associated with a higher likelihood of early retirement (Dahl et al. 2003). Overall, gender differences in retirement decisions may stem from age differences in spouses through associated differences in economic resources; as women are usually younger than their husbands, they have less reason to take husbands' benefit eligibility into consideration (Szinovacz & Deviney 2000). In other words, women are freer to exit the labour market once their spouse (generally the higher income earner) reaches retirement benefit eligibility, but will continue working if the couple needs the added income.

The effect of the educational level of one's spouse has received less attention in the literature, although educational levels are correlated among married partners (Pienta 2003). There is evidence that individuals with lower educational levels and more educated spouses have a higher likelihood of early retirement; however, this may result

from greater lifetime earnings and financial resources in retirement, allowing the less educated spouse to retire early despite losing earnings (Fischer & Sousa-Poza 2006). At the same, spousal educational level has not demonstrated a significant association with a transition to retirement in other research (Zissimopoulos & Karoly 2007). As the theory behind spousal education's influence on retirement behaviour relates to power structures and the influence from disparity in educational levels, the similarity in education among married couples may explain why spousal education does not affect their partners' decisions regarding retirement (Denaeghal et al. 2011).

The impact of health on retirement transitions also applies to the spousal situation. As one partner falls into ill health, the partner may retire early in order to provide care (Szinovacz & Davey 2005; van Solinge & Henkens 2007). At the same time, the partner could need to remain working in the labour market in order to bring in the income necessary to meet care costs (Johnson & Favreault 2001; Pienta & Hayward 2002). Jiménez-Martín et al. (1999) found that the health of the male partner had a stronger effect on a couple's retirement decisions than that of the female partner. Differential effects on the genders are likely to relate to the financial structure of the household; in dual-earner families, women with an ill partner are more likely to retire and provide care, while men in single-earner households with an ill partner are more likely to remain in the labour market to provide financial resources (Denaeghel et al. 2011).

The previous two sections have examined what the literature says about transitions into retirement and the various factors that contribute to such labour market exit. The current research models many of these factors in its effort to examine the employability concept with respect to labour market outcomes, but it should be noted

that the models built here are not intended to provide a comprehensive predictive model of labour market activity of older people. In contrast, the models are meant to provide insight into the relationships between employability dimensions and labour market outcomes, such that a better understanding of how policy around employability may be designed. One example of this difference is how the influence of partnerships, highlighted as important in this section, is not included in the models. This decision was primarily made due to the small proportion of respondents in the data for whom information on partners was available; in fact, though not presented here, including variables on partner characteristics did not demonstrate any significant associations with the outcomes. The next section outlines the rest of the methodological considerations in building the present models.

6.4 Methodological Considerations in Looking at Labour Market

Transitions

Given its design, longitudinal data allow researchers to explore a variety of topics that relate to change and effects over time. The complexity in this kind of analysis also means that numerous methodological techniques have been developed, and the appropriate selection of which approach to apply requires careful thought on the part of the researcher. This section briefly describes the different approaches to analysing longitudinal or panel data followed by an explanation of the techniques applied toward the current research objectives and the justification for such an approach.

6.4.1 Fixed and Random Effects

Stata, the statistical package used here, provides commands for studying longitudinal or panel data (prefixed **xt-**). These commands allow researchers to build

models that predict an outcome of interest for a given individual at a given time based on values of predictor variables measured for these individuals at different times. Fundamentally, these models provide a way to explore how changes in certain measures are associated with changes in outcomes. These models also incorporate an element reflecting individual unobserved heterogeneity, or the error in the predication equation that is related to the individual respondent, which often includes unmeasured characteristics that are expected to influence the outcome. There are two modelling approaches that can be applied depending on the underlying assumptions regarding the relationship between this individual error and the set of regressors: fixed or random effects.

Fixed effects can be thought of as components that have a constant impact on the outcome of the model for a given individual and where the individual specific effect is consequently correlated with the independent variable. In contrast, random effects are those elements that may have a variable impact on the outcome and the individual error is thus uncorrelated with the predictors. Fixed-effects methods help to eliminate omitted variable bias (although the impact of omitted variables that change over time may remain), but their design also means associations with time-constant factors like ethnicity or gender cannot be estimated. Random-effects models can examine the impact of time-constant measures, but the estimates are open to error from omitted variables. Essentially, there is a trade-off between efficiency and consistency in estimates when modelling effects as fixed versus random; random-effects models can provide more efficient estimates when its assumptions are met, but fixed-effects can offer more consistent coefficients.

6.4.2 The Modelling Approach

Analysis of longitudinal or panel data often takes a fixed-effects or random-effects approach to model outcomes related to change over time. While the longitudinal nature of the ELSA data are well-suited to modelling using fixed or random effects in order to analyse changes across time, the analysis here takes a simpler approach based on the measures and outcomes of interest. The samples used cover subsets from an unbalanced panel, incorporating responses from any of the five waves where available, so the models are applied to unweighted data. In order to examine the impact of employability on labour market transitions among the samples, the analysis is done in two parts with each part done separately by gender.

The first dependent variable was coded to compare respondents who exited employment with those who remained employed; despite looking separately at the different categories not in employment in previous chapters, these categories were grouped here essentially due to the relatively low numbers in the samples being analysed. The variable thus took the code of 1 where the status was out of work (inactive or unemployed) but the respondent was employed in the previous wave. It was coded to 0 if the respondent was employed and also employed in previous wave. Thus, it compares the group of people who just left the labour market with those still in employment. Thinking back to the interest in understanding employability as related to employment outcomes, a loose assumption applies here that people who exit have lower employability than those who remain; the model thus tests which measures on the employability framework have an association with the outcome.

The second part uses a similar – though conceptually reversed – dependent variable. People who are employed but were out of work are coded as 1, while 0

represents people out of work in consecutive waves. Again, this operates under a loose assumption that people who enter work have higher employability than those who remain out, and the model tests if the employability measures have the expected associations with the outcome.

Building the models separately for the genders is driven by differences in State Pension Age (SPA). SPA is currently changing in the UK, but among this sample, SPA for men was 65 and for women it was 60. The receipt of the State Pension at SPA can be expected to influence the likelihood of exit from paid work, and generally only a small proportion of people in the UK continue to work past SPA. As a consequence, this analysis is restricted to those prior to SPA, which essentially corresponds to looking at early labour market withdrawal.

Given the nature of the dependent variables as coded and the restrictions put on the samples used in the analysis, the modelling approach was chosen to be a standard logistic regression, accounting for clustering among individuals. Fixed-effects models were considered and examined, but the lack of substantial variation in the independent variables over time resulted in highly inflated standard errors on a number of indicators. Moreover, this lack of variation over time limits the model from providing useful estimates of the effect of time (wave) on the outcome. But it is not expected that the relationship between the employability measures and employment outcomes would be distinct in different waves –that is, there is no compelling reason to think employability would be differentially associated with employment outcomes in one year compared to another. The regression thus controls for wave but does not model it explicitly as a random effect. Finally, clustering by individuals helps account for the fact that responses in one wave will have a degree of correlation with responses in the previous wave.

Full tables of regression results for each outcome measure are included in the following sections, listing the coefficients, standard errors, and p -values. Before moving to the results, some important differences in the variables included here from those seen in previous chapters should be pointed out. First, due to some of the concerns related to sample size and distribution of responses, the dispositional variables here have been simplified to binary indicators, where the four categories of responses have been grouped into two sets of two responses, i.e. “Often” and “Not often” versus “Sometimes” and “Never”. In addition, the continuous nature of the social capital measures on the numbers of close friends and close relatives have been recoded into binary indicators to assess those with three or more on each indicator. Finally, initial results from early modelling displayed odd findings related to age; in exploring this further, a non-linear relationship between age and the outcomes was discovered, so a term for age-squared has been included in these models.

6.5 Results: Transitions from Employment to Being Out of Work

Finances and health were the only areas that demonstrated the significant associations with the likelihood of exiting work for both men and women. Regarding income, respondents in any of the higher income quintiles were less likely to make an exit from employment compared to those in the lowest quintile. In addition, respondents who stated that shortage of money stops them from doing what they like to do were more likely to have moved out of work.

In the literature, the idea of pull factors for retirement suggests that individuals who can maintain a desired standard of living by retiring early will make the decision to do so, whereas those without the same financial resources will opt to continue working.

Table 10: Logistic Regression Results for Transitions out of Employment

	Men				Women		
	Coeff.	SE	<i>p</i>		Coeff.	SE	<i>p</i>
Poor Self-Perceived Health	0.580	(0.203)	0.004		0.179	(0.201)	0.372
Limitations in Usual Activities Due to Health	1.358	(0.180)	0.000		1.361	(0.191)	0.000
Educational Qualifications (Base=Degree)							
Some	-0.695	(0.154)	0.000		-0.124	(0.215)	0.565
None	-0.877	(0.253)	0.001		-0.145	(0.285)	0.610
Undertaken Training	-0.126	(0.165)	0.444		-0.725	(0.204)	0.000
Marital Status (Base=Single)							
Married	-0.140	(0.830)	0.866		1.918	(0.941)	0.042
Div/Sep/Wid	-0.362	(0.861)	0.674		1.128	(0.965)	0.242
3+ Close Relatives	-0.238	<i>(0.132)</i>	<i>0.071</i>		-0.144	(0.160)	0.368
3+ Close Friends	0.068	(0.133)	0.611		0.189	(0.163)	0.246
Organisational Member	0.108	(0.158)	0.494		0.159	(0.182)	0.381
Provides Care	0.452	(0.199)	0.023		0.258	(0.194)	0.184
No-control	0.120	(0.169)	0.476		0.176	(0.184)	0.338
Future-plan	-0.110	(0.220)	0.616		0.196	(0.229)	0.390
Can-do	0.158	(0.276)	0.569		-0.081	(0.327)	0.805
Energy	0.076	(0.203)	0.709		0.182	(0.219)	0.406
New-things	-0.267	<i>(0.143)</i>	<i>0.061</i>		-0.063	(0.171)	0.714
Opportunities	-0.082	(0.223)	0.712		-0.222	(0.245)	0.364
Optimism	-0.042	(0.244)	0.862		-0.095	(0.280)	0.735
Sociability	-0.744	(0.663)	0.261		-0.056	(1.121)	0.960
Family-duty	-0.131	(0.139)	0.344		0.041	(0.160)	0.796
Finance-limits	0.607	(0.147)	0.000		0.381	(0.169)	0.024
Age	0.259	(0.775)	0.738		-3.750	<i>(2.097)</i>	<i>0.074</i>
Age-squared	-0.001	(0.007)	0.919		<i>0.035</i>	<i>(0.019)</i>	<i>0.063</i>
Income (Base=Lowest Quintile)							
Quintile 2	-0.926	(0.232)	0.000		-0.478	<i>(0.273)</i>	<i>0.080</i>
Quintile 3	-1.488	(0.222)	0.000		-1.615	(0.253)	0.000
Quintile 4	-1.792	(0.204)	0.000		-1.450	(0.248)	0.000
Quintile 5	-2.193	(0.202)	0.000		-2.203	(0.273)	0.000
Wave (base=W2)							
W3	-0.210	(0.192)	0.276		-0.308	(0.212)	0.146
W4	-0.420	(0.187)	0.025		-0.421	<i>(0.224)</i>	<i>0.060</i>
W5	-0.251	(0.175)	0.153		-0.554	(0.222)	0.012
Constant	-13.221	(22.813)	0.562		97.888	(58.704)	0.095
<i>N</i>	2794				2006		

Note: *p*<0.05 in **bold**; *p*<0.1 italicised

However, these results suggest that those who have exited early are more likely to be in receipt of much lower levels of income and consider themselves to have limited choices based on their financial situation. This could be due to poor rates of income replacement in retirement, such that the finances drawn from pensions do not compare to those from continued employment; as such, there could be an issue of endogeneity affecting the model as the people who remain employed retain higher levels of income.

At the same time, the greater likelihood of exit among those in the lowest income group could be influenced by broader socioeconomic disadvantages, including shifts in the prevalence of certain occupational groups in the economy. In other words, declines in industries that have historically provided a number of lower wage jobs may be an influencing factor for greater early withdrawal. It may also be that socioeconomic disadvantage itself positions people to have poorer opportunities to maintain employment in later life. Overall, this finding provides evidence that early exit is not associated with a decision based on positive financial wellbeing.

The presence of health limitations impacting the ability to work also demonstrated a positive association with early exit from work for both men and women. However, only among men was general self-reported poor health also associated with exit. This could be explained a number of ways. There could be a question around the reliability of self-reported measures and gender differences, in that men may think of their health status more in relation to physical capacity than women do. As a consequence, it may be that men who recognise that their health limits their ability to work are more likely to consider their health as poor, whereas women may be more open to admit or report poor health despite it having little impact on their ability to work. Another explanation could be related to the types of jobs people do, in that the

women may be filling more roles that can easily accommodate poorer health while men work in areas where poor health and physical capacity are more strongly linked.

Nonetheless, the findings clearly reflect the importance of health to staying in work.

While not a new research finding in and of itself, its inclusion in the conceptual framework here further supports the notion that a useful employability concept as applied to older workers must incorporate the concept of physical capacity.

With regard to the other measures in the models, any other significant associations were present only for one gender or the other. Among men, education and care responsibilities were significant, while close family relations and enjoying new things showed significant associations at the $p < 0.1$ level. For women, participation in training demonstrated a negative association with early exit, while being married was positively associated with early exit. In addition, at the $p < 0.1$ level, age and age-squared showed an association with early exit.

Degree-level education was associated with a higher likelihood of exit from employment among men than either other educational group (some qualifications or no qualifications). Higher education is often associated with higher income, and this remains true in the present data. Given the finding that higher income is associated with a lower likelihood of exit, one interpretation of this finding related to education could suggest that being at degree-level education positions an individual to have greater discretion in their exit from the labour market, while people with lower or no educational qualifications – controlling for both income and health variables – are less able to influence their exit. Though not explicitly reported in the results here, further exploration of this by incorporating an interaction term for income quintile and education shows that the negative association of lower education levels with the

likelihood of exit only occurs for people in the fourth quintile in reference to the lowest quintile, suggesting that the association of education and early exit applies only for a particular band of higher income. Thus, the relationship between degree-level education and early exit appears related to the better financial position of these respondents, rather than an inherent benefit conferred by degree-level education alone.

The other human capital measure, participation in training, was negatively associated with early exit among women. While theory supports the idea that participating in training would help keep people in work for longer, a clear causal relationship here cannot be made. It could be that many of the women who remain in work receive training in their workplace, and that the association reflects the fact that women who exit work do not receive such training. However, the training variable does not explicitly measure work-related training, so it could be that women who exit work are less likely to participate in the kind of educational programmes that the measure potentially reflects. For example, they could be pursuing other leisure pursuits – hobbies or spending more time with family and friends – rather than engaging in formal educational or training activities. Despite the ambiguity of the measure, the finding does lend support to the idea that training is associated with continued employment, and further research should take this into account.

Some of the social capital measures demonstrated associations. Although at a lower level of significance, men with greater close family members were less likely to exit employment. This may, based on the theory described earlier, relate to how social connections help place individuals in better positions with respect to job or promotional opportunities. A greater number of close family relationships may also influence an individual's ability to identify and work through challenges and opportunities they face

in the workplace through more intimate and frank conversations about their situation, including when they sense any sort of pressure to exit. Alternatively, it could be that men with greater family relationships have greater responsibilities toward these people, and continued employment reflects this need to provide.

Social connections were not significant for women, but marital status did display an association. Married women were more likely than single women to exit employment, but there was no difference between single women and those separated, divorced, or widowed. While the data on spousal characteristics were too limited to be included in this analysis, this finding provides support to results in other research suggesting that women are more likely to be influenced by their partners when considering an exit into retirement.

Having informal care responsibilities is theoretically expected to limit one's flexibility to work and thus be positively associated with early exit. However, the results suggest this is only true for men, differing from the results of earlier studies, although the design of the analyses here are different from those (cf. Jiménez-Martín et al. 1999; Denaeghel et al. 2011). Differences in the domestic context likely explain why the impact of informal care responsibilities varies between men and women. Women traditionally provide a greater amount of family care in the UK context, from rearing children to looking after ageing parents. As a consequence, they may be more accustomed to navigating the balance between care and work, whereby care responsibilities do not play a significant role in their exit from work once other factors are taken into consideration. The significance of marital status on exit among women here may also reflect this. In contrast, the caring role may be taken on by men whose partners are the ones requiring care, while taking on any other domestic responsibilities usually handled

by the partner may increase the challenges associated with combining work and care among men.

As age would be expected to demonstrate an association with exit from employment, an interesting finding is that it only showed significance to women, and only at the $p < 0.1$ level; age and age-squared were included in the models here. For men, the fact that age showed no association suggests that early exit from the labour market is just as likely to occur for men of any age in this 50-64 age group once other factors are taken into consideration. It thus partly dispels the myth that early exit more often applies to those just prior to SPA. With respect to women, age itself was actually negatively associated with the likelihood of exit from employment, while age-squared had a positive association. Taken together, this could represent the idea that early exit among women is more likely to occur in their early to mid 50s, but that the influence of age on exit diminishes in the late 50s. In other words, age plays a less significant role in predicting women's early exit for those who are able to maintain employment closer to their SPA of 60.

Another notable finding is that men who choose to do things they have never done before are less likely to exit employment, albeit at the $p < 0.1$ level. Relating this back to the employability framework, this finding suggests a potential role for an open disposition in helping people maintain employment. Men who have this openness to new things may be more inclined to take on challenges that lead to recognition at work, resulting in greater retention as employers want to hold onto them. This disposition may also have been demonstrated across their work history, further placing them in a better position to maintain employment. Of course, a lack of openness to do new things could also reflect a disposition that would encourage one to leave work. However, as any

change like exit from work to retirement could itself be seen as doing something one has never done before, it is less likely that this would be the case.

As discussed throughout this research, the measures for the dispositional dimensions of employability represent proxy measures for the items used in previous work on the subject. Those items were tailored to be more specific to the work/employment context rather than representing general perspectives as the measures used here do. However, the nature of the analysis here – using the sample of people who leave employment compared to those who stay – provide the opportunity to explore work-specific elements in the dataset related to work satisfaction, which are items in ELSA only asked to employed people. A brief exploration, using responses of the previous wave for those who had exited, showed no impact among women. However, one finding of note among men was that men who felt they had control over what happens in most situations were less likely to exit employment. This offers some support to the idea that individuals who feel empowered in their career and position at work are more likely to remain in employment.

6.6 Results: Transitions Back into Employment

Conceptually, the impact of the independent variables used to assess employability in this study is of particular interest in the context of transitions back into employment. Understanding what influences successful transitions into employment should offer important insights into how employability can be used to improve labour force participation among older workers. Overall, however, the results mainly confirm some of the findings from other parts of this research as well as other research on the topic of older workers.

Table 11: Logistic Regression Results for Transitions into Employment

	Men			Women		
	Coeff.	SE	<i>p</i>	Coeff.	SE	<i>p</i>
Poor Self-Perceived Health	-0.253	(0.397)	0.524	-0.421	(0.365)	0.249
Limitations in Usual Activities Due to Health	-1.091	(0.396)	0.006	-1.469	(0.357)	0.000
Educational Qualifications (Base=Degree)						
Some	-0.074	(0.282)	0.793	0.425	(0.413)	0.303
None	-0.558	(0.553)	0.313	0.370	(0.517)	0.475
Undertaken Training	0.870	(0.326)	0.008	1.044	(0.332)	0.002
Marital Status (Single empty for Men)				(base=Single)		
Married	0.130	(0.350)	0.709	0.208	(1.040)	0.841
Div/Sep/Wid	(base)			0.700	(1.057)	0.508
3+ Close Relatives	-0.227	(0.233)	0.330	-0.308	(0.263)	0.242
3+ Close Friends	0.072	(0.239)	0.763	0.053	(0.247)	0.830
Organisational Member	0.042	(0.367)	0.909	-0.266	(0.277)	0.337
Provides Care	-0.978	(0.366)	0.008	<i>-0.507</i>	<i>(0.306)</i>	<i>0.097</i>
No-control	-0.259	(0.304)	0.395	0.056	(0.317)	0.860
Future-plan	0.536	(0.332)	0.106	0.422	(0.357)	0.238
Can-do	0.250	(0.426)	0.557	-0.611	(0.423)	0.149
Energy	-0.329	(0.464)	0.479	0.201	(0.383)	0.600
New-things	-0.204	(0.277)	0.462	-0.354	(0.293)	0.227
Opportunities	0.229	(0.381)	0.548	-0.143	(0.350)	0.682
Optimism	-0.473	(0.456)	0.300	0.149	(0.381)	0.695
Sociability	(omitted)			-0.295	(0.806)	0.714
Family-duty	-0.315	(0.248)	0.203	0.340	(0.287)	0.237
Finance-limits	-0.133	(0.287)	0.644	<i>-0.454</i>	<i>(0.274)</i>	<i>0.098</i>
Age	1.475	(1.405)	0.294	0.741	(3.293)	0.822
Age-squared	-0.014	(0.012)	0.258	-0.008	(0.029)	0.780
Income (Base=Lowest Quintile)						
Quintile 2	0.501	(0.519)	0.335	-0.022	(0.442)	0.959
Quintile 3	<i>0.823</i>	<i>(0.465)</i>	<i>0.077</i>	0.573	(0.437)	0.190
Quintile 4	0.735	(0.457)	0.108	<i>0.726</i>	<i>(0.378)</i>	<i>0.055</i>
Quintile 5	<i>0.858</i>	<i>(0.469)</i>	<i>0.068</i>	<i>0.829</i>	<i>(0.439)</i>	<i>0.059</i>
Wave (base=W2)						
W3	-0.168	(0.307)	0.585	-0.022	(0.307)	0.942
W4	-0.487	(0.325)	0.134	-0.303	(0.339)	0.371
W5	-0.475	(0.326)	0.145	0.092	(0.341)	0.786
Constant	-41.272	(41.245)	0.317	-17.553	(92.187)	0.849
<i>N</i>	863			717		

Note: $p < 0.05$ in **bold**; $p < 0.1$ *italicised*

Men and women were again explored separately, limited to a sample reflecting pre-SPA. In this part, however, the few significant associations were nearly identical for the two genders. Income appeared significant, although for quintiles 3 and 5 among men and quintiles 4 and 5 among women; however, the significance was at the $p < 0.1$ level. Compared to the lowest quintile, these quintiles demonstrating significance suggest those with higher income are more likely to re-enter employment than to stay out of the workforce. This could possibly be related to greater opportunities to pursue work that higher income brings, such as self-employment, or it could be that those in the lowest quintile are differently positioned socio-economically so that a return to work is more difficult or impossible. The other financial variable of significance earlier – feeling that a shortage of money prevented one from doing what they like – was negatively associated with returning to work for women at the $p < 0.1$; given the reduced impact of income in this model, this finding likely reflects perceived improvements in financial situation associated with newly-found employment.

Health limitations that affect the ability to work were negatively associated with a return to employment, while self-reported poor health was not significant for either gender. In this context, these findings underscore the importance of understanding physical capacity to work for efforts to improve employment outcomes. People can be in poor health, but when this poor health does not impact their ability to work, they can just as easily return to work as those in good health.

Training demonstrated a strong positive association with returning to work for both genders. However, there are two particular concerns in this context. One is that taking up new employment will itself offer some form of training or education course. The second concern is that there is likely to be some time between undertaking training

and finding new work, and the measure used here asks about the period just prior to the survey being conducted. To address these concerns, additional models were also generated that included a lagged measure of training, which thus represents having taken a training or educational course two years prior to the interview. For men, lagged training was more strongly associated with a return to work than training just prior to the interview, while for women training just prior to the interview was more strongly associated. In addition for women, lagged training demonstrated a negative association with returning to work, albeit at the $p < 0.1$ level. Combined, this may suggest that the training reported in fact reflects training received due to the new job, while women who had taken some educational course two years prior were pursuing personal interests and were more likely to stay out of work.

The final variable to demonstrate significance for both genders was informal care responsibilities. The significance was much higher for men ($p < 0.01$) than for women ($p < 0.1$), but for both the presence of care responsibilities was negatively associated with a return to work. As discussed above, the differences in the genders may relate to women's experiences in the domestic context conferring them with greater insight into how to combine work and care, but the conclusion nonetheless is that informal care responsibilities are related to a lower likelihood of returning to work.

6.7 Rethinking How Employability Relates to Labour Market Transitions

This chapter has introduced the longitudinal dimension into the exploration of employability and the labour market behaviour of older workers. In doing so, it offers insight into how the various conceptual dimensions are related to labour market transitions, specifically, moves into and out of employment. Overall, the findings suggest

that there may be limited capacity for employability as a multidimensional construct to facilitate positive employment outcomes for older workers.

It may be worth noting at this point that the longitudinal element of the research was intended to take primary focus in the original formulation of the research idea. Since longitudinal analyses allow researchers to see how outcomes are related to how other characteristics have changed over time – and in certain cases identify causation – the present exploration of employability hoped to identify how changes in particular variables of interest were associated with transitions in and out of employment. However, the relatively low numbers of both changes in explanatory variables of interest as well as in specific types of labour market transition – particularly transitions from unemployment to employment – restricted what was possible with the given data. This is not an aberrant feature of the data used, however, as other research using the Labour Force Survey in the UK found only 4.5% of people aged 50-64 changed labour market status across two quarters, with 1.5% entering employment (Beach et al. 2015).¹⁹ As noted earlier, this restriction led the research to look at transitions in and out of employment rather than transitions between particular categories of labour market status. Despite the limitations in what could be done on the longitudinal level, the analysis nonetheless offers important insights into how various characteristics differentiate those who transition in and out of employment in later life.

One insight from the first part of this chapter is that a majority of people aged 50 to SPA have very limited interactions with the labour market over time in terms of transitions. While a substantial proportion remain employed across the waves studied

¹⁹ Although the time periods are different and the research here pooled multiple waves of data, 1.34% of respondents in the present analysis transitioned into employment.

here, a comparably large proportion were out of work across the period examined.

Moreover, where transitions did occur, the most common pathways led out of employment at a given time and stayed out of work; only a small segment of the sample experience successful re-entry to employment. This raises the theme of considering how the retention of older workers may need to be addressed distinctly from the idea of recruiting older workers. In other words, while helping older people return to work is important, preventing their exit in the first place may offer a more efficient strategy for policies seeking to improve the labour force participation of older workers.

In looking at the relationships between different elements linked to employability and the outcomes of employment exit and re-entry, the findings here underscore the role of the health dimension as well as socio-demographic characteristics, while some of the other employability dimensions demonstrate associations only with one outcome or one gender. This first suggests that the employability concept may not provide a useful tool to improve labour market outcomes if applied in a broad, general sense meant to be equally applicable to everyone. In contrast, the heterogeneity of older workers may mean that different circumstances or personal qualities shape the structure of individuals' interactions with work, such that certain employability dimensions might be helpful for some but not others. For example, the adaptability dimension – if considered with respect to being open to do new things – may be less important for an older worker in a routine job who has high job satisfaction than it would be for a worker whose job regularly requires new tasks to be done and challenges to be overcome.

The findings with respect to the health dimensions also provide an interesting insight. While previous research has identified a link between negative health and exit or

absence from employment, the findings here highlight the importance of considering physical capacity to work rather than just an individual's general health status. This implies that it is more than just the concept of illness that impacts older people's engagement with the labour market; their ability to be employed is shaped more by how any health condition intersects with the ability to do a given job. Consequently, efforts to improve the labour force participation of older workers must thus examine how employment opportunities can accommodate the needs of those workers with reduced physical capacity. In the present context, this may suggest that the work ability concept described earlier in Chapter 3 could play a more important role than employability in facilitating employment in later life. Thought should also be given to ensuring that workplaces do as much as possible to mitigate any negative impact on physical capacity from the work environment. Campaigns related to public health could also consider a slight shift in messaging to emphasise the idea of extending good physical capacity rather than simpler messages about how to reduce the risk of developing illnesses and chronic conditions.

Alongside the role of the individual's health, the health of others appears to impact labour market outcomes for older workers in the form of care responsibilities. Again, there was some variation in the results based on gender, at least with respect to exit from employment, suggesting that the flexibility dimension of employability relates to exit in different ways for different groups. Care responsibilities were however associated with a lower likelihood of re-entry for both genders – albeit at different significance levels – which raises the question of how to reconcile the policy objective of higher employment of older workers or fuller working lives with the often vast levels of informal care provision that have an indirect benefit to national economies. In other

words, if employment rates are increased for older workers alongside them reducing their provision of informal care, this care would need to be replaced by the formal system, while social care services are already experiencing heavy pressures related to finance, staff, and skills. The fact that care responsibilities reduce the likelihood of re-employment in the results here suggests that there is indeed a need for better strategies and opportunities to help people combine informal care with work.

Another finding of interest was how training was associated with labour market transitions, particularly given the importance usually placed on the idea of human capital in much of the discourse around employment and employability. However, a main challenge in interpreting the results here rest on the caveats mentioned in the previous section, in that much of the training reported is likely to be received within the context of employment. That said, the results do provide some support for the positive influence of training on employment outcomes for some older workers. For example, providing training opportunities to women may offer a good strategy for encouraging their continued participation in employment, whether this is due to stimulating their engagement in the workplace or providing necessary skills that enable them to stay on the job, which could also reflect positive changes in their job roles (which require the training) that emerge from successful adaptations stemming from health or care needs. Of course, this can only be speculative in the context of the current research, but the other finding that lagged training among women was negatively associated with re-employment could further support this idea that interventions related to training that happen within the context of employment are effective ways to keep older women in work.

Finally, it should again be emphasised that the models developed here are not intended to offer the complete picture of all the various factors that can influence retirement and employment transitions. In contrast, this framework examines the dimensions that constitute employability in the conceptual design outlined in Chapter 3 and if their theorised relationships with labour market outcomes are indeed observed in data nationally representative of people aged 50+. In fact, much of the dominant significance to emerge here relates to the socio-economic and demographic characteristics of the respondents, with the relationships of the employability dimensions – particularly those more aligned to the psychosocial elements – not presenting clear associations with employment outcomes for older workers. Nonetheless, the findings reiterate the importance of health – both for the individual and those close to them in terms of developing care responsibilities – for the labour market transitions of older workers, alongside evidence that training may have a positive relationship, at least for certain groups like women.

The main implication of this would suggest that employability as identified here may not provide particular insight into how to improve the labour market participation of older workers, but that the extensive body of research on the various factors influencing retirement transitions should continue to refine the knowledge around older people and their access to work given the influence of different contexts. This point – that context plays an important role in shaping how individual-level measures relate to labour market outcomes – is the novel aspect of the next chapter, which expands the analysis conducted so far into a multi-national dimension to incorporate macro-level variation in policies that are theorised to impact older people's experiences on the labour market.

Chapter 7: Employability and Older Workers in Europe: Exploring Institutional Context

Earlier chapters have provided an extensive background on the factors impacting older workers and their relationship with the labour market, as well as how these ideas feed into the conceptual framework used for the modelling in this research. The previous two chapters have applied this framework to identify the degree to which there is evidence for an impact of different employability dimensions on the labour market outcomes of older people in England, finding support only for aspects related to health and human capital. This chapter focuses on reporting the results from the extension of this analytical approach to a cross-national perspective, where conceptual elements related to different economic, social, and cultural contexts can be considered. In this way, the research considers more than individual agency in exploring older people's behaviour with regard to the labour market; it looks to recognise and identify how different structural components may impact labour market outcomes alongside the dimensions of employability.

The analyses in this chapter use data from the Survey of Health, Ageing, and Retirement in Europe (SHARE). SHARE is a longitudinal panel survey of people aged 50+ in Europe, including more than 85,000 individuals across 20 European countries. Its design was harmonised with that of ELSA and the Health and Retirement Study (HRS) in the US, allowing for comparable and even combined research of the different datasets. This harmonisation with ELSA allows much of the analyses presented in previous chapters to be replicated using different data and to control for different national settings. Three waves of data have been used here: Wave 1, collected mostly in 2004;

Wave 2, collected across 2006 and 2007; and Wave 4, collected mostly in 2011. Wave 3 in 2009 collected life history data rather than the standard questionnaire, and as a consequence many of the variables of interest here are not available from that wave of data.

The analysis of the European data from SHARE follows the approach applied in the previous chapters with the data from ELSA. It first presents multinomial logistic regression results exploring the relationship between the employability measures and individuals' labour market status, conducted in cross-sections by wave and controlling for country. The analysis then expands into using the longitudinal element of the survey to examine the predictors' associations with transitions both out of and into employment in separate models. This analysis, however, expands the approach from the earlier chapters by introducing measures to explore the influence of the macro-economic and cultural context through the use of country-level variables in a multilevel model.

The first section describes the variables used for employability with particular focus on how they differ from those in the ELSA analysis. This is followed by the results from the cross-sectional regression modelling of labour market status, with a brief reflection on how the findings relate to the underlying objectives of this research. The next section then presents the macro-level context with the data sources and methods used to construct different macro-level variables. These variables are then introduced into multilevel longitudinal models and the results are identified. The chapter concludes with a brief discussion on the implications of these findings.

7.1 Individual-level Measures and Differences with ELSA Variables

Just as with the ELSA data, the dependent variable for labour market status included categories of retired, employed (including self-employed), unemployed, permanently sick or disabled, looking after the home (“homemaker”), and other. Again, responses of other, which here represented around 1% of the entire sample, were dropped from analysis to aid reporting and interpretation. In terms of the other basic demographic identifiers, gender was provided in the dataset, while the variable for age was calculated based on the month and year of both the interview and the respondent’s birth.

To represent income by quintile, particular variables had to be derived by wave due to the fact that income in the SHARE data is provided through multiply imputed data. For each wave, the values for income as reported were divided by a purchasing power parity (PPP) exchange rate provided in the dataset to facilitate comparisons across the different countries and their currencies; for wave four, an extra step was necessary to convert reported values into local currency before using the PPP exchange rate. From this, income quintiles were then generated in the multiple imputation dataset. In order to provide a single variable for respondents in the main dataset, the mode of income quintile was selected for use in the analysis; where there was no clear mode, the median value was used.²⁰

The variable on self-reported health used across the waves in SHARE reflects the scale of responses that range from “excellent” to “poor”. Like with ELSA, the measure

²⁰ Other approaches, such as taking the average across the five imputation datasets, were explored, but the selection using the mode then median provided straightforward results with a sensible distribution of values.

used in the analysis here is a binary variable representing poorer health that groups the two negative responses of “fair” and “poor”. In contrast to the variable in ELSA that reflected health problems limiting a respondent’s ability to participate in work, the SHARE data provide a measure that reflects limitations in the activities people usually do because of health (**gali**). While this is not specific to work like the indicator in ELSA, it serves as the best approximation to measure the relative impact of health on capacity. It is coded as a binary variable, where responses of being limited reflect values in the original survey item of being ‘severely limited’ or ‘limited but not severely’.

The variable for educational qualification is derived from an indicator generated with the SHARE data to compensate for cross-national differences and is based on codes from the International Standard Classification of Education (ISCED-97). In order to facilitate comparison of this stage of analysis with the findings from ELSA, codes 5 and 6 are understood to represent degree-level or equivalent (tertiary) education, codes 3 and 4 are considered to reflect some educational qualification (upper and post-secondary), while codes 1 and 2 – which represent different levels of basic education – reflect no qualifications. The original category of other represents an extremely small percentage of the sample in each country (<1%) and is assumed to represent some level of education beyond basic education.

For the measure related to training, the first two waves of SHARE provide information on training that is assessed by responses to questions on activities in the previous four weeks like in ELSA. In Wave 4, however, there was a change in the questionnaire whereby activities were assessed for the previous year. This results in a noticeable increase in the proportion reporting attendance at education or training courses; there are around twice as many respondents in Wave 4 than in Wave 2. Despite

this difference in the wording and the potential distortions it may cause, the responses were retained as recorded in the dataset. The subsequent possible effect of this difference must be kept in mind when reviewing the modelling results.

With respect to the social capital measures, the variable for marital status was recoded to the same framework as used in the ELSA analysis. The measure for organisational membership was based on responses to activities in which the respondent had taken part; participation in a sport, social or other kind of club, taking part in a religious organisation, or taking part in a political or community organisation were used to represent this element of the social capital measures. This information was asked related to the previous month for Waves 1 and 2, and asked with respect to the previous year in Wave 4; this longer timescale likely reflects why the overall proportion of membership is approximately ten percentage points higher in Wave 4, which should be taken into consideration in analysis. Unfortunately, while the SHARE data have extensive information related to social networks from Wave 4, the high level of missing values for the previous waves – even after assuming constant network over time and feeding values backward – meant that family and friend relationships were excluded from the modelling of the European data.²¹

Just as the analysis of the ELSA data drew on questions related to the CASP measure of quality of life to approximate the dispositional elements of the employability framework, the SHARE analysis uses these as well. The SHARE dataset, however, includes the 12-item schedule rather than the 19 items featured in ELSA. The comparability between the SHARE and ELSA items is displayed in Table 13. The first

²¹ The cross-sectional analysis of Wave 4 data initially included them but found no significant associations to labour market status, so they have been excluded from reporting here.

wave of SHARE collected these measures through the self-completion drop-off questionnaire, whereas the items became part of the main survey from Wave 2; this is the reason for two variable names in the table. Rather than preserve the four different categories of responses as done in the cross-sectional analysis of ELSA in Chapter 5, a binary variable was constructed similar to that used in the longitudinal analysis of Chapter 6; a positive response reflects often or sometimes agreeing with the statement.

Finally, the measure for informal care responsibilities was created using responses on a number of variables that reflect having given personal care to someone in or outside the household. Replacing values using these measures alone left a number of missing values for Wave 4. Nearly all of these missing values were replaced to reflect no care responsibilities, as they represented respondents without responses to the question if they had given help inside their household but had household size of 0 or 1.

Macro-level variables

related to the policy and cultural contexts of different countries were used only in the longitudinal analysis given the potential for these to have greater impact on transitions. For this cross-sectional look at how employability relates to labour market status, however, a control variable for the

Table 12: Countries Included in SHARE by Wave

Country	Wave 1	Wave 2	Wave 4
Austria	X	X	X
Belgium	X	X	X
Czech Republic		X	X
Denmark	X	X	X
France	X	X	X
Germany	X	X	X
Greece	X	X	
Italy	X	X	X
Netherlands	X	X	X
Poland		X	X
Spain	X	X	X
Sweden	X	X	X
Switzerland	X	X	X

respondent's country was included to account for the overall national context. SHARE countries were selected for analysis when there were at least two waves of relevant

data available; Table 12 provides an outline of the countries from SHARE that were included in this research along with the waves for which data were available. For the regression analyses, Germany was held as the reference country.

Table 13: SHARE and ELSA Quality of Life Measures and Their Links to Employability

ELSA Variable	CASP Questionnaire Item	Comparable Variable in SHARE	Conceptual Link	Nickname
scqolb	I feel that what happens to me is out of my control	ac015_, q2_b	Control	No-control
scqole	I can do the things that I want to do	ac017_, q2_d	Self-efficacy	Can-do
scqolo	I feel full of energy these days	ac023_, q2_j	Motivation	Energy
scqolr	I feel that life is full of opportunities	ac024_, q2_k	Resilience/Optimism	Opportunities
scqols	I feel that the future looks good for me	ac025_, q2_l	Optimism	Optimism
scqolf	Family responsibilities prevent me from doing what I want to do	ac018_, q2_e	Flexibility	Family-duty
scqoli	Shortage of money stops me from doing the things I want to do	ac019_, q2_f	Flexibility	Finance-limits
<i>scqolj</i>	<i>I look forward to each day</i>	<i>ac020_, q2_g</i>	<i>Motivation/Optimism</i>	<i>Look-forward</i>
<i>scqolk</i>	<i>I feel that my life has meaning</i>	<i>ac021_, q2_h</i>	<i>Resilience</i>	<i>Meaning</i>
<i>scqoln</i>	<i>On balance, I look back on my life with a sense of happiness</i>	<i>ac022_, q2_i</i>	<i>Resilience</i>	<i>Happiness</i>
<i>scqola</i>	<i>My age prevents me from doing the things I would like to</i>	<i>ac014_, q2_a</i>	<i>-Not explored-</i>	<i>Age-limits</i>
<i>scqold</i>	<i>I feel left out of things</i>	<i>ac015_, q2_c</i>	<i>-Not explored-</i>	<i>Left-out</i>
<i>scqolc</i>	<i>I feel free to plan for the future</i>	<i>N/A</i>	<i>Self-efficacy</i>	<i>Future-plan</i>
<i>scqolp</i>	<i>I choose to do things that I have never done before</i>	<i>N/A</i>	<i>Openness</i>	<i>New-things</i>
<i>scqolm</i>	<i>I enjoy being in the company of others</i>	<i>N/A</i>	<i>Openness (Boundary-less Mindset)</i>	<i>Sociability</i>
<i>scqoll</i>	<i>I enjoy the things that I do</i>	<i>N/A</i>	<i>Optimism</i>	<i>Enjoy</i>
<i>scqolg</i>	<i>I feel that I can please myself what I do</i>	<i>N/A</i>	<i>-Not explored-</i>	<i>Pleasure</i>
<i>scqolh</i>	<i>My health stops me from doing things I want to do</i>	<i>N/A</i>	<i>-Not explored-</i>	<i>Health-limits</i>
<i>scqolq</i>	<i>I feel satisfied with the way my life has turned out</i>	<i>N/A</i>	<i>-Not explored-</i>	<i>Life-satisfaction</i>

Note: Italicised rows represent variables omitted from the final model or not explored in the analysis.

7.2 Employability and Labour Market Status in Europe

The modelling applied to examine the influence of the individual-level variables related to employability used a multinomial logistic regression with labour market status as the dependent variable; like with analyses of ELSA data, employed people served as the reference group. For the sake of brevity, the discussion here will focus on reporting results for people whose labour market status was retired or unemployed, as the associations identified for those sick and disabled or looking after home and family fit accordingly with what would be expected for these groups. Moreover, in the context of the European data, these response categories likely reflect health and care concerns and may include people (women) in particular cultural contexts who have been largely absent from the labour market during their lives.²² The interest here instead is in people who would be more likely to have interactions with the labour market. Regressions were run for each wave separately, applying the relevant cross-sectional weights provided in the dataset.

7.2.1 Retired compared to Employed

In contrast to those in employment, people who were retired were more likely to: be in poorer health, have health-related limitations in their usual activities, be below degree-level education, not have participated in training or education recently, and be older. Except at Wave 1, they were also more likely to be female and have informal care responsibilities. Poor self-reported health showed a strong positive association with the likelihood of being retired rather than employed across the waves; health-related

²² People reporting being sick/disabled or looking after home/family are asked if they ever did paid work; in each wave, slightly more than half had done paid work at some time in their lives.

limitations in usual activities did as well, although at Wave 1 the significance was at the $p<0.1$ level. Strong associations also appeared for lower levels of education, as both groups of people with some qualifications or no qualifications were more likely to be retired than people educated to degree-level. People who were retired were less likely to have taken part in a training or education course recently, which could reflect employed people having access to such courses at work or retired people more often engaging in other kinds of activity.

Income demonstrated an association with the likelihood of being retired rather than employed, though only in Waves 1 and 2. The relationship did not cross all quintiles of income, but was restricted to the top two quintiles compared to the lowest one. This suggests those with the highest levels of income are more likely to be in employment compared to those with the lowest income. This makes conceptual sense simply due to the fact that continued employment provides earnings, and for many people the income from pensions offers less than they earned during employment.

A small number of other variables falling into the social capital and dispositional dimensions of the conceptual framework demonstrated significant associations with the likelihood of being retired rather than employed, but only in one specific wave or at less confident significance levels. In Wave 1, separated, divorced, or widowed people were less likely than married people to be retired. People who said that family responsibilities often or sometimes prevented them from doing what they wanted were also less likely to be retired; this association was also present at Wave 4, though at the $p<0.1$ level. This potentially reflects the greater freedom from not having work-related responsibilities, in that family responsibilities like helping out with occasional care for grandchildren do not consequently prevent these people from pursuing their other interests or desires.

Table 14: Partial Multinomial Regression Results: Retired Compared to Employed

	Wave 1: 2004			Wave 2: 2006/7			Wave 4: 2011		
	Coeff.	Rob SE	p	Coeff.	Rob SE	p	Coeff.	Rob SE	p
Poor Self-Perceived Health Limitations Due to Health	0.631	(0.147)	0.000	0.403	(0.121)	0.001	0.288	(0.124)	0.020
	<i>0.211</i>	<i>(0.124)</i>	<i>0.088</i>	0.372	(0.112)	0.001	0.329	(0.109)	0.003
Educational Qualifications (Base=Degree)									
Some	0.349	(0.135)	0.010	0.605	(0.130)	0.000	0.411	(0.133)	0.002
None	0.392	(0.158)	0.013	0.768	(0.139)	0.000	0.711	(0.165)	0.000
Had Training	-0.593	(0.184)	0.001	-0.730	(0.155)	0.000	-0.948	(0.163)	0.000
Marital Status (Base=Married)									
Single	-0.337	(0.242)	0.164	0.043	(0.202)	0.830	-0.269	(0.227)	0.236
Div/Sep/Wid	-0.349	(0.151)	0.021	-0.121	(0.135)	0.369	0.057	(0.141)	0.688
Org. Memb.	0.162	(0.111)	0.143	0.161	(0.102)	0.116	0.242	(0.117)	0.039
No-control	0.083	(0.117)	0.478	0.039	(0.103)	0.704	0.038	(0.105)	0.718
Can-do	0.207	(0.162)	0.202	-0.141	(0.120)	0.241	0.109	(0.155)	0.479
Energy	<i>-0.281</i>	<i>(0.159)</i>	<i>0.077</i>	-0.096	(0.148)	0.518	-0.179	(0.168)	0.287
Opportunities	-0.076	(0.157)	0.627	0.304	(0.145)	0.036	-0.242	(0.163)	0.138
Optimism	0.032	(0.147)	0.829	-0.252	(0.135)	<i>0.062</i>	-0.094	(0.143)	0.508
Family-duty	-0.241	(0.108)	0.026	-0.148	(0.098)	0.129	<i>-0.190</i>	<i>(0.115)</i>	<i>0.099</i>
Finance-limits	0.005	(0.109)	0.962	-0.046	(0.100)	0.649	0.064	(0.102)	0.534
Provides Care	0.226	(0.146)	0.121	0.384	(0.134)	0.004	0.494	(0.190)	0.009
Age	0.415	(0.017)	0.000	0.489	(0.014)	0.000	0.529	(0.020)	0.000
Gender (Female)	-0.033	(0.103)	0.750	0.216	(0.093)	0.021	0.336	(0.113)	0.003
Income (Base=Lowest Quintile)									
Quintile 2	-0.072	(0.200)	0.720	-0.278	(0.160)	0.083	-0.142	(0.178)	0.427
Quintile 3	<i>-0.323</i>	<i>(0.191)</i>	<i>0.090</i>	-0.090	(0.167)	0.590	-0.108	(0.174)	0.536
Quintile 4	-0.651	(0.201)	0.001	-0.406	(0.164)	0.013	-0.271	(0.183)	0.140
Quintile 5	-1.122	(0.197)	0.000	-0.503	(0.177)	0.004	-0.210	(0.200)	0.294
Country (Base=Germany)									
Austria	1.441	(0.152)	0.000	1.642	(0.172)	0.000	2.093	(0.177)	0.000
Sweden	-0.719	(0.166)	0.000	-0.792	(0.168)	0.000	-1.026	(0.270)	0.000
Netherlands	-0.592	(0.164)	0.000	-0.446	(0.169)	0.008	-0.494	(0.201)	0.014
Spain	-0.670	(0.234)	0.004	-0.370	(0.235)	0.115	-0.050	(0.255)	0.844
Italy	1.025	(0.192)	0.000	1.276	(0.178)	0.000	0.836	(0.230)	0.000
France	0.683	(0.166)	0.000	0.805	(0.168)	0.000	1.120	(0.181)	0.000
Denmark	-0.053	(0.159)	0.741	-0.224	(0.164)	0.173	-0.386	(0.181)	0.033
Greece	0.271	(0.186)	0.144	0.440	(0.184)	0.017			
Switzerland	-1.023	(0.215)	0.000	-1.097	(0.186)	0.000	-0.900	(0.193)	0.000
Belgium	0.702	(0.149)	0.000	0.989	(0.152)	0.000	1.039	(0.192)	0.000
Czech Republic				1.246	(0.175)	0.000	1.366	(0.211)	0.000
Poland				2.074	(0.187)	0.000	1.633	(0.234)	0.000
Constant	-24.572	(1.014)	0.000	-29.996	(0.906)	0.000	-32.781	(1.355)	0.000
N	9,284			12,071			19,458		

Note: $p < 0.05$ in **bold**; $p < 0.1$ italicised

At Wave 2, feeling that life is full of opportunities was positively associated with the likelihood of being retired rather than employed, perhaps further reflecting a greater sense of freedom in retirement. The other measure related to an optimistic attitude – feeling that the future looks good – was also positively correlated with retirement, at the $p < 0.1$ level. In addition to the measure on family responsibilities mentioned above, Wave 4 included an association with organisational membership, where organisational membership was positively associated with the likelihood of retirement. One possible explanation for membership being significant only at Wave 4 could be that since there was no refresher sample drawn for this wave, a number of respondents may have entered retirement since the previous waves and found social activities through organisations of some kind to substitute for the social interaction available in the workplace.

As expected, the inclusion of the country variable demonstrated strong associations with the likelihood of being retired versus employed, indicating that the national context in which older people find themselves plays a role in their identification with these labour market statuses. In comparison to the reference country of Germany, people in Austria, Belgium, France, and Italy were more likely to be retired than employed in all three waves, and those in the Czech Republic and Poland were also more likely in the two waves for which they were included. Greek respondents were more likely to be retired than employed in Wave 2 only. In the Netherlands, Sweden, and Switzerland, respondents were less likely to be retired than employed in all three waves, while this was true for those in Spain in Wave 1 only and for those in Denmark in Wave 4 only.

7.2.2 Unemployed compared to Employed

Comparing unemployed people to employed people, there were only five measures that demonstrated significance across all three waves. Unemployed people were more likely to be older and in poorer health, be in the lowest income quintile, rarely or never feel that the future looks good for them, and say that shortage of money stops them from doing things. These associations were all strongly significant and are not surprising.

Older unemployed people are less likely to return to work than younger ones and more likely to experience long-term unemployment. In addition, older workers can be seen as more expendable when firms need to reduce their workforce, even though these older people have the desire to continue working. Regarding health, people may have left work due to onset of illness but may be prepared to return to work and therefore have begun looking for it. It may also be that those with poorer health struggle to find jobs that are suitable to accommodate their particular needs. However, the relatively poorer health of the unemployed here could also be interpreted to reflect conditions that would not have a detrimental impact on people's capacity to work, supported by the fact that the measure for health limitations was only significant in Wave 4 at the $p < 0.1$ level. In other words, while unemployed people are more likely than employed people to be in poorer health, they appear to be equally capable of continued work.

The other significant variables are impacted by questions of endogeneity, in that being unemployed itself can be expected to have a negative impact on finances and the level of optimism one has about the future. It is impossible to know from the current analytical approach what drives the nature of the associations observed. Socio-economic

disadvantage associated with being in the lowest income quintile may influence the likelihood of being unemployed rather than employed. In the other direction, unemployment may result in a loss of earnings putting one in a lower income quintile. All things considered, while the income effects from loss of earnings are likely to play a role, one can conjecture that a portion of those with low income are unemployed due to having been in lower-skilled and lower-paid occupations that may see higher turnover of staff and fragmentation in work history.

In contrast, reports of being less secure financially – that is, often or sometimes feeling a shortage of money prevents one from doing what he or she wants – are more likely related to the idea of diminished earnings in unemployment, as it is more difficult to explain how perceived financial insecurity would increase one's likelihood of being unemployed rather than employed, even though financial insecurity could in general compel an individual to look for work. Lower levels of optimism are also likely to operate in a similar way, although the theory behind the conceptual framework in the present analysis does offer a suggestion that lower levels of an optimistic outlook could impact individuals' tendency to engage in constructive work-related activities that could be positively related to their overall employability, improving the likelihood that they remain in employment. However, again the approach used here cannot disentangle the direction of the causal relationship.

Education demonstrated some associations with the likelihood of being unemployed rather than employed, though there were differences at each wave. In Wave 1, people with some qualifications were more likely to be unemployed compared to people with degree-level education, although at the $p < 0.1$ level. At Wave 2, a similar but stronger association appeared for people with no qualifications in comparison to

those at degree level. At Wave 4, people either with some qualifications or with no qualifications were more likely than those with degrees to be unemployed rather than employed. These results provide some support for the idea that advanced qualifications can play an important role in helping keep older people in work, likely due to the comparative advantage people with degrees have in the labour market with respect to the kinds of careers they are positioned to pursue. The idea of a protective factor from degree-level education may be further reinforced by the fact that the strongest associations appeared in Wave 4, the only wave of data collected after the financial crisis of 2008.

Being female demonstrated a positive association with being unemployed rather than employed for Wave 1 only. The lack of significance in other waves may be related to increases in female labour force participation over time, such that older women and men are equally likely to be looking for work rather than in employment. Other variables also demonstrated significant associations only at a particular wave. Being married was positively associated with being unemployed rather than employed at Wave 1 compared to those either single or divorced, separated, or widowed. Although marital status was almost completely unrelated to the likelihood of being retired rather than employed, this finding could reflect the impact of partnerships on the timing of retirement, in that married people may be more likely to look for work rather than consider full withdrawal from the labour market in order to coordinate their labour market decisions with their partner's economic activity. However, the result here more precisely suggests that married people are more likely to be unemployed rather than employed, which could possibly be explained by the idea that being in a partnership may offer greater freedom

to leave one job in search for another or to be more discerning or choosy during the job search.

Two of the dispositional variables – being able to do the things they want at Wave 1 and being full of energy at Wave 3 – showed significant associations with the likelihood of being unemployed at the $p < 0.05$ level. Wanting work but not finding it could itself play a role in the negative association with being able to do the things one wants, while the positive association with having energy could be explained in that not being engaged in paid work may leave people feeling more energetic. Both of these explanations raise the question of endogeneity, as it remains unclear if the experience of unemployment is influencing responses on these variables rather than the dispositional characteristics themselves having an impact on labour market status.

Like with being retired, the country variable also showed significant associations with the likelihood of being unemployed rather than employed, although with some quite different results for Wave 4 compared to the other two waves; these differences in Wave 4 are likely explained by the overall economic climate across Europe following the financial crisis of 2008. Austria, Greece, Italy, the Netherlands, Spain, Sweden, and Switzerland all displayed a lower likelihood of respondents being unemployed rather than employed compared to Germany in both Waves 1 and 2. The Czech Republic, France, and Poland also showed negative associations in Wave 2, while Belgium and Denmark were the only countries to show no difference from Germany in the first two waves. However, when it comes to Wave 4, the only significant positive associations were found for Austria, Belgium, Denmark, and Spain, while the Czech Republic was the only significant negative association. Sweden did show a negative association at the

Table 15: Partial Multinomial Regression Results: Unemployed Compared to Employed

	Wave 1			Wave 2			Wave 4		
	Coeff.	Rob SE	<i>p</i>	Coeff.	Rob SE	<i>p</i>	Coeff.	Rob SE	<i>p</i>
Poor Self-Perceived Health Limitations Due to Health	0.553	(0.191)	0.004	0.390	(0.182)	0.032	0.448	(0.185)	0.015
	0.192	(0.174)	0.271	0.272	(0.180)	0.130	0.271	(0.156)	0.081
Educational Qualifications (Base=Degree)									
Some	0.388	(0.209)	0.064	0.217	(0.218)	0.320	0.628	(0.208)	0.002
None	0.376	(0.239)	0.115	0.561	(0.251)	0.025	0.659	(0.227)	0.004
Had Training	0.022	(0.269)	0.936	-0.173	(0.294)	0.557	-0.249	(0.268)	0.352
Marital Status (Base=Married)									
Single	-0.500	(0.246)	0.042	0.243	(0.219)	0.267	-0.200	(0.231)	0.388
Div/Sep/Wid	-0.616	(0.206)	0.003	0.035	(0.200)	0.860	0.066	(0.165)	0.691
Org. Memb.	0.058	(0.165)	0.726	-0.045	(0.181)	0.803	-0.051	(0.170)	0.765
No-control	0.134	(0.171)	0.431	0.313	(0.164)	0.056	0.100	(0.162)	0.539
Can-do	-0.419	(0.195)	0.031	-0.226	(0.171)	0.187	-0.320	(0.177)	0.071
Energy	0.019	(0.215)	0.931	-0.102	(0.192)	0.596	0.638	(0.255)	0.012
Opportunities	-0.124	(0.184)	0.501	-0.287	(0.176)	0.103	-0.183	(0.198)	0.356
Optimism	-0.534	(0.178)	0.003	-0.543	(0.185)	0.003	-0.682	(0.192)	0.000
Family-duty	0.080	(0.159)	0.613	-0.168	(0.159)	0.290	-0.100	(0.174)	0.566
Finance-limits	0.743	(0.174)	0.000	0.493	(0.166)	0.003	0.997	(0.178)	0.000
Provides Care	-0.003	(0.208)	0.989	0.341	(0.213)	0.109	-0.267	(0.232)	0.250
Age	0.067	(0.018)	0.000	0.078	(0.021)	0.000	0.076	(0.021)	0.000
Gender (Female)	0.323	(0.150)	0.032	0.066	(0.153)	0.665	-0.154	(0.149)	0.299
Income (Base=Lowest Quintile)									
Quintile 2	-1.284	(0.227)	0.000	-0.856	(0.204)	0.000	-1.219	(0.200)	0.000
Quintile 3	-2.012	(0.225)	0.000	-1.312	(0.239)	0.000	-1.303	(0.242)	0.000
Quintile 4	-2.537	(0.258)	0.000	-1.952	(0.238)	0.000	-1.791	(0.242)	0.000
Quintile 5	-2.711	(0.271)	0.000	-2.412	(0.243)	0.000	-1.790	(0.289)	0.000
Country (Base=Germany)									
Austria	-0.520	(0.235)	0.027	-0.878	(0.305)	0.004	0.513	(0.258)	0.047
Sweden	-0.890	(0.229)	0.000	-1.466	(0.373)	0.000	-0.678	(0.376)	0.071
Netherlands	-0.691	(0.241)	0.004	-1.388	(0.324)	0.000	0.346	(0.319)	0.278
Spain	-0.965	(0.274)	0.000	-0.812	(0.302)	0.007	0.837	(0.268)	0.002
Italy	-1.667	(0.322)	0.000	-1.701	(0.320)	0.000	-0.442	(0.311)	0.155
France	-0.319	(0.233)	0.171	-0.699	(0.251)	0.005	0.322	(0.265)	0.225
Denmark	0.041	(0.216)	0.851	-0.165	(0.232)	0.478	0.719	(0.284)	0.011
Greece	-1.890	(0.280)	0.000	-2.173	(0.316)	0.000			
Switzerland	-1.379	(0.362)	0.000	-0.981	(0.274)	0.000	-0.182	(0.293)	0.533
Belgium	-0.143	(0.191)	0.453	-0.097	(0.213)	0.649	0.995	(0.249)	0.000
Czech Republic				-1.424	(0.292)	0.000	-0.723	(0.273)	0.008
Poland				-0.840	(0.250)	0.001	0.097	(0.315)	0.758
Constant							-6.364	(1.273)	0.000
N		9,284			12,071			19,458	

Note: $p < 0.05$ in **bold**; $p < 0.1$ italicised

$p < 0.1$ level, making it the only country with associations of some significance in the same direction across all three waves.

7.3 Reflections on Employability and Labour Market Status in Europe

The previous section has outlined in detail the results from the analysis looking at how the variables related to the dimensions of employability are related to the labour market status of older workers across 13 European countries. The findings help provide answers to two aspects of the original questions framing this research: how the employability dimensions differ between employed older people and those in other categories; and whether employability as a concept exists independent of particular cultural or national contexts.

The first aspect was also addressed using the data from ELSA, and a direct comparison of the findings from the analysis of both datasets will begin the next chapter. However, considering the SHARE data alone, the results generally confirm findings from earlier research in the relationship between older people and the labour market, with very limited support that employed older people can be characterised with qualities that would conceptually be associated with higher employability. In other words, known factors that impact older people's labour force participation – chiefly age, gender, education, socio-economic position (income), informal care responsibilities, and (to a degree) partnerships – are the primary predictors associated with labour market status here. Where there are significant associations on other measures related to disposition, the question of endogeneity casts a shadow over possible interpretations.

The second aspect related to the research questions that is addressed here is how national contexts may play a role related to the employability of older workers. The

results identified significant differences between countries with respect to the labour market status of older people. In general, this suggests that the national context in which older individuals find themselves plays a role in influencing their labour force participation. In other words, older individuals may be less empowered or encouraged to engage in work depending on their environment. For example, employment would be less likely where there are fewer jobs or structural barriers to working in later life. At the same time, cultural expectations around the appropriate time to retire can promote labour market exit for older people at different ages depending on where they live.

Although the analytical approach here using a variable to control for country allows a degree of insight into the presence of certain national differences, the approach can only identify if particular countries differ from the reference nation, in this case, Germany. This inclusion of the 13 countries in SHARE into a pooled analysis might obscure some of the interesting variation between countries, so further analyses were conducted to explore how and if there were substantial differences across the various nations.

Although the results are not reported here in the thesis, these further explorations did identify some interesting patterns that relate to theories around welfare state typologies, older workers, and retirement (cf. Mortelmans & Denaeghel 2013). One analytical approach used a variable that assigned countries to their traditional welfare state typology – i.e. Social Democratic, Continental, Southern, Liberal, or Post-communist/Transitional – with expected results that reflect earlier research. For example, the Social Democratic regimes, countries known for relatively high labour force participation among older workers, were less likely to have people

retired rather than employed compared to the other regime types.²³ Another finding was that older workers in Continental regimes were more likely to be unemployed rather than employed compared to the Social Democratic regime, except for Wave 4, where no differences were found; this likely relates to the impact of the financial crisis on levels of unemployment across regime types.

Moreover, when the analyses were run separately for the individual countries, few differences of statistical significance stood out that either would not otherwise be explained by the expected implication of the welfare state regime or were identified consistently across the different waves of data. For example, the variable for health limitations was consistently strongly associated with a higher likelihood of being retired rather than employed for Sweden and Denmark only. This is likely explained by greater efforts in those countries to reduce options for early retirement and labour market exit except in the case of disability. One interesting finding, however, related to the Netherlands, where only marital status and age were associated with the likelihood of being retired versus employed; this could relate to both the gradual reforms there to reduce early retirement as well as their early adoption of a flexicurity approach to labour market issues.

There could be particular interest in looking more closely at how different countries vary with respect to the socio-demographic characteristics that differentiate older people and their labour market status. However, outlining such differences is essentially beyond the scope of this research, as the few differences that can be identified between countries in the cross-sectional analysis of SHARE do little to inform

²³ Note that the analysis of the SHARE data did not include a Liberal welfare regime.

the underlying objective of this research to examine employability. In contrast, variation between countries as represented through different policies will be more pertinent and useful to understand the influence of macro-level features on the relationship between employability and labour market outcomes, as explored in the next section looking at transitions.

Within this context of national variation and the cultural differences between countries, the conceptual dimensions of employability are likely to play less of an important role in determining labour market outcomes for older workers. This is supported by the lack of significance for many of the dispositional elements after controlling for country of residence or even looking at countries separately. Overall, what these findings suggest is that an overall concept of employability based on the dimensions measured here may not exist that captures differences related to labour market outcomes. In other words, there is limited evidence that employed older people are more 'employable' than those retired or unemployed. Instead, the employment of older people could be shaped more by particular elements that should be considered in their own right, such as health and education. Alternatively, it could be that a general understanding of employability is less relevant for older workers, as other issues associated with labour market exit play a greater role in shaping their relationship with employment. These ideas will be explored in more detail in the next chapter. Before that, the rest of this chapter examines the results related to the relationship between employability measures and labour market transitions.

7.4 Labour Market Transitions and Employability: Incorporating Macro-level Measures

While the exploration of the cross-sectional data above provides potential insight into the relationship between employability measures and labour market status – that is, how and if employed people demonstrate higher associations with employability – a longitudinal approach is again required to examine how the theoretical dimensions of employability may play a role in entry to and exit from work. The extension here from the approach used on the ELSA data is the introduction of macro-level variables into a multilevel model.²⁴ The variables related to the macro-level environment reflect a number of the policy and cultural topics discussed in Chapter 2. Unless otherwise specified, the values used for Waves 1, 2 and 4 reflect 2004, 2006 (2007 for Greece and the Netherlands), and 2011 data in order to apply to the year of data collection for each wave of SHARE. Full details of the values for these variables can be found in Appendix 3.

Active labour market policy (ALMP) is measured based on spending as a percentage of GDP. It is taken from the OECD database and reflects the categories 20-70 of their classification of labour market programmes. These categories cover training, employment incentives (including recruitment, retention, and job sharing/rotation), sheltered and supported employment and rehabilitation, direct job creation, and start-up incentives.

The degree of employment protection legislation (EPL) was assessed with an indicator also provided by the OECD to assess the strictness of regulation on individual

²⁴ One difference in the models here from those used with the ELSA data is the removal of the age-squared term here. The SHARE data show a linear relationship between age and each of the two outcomes, so age-squared only introduced noise in the models here.

and collective dismissals. The indicator reflects a weighted sum of 12 items, covering the process required for giving notice and severance pay for no-fault individual dismissal, as well as the difficulty of dismissal and the definitions and regulations around unfair dismissal.

As the prevalence of age discrimination can certainly impact older people's outcomes in navigating the labour market, a measure to assess the extent of age discrimination in a given country was introduced. The variable constructed was drawn from the percentage of respondents to the Eurobarometer surveys of 2006 and 2012 reporting that discrimination on the basis of age was widespread in their country. As the availability of age discrimination estimates from the two Eurobarometer surveys is limited, an estimate is not supplied for Wave 1 of the SHARE data. In addition, the measure for Switzerland – not included in the Eurobarometer surveys – was based on a similar measure provided in the European Social Survey report, Ageism in Europe, reflecting 2008. The estimates for 2006 and 2012 were constructed by comparing the average differences in the reported prevalence of ageism in other countries included in both the Eurobarometer and ESS data; as such, the approximation of this measure for Switzerland must be taken into account for any interpretations of results specific to age discrimination and Switzerland.

As differences in pension age would be expected to impact the timing of labour market exit in different countries, two measures were included to incorporate this, drawn from OECD data. The measures on retirement age assess both the official retirement age and the effective retirement age, the latter accounting for the prevalence of early exit. The measure related to the official retirement age was coded to represent 1 if the official retirement age was 65 and 0 if less than 65; no countries in the

study had an official retirement age higher than 65. These retirement ages were also measured separately for men and for women in each country, as a number of the countries included in the analysis here have lower official and effective retirement ages for women. There are also questions in how to assess official retirement age where complex rules allow differently timed retirement. The measures used here are taken as reported in the sources except for the Wave 1 measure for Greece, which reflects an earlier retirement age more in line with the value reported for Wave 2.²⁵

Another policy factor that can influence exit among older workers is the generosity of pension provision. An indicator measuring the net pension replacement rate was included for Waves 2 and 4. These figures were also taken from the OECD and reflect the percentage of pre-retirement income provided by public pensions. Figures from 2010 were applied to Wave 4. In addition, the replacement rates used are those for men, as there is no or little difference between men and women; in Wave 4, for example, the only difference was less than 1% in Switzerland.

Flexibility in working conditions has already been highlighted in this research as an important aspect to help older people continue working. To incorporate this, a measure to assess the extent of flexible working in different countries was developed from Eurostat data. The variable provides the percentage of workers aged 50-64 who report some degree of flexibility in their working hours, through time banking, freedom to decide their start and end given fixed number of daily hours, or complete freedom to determine their work schedule. The availability of this data is limited; as a consequence,

²⁵ The official retirement age chosen for Greece in Wave 1 reflects rules that allowed retirement based on years of work and contribution that permitted retirement at age 57. The selection of this retirement age reflects the fact that many Greeks at this time qualified for the official retirement based on the rules and their work histories. This selection actually has no impact on the modelling, as this variable at Wave 1 does not apply.

Wave 2 uses data from 2004 and Wave 4 uses 2010 data. In addition, no measure was available for Switzerland for Wave 4.

The final macro-level measure assesses the prevalence of lifelong learning (LLL) and adult education. This indicator was constructed from Eurostat data and reflects the participation rate in education and training in the previous four weeks among people aged 55-64, the best age breakdown for older working-age people available. Appendix 3 presents the values for the macro-level variables that were found from the sources listed above.

7.5 Methodological Considerations in Looking at the Macro-level Context

The macro-level variables vary only at the country level across time and will be constant for all respondents from a given country in a given wave. To incorporate these variables, multilevel logistic regression models were built.²⁶ Unlike with the ELSA data, where separate models were constructed for men and women, the genders are kept together here since retirement ages are different in the various countries for both men and women. This means that the transitions seen do not always strictly represent retirement or exit earlier than the traditional age in some of the countries included, as they did in the ELSA data.

Serious consideration was also required to develop the models in terms of how to incorporate the macro-level variables with respect to how they would potentially impact transitions depending on timeframes. The best-case scenario would be to have more detailed data and explore an event history analysis to more accurately represent the exact timing of transitions alongside changes in the broader contextual landscape.

²⁶ The command used in Stata is **xtmelogit**, which fits multilevel mixed-effects logistic regression models, applicable to panel data nested in groups (in this case, country).

This would improve the precision in understanding how cause and effect might occur.

Given that the SHARE data used in this research do not lend themselves to such an approach, the final models used for analysis and presented here apply the lagged values, i.e. using the value of the previous wave, for some of the macro-level variables. The choice to use lagged values on these measures relates to their influence in the concepts of hiring and firing, and how any impact from these variables would likely be a result from their influence in the past; here, that can only mean a previous wave. The selection of the final models was based on this reasoning and verified by looking at the different variations of the models.

For example, models for both kinds of transitions represented in the dependent variables used the lagged value for employment protection legislation. Higher levels of EPL would theoretically be expected to reduce the likelihood of employed people losing their jobs, and the restrictions EPL can place on employers' ability to shed labour can create a disincentive to hiring – potentially reducing the likelihood of transitions back into employment. In addition, if lifelong learning and adult education prevalence were to impact transitions in and out of employment, it is likely that the rates of prevalence would be of most interest when identifying non-employment, so the lagged measure of this has been applied to the model with the dependent variable measuring transitions from being out of work to employment. The non-lagged measure was kept for the model of transitioning out of employment to examine the possible association between lower levels of lifelong learning at a given time with early exit from employment. Active labour market policy was also examined like lifelong learning, with the non-lagged variable used in the model of transitions out of employment, while the lagged measure was used in model for returns to work. This reflects the idea that ALMP is intended to enhance

people's access to jobs, so the levels at the time of non-employment would again be of primary interest.

7.6 Transitions out of Employment

The model for transitions out of employment showed significant associations with all the measures related to employability resources (health, human capital, and social capital), an optimistic dispositional quality, the control measures of age, gender, and income, the wave of data, and four of the macro-level factors. Poor health and limitations in usual activities due to health were positively associated with the likelihood of leaving employment, as were lower levels of educational qualifications. This means that people in better health, with greater physical capacity, and degree-level education were more likely to stay employed than to leave employment, findings consistent with theory and previous research.

Having undertaken earlier training was negatively associated with leaving employment, demonstrating support for the idea that training can keep people in work. In addition, it is likely that employed people who have training receive it through their employer, supporting the notion that investment in the professional development of older workers can actually provide a good return on investment as these workers are more likely to remain employed. While it is possible that respondents could be employed with a different employer, it is more likely for older workers that they have remained with the same employer, and other research has shown that older employees who are given recognition and opportunities in the workplace demonstrate greater loyalty to their employers.

Married people were more likely to have left employment than single people or those divorced, separated, or widowed. This may be related to findings from previous research indicating that partners make labour market exit decisions in tandem. If so, the findings here could suggest that exit before the age of 65 is partly due to a coordinated choice among married people and their partners. However, it could also be that those without partners are more compelled to stay in employment due to the social connections that the workplace provides.

Organisational membership was positively related to the likelihood of exit. This conflicts with the underlying theory behind how social capital should influence employability and employment outcomes, namely that social connections should foster a greater capacity to navigate difficulties in the workplace and identify opportunities for continued employment. However, the theoretical reason these connections should be helpful is in great respect more related to how people might identify job opportunities, which is the focus of the next part of the analysis. At the same time, this result could again reflect the absence of social connection following exit from work, in that the experience of retirement may compel people to seek new sources of social interaction. It could also be that retired people are simply freer in their time to engage in extra-curricular social activities.

The only dispositional variable to demonstrate an association with exit from employment was optimism. Those who felt the future looked better for them were less likely to leave work. The nature of this relationship is unclear given the question of endogeneity. In the conceptual framework, it would be theorised that people with a more optimistic outlook would have greater adaptability helping them stay in work. However, it could be that negative experiences following exit from employment could

reduce the level of optimism one feels. Again, the nature of this relationship is unclear from the modelling, but the fact that no other associations were found for the measures that approximate disposition suggests this latter point may be a more likely explanation.

The three socio-demographic measures included in the model all displayed associations in an expected way. Being older and female were associated with a higher likelihood of exiting employment, while higher quintiles of income were all less likely than the lowest quintile to leave work. These findings reiterate the message that working up to the age of 65 is heavily mitigated by factors related to age, gender, and economic position across Europe.

Before moving to the results with respect to the macro-level variables, the final indicator in the model to demonstrate an association with the independent variable is the wave of study. Since the dependent variable is constructed from consecutive waves of data, the variable in the model compares Wave 4 to Wave 2. The results show that individuals were more likely to exit employment by Wave 4 than by Wave 2. This is completely unsurprising given the financial crisis that occurred between Waves 2 and 4 and the subsequent impact on overall employment figures across Europe.

A number of the macro-level indicators included in the model showed an association with exit from employment. A higher prevalence of age discrimination was positively associated with leaving work, suggesting that cultural attitudes related to age continue to influence the perception that older people are a more expendable part of the labour force. At the same time, having an official retirement age of 65 was associated with a lower likelihood of exit from employment, partly reflecting how the removal of formal early exit pathways has contributed to people staying in work up to official retirement age. A higher overall prevalence of lifelong learning and adult

education was also negatively associated with exit before age 65, suggesting that people's employability can indeed be enhanced by education and training and that there is scope for this impact to be applied at a national level.

Two other macro-level variables were associated with the likelihood of a transition out of employment, but in opposite directions than expected. Proportional spending on active labour market policy was positively associated with the likelihood of exit. This positive association between ALMP and exit is a particularly interesting finding given the theory behind how activation policies are intended to work. ALMPs are designed to improve movements into employment, 'activating' individuals in a more disadvantaged labour market position; consequently, the finding that spending on ALMPs is associated with a greater likelihood of leaving employment is surprising.

It could be that higher spending on ALMP results in activation programmes with greater visibility, thus leading workers to be more willing to voluntarily give up work to pursue other opportunities such as self-employment or new career prospects. Thus, where there is higher spending on ALMP, older people are aware of the support in place and are more prepared to risk leaving a job. Alternatively, it could be that increased proportional spending on ALMP is itself a reflection of greater need, responding to an increase in exits from employment among older people. This may be relevant in the context of the analysis here, as the ALMP measure used for exit transitions reflected spending at the time when respondents had already transitioned out of employment. Another possible explanation could be related to the fact that the majority of countries in this study fall into welfare state typologies that still have considerable work to do to develop adequate activation policies for older workers and eliminate special early retirement pathways (Mortelmans & Denaeghel 2013).

Another consideration that may have influenced the positive association between ALMP spending and exit may relate to the ALMP measure itself. The measure used here reflects spending on all ALMPs rather than only those targeting older people, so a possible explanation for the association could be that many of the ALMPs (or a higher proportion of the spending on them) benefit younger age groups more than older ones or are ill-suited to the particular needs of older people. Indeed, in one classification of ALMPs into different categories, younger workers appear as a particular target group, while older workers do not (Kluve 2010). And while the ALMP measure here included incentives for job retention in addition to elements related to helping those out of work – which further makes the positive association with exit surprising – previous research has concluded that it is almost exclusively the type of ALMP that influences the programme’s effectiveness (Kluve 2010).

The proportion of people with flexible working arrangements also demonstrated an unexpected direction of association. According to the results, a higher proportion of people with flexible working hours is positively associated with the likelihood of exit from employment. This is surprising given the general consensus in research on older workers that flexibility in working arrangements is needed to help promote continued work in later life. This finding may in fact result from flexible working hours in the context of phased retirement, in that older workers enjoy a degree of flexibility over time but eventually leave work, whereas those without such flexibility feel compelled to push on and remain in their current job until retirement at 65. At the same time, none of the individual-level measures related to flexibility (family responsibilities, financial limitations, or informal care responsibilities) were associated with the likelihood of exit, suggesting that an individual’s need for flexibility was unrelated to leaving work.

Table 16: Regression Results for Labour Market Transitions

	Employed to Not Employed			Not Employed to Employed		
	Coeff.	SE	p	Coeff.	SE	p
Poor Self-Perceived Health	0.442	(0.082)	0.000	-0.619	(0.146)	0.000
Limitations in Usual Activities Due to Health	0.364	(0.070)	0.000	-0.424	(0.127)	0.001
Educational Qualifications (Base=Degree)						
Some	0.298	(0.076)	0.000	-0.196	(0.152)	0.195
None	0.298	(0.085)	0.000	-0.148	(0.157)	0.347
Undertaken Training	-0.552	(0.089)	0.000	<i>0.297</i>	<i>(0.177)</i>	<i>0.093</i>
Marital Status (Base=Married)						
Single	-0.565	(0.138)	0.000	-0.181	(0.259)	0.485
Div/Sep/Wid	-0.466	(0.089)	0.000	0.134	(0.162)	0.407
Organisational Membership	0.162	(0.063)	0.010	-0.095	(0.114)	0.406
No-control	-0.061	(0.068)	0.372	0.002	(0.118)	0.989
Can-do	-0.095	(0.094)	0.316	-0.023	(0.147)	0.877
Energy	-0.146	(0.104)	0.158	0.406	(0.183)	0.026
Opportunities	0.081	(0.105)	0.440	-0.023	(0.172)	0.895
Optimism	-0.309	(0.099)	0.002	0.247	(0.166)	0.135
Family-duty	-0.038	(0.066)	0.560	0.056	(0.115)	0.625
Finance-limits	0.040	(0.066)	0.539	0.154	(0.117)	0.189
Provides Care	0.157	(0.096)	0.101	-0.005	(0.154)	0.975
Age	0.324	(0.011)	0.000	-0.269	(0.017)	0.000
Gender (Female)	0.174	(0.080)	0.030	-0.383	(0.134)	0.004
Income (Base=Lowest Quintile)						
Quintile 2	-0.291	(0.117)	0.013	-0.128	(0.190)	0.501
Quintile 3	-0.655	(0.112)	0.000	-0.041	(0.188)	0.827
Quintile 4	-0.781	(0.110)	0.000	0.498	(0.178)	0.005
Quintile 5	-1.095	(0.115)	0.000	0.767	(0.189)	0.000
Wave 4 (Base=Wave 2)	0.239	(0.085)	0.005	0.513	(0.142)	0.000
ALMP						
Lagged ALMP	1.273	(0.456)	0.005	0.620	(0.430)	0.150
Lagged EPL	-0.145	(0.613)	0.813	0.505	(0.558)	0.365
Age Discrimination	0.030	(0.011)	0.008	0.010	(0.013)	0.427
Official Retirement Age of 65	-0.292	(0.122)	0.017	0.032	(0.191)	0.869
Effective Retirement Age	-0.060	(0.047)	0.199	0.117	(0.057)	0.041
Net Public Pension	-0.008	(0.007)	0.267	-0.015	(0.007)	0.033
Replacement Rate						
Flexible Working Hours	0.017	(0.008)	0.045	0.002	(0.011)	0.834
Lifelong Learning	-0.077	(0.029)	0.007			
Lagged LLL				0.030	(0.018)	0.104
Constant	-16.857	(3.511)	0.000	4.503	(4.109)	0.273
N	8,233			6,106		

Note: $p < 0.05$ in **bold**; $p < 0.1$ italicised

Although there is no indicator identifying if an individual works with flexible hours, the result here could relate to a greater number of positions with flexible hours being eliminated rather than traditional jobs with set working times.

7.7 Transitions into Employment

A number of the variables that were significant for transitions out of employment also demonstrated associations with transitions back into employment in comparable ways. Poor health and limitations due to health were both negatively associated with re-employment, providing further support to the idea that health and physical capacity are crucial elements for working in later life. Training was positively associated with re-employment, but only weakly at the $p < 0.1$ level. The weakness of this association could be related to the degree to which training is often provided by an employer as well as the idea that retired people may seek education courses as a leisure activity. Like with the ELSA results, the presence of an association could also reflect training that is given following re-employment, so it remains unclear if undertaking training is an effective method for returning to work.

The socio-demographic variables were also significantly associated with the likelihood of re-employment. Being older and female demonstrated negative associations with the likelihood of re-employment, offering yet further evidence that these characteristics may disproportionately create barriers or disadvantages to labour market opportunities. Higher income was associated with a greater likelihood of re-employment, but only for the two highest quintiles compared to the lowest one. There could again be an effect of earnings from employment raising income in these cases, but it otherwise suggests that only those in better economic positions are able to find

employment. While education showed no association with the likelihood of re-employment, this finding related to income could suggest that re-employment opportunities are structured by socio-economic position, with those having higher earnings potential also having better luck at finding work.

One dispositional measure was significantly and positively associated with the likelihood of re-employment: feeling full of energy. This is conceptually related to the idea of motivation, so in the employability framework could suggest that more motivated people are more likely to find re-employment. This could be explained by these individuals taking a more ardent approach to finding work, pursuing more opportunities and thus winning out through persistence. It could also be that this motivational attitude comes across more appealingly to prospective employers and improves hiring success. At the same time, the direction of causation is unclear, so it could be that merely becoming re-employed fills people with a greater sense of energy. While this explanation must necessarily be taken into consideration, it should be acknowledged that the vast majority of respondents have the same value for this variable across waves.

Just as with the model of transitions out of employment, the wave of data was associated with transitions into employment. In this case, people at Wave 4 were more likely than those at Wave 2 to find re-employment. Initially, this could be a surprising result given the financial crisis occurring between these waves and the overall negative impact on European economies. However, this finding may be explained precisely by the effects of the financial crisis insofar as people felt more comfortable out of work prior to the recession, but due to its impact felt more pressed to find work afterward. Another possible explanation could be that limited recovery from the recession ahead of the

fourth wave of data collection could have produced job opportunities of which the respondents were able to take advantage.

Only two of the macro-level variables demonstrated significance with re-employment: the effective retirement age and the net public pension replacement rate. A higher effective retirement age was positively associated with re-employment. On one hand, this makes obvious sense as the effective retirement age is measured based on the average age of retirement in a population. However, given that many of the respondents who transitioned back to work were classified as retirement at the previous wave, it more likely reflects the impact of a cultural consensus around retirement, in that where retirement is generally taken later in life, there is greater attachment to the labour market. The net replacement rate from public pensions was negatively associated with re-employment, suggesting that there is also a greater attachment to the labour market in contexts where people have a lower sense of financial security from public sources of income in retirement.

7.8 Labour Market Transitions, Employability, and Policy and Cultural Contexts

The second half of this chapter has examined the relationships between the conceptual measures related to employability and the labour market transitions into and out of employment among older workers within a cross-national framework. While the cross-sectional analysis in the first half of the chapter contributed to evaluating aspects of the research objectives related to employability and actually being employed, the results here offer insights into the role that employability may play in shaping labour market exit among older workers and in helping them find re-employment. Insights in

this respect were also obtained from the analysis in Chapter 6 using the data from ELSA, and the next chapter will feature a discussion around how these two stages of longitudinal research compare. The rest of this chapter will focus on how the SHARE analysis relates to a further component of the original research questions, namely how different aspects of policy and cultural context play a role in the labour market transitions and employability of older workers.

As highlighted earlier in the discussion around the cross-sectional results, known determinants of older people's interaction with the labour market also feature with respect to their moves in and out of employment. Transitions both into and out of employment were associated with age, gender, socio-economic position (income), and health; in addition, the year of survey was significant due to the impact on European economies due to the financial crisis that occurred between the two waves modelled in the longitudinal analysis.

Measures of human and social capital, in contrast, were only associated with the likelihood of exit from employment and showed no significant relationship with the likelihood of re-employment, save for training at the $p < 0.1$ level. However, this finding related to training could be a result of training that is received following entry into a new job, rather than an indication that training prior to re-employment enhances one's chances of finding work. With respect to exit, the results point to a protective factor related to degree-level education and training that helps older people stay in work. The higher likelihood for married people to exit also supports previous evidence related to joint decision-making in couples with respect to the timing of retirement. No association between marital status and re-employment supports this conclusion; married people are just as likely to return to work from retirement, other inactivity, or unemployment, so

the influence of partnership manifests solely in the exit from employment and is likely to reflect exits into retirement for the most part. Overall, the fact that human and social capital were associated with exit rather than re-entry provides support for the idea that these factors operate more with regard to the timing of labour market exit rather than enhancing and older worker's ability to get employed.

The unique contribution of this analysis to the present research rests in its inclusion of macro-level variables to assess their impact on the labour market transitions of older workers. These findings offer distinct insights into how older people's interactions with the world of work are shaped by the socio-economic environment in which they find themselves and how these contexts might mitigate the role that employability can play in contributing to extending working lives.

Of the associations identified, two provided surprising directions of association, while the relationships of the others to employment exit or re-entry fit in with the underlying theoretical impact that these elements would play. For example, a higher proportion of older people engaging in lifelong learning was associated with a lower likelihood of exit, supporting the role of human capital and professional development in keeping older people in work.

The prevalence of age discrimination was positively associated with exit but not associated with re-entry. This could suggest that the perceived overall prevalence of discriminatory attitudes related to age may not in fact serve as a barrier preventing older people from finding work. However, a higher likelihood of exit could be explained by employers undervaluing their older workers, resulting in greater exit. At the same time, the overall perceived prevalence could itself influence older people's own attitudes about the intersection of age and work, stimulating them into leaving

employment. Yet this explanation may be less likely given a similar measure related to cultural ideas around retirement timing – the effective retirement age – demonstrated no association with exit; it was, however, positively associated with re-employment, suggesting that older people are more likely to return to work where working into later life is more common.

The net replacement rate from public pensions was the other macro-level associated with re-employment. In this case, a lower replacement rate was associated with the likelihood of re-entry. Having an official retirement age of 65 was negatively associated with exit; taken together, these findings suggest that there is some scope for pension policies to encourage work into later life. This is not to say that public pension benefits should be eliminated, leaving older people without adequate income support and in poverty in later life. It does however suggest that financial incentives to extending working lives – such as increasing pension receipt for years worked beyond state pension age – may encourage older people to return to work.

One of the surprising findings related to active labour market policy. Higher proportional spending on ALMP would be expected to increase re-employment given the objectives of ALMP programmes. While no association was identified for the likelihood of returning to work, ALMP spending was positively related to the likelihood of exit. As mentioned earlier, this finding could suggest that older people in countries with higher ALMP spending feel better enabled to risk exit and look for a new job, or that higher spending reflects greater need due to changes in economic conditions. At the same time, lack of significance with re-employment outcomes may suggest that the programmes that are actually enacted have little impact on helping older people return to work. As the measure used for ALMP included spending on all such policies, rather

than being restricted to those that focus on older people, it could be that the policies in place work better for younger groups or are ill-suited to the needs of older people. It may also be that a higher proportion of ALMP goes to programmes targeting younger age groups. If this is the case, national governments keen to encourage work into later life should improve their awareness of what kind of official support older workers need.

This chapter has presented the results from analysis of the data from SHARE to provide a cross-national perspective into the exploration of the role of employability and labour market outcomes of older workers. The greatest contribution of using the SHARE dataset was in allowing labour market transitions to be assessed while taking into account various factors at the national level. The overarching conclusion from modelling both transitions into and out of employment is that known determinants of older people's interaction with the labour market drive much of the predictive associations in the model, while the dispositional elements associated with employability show few clear relationships. The importance of health and human capital here reflect the findings in the previous empirical chapters looking at the situation in England using ELSA.

An important contribution of this chapter is finding evidence that particular macro-economic factors can also play an important role in the likelihood of exit and re-entry independent of individual characteristics. This means that whatever potential role employability could serve in promoting work into later life is likely to be mitigated by the economic and social context. This contextual influence, combined with the consistent importance of the health dimension, again brings the concept of the work ability approach to mind, further suggesting a potentially more important role for it compared to the employability framework. The next chapter will revisit the ideas around the intersection of individual- and macro-level factors while taking into consideration the

similarities and differences of the ELSA and SHARE results, along with further discussion on some of the emerging themes and lessons to be learned from the findings.

Chapter 8: Implications: Rethinking the Role of Employability for Older Workers

This chapter consolidates the findings from the different parts of the research here by reviewing the primary research questions identified in Chapter 3 and outlining what the findings from the ELSA and SHARE data mean for the related hypotheses. The evidence so far points to a strong influence of health on labour market outcomes, a potential association for human capital to improve employment opportunities, and a role for macro-level policy factors to impact people's relationship with work in later life. So far, contrary to the original theory, there is little support for the relevance of a multidimensional framework of employability to impact the labour market experiences of older people.

The chapter starts by comparing the results from the English and European data related to the association between the dimensions of employability and labour market status. It then moves to a similar comparative discussion around the findings related to labour market transitions. These discussions feed into a re-evaluation of how useful employability is as a concept for helping older people remain connected to the labour market. The second half of the chapter identifies the primary implications of this conclusion, highlighting important themes that may explain the findings and that could help inform future research on this topic.

8.1 Comparing the Results on Employability and Labour Market Status

The primary motivation behind looking at different models related to labour market status was to explore the idea of employability as an outcome-based measure. More specifically, the cross-sectional analyses were conducted to assess the potential

relationships between measures related to the conceptual dimensions of employability and an outcome measure of being employed compared to other types of economic activity. Essentially, the interest in employability for this research is shaped around how it can improve outcomes (i.e. employment), so these models serve to help identify those elements that differentiate employed people from others, with particular emphasis on the retired and the unemployed. In doing so, the objective was to test whether the theoretical components of employability were indeed higher among employed older people. Doing so using both the ELSA and SHARE data offered insights within a particular cultural and institutional setting as well as allowing and controlling for variation in such contexts. This section discusses how the results from SHARE relate to those found with ELSA.

There are some stark similarities as well as differences in the cross-sectional results from the European data compared to the findings from ELSA with respect to the different measures of employability included here as they relate to retirement, employment, and unemployment. The health measures generally agree, suggesting that poorer health and diminished capacity due to health are negatively associated with employment compared to being retired or unemployed. Again, this finding is unsurprising given the existing literature and research showing that ill health is a main reason people leave the labour market, especially when they leave it early. One interesting finding here, however, is that reported limitations due to health showed no association with the likelihood of being unemployed compared to employed in the European data. It could be that viable labour market exit options are more readily available in Europe compared to England, so the need to look for work is less pressing. Alternatively, this finding could suggest that employment opportunities in Europe are

generally better at accommodating these kinds of limitations, so that the pools of those in work and those looking for work have no significant differences in this respect.

In terms of the human capital measures, the associations between educational qualifications and labour market status were different compared to ELSA, while the measure for training was similar. Training was negatively associated with the likelihood of being retired, while no association was present for the likelihood of being unemployed. Educational qualifications lower than degree were negatively associated with the likelihood of being retired in the ELSA data, but in the European data, those with degree-level education were less likely than the other education levels to be retired. With respect to the unemployed, there was little evidence in the ELSA data that education played a differential role in being unemployed compared to employed; in the European data, there was some suggestion that lower educational levels were associated with an increased likelihood of being unemployed.

Taken together, it appears that human capital may play a more complex role with regard to labour market outcomes than traditional theory implies. That is, higher levels of human capital may not be directly linked to better opportunities for employment. More highly education people in England are more likely to be retired than employed, while less educated people in the European countries studied are more likely to be retired and (to some degree) unemployed. This difference may relate to the structure of the labour markets and the opportunities for work and retirement that exist in the different countries. It may be that pathways into early retirement are more available for English people whose degree-level education places them in particular roles. In contrast, exit from the labour market before age 65 in the European countries may carry a particular appeal to those with lower education, while the nature of the

labour markets in those countries may mean that people with degrees are better positioned to continue work into later life. The results around training may be a relic of the measurement used here or be related to endogeneity, as retired people would be less likely to consider training or education as a need. At the same time, the fact that no associations were found with respect to those unemployed versus employed may suggest that skills development does not lead to higher employability when considering actual employment outcomes.

For both the ELSA and SHARE data, the social capital measures demonstrated few to no associations with labour market status. With respect to marital status, an interesting characteristic of the results was that all but one of the few associations that did appear were in the first wave of either dataset. These first waves represent different years, so it is unlikely that this represents a kind of period effect. The only consistent result in this case is that divorced, separated, or widowed people were less likely than married people to be retired rather than employed; in the European data, they were also less likely to be unemployed than employed. Single people were also less likely to be unemployed than employed in Europe, but more likely to be unemployed in England. As discussed earlier, partnerships have been shown to influence decisions around retirement, which may supersede the role of partners with respect to the theory around employability. In other words, joint relationship decisions may be more important than the way that a partner could improve one's employability and access to job opportunities. The only hint from the data that marital status may improve one's employment outcome is that single people were more likely to be unemployed in England in some of the waves.

The other social capital measure available for both datasets, membership in an organisation, was positively associated with the likelihood of being retired rather than employed in a number of waves of ELSA as well as Wave 4 of SHARE. These findings provide no support for the theoretical role of this element of social capital in the employability framework, as the expected result would be that participating in social groups would improve the likelihood of being employed. However, this again operates more for the idea of how social connections can improve access to job opportunities and paths for re-employment; the social role that work plays in people's everyday lives is likely to lead to people finding other social activities once they leave work and enter retirement, and this finding could reflect this phenomenon. Still, no association between organisational membership and the likelihood of being unemployed suggests in this context that employed people do not have higher employability in this regard than those looking for work.

Because of differences in the approaches taken with the ELSA and SHARE data regarding the dispositional elements related to employability, direct comparison between the two sets of analysis are more difficult to make. At the same time, there were very few to no associations using either dataset from which clear and consistent associations between these measures and labour market status emerged. The only instances of strong associations from the SHARE data related to the measures of optimism and financial limitations for those unemployed compared to employed. As discussed in the previous chapter, higher optimism was associated with a lower likelihood of being unemployed, while feeling limited by a shortage of money was associated with a higher likelihood, and both these findings could be impacted by endogeneity. In the ELSA data, there is very weak support or corroboration of these

findings. The lack of clear associations between these elements and labour market status could be related to the measures used here to approximate the concepts of interest; this will be discussed in further detail later.

With both the English and European data, having informal care responsibilities was positively associated with the likelihood of being retired rather than employed, but no associations appeared with respect to the unemployed. This difference could be related to the intensity of care provision, as those with fewer care responsibilities may be equally likely to work or be looking for work, while those with a more intense need to provide care may opt to exit the labour market altogether. Thinking back to the dimensions of employability, this provides support for the idea that people with greater flexibility from external constraints are better positioned to work.

However, this should be considered with respect to the other measures related to such flexibility – those dispositional variables related to family responsibilities and financial limitations. Being more constrained by financial concerns was associated with a greater likelihood of being unemployed, though the associations were weaker in the English data than with SHARE; however, as mentioned in earlier discussions, these financial pressures could in fact result from the absence of income during a period of unemployment. Less flexibility due to family responsibilities showed some associations with the likelihood of being retired, but the results are inconsistent across waves and the direction of association is different for ELSA and SHARE. Overall, the findings from the research here provide only tenuous support for the idea that greater flexibility as a component of employability is related to better employment outcomes. It is more feasible that informal care provision itself represents a particular concern for older people with regard to working in later life.

8.2 Comparing the Results on Employability and Labour Market

Transitions

Just as there were differences in the approaches used for the cross-sectional analyses of ELSA and SHARE, the longitudinal models looking at transitions were also different regarding the English and European contexts, making direct comparisons slightly challenging. To review, the ELSA models were divided by gender since the state pension age was different for the men and women in the sample. The models using SHARE included the macro-level variable of official retirement age (differentiated by gender within countries where applicable), so gender was included as a predictor in these models.

The models using SHARE also differed from those using ELSA due to the inclusion of the macro-level variables within a multilevel model. Nonetheless, comparing the results related to the predictors common to both approaches helps offer answers to the underlying objective of this research to identify the potential role of employability in facilitating transitions in the labour market among older workers, taking into account the impact of the economic, social, and cultural context.

With the ELSA data, there were few differences in the results between the genders with respect to re-employment, but more differences emerged in the models of employment exit. Specifically, age was not significant for men regarding exit, but showed slight significance ($p < 0.1$) for women. Also for exit, poor health, educational level, and being a carer were significant for men but not women, while being married rather than single and having undertaken training were significant for women but not men. Regarding re-employment, limitations in health that impact work, training, and

being a carer were all significant for both genders, though caring was significant for women only at the $p < 0.1$ level. Income demonstrated associations with both exit and re-employment for both genders, though only for higher quintiles at the $p < 0.1$ level with respect to re-employment.

In comparison to the results using SHARE, the overarching theme to emerge is that established determinants related to socio-demographic factors provide the bulk of predictive power in these models of employment exit and entry. Overall, higher income was related to an increased likelihood of re-entry, although the significance level was not as strong for the ELSA data. Higher income was associated with a lower likelihood of exit from employment in all the models, demonstrating that people in the lowest quintile of income have the greatest chance of losing work regardless of national context. Gender played a role as well, by demonstrating significance in the SHARE data with women more likely to exit and less likely to become re-employed; differences in some of the results from the ELSA analysis also suggest the impact of employability measures varies across the genders, such as the impact of caring for men but not for women.

The measures for health also demonstrated significance across the models and datasets, suggesting that health-related issues can severely dampen older people's chances of finding or staying in work. An interesting difference between the SHARE and ELSA data is that general health was not significant in the ELSA data except for exit among men; health-related limitations in work provided the associations in the health dimension. This goes back to the argument posited in earlier chapters that relative poorer health in and of itself is only a factor in labour market outcomes where it has an impact on physical capacity to work. The joint associations of the two variables in SHARE

is likely a result of the limitations measure in SHARE not being explicitly related to limitations that impact work; the finding does however support the notion that limitations resulting from health conditions are an important factor in the relationship between the health dimension of employability and employment outcomes.

Outside health and income, the results between SHARE and ELSA showed some interesting differences, which varied depending on the transition being modelled. With respect to the exit from employment, there were significant results on the human capital dimension in each model. However, while people in SHARE with degree-level education were less likely to exit, in ELSA men with degrees were more likely to exit, and no association appeared for women. This could be related to differences in the political economies of the UK and European countries. Comparatively greater welfare provision in European states may mean that, for those whose labour market options are fewer due to lower education, early exit from employment may be a more viable opportunity than for English respondents. It could also be that a greater focus on the market in the UK context provides greater early exit opportunities to those with degrees compared to other education levels, as degree-holders may have a comparative advantage in determining their need or desire for work. One way to think about this is the idea of labour commodification; within a liberal market-oriented context, individuals carry greater responsibility for selling themselves as workers. In this respect, English people with lower levels of education may have a greater need to stay in work compared to people with degrees, whose qualification confers greater scope to pursue other interests. In contrast, with the European countries – where labour decommodification certainly varies but is generally considered higher than in liberal welfare regimes like the

UK – the value of a worker with respect to educational qualifications may outweigh the worker's personal need to remain in work ahead of retirement.

The other human capital measure, training, was not associated with exit for men in ELSA. It has already been mentioned that the high prevalence of training that occurs on the job could create an issue of endogeneity, as people who have left work might have fewer options or less need to undertake training. The provision of on the job training may also feature in employers' decisions related to shedding workers when redundancies are necessary, such as in the context of the 2008 financial crisis, as it would be in their interest to keep workers to whom they had recently given training. These factors may play a role in explaining the significance in the SHARE data. The lack of significance for training among men in ELSA could suggest that training itself provides little improvement to one's chances of remaining employed, while the significance for women in ELSA, for whom education was not significant, may provide support to the opposite idea that training can play an important role in keeping older people engaged in work. It could be that differences in the skills held by women and men are related to these different results, with women in greater need of professional development in order to stay employed. The question around training and skills will be discussed in further detail later in this chapter.

While the social capital measures related to marital status and organisational membership were significant with respect to exit from employment in the SHARE data, the only comparable result in the ELSA data was that married women were more likely to exit than single women. For women at least, this supports the idea that partnerships play a role in early exit from employment, either through coordinated retirement decisions or by offering a financial context in which early exit from employment is

possible. Overall, the results do not provide strong support for the underlying theoretical perspective that the social capital dimension of employability confers some benefit to older workers that enables them to remain in work; in contrast, at least in the context of partnerships, elements of social capital may actually play a greater role in promoting exit.

Another interesting difference between the SHARE and ELSA results for the likelihood of exit from employment is the fact that age was not significant for English respondents. More precisely, age was not significant for English men, while there was weak significance of a negative association for English women. This latter point may reflect the notion that older women in employment in England are more likely to be retained in their jobs or choose to stay up to SPA at 60 (in this sample) as they get closer to this age, with early exit more likely closer to the age of 50. Overall however, the weak significance for women and lack of significance for men in the ELSA data suggests that when other factors are taken into consideration, the likelihood of exit from employment is equal for older workers at any age, not just those closest to SPA.

The final point to discuss related to differences in the SHARE and ELSA results for employment exit is the apparent impact of the 2008 financial crisis in terms of significant results for the wave variable. For 2008 compared to 2004 in the ELSA data, the likelihood of exit from employment was lower, while it was higher for the SHARE data comparing 2011 to 2006/7. The positive association in the SHARE may be explained by a comparatively higher impact of the recession on employment in a number of European countries. At the same time, in the English context, employers may have been keener to retain the skills and expertise of their older staff when facing cuts to the

workforce, while older people in England may have also been more drawn to leaving the labour force in the period prior to the recession.

In looking at the results related to re-employment, there are few significant associations for either the SHARE or ELSA data, and for the associations that do exist, there is equal concurrence and divergence in the findings. Higher quintiles of income were associated with a greater likelihood of re-employment, though the significance was weaker in the ELSA data. However, this was only the case for two of the higher income quintiles compared to the lowest, rather than standing true across all levels of income; this could imply that the level of income measured reflects gains through re-employment rather than demonstrating a particular advantage related to higher economic position. Health again played a role, although self-reported general health was not significant in the English data; this further supports the point mentioned above that capacity to work should be a particular focus in considering the intersection of health and employment.

Training was significant for both men and women in ELSA, but less so in the SHARE data ($p < 0.1$); again, this finding, particularly given the timeframes for measuring labour market status in different waves and when the training was undertaken, is likely to reflect on the job training occurring after re-employment rather than the idea that training improves chances of successfully finding work. Though not reported, models that included lagged measures of training were examined, but lagged training was unrelated to re-employment, suggesting this conclusion is the more likely explanation.

Similar to the models of exit, age again demonstrated no significant association with re-employment in the English data but a negative one in the European data. This again suggests some underlying factors in the English context that eliminate any

differences in re-employment chances for people aged 50 to SPA. Another interesting difference in the results related to informal care; being a carer was significantly associated with a lower likelihood of re-employment with the ELSA data ($p < 0.1$ for women) but not significant in the SHARE data. Like with education in the exit transition, this may again relate to variations in the welfare structures in the countries studied, as the provision of informal care manifests in different ways in distinct national contexts given how the roles of the state and family in this respect vary widely. For example, some of the countries like Sweden offer extensive public support in the care sphere, while in others an emphasis on a male breadwinner orientation or a familialist perspective reinforces a gendered division of labour in the domestic sphere that may manifest to a lesser degree in the UK, at least with respect to combining work and care.

The wave of data collection also demonstrated different results in the ELSA and SHARE samples that are worth discussing. First, there were no significant associations with wave and re-employment in ELSA. This suggests that the financial crisis had little impact on older people's chances of finding work. This could mean that older people fared well in terms of finding work across the recession; however, a more likely explanation is that the challenges older people face in this respect were entrenched prior to the recession, such that fewer opportunities in the market due to the downturn did not reduce the rate of success in finding new jobs. In the SHARE data, wave was positively associated with the likelihood of re-employment, meaning that older people were more likely to return to work in the period between 2006/7 and 2011 (spanning the recession) than in the period 2004 to 2006/7. This finding could be the result of a greater number of older people looking for and finding work in the context of austerity or even a result of changing attitudes toward work in later life across Europe. The

inclusion of the Czech Republic and Poland in this time frame, who potentially derived greater benefit from their accession to the EU in 2004 and who were less affected by the recession by being outside the eurozone, may have also contributed to this finding.

Overall, the combined review of the results related to the conceptual dimensions of employability and labour market transitions suggests that the resource-related elements play a complex role in exits from employment among older workers, with some of them influencing the likelihood of re-employment as well. However, those dimensions associated with disposition demonstrated no consistent results related to labour market transitions. These variables provide much of the theoretical depth to the notion of employability, given how many of the resource elements have previously been identified in research to have particular associations with employment. Taken together, the findings here provide no clear evidence that the multidimensional framework of employability can in fact help older workers to remain in employment or find greater success in re-employment. The rest of this chapter discusses the implications of this conclusion, highlighting the ways that some of the different dimensions of the employability concept relate to the expected outcomes. It also offers some explanations on why the findings diverge from expectations and what this means for future efforts to improve labour market outcomes for older workers.

8.3 The Importance of Health

In the design of the conceptual framework for employability, it was argued here that considerations of what would impact an individual's ability to find or keep employment must necessarily include elements related to health. This has already been acknowledged in the work ability approach, and it was of interest here to consider how

and if health and employability were indeed interrelated. A primary conclusion that should be drawn from the different parts of the analysis included here is that health plays a crucial role in older people's interaction with the labour market. While this finding is not new, what the present research does is highlight how the employability of older workers – in terms of what impacts their ability to be employed – is underpinned by good health and the physical capacity to work.

There is an important motivation to keep people healthy, especially if they are to work for longer. Maintaining health and helping people to manage long-term illness can have fiscal benefits for both savings and national health plans, but will also provide benefit to the economy at large. This does however require a life course perspective, as health deterioration in later life is highly related to lifestyle choices made at younger and middle ages. In many cases, for older people with poor health or long-term illness, these conditions can be managed in particular ways, but a preventive approach would be arriving too late.

In this context, successfully addressing the health needs of older people to improve their employability requires greater motivation by employers to provide flexibility in the workplace. In terms of the conceptual framework, this would directly improve individuals' employability on the flexibility dimension by offering greater freedom to combine work with physical limitations as needed, but could also have a positive indirect impact on the adaptability dimension, as individuals with such arrangements could feel better equipped to take on new responsibilities or tackle new challenges. The analysis here did not provide any insight into the kinds of flexible working to which older respondents had access, so this could be a useful component of future research.

An individual's own health is not the only way that sickness can create an obstacle to continued engagement in employment or in the search for work. A growing number of older people provide care to older parents – and even sometimes also to grandchildren – as well as their partners who may be ill. For those that struggle to combine work and care, in these situations leaving work to provide care is generally the only acceptable option, even in cases where the financial resources from work are needed (particularly when the care is given to a partner also out of the labour market). In this context, the ability to be employed can further be affected by the national and cultural context, as nations with strong public support in social care could offer more enabling environments, while those with a greater tradition of family responsibility for the care of older people could have a more challenging one. Thinking ahead, this point should be heavily considered as many countries with a greater focus on family, like those in southern Europe, will also experience a greater squeeze on the labour force from demographic change given their relatively lower fertility rates.

For people who provide care, returning to work is impossible if they cannot access the flexibility that their role as an informal care provider requires. And for those whose care responsibilities have ended, the unfortunate reality is that many of them continue to stay out of the labour market – sometimes because of the negative toll on their own health that informal care can take. For older people to have feasible opportunities to work in later life, adequate support to address the health needs of individuals as well as their responsibilities to those under their care must be available.

8.4 The Question of Skills and Training

As noted in the conceptual framework of employability, human capital is absolutely necessary in discussions around employment. In the context of older workers, there have been many calls in policy circles to promote the updating of older workers' skills, as revitalising and modernising workers' skills are seen as key to managing an ageing workforce. The current cohort of older workers in Europe have low levels of education and qualifications compared to younger groups, and are more likely to have worked in agriculture and production (European Commission 2012). Ageing workers are less likely to be over-skilled, but more likely to be over-educated; it is unclear however whether this finding relates to a bias from a greater proportion of under-educated older workers leaving the labour market early due to an inability to find employment, health issues, or the other barriers that affect employment in later life (Cedefop 2010).

An important way to ensure that workers receive adequate professional development over time is for appropriate training programmes implemented by employers, who usually already have a system for necessary training along with the incentive to keep the productivity of their workforce up. This would also help employers retain their older employees, which they need to do to remain competitive in the future.

Access to such training is crucial, but research indicates there are challenges on two fronts (Jorgensen & Taylor 2008). Some groups of older workers (e.g. temporary or part-time employees) tend to receive fewer opportunities, partly as employers' stereotypes reinforce lingering questions about investing in skills development for older workers, especially when the return on investment is perceived as potentially marginal. At the same time, some older workers themselves can be ambivalent about taking up

training opportunities, consider retraining unnecessary due to their age, or that they are too old to be rehired when unemployed (Phillipson & Smith 2005; Taylor 2008). Thus little uptake of skills training by older people may be because they are unsure that it is worth the effort, in part shaped by the timescale required for the training when considered alongside the expected timing of retirement.

In terms of returning to work, it could also be that the skills necessary for finding re-employment – in contrast to the idea of being qualified for a job – are lacking in many older people, as the process of the job search has changed with time, while for many of them their last job search could have been years or decades prior. Another perhaps key reason that older people struggle to find work even when they do have qualifications and skills could be that the labour market where they live simply does not have any jobs to offer that fit their qualifications. Of course, this would be a key point underscoring the necessity for re-skilling, but for there to be any impact on older people's return to work, the skills development and training on offer would need to be informed by regional and local vacancies, ideally with buy-in from employers to understand the realities rather than stereotypes of the older worker.

However, when thinking about how to help get older people back into work, the available evidence suggests that qualifications and training may not be as important or effective as generally thought. On one hand, the vast majority of older people say they have adequate skills and little need for training, and employers tend to agree (McNair 2011). Older people who undertake formal education toward a qualification are also less likely than younger people to improve their occupational situations (Casebourne et al. 2008). Moreover, age remains a barrier for those looking for re-employment following education, as further training and qualifications do not appear to be a successful

strategy for returning to work among older people (McNair 2010). Where it does seem effective is when it is linked to specific job opportunities like work placements.

There is also some anecdotal evidence from focus groups in other research that supports the idea that retraining and updating skills may not be useful (Beach et al. 2015). Some older people have reported feeling that they were unsuccessful in their job search because they were considered too experienced for the job, or that potential employers did not value their skills and knowledge because they were over 50 despite retraining and updating skills. This perception that skills and experiences are under-appreciated can lead to lower confidence, frustration, and disillusionment, making the journey to find re-employment all the more challenging. In terms of employability, this could also impact individuals' disposition, negating any potential benefit positive dispositional qualities could have on successful labour market outcomes.

While the results from the current study vary to differing degrees, the overarching conclusion is that educational qualifications have opposite associations with employment in an English versus European context, while training – generally more likely in an employed context – may in fact represent the receipt of training from an employer, rather than training itself providing some influence on the success of finding re-employment. As this section highlights, these findings have also emerged in other research. This suggests that the role of human capital as an element of employability may not provide some universal benefit to older workers but should be considered in light of a more detailed approach to older workers' relationship with a given labour market. In other words, while education and skills do matter even for older workers, the way that they influence labour market opportunities are greatly impacted by the

structure of those opportunities rather than imbuing some beneficial quality of broad scope.

8.5 The Potential Contradictions of Disposition

A key contributing component of the employability framework used here relates to the dimensions associated with disposition. As noted in Chapters 3 and 5, this aspect is of growing interest in the existing literature on employability. However, the results from the analyses conducted here showed no strong and consistent associations between the outcome measures and those used for the dispositional elements. A major limiting factor could be the actual measures used here, which has been discussed at various points in previous chapters and will be revisited in the next concluding chapter in a summary of limitations to the current research. Despite the lack of clear evidence here and the potential limitations from the measures, there are nonetheless reasons to explore why the disposition side of employability may be affected by an inherent contradiction in itself.

For older workers, it is possible that career identity will only improve an individual's situation when exit from the labour market becomes an attractive option. Those who want to keep working will make more adaptations if possible, while those with less career identity will accept exit when it is a viable option. This could suggest that improving career identity could be a useful strategy to encourage longer working lives. However, research on other psychological traits such as the Big Five²⁷ has suggested a high degree of stability in these traits within individuals over time, at least

²⁷ The Big Five personality traits include openness (to experience), conscientiousness, extraversion, agreeableness, and neuroticism. Openness has particular parallels with the dispositional dimensions included in the conceptual framework of employability used here.

with respect to the ages of the samples used in this research (cf. Cobb-Clark & Schurer 2012; Specht et al. 2011). As a consequence, those who think about their lives with a strong focus on career may be inherently motivated to stay in work. They may have already made the appropriate choices and efforts to avoid exit, and there may not be much scope for trying to change these traits in later life. This reinforces the importance of a life course perspective, in that the formation of an identity conducive to longer working lives may need to start at the beginning of one's working life, if not even earlier.

This also applies to the conceptual dimension of adaptability. Those people disposed to doing new things may be better positioned to accept new tasks, roles, or responsibilities, which may improve their opportunities to find meaningful work in later life. Similarly, they may also be more amenable to reducing responsibilities or 'down-shifting', which could make phased or gradual retirement options more attractive. This would facilitate the retention of these workers along with the skills and expertise they have to offer. However, a reduced sense of adaptability could also discourage exit. An aversion to change could compel some workers to remain steadfast in their position. They may be reluctant to leave their current job for this reason, even when other factors such as ill health or caring responsibilities make continued work more difficult. Insecurity – both emotional and financial – could also discourage people with low adaptability from simply leaving the workplace for retirement; the unknowns in this new phase of life may make the prospect unpalatable.

Overall, there are sound reasons for the theorised relationship between such dispositional elements to play a role in employability. The current research can provide no clear evidence to support the idea that dispositional qualities influence older people's interactions with the labour market, which could be related to the exit

opportunity that retirement offers older people in contrast to younger and middle aged workers. Like with the human capital dimension discussed in the previous section, the structure of opportunities may play a more fundamental part in older workers' engagement with the labour market than inherent individual aspects of employability.

8.6 The Structure of Opportunities: Older versus Younger Workers

Much of the previous research on employability has been studied within the context of younger workers, looking at preparedness for entry into the workforce (graduate employability; cf. Smith et al. 2000, Cranmer 2006, Dacre Pool & Sewell 2007). Much of this has consequently been framed with respect to graduate skills and the importance of training and qualifications for people's ability to find employment as they enter the labour market. However, this framework for employability leads to a possible argument that employability is fundamentally different based on age. A number of the aspects of graduate employability that revolve around preparedness for labour market entry are likely to have been developed in older workers through participation in work over time. In other words, when it comes to making older workers employable, there may be an important need and motivation to look beyond skills and qualifications. There is unquestionably a need to ensure the health and physical capacity of older workers to allow them to work in fulfilling jobs to later ages. In addition sufficient alternatives will need to be provided to allow older workers to make appropriate and necessary adaptations to their working circumstances, depending on health declines and other needs like care responsibilities. The availability of such opportunities plays an important role in people's ability to engage in work in later life.

One critical difference between older workers and those in other age groups is the cultural institution of retirement. Retirement has evolved over time into an extended period out of work that is generally accepted as recognition for a long working life; it is no longer considered as a phase of later life determined by the inability to work. It thus provides a pathway for older people to stop working that would be seen by others as culturally acceptable; the general public ethos is not that retired people are lazy and should get back to work.

One can think of the impact this would have on a concept like employability when contrasted to the attitudes toward inactivity of another age group. Specifically, there has even evolved a unique terms that applies to younger people who are not in work or pursuing some form of education or training: NEETs (not in employment, education, or training). Youth unemployment continues to feature in policy debates as a particular concern since a lack of employment in early working life may foster a generalised sense of detachment from work and could greatly impact individuals' opportunities to save or otherwise engage in the future. In general, public thought, at least in the UK context, is that NEETs should be doing something, either in work or engaging in something to improve their human capital, and policies should be applied to help younger people follow this pathway.

This contrasting perspective toward NEETs supports the argument that employability – as it has generally been framed in this and previous research – may be mitigated by the structure of opportunities in the labour market. The retirement pathway, combined with issues that relate more often to older rather than younger people like health and care, may mean that the relationship between a measure of employability and labour market outcomes would differ according to age. This may

explain why little evidence to support the theorised relationships in this research was identified. Employability, as it has been understood, may not be a helpful tool in driving increases in employment in later life.

Chapter 9: Conclusion

This research has examined the concept of employability as it applies to the labour market dynamics of older workers in Europe. It began with an overview of why population ageing is a concern for European countries, particularly with respect to an ageing workforce. It continued by looking at the particular issues that older workers face alongside the influences of public policy that impact the labour market. This policy context then led to a focus on the concept of employability, and a specific conceptual framework was developed based on previous research to facilitate an exploration of how employability might be applied as a tool to improve the employment opportunities and labour force participation of older workers, given the policy drive to extend working lives.

The analysis began by looking at different conceptual dimensions of employability as they relate to the labour market status of older workers in England, first with a focus on resources followed by elements related to disposition. This was extended to look at these relationships with exits from employment and successes at re-employment. Looking first at the singular national context of England offered such an examination without the influence of different policies and orientations toward social provision and regulation of the labour market. However, this influence of the social, political, and economic environment was also of interest; the analysis was consequently extended to a European context, where such factors were incorporated into the models.

The different stages of this research offer specific insights into the relationship between employability and labour market outcomes for older workers. Overall, however, the research sought to identify the ways that employability could serve as a

useful tool to facilitate extended working lives. The findings provide little evidence that promoting employability as an overall concept can improve labour market outcomes for older workers. Under the conceptual framework of employability applied here, older workers' relationships with employment appear to be driven mainly by factors associated with their health and socio-economic position. However, the contextual setting – in this case, country – does play a role in shaping such relationships. A number of policy orientations and cultural factors appear significant, at least when considered with respect to exits from employment.

In many ways, these findings lead to a recognition that there are different roles that can be played by individuals, governments, and business to encourage extended working lives. Older people have a certain degree of agency, but they do not exist in a space shaped solely on their own. The different structure of opportunities that older workers have in comparison to other age groups – including the effects of deteriorating health as well as the culturally accepted and expected option of labour market withdrawal into retirement – plays an important role in shaping the latter part of their working lives. In particular, the presence of the retirement pathway highlights the importance of retention when thinking about the labour market dynamics of older workers. In fact, even within the context of the employability research here, there are important reasons to consider how the differences in retention and recruitment among older workers require diverse approaches and attention. This chapter provides some reflections on these two themes and concludes with a discussion on the limitations of this study, with potential solutions and directions for further research on the employability of older workers.

9.1 Individuals, Governments, and Businesses: Different Roles to Play

The longitudinal European component of the current research introduced macro-level variables to account for variation in certain policy elements that are theoretically conceived to play a role in shaping the opportunities of older workers. And while the previous research on employability highlighted the importance of considering such outside factors on an individual's outcome, much of the focus in policy analysis on extending working lives has been on supply-side issues, that is, whether older people themselves are equipped or have the right qualities to keep working. This context provided much of the impetus to explore the employability concept in this research.

However, it must be accepted that labour market dynamics also feature the demand side of things. While the research literature has looked at the older worker, their skills, what encourages them to retire, and so on, these insights often neglect to consider the degree to which European economies have been creating the right sort of jobs to meet the needs and wishes of older workers or if the requirements of these jobs match existing skills of older workers. And yet, for any progress to be made on facilitating extending working lives, appropriate jobs must be available for older workers to occupy.

This suggests that there are important roles to be played by other relevant stakeholders, in particular government and business, if the labour force participation rates of older workers are to increase. Of course, individuals have responsibilities themselves, such as looking after their own health and engaging in lifelong learning to keep up their skills and expertise. However, the research findings here related to the employability concept found no clear evidence that the dispositional elements, for

example, were highly correlated with labour market outcomes. In other words, theorised ideas like motivation or adaptability did not clearly lead to better employment opportunities, which suggests that the extent to which older individuals have full agency over their ability to find employment is limited. This underscores how they also require environments supportive to working in later life if real opportunities are to be achieved.

Supportive environments to facilitate work in later life – combined with both the lack of evidence for an impact from dispositional elements of employability and the identification of known associations between labour market outcomes and variables related to health and physical capacity to work – suggest an enhanced role for the work ability concept as opposed to a broader employability approach as modelled here. In other words, the empirical evidence presented here may indicate that the work ability approach is more suitable for helping older individuals improve their opportunities with respect to employment.

The framework adopted here introduced health-related elements to understand employability given their well-established influence on work outcomes. Yet a lack of significance on many of the other employability dimensions when controlling for health suggests that the psychosocial characteristics that differentiate older workers are irrelevant with respect to their labour market opportunities and outcomes. Rather than identifying the variety of qualities in multiple dimensions that can improve older workers' employability, the evidence here identified a primary importance for health and physical capacity when looking at older workers. As a result – at least when it comes to work in later life – work ability, with its base in health, appears to be a much more useful concept than employability when it comes to improving labour market opportunities. Moreover, the work ability approach has been more thoroughly validated

and consistently applied in empirical work, although this could indicate concerns around the employability model here, as discussed later in this chapter.

The influence of the cultural construct of retirement on labour market exit was discussed in the previous chapter. The results from the European analysis here demonstrated that having an official retirement age of 65 reduced the likelihood of exit from employment, while a higher effective retirement age was positively associated with the likelihood of re-employment. These findings suggest that there is real scope for public policy around retirement age to influence older people's engagement with the labour market. In this sense, governments can be encouraged that ongoing efforts to gradually increase statutory retirement ages – likely to also increase effective retirement ages – are likely to improve labour force participation of older workers.

At the same time, some of the macro-level variables did not demonstrate the expected associations with labour market transition. In particular, a higher proportion of spending on active labour market policy was associated with a higher likelihood of exit from employment and had no association with re-employment. While there could be different explanations for these unexpected results, governments can still play a role in providing appropriate support services for older jobseekers. The results here may in fact reflect a reality that existing services do a poor job in addressing the needs specific to older people; the UK for example has begun a rollout in 2015 of champions to different JobCentres Plus to help offer guidance specific to the older worker, and it will be interesting to see if future research identifies this as an effective way to facilitate re-employment among older people.²⁸

²⁸ A previous UK scheme for older jobseekers, New Deal 50+, was replaced in October 2009 by a programme without a specific component for older people. Much of the research evidence on the programme has been descriptive rather than an assessment of impact (Vegeris et al. 2010).

There is often significant variation in the policies and practices related to older workers, even within a particular country. Regional factors, such as structural unemployment or differing degrees of influence in regional governments, can play important roles in shaping the kinds of opportunities available to older people in the labour market. Some EU countries have strong regional governments with rather robust policy-making powers, for example, the German Länder or Spanish Autonomous Regions. While national policy may be better suited for shaping such elements related to cultural expectations like the retirement age, it is important to recognise that smaller geographical entities may yield greater influence on determining how older people interact with the labour market, particularly when considering how different local areas or regions can vary widely in the employment opportunities available. This factor has not been taken into account in the current research, but its importance should be recognised and highlights an opportunity for further research.

Still, while governments can play a role in encouraging later retirement or helping older jobless people search for work, employment in most contexts also requires an employer; businesses also have a crucial role to play if the labour market participation rates of older workers are to increase. In fact, the changing age structure of the population means that businesses will need to draw more and more on older workers to fill their labour needs. Competitive businesses will also recognise that by taking an age-inclusive approach, for example, in recruitment, they will tap into a larger pool of talent and increase the likelihood of finding a highly-qualified applicant who best matches a given job opening. In other words, business interest in older workers not only benefits the worker but the business itself.

While age bias is prevalent across all aspect of society, EU businesses are obligated under law to avoid discrimination on the basis of age. However, age itself continues to be a major barrier to employment for older workers, shaped by stereotypes that manifest in the form of discrimination. Businesses also have an important role to play in this respect, by addressing unconscious bias among their staff – especially those involved in management and recruitment – and promoting positive images and messaging around ageing and older people. In fact, a great deal of what businesses can do with respect to encouraging higher rates of labour force participation among older people will differ whether they are looking at recruiting new members of staff or seeking to keep on their current employees as they age. The next section turns to this distinction between the different needs related to retention and recruitment.

9.2 Retention versus Recruitment: Different Focal Needs

The separate dependent variables used for the longitudinal elements of the analysis of both the ELSA and SHARE data represent exit from and re-entry into employment. In this way, they reflect the related but distinct issues of the retention and recruitment of older workers. In other words, not exiting employment in this sense can be considered akin to retention, while re-entry reflects recruitment.

This is an important distinction to consider when reviewing the potential relationship between the concept of employability and older workers. Any efforts seeking to help older people be actively engaged in the labour market will need to consider the starting point of these older people, as the ideas of remaining in and finding work themselves entail different processes. Among the results in this research, some of the measures included here to assess employability have different associations

with the outcome of labour market transition depending on whether the outcome reflects exit from or re-entry into employment. For example, while there are fewer apparent differences in the English data, the European data suggest that the human and social capital elements are associated with exit (retention) but not re-entry (recruitment). From the theoretical background underpinning this research, this could reflect the idea that these particular resources structure a decision to retire rather than condition one's position in the labour market. In other words, human and social capital play less of a role in helping an older person get back into work than they do in shaping the timing of exit from the labour market.

This finding is of particular relevance given the relative importance placed on the human capital elements within the discourse on employability and the general policy debates around extending working lives. The results here do not identify in a clear way the expected relationships between education or training and labour market outcome. This is not to say that human capital elements are irrelevant for older people's opportunities for employment, only that a clear conclusion that more educated or trained older people are more likely to stay in or find work cannot be drawn from the findings here. This is likely to relate to the greater heterogeneity of older workers as a group combined with differences in the local labour markets in which they find themselves, where a particular set of skills may or may not be of use.

As previously mentioned, the idea of the cultural construct of retirement plays a role in stimulating or structuring the labour market exit of older workers. As a cultural norm, older people think about retirement, making different plans and developing different expectations around their exit from the world of work. Within this context, retention and recruitment must entail different strategies in order to promote extending

working lives and keep older workers engaged in the labour market. For example, older people in work may have developed an idea of retiring at a particular age but could be persuaded to stay on given the right structure of incentives to do so. Businesses can facilitate this by encouraging routine and open conversations on such topics with their employees, preferably well before they get close to the traditional retirement age. Likely of particular importance – as reflected in the findings in this research – is how older people may also need accommodations in the workplace to account for declines in health or a need to provide care. In this respect, businesses have a duty to provide safe working environments, but they should also explore options for flexible work in order to retain the knowledge and expertise of existing staff but also to serve as an attractive employer to potential recruits. All in all, older workers today are aware of the retirement option, so promoting extended working lives, reducing early exit, and improving the retention of older workers must make work fit their needs.

At the same time, those older workers whose needs have not been met and who are out of work may see full withdrawal into retirement as a preferred option when their search for work appears to lead nowhere and they become discouraged with their prospects for re-employment. Much of this often relates to the age-based barriers that older people face in the job market. As highlighted in the previous section, this is an area where governments and businesses have particularly crucial roles to play. Governments need to ensure that appropriate and substantive support services are available for jobseekers, and that the institutions in place do not themselves discourage or belittle older people. Businesses can encourage older jobseekers by avoiding age-based terminology in their advertisements, posting announcements for vacancies in a wide

range of media, and offering age management or unconscious bias training to their human resource and management staff.

There are particular reasons to think about retention and recruitment separately when it comes to older workers. Any strategies seeking to improve the labour force participation of older workers will differ depending on whether they seek to keep older employees in the work force or if they aim to help older people find employment. This fundamental difference was also reflected in how the elements related to employability in the research here demonstrated different associations with the different types of labour market transitions. This reinforces the idea that the employability idea may not offer a strong central concept to enhance overall employment among older workers, but that research to this end may need to adopt a more nuanced approach based on more specifically defined goals or subgroups of older people.

9.3 Limitations of the Current Research and Paths for Future Work

As with any complex and detailed piece of research such as this, there are always certain limitations between what is desired and what can be achieved. In this work, a number of the primary limitations results from the use of the large-scale datasets ELSA and SHARE and the fact that they did not provide indicators on employability to the detail seen in previous research. However, a primary motivating factor in this research was to explore the employability concept within a nationally-representative context in hopes of gaining insight into how various aspects of employability could inform policy-making with respect to older workers. Moreover, the cross-national comparative component was of interest in order to highlight the potential for different contexts to influence the relationships of interest. As such, this research needed to use the large

survey datasets, as it would have been unfeasible and much too broad in scope to conduct primary data collection in the form of a specially designed survey in multiple countries.

As highlighted in various parts of this research, a main implication of this overall limitation has been that the indicators available to assess the dispositional elements of employability were far from ideal. While the conceptual link was made in Chapter 5 to connect the available indicators associated with quality of life with the dispositional ideas of from the conceptual model, the fact that these items do not better reflect the elements seen in previous research on employability creates a strong limitation to the current work. Although this compromise was unavoidable, it does highlight the possibility for future work to be done that could revisit the conceptual framework applied here using more of the dispositional measures that feature in earlier work on employability.

There were other cases where the independent variables used here to model the dimensions of employability were limited in the kind of information they could provide. The training variable was restricted to a small window just prior to the respondent's interview; in all likelihood, training that may have been undertaken by individuals out of work that then helps them find re-employment will have occurred a bit farther into the past than this measure captures. Moreover, the training variable does not capture whether the training or educational course was even related to work or not. Similarly, the social capital variables related to relationships (where available) only capture the absolute number of close relationships, but no further information related to the depth of them. There was no way to identify those social connections that would have been

more closely associated with work and thus potential links to job opportunities, a strong component for the theoretical basis of a social capital dimension of employability.

These limitations in available independent variables are important considerations, and future research on this topic should strive to find better indicators for analysis. As mentioned above, the dispositional elements could be improved by using the same questions designed for previous employability research, but there are other areas for improvement. For example, a variable related to training would be improved if it contained information on the nature of the training undertaken, as well as a more useful timeframe for exploring training and outcomes over time. The impact of training on labour market outcomes is likely to manifest both on a shorter time scale than the two-year window available across the waves of data as well as a longer timescale than the month prior to interview. Furthermore, It would potentially be insightful if the time between training and measurement of labour market outcome were known, possibly leading to the discovery of an 'optimal' time to expect training to impact one's position in the labour market. From the point of view of policy intervention, this could then offer a sort of benchmark for follow-up with training participants.

Another measurement improvement that might provide insights obscured here would be more refined measures of social capital. In particular, indicators that assess work-related social capital, e.g. number of colleagues who are friends, would likely bear greater relevance on labour market outcomes than measures that look solely at the broad social network. In addition, as discussed in Chapter 4, the depth of social connections are also important, so measures that incorporate the closeness of different social relationships would be more informative. Insights from improving social capital measures in these ways could provide recommended guidance to people on the kinds of

relationships they should work to develop in order to better position themselves for improved labour market opportunities in later life. Some of the limitations due to the data also arose at different points in the dependent variable used. In the analysis of labour market transitions, respondents were categorised in terms of being in or out of employment. As a consequence, all those inactive or unemployed were grouped together. Ideally, given the distinct factors that contribute to labour market exit into retirement, this examination of employability would have focussed more specifically on transitions between employment and unemployment. This was unfortunately not possible primarily due to the small numbers of transitions that occurred strictly between employment and unemployment, and the restrictions this placed on possible statistical analysis. Addressing this limitation would be a ripe avenue for extending this research in order to better understand the elements that impact older people's transitions solely within the labour market.

A unique contribution of this research was to explore employability within the multilevel framework and to incorporate different macro-level factors associated with the social and policy contexts of different countries. However, a lingering limitation to the current research in this respect is a lack of information on the meso-level, in particular, elements related to respondents' current or recent work environment. For example, the overall prevalence of flexible working hours was included as a macro-level variable, but a much better measure would have been to identify whether respondents had access to flexible work in their own specific work contexts. This would inform the flexibility dimension of employability beyond the one aspect of informal care responsibilities used here.

Moreover, a range of other indicators specific to the meso-level of the work environment would have been ideal, particularly to assess the degree to which a respondent's current or previous employer accommodated health needs or the underlying interface with the management structure. These and other aspects, like industrial sector or firm size, would add the meso-level into the multilevel framework and provide insights into the degree to which specific work environments moderate the outcomes individuals experience in particular labour market contexts. Future work looking at employability or the labour market transitions of older workers should put emphasis on identifying how factors at this level play a role and how they vary within different national contexts. Such indicators would therefore greatly enrich the understanding of how employability relates to labour market outcomes.

While it would be difficult for any research project at the scale of a doctorate to satisfactorily address these different limitations and pursue all these possibilities, there could be scope for existing large-scale surveys to assist in remedying some of the pitfalls. With respect to the ELSA and SHARE datasets, a starting point would be to collect information on work satisfaction variables for people who are out of work based on their previous jobs. This would allow more complete longitudinal analyses to be constructed and would not add significant burden to the data collection since this would only need to be assessed once. However, modifying these datasets to address some of the other issues around the employability or meso-level measures is likely to be unrealistic. An alternative solution could rest in the national Labour Force Surveys, which already collect extensive data on respondents' working situations. These surveys also generally have sufficient sample sizes to conduct analyses on transitions.

This research has argued that employability may not be a useful tool for improving the labour market participation of older people, as the data analysis demonstrated few clear insights into how the theorised dimensions of the conceptual framework could yield greater employment for this age group. Nonetheless, there are important reasons to develop a better understanding of the factors that relate to employability, how these might be harnessed to enhance older people's engagement with work into later life, and how different contexts shape the structure of such opportunities. As European societies continue to experience demographic change and ageing of their workforces, further insights in this respect could play a crucial role in helping promote extended – but fulfilling – working lives.

References

- Adler, P.S. & Kwon, S.-W. (2002) "Social Capital: Prospects for a New Concept." *The Academy of Management Review*. 27(1): 17–40.
- Alavinia, S.M., de Boer, A.G.E.M., van Duivenbooden, J.C., Fings-Dresen, M.H.W., & Burdorf, A. (2009) "Determinants of work ability and its predictive value for disability." *Occupational Medicine*. 59(1): 32-37
- Allen, W.D. (2000) "Social networks and self-employment." *The Journal of Socio-Economics*. 29(5): 487–501.
- Anderson, K. & Burkhauser, R. (1984) "The importance of the measure of health in empirical estimates of the labor supply of older men." *Economics Letters*. 16(3-4): 375–380.
- Andrew, A. (2009) "Challenging Boundaries to 'Employability': Women Apprentices in a Non-Traditional Occupation." *Social Policy & Society*. 8(3): 347-359.
- Arber, S. & Ginn, J. (1995) "Gender Differences in the Relationship between Paid Employment and Informal Care." *Work, Employment & Society*. 9(3): 445–471.
- Arksey, H. & Glendinning, C. (2008) "Combining Work and Care: Carers' Decision-making in the Context of Competing Policy Pressures." *Social Policy & Administration*. 42(1): 1–18.
- Ashford, S. & Taylor, M. (1990) "Adaptation to work transitions: An integrative approach." in G. Ferris & K. Rowland, eds. *Research in Personnel and Human Resources Management*. Greenwich, CT: JAI Press, pp. 1–39.
- Avolio, B. & Waldman, D. (1994) "Variation in Cognitive, Perceptual, and Psychomotor Abilities Across the Working Life Span: Examining the Effects of Race, Sex, Experience, Education, and Occupational Type." *Psychology and Aging*, 9(3): 430-442.
- Baker, M., Stabile, M. & Deri, C. (2004) "What Do Self-Reported, Objective, Measures of Health Measure?" *The Journal of Human Resources*. 39(4): 1067–1093.
- Ball, K., Berch, D., Helmers, K., Jobe, J., Leveck, M., Marsiske, M., Morris, J., Rebok, G., Smith, D., Tennstedt, S., Unverzagt, F., & Willis, S. (2002) "Effects of Cognitive Training Interventions with Older Adults: A Randomized Controlled Trial." *Journal of the American Medical Association*. 288(18): 2271-2281.
- Beach, B., Bamford, S., Franklin, B., & Holley-Moore, G. (2015) *The Missing Million: Pathways back into employment*. London: Business in the Community (BITC).
- Becker, G. (1964) *Human Capital*. New York: Columbia University Press.
- Becker, G. (1994) *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education* 3rd ed. University of Chicago Press.
- Beehr, T., Glazer, S., Nielson, N., & Farmer, S. (2000) "Work and Nonwork Predictors of Employees' Retirement Ages." *Journal of Vocational Behavior*. 57(2): 206-225.
- Benítez-Silva, H., Buchinsky, M., Man Chan, H., Cheidvasser, S. & Rust, J. (2004) "How large is the bias in self-reported disability?" *Journal of Applied Econometrics*. 19(6): 649–670.
- Berkman, L.F. & Syme, S.L. (1979) "Social Networks, Host Residence, and Mortality: A Nine-Year Follow-Up Study of Alameda County Residents." *American Journal of Epidemiology*. 109(2): 186–204.

- Berntson, E., Näswall, K., & Sverke, M. (2010) "The moderating role of employability in the association between job insecurity and exit, voice, loyalty and neglect." *Economic and Industrial Democracy*. 31(2): 215-230.
- Berntson, E., Sverke, M. & Marklund, S. (2006) "Predicting Perceived Employability: Human Capital or Labour Market Opportunities?" *Economic and Industrial Democracy*. 27(2): 223–244.
- Bettio, F. & Plantenga, J. (2004) "Comparing Care Regimes in Europe." *Feminist Economics*. 10(1): 85-113.
- Blau, D.M. (1998) "Labor Force Dynamics of Older Married Couples." *Journal of Labor Economics*. 16(3): 595–629.
- Blau, D. & Shvydko, T. (2007) "Labor Market Rigidities and the Employment Behavior of Older Workers." IZA Discussion Paper No. 2996. Bonn: Institute for the Study of Labour (IZA).
- Blöndal, S. & Scarpetta, S. (1999) "The Retirement Decision in OECD Countries". OECD Economics Department Working Papers, No. 202. OECD Publishing.
- Blundell, R., Dearden, L., Meghir, C. & Sianesi, B. (1999) "Human Capital Investment: The Returns from Education and Training to the Individual, the Firm and the Economy." *Fiscal Studies*. 20(1): 1–23.
- Bolin, K., Lindgren, B. & Lundborg, P. (2008) "Your next of kin or your own career? Caring and working among the 50+ of Europe." *Journal of Health Economics*. 27(3): 718–38.
- Börsch-Supan, A., Düzgün, I. & Weiss, M. (2006) "Age and productivity in work teams: evidence from the assembly line." Presented at the 8th Economics of Ageing RTN Workshop, Paris, May.
- Bound, J. (1991) "Self-Reported versus Objective Measures of Health in Retirement Models." *The Journal of Human Resources*. 26(1): 106–138.
- Bound, J., Schoenbaum, M., Stinebrickner, T.R. & Waidmann, T. (1999) "The dynamic effects of health on the labor force transitions of older workers." *Labour Economics*. 6(2): 179–202.
- Bourdieu, P. (1986) "The Forms of Capital." in J. G. Richardson, ed. *Handbook of Theory and Research for the Sociology of Education*. New York: Greenwood Press, pp. 241–258.
- Bowling, A. & Windsor, J. (2008) "The effects of questions order and response-choice on self-rated health status in the English Longitudinal Study of Ageing (ELSA)." *Journal of Epidemiology and Community Health*. 62(1): 81–85.
- Briscoe, J.P., Hall, D.T. & Frautschy DeMuth, R.L. (2006) "Protean and boundaryless careers: An empirical exploration." *Journal of Vocational Behavior*. 69(1): 30–47.
- Brooke, L. & Taylor, P. (2005) "Older workers and employment: managing age relations." *Ageing & Society*. 25(3): 415-429.
- Brown, P., Hesketh, A., & Williams, S. (2003) "Employability in a Knowledge-driven Economy." *Journal of Education and Work*. 16(2): 107-126.
- Buckner, L. & Yeandle, S. (2015) *Valuing Carers 2015: the rising value of carers' support*. London: Carers UK.

- Büsch, V., Dittrich, D., & Lieberum, U. (2010) "Determinants of work Motivation and Work Ability among Older Workers and Implications for the Desire for Continued Employment." *Comparative Population Studies*. 35(4): 931-958.
- Bynner, J., Butler, N., Ferri, E., Shepherd, P. & Smith, K. (2000) *The Design and Conduct of the 1999-2000 Surveys of the National Child Development Study and the 1970 British Cohort Study*. Centre for Longitudinal Studies Cohort Series Working Paper 1.
- Camerino, D., van der Heijden, B., Estryng-Behar, M., Kiss, P., Pokorski, J., Hasselhorn, H-M. & the NEXT-Study Group. "Work ability in the nursing profession." in H-M. Hasselhorn, P. Tackenberg, & B.H. Müller (eds.) *Working conditions and intent to leave the profession among nursing staff in Europe*. Report No. 7. Stockholm: National Institute of Working Life.
- Cannuscio, C.C., Colditz, G., Rimm, E.B., Berkman, L.F., Jones, C.P. & Kawachi, I. (2004) "Employment status, social ties, and caregivers' mental health." *Social Science & Medicine*. 58(7): 1247-56.
- Carmichael, F. & Charles, S. (2003) "The opportunity costs of informal care: does gender matter?" *Journal of Health Economics*. 22(5): 781-803.
- Carmichael, F., Charles, S. & Hulme, C. (2010) "Who will care? Employment participation and willingness to supply informal care." *Journal of Health Economics*. 29(1): 182-90.
- Carmichael, F., Hulme, C., Sheppard, S. & Connell, G. (2008) "Work – life imbalance: Informal care and paid employment in the UK." *Feminist Economics*. 14(2): 3-35.
- Casebourne, J., Bivand, P., Franceschelli, M., & Forsythe, L. (2008) *Impact of Learning on Employability*. Coventry: Learning and Skills Council.
- Cedefop (The European Centre for the Development of Vocational Training) (2010) "The right skills for silver workers: An empirical analysis." Research Paper No. 8. Luxembourg: Publications Office of the European Union.
- Chartered Institute of Personnel and Development (CIPD) (2005) *Tackling age discrimination in the workplace: Creating a new age for all*. London: CIPD.
- Clarke, M. & Patrickson, M. (2008) "The new covenant of employability." *Employee Relations*. 30(2): 121-141.
- Cobb-Clark, D. & Schurer, S. (2012) "The stability of big-five personality traits." IZA Discussion Paper No. 5943. Bonn: Institute for the Study of Labour (IZA).
- Coleman, J. (1990) *Foundations of Social Theory*. Harvard University Press.
- Coleman, J. (1988) "Social Capital in the Creation of Human Capital." *American Journal of Sociology*. 94(Supplement): S95-S120.
- Commission of the European Communities (CEC) (2007a) *Towards Common Principles of Flexicurity: More and better jobs through flexibility and security*, COM(2007) 359 final, Brussels, 27 Jun 2007.
- CEC (2007b) *Integrated Guidelines for Growth and Jobs (2008-2010)*, COM(2007) 803 final, Part V, Brussels, 11 Dec 2007.
- Cornwell, B. (2011) "Independence Through Social Networks: Bridging Potential Among Older Women and Men." *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*. 66(6): 782-794.

- Cranmer, S. (2006) "Enhancing graduate employability: Best intentions and mixed outcomes." *Studies in Higher Education*. 31(2): 169-184.
- Creed, P., Fallon, T. & Hood, M. (2009) "The relationship between career adaptability, person and situation variables, and career concerns in young adults." *Journal of Vocational Behavior*. 74(2): 219-229.
- Creighton, H. (2014) *Europe's Ageing Demography: ILC-UK 2014 EU Factpack*. London: International Longevity Centre – UK.
- Crossley, T.F. & Kennedy, S. (2002) "The reliability of self-assessed health status." *Journal of Health Economics*. 21(4): 643-58.
- Currie, J. & Madrian, B.C. (1999) "Health, health insurance and the labor market." in *Handbook of Labor Economics*. pp. 3309-3416.
- Dacre Pool, L. & Sewell, P. (2007) "The key to employability: developing a practical model of graduate employability." *Education and Training*. 49(4): 277-289.
- Dahl, S.-Å., Nilsen, Ø.A. & Vaage, K. (2003) "Gender Difference in Early Retirement Behaviour." *European Sociological Review*. 19(2): 179-198.
- Daniel, K. & Heywood, J.S. (2007) "The determinants of hiring older workers: UK evidence." *Labour Economics*. 14(1): 35-51.
- Danø, A.M., Ejrnæs, M., & Husted, L. (2005) "Do single women value early retirement more than single men?" *Labour Economics*. 12(1): 47-71.
- Davies, P. & Hughes, J. (2009) "The fractured arms of government and the premature end of lifelong learning." *Journal of Education Policy*. 24(5): 595-610.
- De Cuyper, N., Bernhard-Oettel, C., Berntson, E., De Witte, H. & Alarco, B. (2008) "Employability and Employees' Well-Being: Mediation by Job Insecurity." *Applied Psychology*. 57(3): 488-509.
- Deelen, A., de Graaf-Zijl, M. & van den Berge, W. (2014) *Labour market effects of job displacement for prime-age and older workers*. CPB Discussion Paper 285. CPB Netherlands Bureau for Economic Policy Analysis.
- Denaeghel, K., Mortelmans, D., & Borghgraef, A. (2011) "Spousal influence on the retirement decisions of single-earner and dual-earner couples." *Advances in Life Course Research*. 16(3): 112-123
- Dentinger, E. & Clarkberg, M. "Informal Caregiving and Retirement Timing among Men and Women: Gender and Caregiving Relationships in Late Midlife." *Journal of Family Issues*. 23(7): 857-579.
- Descy, P. (2006) "Review of European and international statistics." in T. Tikkanen & B. Nyhan (eds.), *Promoting lifelong learning for older workers: An international overview*. Cedefop Reference Series 65. Luxembourg: Office for Official Publications of the European Communities, pp. 68-89.
- Digman, J. (1990) "Personality Structure: Emergence of the Five-Factor Model." *Annual Review of Psychology*. 41(1): 417-440.

- Dingeldey, I. (2007) "Between workfare and enablement – The different paths to transformation of the welfare state: A comparative analysis of activating labour market policies." *European Journal of Political Research*. 46: 823-51.
- Disney, R., Emmerson, C. & Wakefield, M. (2006) "Ill health and retirement in Britain: a panel data-based analysis." *Journal of Health Economics*. 25(4): 621–49.
- Dorn, D. & Sousa-Poza, A. (2010) "Voluntary and involuntary early retirement: an international analysis." *Applied Economics*. 42(4): 427-438.
- Duffy, R. (2010) "Sense of Control and Career Adaptability Among Undergraduate Students." *Journal of Career Assessment*. 18(4): 420–430.
- Duncan, C. & Loretto, W. (2004) "Never the Right Age? Gender and Age-Based Discrimination in Employment." *Gender, Work and Organization*. 11(1): 95-115.
- Dwyer, D.S. & Mitchell, O.S. (1999) "Health problems as determinants of retirement: are self-rated measures endogenous?" *Journal of Health Economics*. 18(2): 173–93.
- Ebbinghaus, B. (2006) *Reforming Early Retirement in Europe, Japan and the USA*. Oxford: Oxford University Press.
- ec.europa.eu (website of the European Commission). "Europe 2020 Initiatives - Agenda for new skills and jobs." <http://ec.europa.eu/social/main.jsp?langId=en&catId=958>
- Eldh, A.C. & Carlsson, E. (2011) "Seeking a balance between employment and the care of an ageing parent." *Scandinavian Journal of Caring Sciences*. 25(2): 285–93.
- Eurobarometer (2007) "Discrimination in the European Union: Summary." Special Eurobarometer 263 / Wave 65.4.
- Eurobarometer (2008) "Discrimination in the European Union: Perceptions, Experiences, and Attitudes." Special Eurobarometer 296 / Wave 69.1.
- Eurobarometer (2012) "Discrimination in the EU in 2012." Special Eurobarometer 393 / Wave EB77.4.
- Eurofound (European Foundation for the Improvement of Living and Working Conditions) (2012) "Employment trends and policies for older workers in the recession." Luxembourg: Office for Official Publications of the European Communities.
- European Commission (EC) (2007) *Employment in Europe 2007*. Luxembourg: Office for Official Publications of the European Communities.
- EC (2009) *Draft Joint Employment Report (JER) 2009/2010*, COM(2009) 674/3, Brussels.
- EC (2010) *Communication from the Commission: Europe 2020: A strategy for smart, sustainable and inclusive growth*. COM(2010) 2020 final, Brussels.
- EC (2012) *European Employment Observatory Review: Employment Policies to Promote Active Ageing 2012*. Luxembourg: Publications Office of the European Union.
- Eurostat-a. Average exit age from the labour force - table lfsi_exi_a.
- Eurostat-b. Employment (main characteristics and rates) - annual averages - table lfsi_emp_a.
- Eurostat-c. Employment rate of older workers - table tsdde100.

- Euwals, R., Van Vuren, A., & Van Vuuren, D. (2012) "The decline of substitute pathways into retirement: Empirical evidence from the Dutch health care sector." *International Social Security Review*. 65(3): 101-122.
- Evandrou, M. & Glaser, K. (2003) "Combining work and family life: the pension penalty of caring." *Ageing and Society*. 23(5): 583-601.
- Evans, C., Nathan, M., & Simmonds, D. (1999) *Employability through Work*. Manchester: Centre for Local Economic Strategies.
- Fernandez, R.M., Castilla, E.J. & Moore, P. (2000) "Social Capital at Work: Networks and Employment at a Phone Center." *American Journal of Sociology*. 105(5): 1288-1356.
- Ferraro, K.F. (1980) "Self-Ratings of Health among the Old and Old-Old." *Journal of Health and Social Behavior*. 21: 377-383.
- Fischer, J. & Sousa-Poza, A. (2006) *The Institutional Determinants of Early Retirement in Europe*. University of St. Gallen Economics Discussion Paper No. 2006-08.
- Forrier, A. & Sels, L. (2003) "The concept employability: a complex mosaic." *International Journal of Human Resources Development and Management*. 3(2): 102-124.
- Forrier, A., Sels, L. & Stynen, D. (2009) "Career mobility at the intersection between agent and structure: A conceptual model." *Journal of Occupational and Organizational Psychology*. 82(4): 739-759.
- Frerichs, F. & Taylor, P. (2005) "The Greying of the Labour Market: What can Britain and Germany learn from each other?" London: Anglo-German Foundation for the Study of Industrial Society.
- Fugate, M. & Kinicki, A.J. (2008) "A dispositional approach to employability: Development of a measure and test of implications for employee reactions to organizational change." *Journal of Occupational and Organizational Psychology*. 81(3): 503-527.
- Fugate, M., Kinicki, A.J. & Ashforth, B.E. (2004) "Employability: A psycho-social construct, its dimensions, and applications." *Journal of Vocational Behavior*. 65(1): 14-38.
- Gazier, B. (2002) "Transitional labour markets: from positive analysis to policy proposals." in G. Schmid & B. Gazier (eds.), *The Dynamics of Full Employment: Social Integration Through Transitional Labour Markets*. Cheltenham: Edward Elgar, pp. 196-232.
- Ghosheh, N.S. Jr., Lee, S., & McCann, D. (2006) "Conditions of work and employment for older workers in industrialized countries: Understanding the issues." Conditions of Work and Employment Series No. 15. Geneva: International Labour Office.
- Giullari, S. & Lewis, J. (2005) "The Adult Worker Model Family, Gender Equality and Care." Social Policy and Development Programme Paper Number 19. Geneva: United Nations Research Institute for Social Development.
- Glendenning, F. (2001) "Education for older adults." *International Journal of Lifelong Education*. 20(1): 63-70.
- Granovetter, M. (1985) "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology*. 91(3): 481-510.
- Granovetter, M. (1983) "The Strength of Weak Ties: A Network Theory Revisited." *Sociological Theory*. 1: 201-233.

- Green, A., de Hoyos, M., Barnes, S.-A., Owen, D., Baldauf, B., & Behle, H. (2013) *Literature Review on Employability, Inclusion and ICT, Report 1: The Concept of Employability with a Specific Focus on Young People, Older Workers and Migrants*. Joint Research Centre Technical Report EUR 25794 EN. Luxembourg: Publications Office of the European Union.
- Guillemard, A.-M. & van Gunsteren, H. (1991) "Pathways and their Prospects: A Comparative Interpretation of the Meaning of Early Exit." in M. Kohli, M. Rein, A.-M. Guillemard, & H. van Gunsteren (eds.), *Time for Retirement*. Cambridge: Cambridge University Press, pp. 362-87.
- Harper, S., Khan, H., Saxena, A., & Leeson, G. (2006) "Attitudes and Practices of Employers towards Ageing Workers: Evidence from a Global Survey on the Future of Retirement." *Ageing Horizons*, 5: 31-41.
- Heitmueller, A. (2007) "The chicken or the egg? Endogeneity in labour market participation of informal carers in England." *Journal of Health Economics*. 26(3): 536-59.
- Henkens, K. (1999) "Retirement Intentions and Spousal Support: A Multi-Actor Approach." *Journal of Gerontology: Social Sciences*. 54B(2): S63-S73.
- Heyma, A. (2004) "A Structural Dynamic Analysis of Retirement Behaviour in the Netherlands." *Journal of Applied Econometrics*. 19: 739-759.
- Heyma, A., van der Weff, S., Nauta, A. & van Sloten, G. (2014) "What Makes Older Job-Seekers Attractive to Employers?" *De Economist*. 162(4): 397-414.
- Heywood, J., Jirjahn, U. & Tsertsvardze, G. (2010) "Hiring older workers and employing older workers: German evidence." *Journal of Population Economics*. 23(2): 595-615.
- Hillage, J. & Pollard, E. (1998) *Employability: Developing a framework for policy analysis*. London: Department for Education and Employment.
- Hirschi, A. (2009) "Career adaptability development in adolescence: Multiple predictors and effect on sense of power and life satisfaction." *Journal of Vocational Behavior*. 74(2): 145-155.
- Hoff, A., Reichert, M., Hamblin, K., Perek-Bialas, J., & Principi, A. (2014) "Informal and formal reconciliation strategies of older peoples' working carers: The European carers@work project." *Vulnerable Groups & Inclusion*. Vol. 5.
- Hoskins, I. (1993) "Combining work and care for the elderly: An overview of the issues." *International Labour Review*. 132(3): 347-369.
- Hurd, M. (1996) "The Effect of Labor Market Rigidities on the Labor Market Behavior of Older Workers." in D. Wise, ed. *Advances in the Economics of Aging*. University of Chicago Press, pp. 11-60.
- Hurd, M. (1990) "The Joint Retirement Decision of Husbands and Wives." in D. Wise, ed. *Issues in the Economics of Aging*. University of Chicago Press, pp. 231-258.
- Ilmarinen, J. (1999) *Ageing Workers in the European Union – Status and promotion of work ability, employability and employment*. Helsinki: Finnish Institute of Occupational Health, Ministry of Social Affairs and Health, Ministry of Labour.
- Ilmarinen, J. (2001) "Aging Workers." *Occupational and Environmental Medicine*. 58(8): 546-552.

- Ilmarinen, J. (2006) "Towards a better and longer work life." in M. Ylikoski, M. Lamberg, E. Yrjänheikki, J. Ilmarinen, R. Partinen, H. Jokiluoma, & H. Vainio (eds.), *Health in the World of Work: Workplace Health Promotion as a Tool for Improving and Extending Work Life/* Helsinki: Ministry of Social Affairs and Health, pp. 49-59.
- Ilmarinen, J. & Rantanen, J. (1999) "Promotion of Work Ability During Ageing." *American Journal of Industrial Medicine*. 36(S1): 21-23.
- Jiménez-Martín, S., Labeaga, J., & Martínez-Granado, M. (1999) "Health Status and Retirement Decisions for Older European Couples." Economics Series 30 Working Paper 99-82. Economics Department, Universidad Carlos III de Madrid.
- Johnson, R. & Favreault, M. (2001) "Retiring together or working alone: The impact of spousal employment and disability on retirement decisions." CRR WP 2001-01. Center for Retirement Research at Boston College.
- Johnson, R. (2004) "Do Spouses Coordinate their Retirement Decisions?" Issue Brief No. 19. Center for Retirement Research at Boston College.
- Jones, E. & Long, J. (1979) "Human Capital and Labor Market Employment: Additional Evidence for Women." *The Journal of Human Resources*. 14(2): 270-279.
- Jorgensen, B. & Taylor, P. (2008) "Older Workers, Government and Business: Implications for Ageing Populations of a Globalising Economy." *Economic Affairs*. 28(1): 17-22.
- Judge, T.A., Cable, D.M., Boudreau, J.W. & Bretz Jr., R.D. (1994) *An Empirical Investigation of the Predictors of Executive Career Success*. CAHRS Working Paper 94-08.
- Kalwij, A. & Vermeulen, F. (2008) "Health and labour force participation of older people in Europe: What do objective health indicators add to the analysis?" *Health Economics*. 17(5): 619-638.
- Kanfer, R., Wanberg, C. & Kantrowitz, T. (2001) "Job Search and Employment: A Personality-Motivational Analysis and Meta-Analytic Review." *Journal of Applied Psychology*. 86(5): 837-855.
- Kawachi, I., Kim, D., Coutts, A. & Subramanian, S. V (2004) "Commentary: Reconciling the three accounts of social capital." *International Journal of Epidemiology*. 33(4): 682-90.
- Kerkhofs, M. & Lindeboom, M. (1995) "Subjective Health Measures and State Dependent Reporting Errors." *Health Economics*. 4(3): 221-235.
- Keune, M. & Jepsen, M. (2007) "Not balanced and hardly new: the European Commission's quest for flexicurity." ETUI-REHS Working Paper 2007.01, Brussels.
- King, D. & Pickard, L. (2013) "When is a carer's employment at risk? Longitudinal analysis of unpaid care and employment in midlife in England." *Health and Social Care in the Community*. 21(3): 303-314.
- King, Z., Burke, S. & Pemberton, J. (2005) "The 'bounded' career: An empirical study of human capital, career mobility and employment outcomes in a mediated labour market." *Human Relations*. 58(8): 981-1007.
- Kluve, J. (2010) "The effectiveness of European active labor market programs." *Labour Economics*. 17(6): 904-918.
- Koen, J., Klehe, U.-C., Van Vianen, A.E.M., Zikic, J. & Nauta, A. (2010) "Job-search strategies and reemployment quality." *Journal of Vocational Behavior*. 77(1): 126-139.

- Kooij, D., de Lange, A., Jansen, P., & Dijkers, J. (2008) "Older workers' motivation to continue work: five meanings of age." *Journal of Managerial Psychology*. 23(4): 364-394.
- Krings, F., Sczesny, S., & Kluge, A. (2011) "Stereotypical Inferences as Mediators of Age Discrimination: The Role of Competence and Warmth." *British Journal of Management*. 22: 187-201.
- Laczko, F. & Noden, S. (1992) "Eldercare and the labour market: Combining care and work." in F. Laczko & C. Victor (eds.), *Social Policy and Elderly People: The Role of Community Care*, Aldershot: Avebury.
- LaRue, A., Bank, L., Jarvik, U. & Hetland, M. (1979) "Health in Old Age: How Do Physicians' Ratings and Self-ratings Compare ?" *Journal of Gerontology*. 34(5): 687-691.
- Lazear, E. (1990) "Job Security Provisions and Employment." *The Quarterly Journal of Economics*. 105(3): 699-726.
- Lee, C.C., Czaja, S.J. & Sharit, J. (2009) "Training Older Workers for Technology-Based Employment." *Educational Gerontology*. 35(1): 15-31.
- Lepak, D.P. & Snell, S.A. (2002) "Examining the Human Resource Architecture: The Relationships Among Human Capital, Employment, and Human Resource Configurations." *Journal of Management*. 28(4): 517-543.
- Lewis, J. (2001) "The Decline of the Male Breadwinner Model: Implications for Work and Care." *Social Politics*. 8(2): 152-169.
- Lin, N. (1999a) "Building a Network Theory of Social Capital." *Connections*. 22(1): 28-51.
- Lin, N. (1999b) "Social Networks and Status Attainment." *Annual Review of Sociology*. 25: 467-487.
- Lin, N. (1982) "Social Resources and Instrumental Action." in P. Marsden & N. Lin, eds. *Social Structure and Network Analysis*. SAGE, pp. 131-145.
- Lorenz, E. & Valeyre, A. (2004) "Organisational Change in Europe: National Models or the Diffusion of a New 'One Best Way'?" DRUID Working Paper No 04-04.
- Loretto, W. & Vickerstaff, S. (2013) "The domestic and gendered context for retirement." *Human Relations*. 66(1): 65-86.
- Loretto, W., Vickerstaff, S. & White, P. (2005) "Older workers and options for flexible work." EOC Working Paper Series No. 31. Manchester: Equal Opportunities Commission.
- Loury, G. (1976) *A Dynamic Theory of Racial Income Differences*. CMS-EMS Discussion Paper 225.
- Lubben, J. (1988) "Assessing social networks among elderly populations." *Family & Community Health*. 11(3): 42-52.
- Lubben, J., Blozik, E., Gillmann, G., Iliffe, S., Von Renteln Kruse, W., Beck, J.C. & Stuck, A.E. (2006) "Performance of an Abbreviated Version of the Lubben Social Network Scale Among Three European Community-Dwelling Older Adult Populations." *The Gerontologist*. 46(4): 503-13.
- Luppi, E. (2009) "Education in old age: An exploratory study." *International Journal of Lifelong Education*. 28(2): 241-276.
- Madden, D. (2004) "Labour market discrimination on the basis of health: an application to UK data." *Applied Economics*. 36(5): 421-442.

- Maddox, G.L. & Douglass, E.B. (1973) "Self-Assessment of Health: A Longitudinal Study of Elderly Subjects." *Journal of Health and Social Behavior*. 14(1): 87–93.
- Madsen, P.K. (2002) "The Danish model of *flexicurity*. A paradise – with some snakes." in H. Sarfati & G. Bonoli, eds. *Labour Market and Social Protections Reforms in International Perspective: Parallel or converging tracks?* Aldershot: Ashgate, pp. 243-265.
- Mairhuber, I. (2015) "Domain: Legislation and its Implementation." in Hasselhorn, M. & Apt, W. (eds.). *Understanding employment participation of older workers: Creating a knowledge base for future labour market challenges*. Berlin: Federal Ministry of Labour and Social Affairs (BMAS) and Federal Institute for Occupational Safety and Health (BAuA).
- McArdle, S., Waters, L., Briscoe, J.P. & Hall, D.T. (Tim) (2007) "Employability during unemployment: Adaptability, career identity and human and social capital." *Journal of Vocational Behavior*. 71(2): 247–264.
- McCrae, R. & Costa, P.J. (2008) "The Five-Factor Theory of Personality." in O. John, R. Robins, & L. Pervin, eds. *Handbook of Personality: Theory and Research*. New York: Guilford Press, pp. 159–181.
- McNair, S. (2010) *A sense of a future: A study of training and work in later life*. A Report for the Nuffield Foundation. Leicester: National Institute of Adult Continuing Education.
- McNair, S. (2011) *Older people and skills in a changing economy*. Briefing Paper Series, UK Commission for Employment and Skills.
- McQuaid, R. & Lindsay, C. (2005) "The Concept of Employability." *Urban Studies*. 42(2): 197-219.
- Meijers, F. (1998) "The development of a career identity." *International Journal for the Advancement of Counselling*. 20(3): 191–207.
- Mein, G., Martikainen, P., Standsfeld, S., Brunner, E., Fuhrer, R., & Marmot, M. (2000) "Predictors of early retirement in British civil servants." *Age and Ageing*. 29(6): 529-536.
- Metcalf, H. & Meadows, P. (2010) *Second survey of employers' policies, practices and preferences relating to age, 2010*. Employment Relations Research Series No. 110. London: Department for Business, Innovation and Skills and Department for Work and Pensions.
- Moen, P., Huang, Q., Plassmann, V., & Dentinger, E. (2006) "Deciding the Future: Do Dual-Earner Couples Plan Together for Retirement?" *The American Behavioral Sciences*. 29(10): 1422-1443.
- Montgomery, J.D. (1992) "Job Search and Network Composition: Implications of the Strength-Of-Weak-Ties Hypothesis." *American Sociological Review*. 57(5): 586–596.
- Montgomery, J.D. (1991) "Social Networks and Labor-Market Outcomes: Toward an Economic Analysis." *The American Economic Review*. 81(5): 1408–1418.
- Mortelmans, D. & Denaeghel, K. (2013) "The Clustering of Countries According to Policy Measures Concerning Early Retirement." *International Review of Social Sciences and Humanities*. 5(1): 1-19.
- Moss, P. & Tilly, C. (1996) "'Soft' Skills and Race: An Investigation of Black Men's Employment Problems." *Work and Occupations*. 23(3): 252–276.
- Mossey, J.M. & Shapiro, E. (1982) "Self-rated health: a predictor of mortality among the elderly." *American Journal of Public Health*. 72(8): 800–808.

- Nagi, S.Z. (1969) "Congruency in medical and self-assessment of disability." *Industrial Medicine and Surgery*. 38(3): 27–36.
- Naschold, F. & de Vroom, B. (eds.) (1994) *Regulating Employment and Welfare: Company and National Policies of Labour Force Participation at the End of Worklife in Industrial Countries*, Berlin: W. de Gruyter.
- Nauta, A., Vianen, A., Heijden, B., Dam, K. & Willemsen, M. (2009) "Understanding the factors that promote employability orientation: The impact of employability culture, career satisfaction, and role breadth self-efficacy." *Journal of Occupational and Organizational Psychology*. 82(2): 233–251.
- Ng, T. & Feldman, D. (2008) "The Relationship of Age to Ten Dimensions of Job Performance." *Journal of Applied Psychology*. 93(2): 392–423.
- Ng, T. & Feldman, D. (2012) "Evaluating Six Common Stereotypes About Older Workers with Meta-Analytical Data." *Personnel Psychology*. 65(4): 821–858.
- Nickson, D., Warhurst, C., Commander, J., Hurrell, S. & Cullen, A.M. (2012) "Soft skills and employability: Evidence from UK retail." *Economic and Industrial Democracy*. 33(1): 65–84.
- Nielsen, J. "Employability and workability among Danish employees." *Experimental Aging Research*. 25(4): 393–397.
- Nilsson, S. (2010) "Enhancing individual employability: the perspective of engineering graduates." *Education + Training*. 52(6/7): 540–551.
- Noe, R., Noe, A.W. & Bachhuber, J. (1990) "An Investigation of the Correlates of Career Motivation." *Journal of Vocational Behavior*. 37(3): 340–356.
- Noone, J., Alpass, F., & Stephens, C. (2010) "Do men and women differ in their retirement planning? Testing a theoretical model of gendered pathways to retirement preparation." *Research on Aging*. 32(6): 715–738.
- Nunn, S., Cox, K., Wood, N. & Scholes, S. *English Longitudinal Study of Ageing (ELSA), Wave 3 Core Dataset, Phase 2 Deposit User Guide*. National Centre for Social Research.
- Nyhan, B. (2006) "New policy thinking on the relationship between age, work and learning." in T. Tikkanen & B. Nyhan (eds.), *Promoting lifelong learning for older workers: An international overview*, Cedefop Reference Series 65. Luxembourg: Office for Official Publications of the European Communities, pp. 48–65.
- Office for National Statistics (ONS) (2013) "DC3301EW - Provision of unpaid care by general health by sex by age." Available at: http://www.nomisweb.co.uk/census/2011/DC3301EW/view/2092957699?rows=c_age&cols=c_carer
- Organisation for Economic Co-operation and Development (OECD). (1998) *Maintaining prosperity in an ageing society*. Paris: OECD.
- Parker, S.K. (1998) "Enhancing role breadth self-efficacy: the roles of job enrichment and other organizational interventions." *The Journal of Applied Psychology*. 83(6): 835–852.
- Parsons, D.O. (1982) "The Male Labour Force Participation Decision: Health, Reported Health, and Economic Incentives." *Economica*. 49(193): 81–91.
- Pavalko, E. & Henderson, K. (2006) "Combining Care Work and Paid Work: Do Workplace Policies Make a Difference?" *Research on Aging*. 28(3): 359–374.

- Phillipson, C. & Smith, A. (2005) "Extending working life: A review of the research literature." Research Report No. 299. Leeds: Department for Work and Pensions.
- Pickard, L. (2008) *Informal Care for Older People Provided by Their Adult Children: Projections of Supply and Demand to 2041 in England*. PSSRU Discussion Paper 2515. Canterbury: Personal Social Services Research Unit (PSSRU), University of Kent.
- Pienta, A. (2003) "Partners in Marriage: An Analysis of Husbands' and Wives' Retirement Behavior." *Journal of Applied Gerontology*. 22(3): 340-358.
- Pienta, A. & Hayward, M. (2002) "Who Expects to Continue Working After Age 62? The Retirement Plans of Couples." *The Journals of Gerontology*. 57B(4): S199-S208.
- Podolny, J.M. & Baron, J.N. (1997) "Resources and Relationships: Social Networks and Mobility in the Workplace." *American Sociological Review*. 62(5): 673-693.
- Pohrt, A & Hasselhorn, M. (2015) "Domain: Work factors." in Hasselhorn, M. & Apt, W. (eds.). *Understanding employment participation of older workers: Creating a knowledge base for future labour market challenges*. Berlin: Federal Ministry of Labour and Social Affairs (BMAS) and Federal Institute for Occupational Safety and Health (BAuA).
- Portes, A. (1998) "Social Capital: Its Origins and Applications in Modern Sociology." *Annual Review of Sociology*. 24(1): 1-24.
- Posthuma, R. & Campion, M. (2009) "Age Stereotypes in the Workplace: Common Stereotypes, Moderators, and Future Research Directions." *Journal of Management*. 35(1): 158-188.
- Pruijt, H. & Derogee, P. (2010) "Employability and job security, friends or foes? The paradoxical reception of employability in the Netherlands." *Socio-Economic Review*. 8(3): 437-460.
- Putnam, R. & Leonardi, R. (1993) *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press.
- Radl, J. (2013) "Labour Market Exit and Social Stratification in Western Europe: The Effects of Social Class and Gender on the Timing of Retirement." *European Sociological Review*, 29(3): 654-668.
- Reingold, D. (1999) "Social Networks and the Employment Problem of the Urban Poor." *Urban Studies*. 36(11): 1907-1932.
- Riach, K. & Loretto, W. (2009) "Identity work and the 'unemployed' worker: age, disability and the lived experience of the older unemployed." *Work, Employment & Society*. 23(1): 102-119.
- Roscigno, V.J., Mong, S., Byron, R., & Tester, G. (2007) "Age Discrimination, Social Closure and Employment." *Social Forces*. 86(1): 313-34.
- Rottinghaus, P., Buelow, K., Matyja, A. & Schneider, M. (2012) "The Career Futures Inventory-Revised: Measuring Dimensions of Career Adaptability." *Journal of Career Assessment*. 20(2): 123-139.
- Rottinghaus, P., Day, S. & Borgen, F. (2005) "The Career Futures Inventory: A Measure of Career-Related Adaptability and Optimism." *Journal of Career Assessment*. 13(1): 3-24.
- Saint-Paul, G. (2002) "The Political Economy of Employment Protection." *The Journal of Political Economy*. 110(3): 672-704.

- Salling Olesen, H. (2006) "Identification with work: inhibition or resource for learning?" in T. Tikkanen & B. Nyhan (eds.), *Promoting lifelong learning for older workers: An international overview*, Cedefop Reference Series 65. Luxembourg: Office for Official Publications of the European Communities, pp. 164-176.
- Savickas, M. (1997) "Career Adaptability: An Integrative Construct for Life-Span, Life-Space Theory." *The Career Development Quarterly*. 45(3): 247-259.
- Savickas, M. (2002) "Career Construction: A Developmental Theory of Vocational Behavior." in D. Brown, ed. *Career Choice and Development*. San Francisco: Jossey-Bass, pp. 149-205.
- Savickas, M. (2005) "The Theory and Practice of Career Construction." in S. Brown & R. Lent, eds. *Career Development and Counseling: Putting Theory and Research to Work*. Hoboken, NJ: John Wiley & Sons, Inc., pp. 42-70.
- Schils, T. (2008) "Early Retirement in Germany, the Netherlands, and the United Kingdom: A Longitudinal Analysis of Individual Factors and Institutional Regimes." *European Sociological Review*. 24(3): 315-329.
- Schmid, G. (2000) "Transitional Labour Markets: A New European Employment Strategy." in B. Marin, D. Meulders, & D.J. Snower (eds.), *Innovative Employment Initiatives*. Aldershot: Ashgate, pp. 223-254.
- Seeman, T.E., Kaplan, G.A., Knudsen, L., Cohen, R. & Guralnik, J. (1987) "Social Network Ties and Mortality Among the Elderly in the Alameda County Study." *American Journal of Epidemiology*. 126(4): 714-723.
- Simonazzi, A. (2009) "Care regimes and national employment models." *Cambridge Journal of Economics*. 33(2): 211-232.
- Skirbekk, V. (2003) "Age and Individual Productivity: A Literature Survey." MPIDR Working Paper WP 2003-028. Rostock: Max Planck Institute for Demographic Research.
- Smith, J., McKnight, A., & Naylor, R. (2000). "Graduate employability: policy and performance in higher education in the UK." *The Economic Journal*. 110(464): 382-411.
- Snell, S.A., Youndt, M. & Wright, P. (1996) "Establishing a framework for research in strategic human resource management: Merging resource theory and organizational learning." in G. Ferris, ed. *Research in Personnel and Human Resources Management*. Greenwich, CT: JAI Press, pp. 61-90.
- Specht, J., Egloff, B., & Schmukle, S. (2011) "Stability and Change of Personality Across the Life Course: The Impact of Age and Major Life Events on Mean-Level and Rank-Order Stability of the Big Five." SOEP Papers on Multidisciplinary Panel Data Research No. 377. Berlin: DIW Berlin (German Institute for Economic Research).
- Stern, S. (1989) "Measuring the Effect of Disability on Labor Force Participation." *The Journal of Human Resources*. 24(3): 361-395.
- Stone, W. & Hughes, J. (2002) *Social capital: Empirical meaning and measurement validity*. Australian Institute of Family Studies Research Paper No. 27.
- Super, D. & Knasel, E. (1981) "Career development in adulthood: Some theoretical problems and a possible solution." *British Journal of Guidance & Counselling*. 9(2): 194-201.
- Szinovacz, M. & Davey, A. (2005) "Predictors of Perceptions of Involuntary Retirement." *The Gerontologist*. 45(1): 36-47.

- Szreter, S. & Woolcock, M. (2004) "Health by association? Social capital, social theory, and the political economy of public health." *International Journal of Epidemiology*. 33(4): 650–67.
- Taylor, P. (2007) "Older Workers and the Labor Market: Lessons from Abroad." *Generations*. 31(1): 96-101.
- Taylor, P. (2008) *Ageing labour forces: promises and prospects*. Cheltenham: Edward Elgar.
- Taylor, P. & Walker, A. (1998a) "Employers and older workers: attitudes and employment practices." *Ageing & Society*. 18(6): 641-658.
- Taylor, P. & Walker, A. (1998b) "Policies and practices towards older workers: a framework for comparative research." *Human Resource Management Journal*. 8(3): 61-76.
- Thomas, J.P., Whitman, D.S. & Viswesvaran, C. (2010) "Employee proactivity in organizations: A comparative meta-analysis of emergent proactive constructs." *Journal of Occupational and Organizational Psychology*. 83(2): 275–300.
- Tikkanen, T. (2006) "The lifelong learning debate and older workers." in T. Tikkanen & B. Nyhan (eds.), *Promoting lifelong learning for older workers: An international overview*, Cedefop Reference Series 65. Luxembourg: Office for Official Publications of the European Communities, pp. 18-47.
- Torring, J. (1999) "Towards a Schumpeterian workfare postnational regime: Path-shaping and path-dependency in Danish welfare state reform." *Economy and Society*. 28(3): 369-402.
- Tros, F. & Wilthagen, T. (2013) "Flexicurity: Concepts, practices, and outcomes." in B. Greve (ed.), *The Routledge Handbook of the Welfare State*. Milton Keynes: Routledge, pp. 125-136.
- Trukeschitz, B., Schneider, U., Mühlmann, R. & Ponocny, I. (2013) "Informal Eldercare and Work-Related Strain." *Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*. 68(2): 257–267.
- Tuomi, K., Huuhtanen, P., Nykyri, E., & Ilmarinen, J. (2001) "Promotion of work ability, the quality of work and retirement." *Occupational Medicine*. 51(5): 318-324.
- Van Dalen, H.P., Henkens, K., & Schippers, J. (2009) "Dealing with older workers in Europe: a comparative survey of employers' attitudes and actions." *Journal of European Social Policy*. 19(1): 47-60.
- Van Dam, K. (2004) "Antecedents and consequences of employability orientation." *European Journal of Work and Organizational Psychology*. 13(1): 29–51.
- Van Dam, K. (2003) "Understanding experts' attitudes towards functional flexibility." *International Journal of Human Resources Development and Management*. 3(2): 138–153.
- Van der Heijde, C. & Van der Heijden, B. (2006) "A Competence-Based and Multidimensional Operationalization and Measurement of Employability." *Human Resource Management*. 45(3): 449–476.
- Van der Heijden, B., de Lange, A., Demerouti, E., & Van der Heijde, C. (2009) "Age effects on the employability-career success relationship." *Journal of Vocational Behavior*. 74(2): 156-164.
- Van Solinge, H. & Henkens, K. (2007) "Involuntary Retirement: The Role of Restrictive Circumstances, Timing, and Social Embeddedness." *Journal of Gerontology: Social Sciences*. 62B(5): S295-S303.

- Vegeris, S., Smeaton, D., & Sahin-Dikmen, M. (2010) *50+ back to work evidence review and indicative guide for secondary data analysis*. DWP Research Report No 615. London: Department for Work and Pensions.
- Vickerstaff, S., & Cox, J. (2005). "Retirement and risk: the individualisation of retirement experiences?" *The Sociological Review*. 53(1): 77-95.
- Villosio, C., Di Pierro, D., Giordanengo, A., Pasqua, P., & Richiardi, M. (2008) *Working conditions of an ageing workforce*. Luxembourg: Office for Official Publication of the European Communities.
- Walker, A. (2005) "The Emergence of Age Management in Europe." *International Journal of Organisational Behaviour*. 10(1): 685-97.
- Wang, M. & Shultz, K. (2010) "Employee Retirement: A Review and Recommendations for Future Investigation." *Journal of Management*. 36(1): 172-206.
- Weyman, A., Wainwright, D., O'Hara, R., Jones, P., & Buckingham, A. (2012) *Extending working life: Behavioural change interventions*. Research Report No 809. Sheffield: Department for Work and Pensions.
- Williamson, O. (1973) "Markets and Heirarchies: Some Elementary Considerations." *The American Economic Review*. 63(2): 316–325.
- Wilthagen, T. & Tros, F. (2004) "The concept of 'flexicurity': a new approach to regulating employment and labour markets." *Transfer*. 10(2): 166-86.
- Woolcock, M. & Narayan, D. (2000) "Social Capital: Implications for Development Theory, Research, and Policy." *The World Bank Research Observer*. 15(2): 225–249.
- Zechner, M. (2005) "Family Commitments under Negotiation: Dual Carers in Finland and Italy." in T. Kröger & J. Sipilä (eds.), *Overstretched: European Families Up Against the Demands of Work and Care*. Oxford: Blackwell, pp. 81-94.
- Zhou, J. (2007) "Danish for All? Balancing Flexibility with Security: The Flexicurity Model." IMF Working Paper No. 36. International Monetary Fund.
- Zissimopoulos, J. & Karoly, L. (2007) "Transitions to self-employment at older ages: The role of wealth, health, health insurance and other factors." *Labour Economics*. 14(2): 269-295

Appendix 1: Full Regression Results from Chapter 4

Multinomial Logistic Regression Results from ELSA:

Resource-based Dimensions and Labour Market Status (base=Employed)

	Wave 1: 2002			Wave 2: 2004		
	Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Poor Self-Perceived Health						
Retired	0.643	(0.226)	1.902	0.041	(0.150)	1.042
Unemployed	0.178	(0.357)	1.195	-0.204	(0.496)	0.816
Sick/Disabled	2.917	(2.625)	18.491	1.583	(0.229)	4.868
Home/Family	0.663	(0.284)	1.940	0.077	(0.198)	1.080
Health Limitations Affecting Work						
Retired				1.310	(0.151)	3.706
Unemployed				1.274	(0.424)	3.576
Sick/Disabled	<i>variable not available</i>			4.166	(0.359)	64.476
Home/Family				1.214	(0.187)	3.366
Educational Qualifications: Some						
Retired	-0.454	(0.087)	0.635	-0.252	(0.152)	0.777
Unemployed	-0.420	(0.234)	0.657	0.777	(0.619)	2.175
Sick/Disabled	0.808	(0.633)	2.243	0.315	(0.335)	1.371
Home/Family	0.019	(0.226)	1.020	0.186	(0.265)	1.204
Educational Qualifications: None						
Retired	-0.814	(0.073)	0.443	-0.615	(0.185)	0.540
Unemployed	-0.383	(0.265)	0.682	0.711	(0.726)	2.036
Sick/Disabled	0.775	(0.637)	2.171	0.131	(0.371)	1.140
Home/Family	-0.038	(0.237)	0.963	0.132	(0.299)	1.142
Training Undertaken in Past Year						
Retired	-0.485	(0.074)	0.616	-0.639	(0.146)	0.528
Unemployed	-0.219	(0.267)	0.803	-0.097	(0.500)	0.907
Sick/Disabled	-0.718	(0.099)	0.488	-1.169	(0.318)	0.311
Home/Family	-0.782	(0.074)	0.457	-0.766	(0.204)	0.465
Marital Status: Single						
Retired	0.442	(0.324)	1.556	0.169	(0.256)	1.184
Unemployed	0.554	(0.624)	1.741	0.849	(0.513)	2.338
Sick/Disabled	0.253	(0.355)	1.288	0.849	(0.402)	2.337
Home/Family	-2.046	(0.080)	0.129	-1.415	(0.619)	0.243

	Wave 1: 2002			Wave 2: 2004		
	Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Marital Status: Divorced, Separated, or Widowed						
Retired	-0.416	(0.079)	0.660	-0.278	(0.146)	0.757
Unemployed	0.027	(0.292)	1.028	0.113	(0.423)	1.120
Sick/Disabled	0.192	(0.194)	1.211	-0.022	(0.224)	0.979
Home/Family	-1.638	(0.037)	0.194	-1.544	(0.227)	0.214
Number of Close Relatives						
Retired	-0.035	(0.015)	0.966	0.011	(0.020)	1.011
Unemployed	-0.061	(0.045)	0.941	-0.104	(0.086)	0.901
Sick/Disabled	0.001	(0.018)	1.001	0.057	(0.028)	1.059
Home/Family	-0.008	(0.015)	0.992	0.021	(0.021)	1.022
Number of Close Friends						
Retired	0.005	(0.012)	1.005	-0.001	(0.014)	0.999
Unemployed	0.022	(0.024)	1.022	0.028	(0.017)	1.028
Sick/Disabled	0.017	(0.012)	1.017	-0.037	(0.034)	0.963
Home/Family	0.015	(0.019)	1.015	-0.026	(0.026)	0.974
Organisational Membership						
Retired	0.316	(0.151)	1.372	0.355	(0.134)	1.426
Unemployed	-0.199	(0.209)	0.819	0.368	(0.401)	1.445
Sick/Disabled	-0.195	(0.113)	0.823	0.309	(0.205)	1.362
Home/Family	-0.161	(0.109)	0.852	0.030	(0.165)	1.030
Age						
Retired	0.343	(0.020)	1.409	0.364	(0.019)	1.439
Unemployed	0.047	(0.033)	1.048	0.003	(0.055)	1.003
Sick/Disabled	0.084	(0.018)	1.087	0.043	(0.030)	1.044
Home/Family	0.094	(0.018)	1.099	0.090	(0.024)	1.095
Gender (Female)						
Retired	0.815	(0.227)	2.258	0.612	(0.119)	1.845
Unemployed	-1.217	(0.083)	0.296	-0.318	(0.356)	0.728
Sick/Disabled	-0.140	(0.120)	0.869	-0.334	(0.197)	0.716
Home/Family	2.978	(4.335)	19.643	2.938	(0.287)	18.876
Income Quintile 2						
Retired	-0.607	(0.095)	0.545	-0.969	(0.215)	0.380
Unemployed	-2.199	(0.045)	0.111	-1.659	(0.514)	0.190
Sick/Disabled	-0.389	(0.138)	0.678	-0.892	(0.293)	0.410
Home/Family	-0.843	(0.091)	0.430	-0.806	(0.256)	0.446

	Wave 1: 2002			Wave 2: 2004		
	Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Income Quintile 3						
Retired	-1.322	(0.044)	0.267	-1.414	(0.201)	0.243
Unemployed	-2.938	(0.021)	0.053	-2.716	(0.554)	0.066
Sick/Disabled	-0.880	(0.083)	0.415	-1.401	(0.286)	0.246
Home/Family	-1.590	(0.041)	0.204	-1.355	(0.238)	0.258
Income Quintile 4						
Retired	-1.793	(0.027)	0.167	-1.696	(0.199)	0.183
Unemployed	-4.072	(0.008)	0.017	-2.546	(0.449)	0.078
Sick/Disabled	-1.751	(0.037)	0.174	-1.804	(0.294)	0.165
Home/Family	-2.038	(0.025)	0.130	-1.946	(0.249)	0.143
Income Quintile 5						
Retired	-1.955	(0.024)	0.142	-1.901	(0.199)	0.149
Unemployed	-3.819	(0.009)	0.022	-4.314	(0.743)	0.013
Sick/Disabled	-2.434	(0.022)	0.088	-2.621	(0.363)	0.073
Home/Family	-2.105	(0.024)	0.122	-2.317	(0.250)	0.099
<i>Constant</i>						
Retired	-19.573	(0.848)		-21.479	(1.144)	
Unemployed	-2.580	(1.824)		-2.635	(3.165)	
Sick/Disabled	-7.127	(0.975)		-6.490	(1.750)	
Home/Family	-7.455	(0.983)		-7.788	(1.505)	
Pseudo R ²	0.2931			0.3204		
Wald χ^2	1863.72			1159.05		
df	60			64		
N	4579			3016		

Notes: Significance is displayed through formatting: $p < 0.10$; $p < 0.05$; and $p < 0.001$.
Reference categories for dummy variables include: Degree-level for Educational Qualifications; Married or Legally Partnered for Marital Status; and Income Quintile 1 (poorest) for Income Quintiles.

**Multinomial Logistic Regression Results from ELSA:
Resource-based Dimensions and Labour Market Status (base=Employed) (cont'd.)**

	Wave 3: 2006			Wave 4: 2008		
	Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Poor Self-Perceived Health						
Retired	0.122	(0.150)	1.130	-0.032	(0.176)	0.969
Unemployed	0.705	(0.323)	2.024	0.839	(0.371)	2.313
Sick/Disabled	1.576	(0.245)	4.836	1.548	(0.315)	4.704
Home/Family	0.003	(0.197)	1.003	0.175	(0.263)	1.191
Health Limitations Affecting Work						
Retired	1.326	(0.162)	3.765	1.317	(0.170)	3.732
Unemployed	1.514	(0.335)	4.543	0.901	(0.375)	2.461
Sick/Disabled	4.331	(0.391)	76.022	4.315	(0.537)	74.834
Home/Family	1.687	(0.196)	5.401	1.475	(0.243)	4.373
Educational Qualifications: Some						
Retired	-0.724	(0.147)	0.485	-0.420	(0.156)	0.657
Unemployed	0.680	(0.572)	1.974	-0.176	(0.398)	0.839
Sick/Disabled	0.321	(0.358)	1.379	0.291	(0.457)	1.338
Home/Family	-0.115	(0.224)	0.892	0.207	(0.274)	1.230
Educational Qualifications: None						
Retired	-0.788	(0.192)	0.455	-0.113	(0.211)	0.894
Unemployed	0.941	(0.640)	2.562	-0.403	(0.529)	0.668
Sick/Disabled	0.847	(0.397)	2.333	1.060	(0.493)	2.885
Home/Family	0.039	(0.269)	1.040	0.141	(0.352)	1.151
Training Undertaken in Past Year						
Retired	-0.552	(0.155)	0.576	-0.640	(0.174)	0.527
Unemployed	0.068	(0.383)	1.071	-0.153	(0.378)	0.858
Sick/Disabled	-0.929	(0.326)	0.395	-1.341	(0.469)	0.262
Home/Family	-1.005	(0.229)	0.366	-0.755	(0.266)	0.470
Marital Status: Single						
Retired	0.221	(0.251)	1.247	0.417	(0.254)	1.517
Unemployed	0.837	(0.447)	2.310	0.664	(0.497)	1.943
Sick/Disabled	0.682	(0.386)	1.977	0.760	(0.443)	2.138
Home/Family	-1.350	(0.576)	0.259	-1.040	(0.540)	0.353
Marital Status: Divorced, Separated, or Widowed						
Retired	-0.190	(0.143)	0.827	-0.221	(0.148)	0.802
Unemployed	0.108	(0.395)	1.114	0.247	(0.354)	1.280
Sick/Disabled	0.279	(0.233)	1.322	0.178	(0.297)	1.194
Home/Family	-1.414	(0.238)	0.243	-1.020	(0.260)	0.361

	Wave 3: 2006			Wave 4: 2008		
	Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Number of Close Relatives						
Retired	-0.021	(0.027)	0.979	-0.034	(0.020)	0.966
Unemployed	-0.117	(0.066)	0.890	-0.150	(0.074)	0.861
Sick/Disabled	-0.049	(0.040)	0.952	0.031	(0.039)	1.031
Home/Family	0.008	(0.017)	1.008	0.002	(0.026)	1.002
Number of Close Friends						
Retired	0.003	(0.008)	1.003	-0.002	(0.022)	0.998
Unemployed	0.000	(0.026)	1.000	0.038	(0.044)	1.039
Sick/Disabled	0.015	(0.013)	1.015	-0.043	(0.067)	0.958
Home/Family	-0.001	(0.013)	0.999	-0.002	(0.039)	0.998
Organisational Membership						
Retired	0.292	(0.131)	1.339	0.245	(0.142)	1.278
Unemployed	0.120	(0.340)	1.128	-0.375	(0.303)	0.687
Sick/Disabled	-0.307	(0.213)	0.735	0.056	(0.263)	1.057
Home/Family	0.006	(0.166)	1.006	0.067	(0.201)	1.070
Age						
Retired	0.361	(0.019)	1.434	0.379	(0.022)	1.461
Unemployed	0.064	(0.035)	1.066	0.037	(0.043)	1.037
Sick/Disabled	0.078	(0.026)	1.081	0.012	(0.034)	1.012
Home/Family	0.052	(0.021)	1.053	0.011	(0.030)	1.012
Gender (Female)						
Retired	0.687	(0.118)	1.988	0.879	(0.129)	2.408
Unemployed	-0.417	(0.351)	0.659	-0.261	(0.302)	0.771
Sick/Disabled	-0.021	(0.209)	0.979	-0.513	(0.271)	0.598
Home/Family	2.601	(0.266)	13.480	2.997	(0.375)	20.016
Income Quintile 2						
Retired	-0.589	(0.210)	0.555	-0.664	(0.222)	0.515
Unemployed	-2.571	(0.554)	0.076	-0.381	(0.404)	0.683
Sick/Disabled	-0.628	(0.294)	0.533	-0.468	(0.368)	0.626
Home/Family	-1.074	(0.264)	0.342	-0.826	(0.292)	0.438
Income Quintile 3						
Retired	-1.174	(0.198)	0.309	-1.094	(0.204)	0.335
Unemployed	-3.147	(0.642)	0.043	-1.202	(0.367)	0.301
Sick/Disabled	-1.389	(0.297)	0.249	-1.429	(0.360)	0.239
Home/Family	-1.778	(0.255)	0.169	-1.812	(0.295)	0.163

	Wave 3: 2006			Wave 4: 2008		
	Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Income Quintile 4						
Retired	-1.780	(0.198)	0.169	-1.184	(0.206)	0.306
Unemployed	-2.851	(0.500)	0.058	-3.096	(0.663)	0.045
Sick/Disabled	-1.967	(0.338)	0.140	-1.993	(0.396)	0.136
Home/Family	-2.041	(0.235)	0.130	-2.013	(0.292)	0.134
Income Quintile 5						
Retired	-1.927	(0.205)	0.146	-1.294	(0.203)	0.274
Unemployed	-3.226	(0.491)	0.040	-3.345	(0.652)	0.035
Sick/Disabled	-2.236	(0.368)	0.107	-2.444	(0.456)	0.087
Home/Family	-2.134	(0.237)	0.118	-1.693	(0.271)	0.184
<i>Constant</i>						
Retired	-21.081	(1.121)		-22.866	(1.346)	
Unemployed	-5.996	(2.052)		-3.484	(2.539)	
Sick/Disabled	-8.711	(1.548)		-5.153	(1.998)	
Home/Family	-5.271	(1.258)		-4.048	(1.825)	
Pseudo R ²	0.3453			0.329		
Wald χ^2	1234.57			934.23		
df	64			64		
N	3130			2671		

Notes: Significance is displayed through formatting: $p < 0.10$; $p < 0.05$; and $p < 0.001$.
Reference categories for dummy variables include: Degree-level for Educational Qualifications; Married or Legally Partnered for Marital Status; and Income Quintile 1 (poorest) for Income Quintiles.

**Multinomial Logistic Regression Results from ELSA:
Resource-based Dimensions and Labour Market Status (base=Employed) (cont'd.)**

	Wave 5: 2010			Pooled Waves 1-5		
	Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Poor Self-Perceived Health						
Retired	0.082	(0.179)	1.085	0.090	(0.091)	1.095
Unemployed	<i>0.738</i>	<i>(0.433)</i>	<i>2.092</i>	0.502	(0.227)	1.652
Sick/Disabled	-0.200	(0.285)	0.819	1.728	(0.158)	5.631
Home/Family	2.019	(0.373)	7.527	-0.006	(0.121)	0.994
Health Limitations Affecting Work						
Retired	1.251	(0.168)	3.493	1.326	(0.093)	3.768
Unemployed	<i>0.858</i>	<i>(0.479)</i>	<i>2.358</i>	1.119	(0.220)	3.062
Sick/Disabled	1.184	(0.253)	3.267	4.316	(0.236)	74.899
Home/Family	3.945	(0.459)	51.690	1.331	(0.117)	3.784
Educational Qualifications: Some						
Retired	-0.416	(0.148)	0.660	-0.465	(0.098)	0.628
Unemployed	-0.247	(0.471)	0.781	-0.095	(0.237)	0.910
Sick/Disabled	-0.089	(0.259)	0.915	0.046	(0.229)	1.047
Home/Family	0.170	(0.451)	1.185	0.129	(0.169)	1.138
Educational Qualifications: None						
Retired	-0.547	(0.208)	0.578	-0.510	(0.126)	0.601
Unemployed	0.132	(0.600)	1.141	-0.132	(0.318)	0.876
Sick/Disabled	0.487	(0.318)	1.627	0.321	(0.252)	1.378
Home/Family	0.445	(0.513)	1.561	0.535	(0.194)	1.707
Training Undertaken in Past Year						
Retired	-0.734	(0.171)	0.480	-0.645	(0.087)	0.525
Unemployed	0.249	(0.420)	1.283	-0.119	(0.226)	0.888
Sick/Disabled	-1.259	(0.347)	0.284	-1.168	(0.213)	0.311
Home/Family	-1.922	(0.546)	0.146	-0.831	(0.137)	0.436
Marital Status: Single						
Retired	-0.626	(0.481)	0.535	-0.293	(0.306)	0.746
Unemployed	0.651	(0.964)	1.917	0.187	(0.528)	1.205
Sick/Disabled	<i>-2.051</i>	<i>(1.096)</i>	<i>0.129</i>	0.484	(0.501)	1.622
Home/Family	0.818	(0.712)	2.265	-1.422	(0.896)	0.241
Marital Status: Divorced, Separated, or Widowed						
Retired	-0.395	(0.149)	0.674	-0.311	(0.093)	0.733
Unemployed	0.112	(0.378)	1.119	0.123	(0.209)	1.131
Sick/Disabled	-1.247	(0.289)	0.287	0.026	(0.149)	1.026
Home/Family	0.035	(0.307)	1.036	-1.326	(0.146)	0.266

	Wave 5: 2010			Pooled Waves 1-5		
	Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Number of Close Relatives						
Retired	-0.032	(0.019)	0.969	-0.011	(0.011)	0.989
Unemployed	-0.025	(0.047)	0.976	-0.105	(0.040)	0.900
Sick/Disabled	0.003	(0.027)	1.003	0.000	(0.020)	1.000
Home/Family	-0.064	(0.034)	0.938	0.007	(0.014)	1.007
Number of Close Friends						
Retired	0.019	(0.020)	1.019	0.001	(0.007)	1.001
Unemployed	0.053	(0.040)	1.055	0.014	(0.012)	1.014
Sick/Disabled	0.031	(0.036)	1.032	0.006	(0.014)	1.006
Home/Family	0.041	(0.043)	1.042	0.009	(0.010)	1.009
Organisational Membership						
Retired	0.179	(0.138)	1.196	0.303	(0.077)	1.353
Unemployed	0.397	(0.388)	1.488	-0.007	(0.194)	0.993
Sick/Disabled	-0.385	(0.201)	0.681	-0.049	(0.130)	0.952
Home/Family	0.050	(0.283)	1.051	0.039	(0.103)	1.040
Age						
Retired	0.423	(0.025)	1.526	0.371	(0.012)	1.450
Unemployed	0.090	(0.054)	1.095	0.074	(0.025)	1.077
Sick/Disabled	0.096	(0.034)	1.101	0.034	(0.018)	1.035
Home/Family	0.035	(0.045)	1.035	0.058	(0.014)	1.059
Gender (Female)						
Retired	0.902	(0.130)	2.464	0.768	(0.084)	2.154
Unemployed	-0.873	(0.380)	0.418	-0.541	(0.189)	0.582
Sick/Disabled	2.651	(0.376)	14.174	-0.253	(0.141)	0.776
Home/Family	-0.092	(0.275)	0.912	2.999	(0.211)	20.066
Income Quintile 2						
Retired	-0.421	(0.216)	0.656	-0.474	(0.115)	0.623
Unemployed	-0.595	(0.420)	0.551	-0.976	(0.239)	0.377
Sick/Disabled	-0.786	(0.313)	0.456	-0.314	(0.173)	0.730
Home/Family	-0.762	(0.435)	0.467	-0.457	(0.144)	0.633
Income Quintile 3						
Retired	-0.881	(0.205)	0.414	-1.076	(0.114)	0.341
Unemployed	-1.700	(0.534)	0.183	-2.161	(0.274)	0.115
Sick/Disabled	-1.549	(0.333)	0.212	-1.130	(0.169)	0.323
Home/Family	-0.821	(0.363)	0.440	-1.458	(0.154)	0.233

	Wave 5: 2010			Pooled Waves 1-5		
	Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Income Quintile 4						
Retired	-0.919	(0.197)	0.399	-1.188	(0.112)	0.305
Unemployed	-3.213	(0.779)	0.040	-2.578	(0.284)	0.076
Sick/Disabled	-1.392	(0.310)	0.249	-1.439	(0.189)	0.237
Home/Family	-1.372	(0.416)	0.254	-1.518	(0.142)	0.219
Income Quintile 5						
Retired	-1.400	(0.199)	0.247	-1.577	(0.115)	0.207
Unemployed	-3.487	(0.659)	0.031	-3.011	(0.310)	0.049
Sick/Disabled	-1.263	(0.285)	0.283	-2.386	(0.258)	0.092
Home/Family	-1.788	(0.506)	0.167	-1.620	(0.149)	0.198
<i>Constant</i>						
Retired	-25.737	(1.502)		-22.274	0.750	
Unemployed	-7.540	(3.147)		-5.926	1.430	
Sick/Disabled	-8.552	(2.068)		-6.388	1.052	
Home/Family	-6.633	(2.686)		-6.676	0.917	
Pseudo R ²	0.3094			0.3024		
Wald χ^2	827.05			2767.39		
df	64			64		
N	2396			10,387		

Notes: Significance is displayed through formatting: $p < 0.10$; $p < 0.05$; and $p < 0.001$. Reference categories for dummy variables include: Degree-level for Educational Qualifications; Married or Legally Partnered for Marital Status; and Income Quintile 1 (poorest) for Income Quintiles.

Appendix 2: Full Regression Results from Chapter 5

Multinomial Logistic Regression Results from ELSA:

Including Dispositions with Labour Market Status (Base Outcome = Employed)

		Wave 1: 2002			Wave 2: 2004		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Poor Self-Perceived Health							
	Retired	0.706	(0.143)	2.026	0.017	(0.174)	1.017
	Unemployed	-0.118	(0.380)	0.889	0.086	(0.546)	1.090
	Sick/Disabled	1.953	(0.175)	7.050	1.214	(0.255)	3.367
	Home/Family	0.643	(0.179)	1.902	0.262	(0.219)	1.300
Health Limitations Affecting Work							
	Retired				1.324	(0.160)	3.758
	Unemployed				1.172	(0.472)	3.228
	Sick/Disabled	<i>variable not available</i>			3.862	(0.373)	47.560
	Home/Family				1.271	(0.201)	3.564
Educational Qualifications (base=Degree)							
Some	Retired	-0.439	(0.143)	0.645	-0.217	(0.156)	0.805
	Unemployed	-0.585	(0.394)	0.557	0.975	(0.686)	2.651
	Sick/Disabled	0.802	(0.338)	2.230	<i>0.614</i>	<i>(0.368)</i>	<i>1.848</i>
	Home/Family	0.148	(0.227)	1.160	0.364	(0.269)	1.439
None	Retired	-0.784	(0.175)	0.457	-0.485	(0.197)	0.616
	Unemployed	-0.718	(0.423)	0.488	0.926	(0.762)	2.524
	Sick/Disabled	<i>0.678</i>	<i>(0.355)</i>	<i>1.970</i>	0.397	(0.403)	1.487
	Home/Family	0.091	(0.257)	1.095	0.365	(0.310)	1.441
Training Undertaken in Past Year							
	Retired	-0.493	(0.129)	0.611	-0.686	(0.151)	0.504
	Unemployed	-0.285	(0.375)	0.752	-0.382	(0.564)	0.682
	Sick/Disabled	-0.743	(0.224)	0.476	-1.025	(0.330)	0.359
	Home/Family	-0.784	(0.175)	0.457	-0.820	(0.215)	0.440
Marital Status (base=Married)							
Single	Retired	0.560	(0.216)	1.751	0.177	(0.268)	1.194
	Unemployed	<i>0.676</i>	<i>(0.383)</i>	<i>1.966</i>	0.672	(0.502)	1.958
	Sick/Disabled	0.325	(0.311)	1.384	0.628	(0.428)	1.874
	Home/Family	-1.933	(0.662)	0.145	-1.691	(0.805)	0.184
Div/Sep/Wid	Retired	-0.289	(0.130)	0.749	-0.151	(0.157)	0.860
	Unemployed	-0.008	(0.317)	0.992	-0.260	(0.415)	0.771
	Sick/Disabled	0.057	(0.185)	1.059	-0.079	(0.266)	0.924
	Home/Family	-1.785	(0.215)	0.168	-1.512	(0.252)	0.220

		Wave 1: 2002			Wave 2: 2004		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Number of Close Relatives							
	Retired	-0.039	(0.017)	0.962	0.011	(0.020)	1.011
	Unemployed	-0.021	(0.044)	0.979	-0.095	(0.068)	0.909
	Sick/Disabled	0.011	(0.020)	1.011	0.077	(0.028)	1.080
	Home/Family	-0.003	(0.018)	0.997	0.008	(0.024)	1.008
Number of Close Friends							
	Retired	0.000	(0.013)	1.000	-0.004	(0.013)	0.996
	Unemployed	0.035	(0.025)	1.036	0.019	(0.022)	1.019
	Sick/Disabled	0.019	(0.014)	1.019	-0.018	(0.029)	0.982
	Home/Family	0.014	(0.019)	1.014	-0.012	(0.026)	0.988
Organisational Membership							
	Retired	0.244	(0.117)	1.276	0.343	(0.144)	1.409
	Unemployed	0.034	(0.275)	1.035	0.445	(0.444)	1.560
	Sick/Disabled	0.100	(0.155)	1.105	0.509	(0.233)	1.664
	Home/Family	-0.126	(0.140)	0.882	0.150	(0.180)	1.162
Provides Care							
	Retired	0.480	(0.120)	1.616	0.382	(0.135)	1.465
	Unemployed	0.833	(0.310)	2.300	0.507	(0.375)	1.660
	Sick/Disabled	0.107	(0.194)	1.113	<i>0.443</i>	<i>(0.248)</i>	<i>1.557</i>
	Home/Family	0.789	(0.139)	2.201	0.767	(0.167)	2.153
No-control (base=Never)							
Not often	Retired	0.034	(0.117)	1.035	0.461	(0.138)	1.586
	Unemployed	-0.274	(0.333)	0.760	0.246	(0.389)	1.279
	Sick/Disabled	-0.099	(0.208)	0.906	0.394	(0.304)	1.483
	Home/Family	0.486	(0.153)	1.626	0.544	(0.189)	1.723
Sometimes	Retired	0.047	(0.143)	1.048	0.253	(0.179)	1.288
	Unemployed	-0.361	(0.355)	0.697	-0.410	(0.570)	0.664
	Sick/Disabled	0.216	(0.213)	1.241	0.126	(0.298)	1.134
	Home/Family	0.461	(0.182)	1.586	<i>0.428</i>	<i>(0.236)</i>	<i>1.534</i>
Often	Retired	0.347	(0.284)	1.415	1.053	(0.339)	2.866
	Unemployed	0.037	(0.614)	1.038	0.875	(0.683)	2.399
	Sick/Disabled	0.875	(0.275)	2.399	1.030	(0.414)	2.801
	Home/Family	0.429	(0.364)	1.536	0.595	(0.481)	1.813
Future-plan (base=Often)							
Sometimes	Retired	-0.499	(0.135)	0.607	<i>-0.248</i>	<i>(0.150)</i>	<i>0.780</i>
	Unemployed	-0.076	(0.367)	0.927	0.190	(0.411)	1.209
	Sick/Disabled	-0.067	(0.192)	0.935	-0.253	(0.286)	0.776
	Home/Family	-0.053	(0.168)	0.948	-0.244	(0.213)	0.783

		Wave 1: 2002			Wave 2: 2004		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Can-do	Not Often	Retired	-0.191 (0.223)	0.826	-0.533 (0.235)	0.587	
		Unemployed	0.652 (0.435)	1.919	-0.505 (0.640)	0.604	
		Sick/Disabled	-0.148 (0.270)	0.862	0.047 (0.364)	1.048	
		Home/Family	0.099 (0.300)	1.104	-0.363 (0.300)	0.696	
	Never	Retired	-0.216 (0.209)	0.806	-0.072 (0.273)	0.931	
		Unemployed	0.599 (0.527)	1.820	0.952 (0.980)	2.591	
		Sick/Disabled	0.385 (0.273)	1.470	0.099 (0.458)	1.104	
		Home/Family	0.132 (0.244)	1.141	-0.131 (0.340)	0.877	
	Sometimes	Retired	0.011 (0.134)	1.011	0.095 (0.155)	1.100	
		Unemployed	0.449 (0.335)	1.567	0.024 (0.420)	1.024	
		Sick/Disabled	0.518 (0.193)	1.679	0.345 (0.252)	1.412	
		Home/Family	-0.232 (0.172)	0.793	-0.171 (0.212)	0.843	
Energy	Not Often	Retired	0.033 (0.265)	1.034	0.026 (0.278)	1.026	
		Unemployed	-0.029 (0.505)	0.971	0.167 (0.948)	1.182	
		Sick/Disabled	0.792 (0.281)	2.208	1.156 (0.329)	3.177	
		Home/Family	-0.571 (0.309)	0.565	0.055 (0.357)	1.057	
	Never	Retired	0.263 (0.281)	1.301	0.251 (0.324)	1.285	
		Unemployed	-0.289 (0.890)	0.749	-0.239 (1.301)	0.787	
		Sick/Disabled	0.521 (0.361)	1.684	1.124 (0.499)	3.077	
		Home/Family	0.278 (0.336)	1.320	0.437 (0.413)	1.548	
	Sometimes	Retired	0.068 (0.117)	1.070	-0.244 (0.142)	0.783	
		Unemployed	0.211 (0.358)	1.235	0.345 (0.433)	1.412	
		Sick/Disabled	1.177 (0.313)	3.245	1.19 (0.560)	3.287	
		Home/Family	0.078 (0.156)	1.081	-0.097 (0.197)	0.908	
	Not Often	Retired	0.196 (0.198)	1.217	0.012 (0.240)	1.012	
		Unemployed	-0.293 (0.505)	0.746	-0.292 (0.666)	0.747	
		Sick/Disabled	1.752 (0.358)	5.766	1.354 (0.585)	3.873	
		Home/Family	0.405 (0.246)	1.499	-0.440 (0.314)	0.644	
	Never	Retired	1.036 (0.366)	2.818	0.402 (0.414)	1.495	
		Unemployed	0.260 (0.788)	1.297	-15.890 (0.818)	0.000	
		Sick/Disabled	2.764 (0.432)	15.863	1.824 (0.686)	6.197	
		Home/Family	0.684 (0.473)	1.982	-0.050 (0.543)	0.951	

		Wave 1: 2002			Wave 2: 2004		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
New-things							
Sometimes	Retired	0.093	(0.138)	1.097	0.075	(0.188)	1.078
	Unemployed	-0.609	(0.401)	0.544	0.174	(0.583)	1.190
	Sick/Disabled	0.127	(0.283)	1.135	1.285	(0.601)	3.615
	Home/Family	-0.133	(0.179)	0.875	0.364	(0.272)	1.439
Not Often	Retired	-0.181	(0.167)	0.834	0.170	(0.209)	1.185
	Unemployed	-0.753	(0.478)	0.471	-0.898	(0.676)	0.407
	Sick/Disabled	-0.053	(0.294)	0.948	<i>1.064</i>	<i>(0.613)</i>	<i>2.898</i>
	Home/Family	-0.035	(0.218)	0.966	0.461	(0.302)	1.586
Never	Retired	0.324	(0.282)	1.383	0.438	(0.317)	1.550
	Unemployed	-0.415	(0.672)	0.660	-1.817	(1.659)	0.163
	Sick/Disabled	1.006	(0.339)	2.735	1.745	(0.644)	5.726
	Home/Family	0.294	(0.335)	1.342	<i>0.799</i>	<i>(0.422)</i>	<i>2.223</i>
Opportunities							
Sometimes	Retired	-0.008	(0.117)	0.992	-0.133	(0.151)	0.875
	Unemployed	<i>0.685</i>	<i>(0.403)</i>	<i>1.984</i>	-0.379	(0.424)	0.685
	Sick/Disabled	-0.106	(0.215)	0.899	0.384	(0.340)	1.468
	Home/Family	0.049	(0.158)	1.050	<i>-0.381</i>	<i>(0.203)</i>	<i>0.683</i>
Not Often	Retired	0.405	(0.185)	1.499	0.267	(0.233)	1.306
	Unemployed	0.745	(0.491)	2.106	-0.742	(0.623)	0.476
	Sick/Disabled	-0.065	(0.246)	0.937	<i>0.728</i>	<i>(0.402)</i>	<i>2.071</i>
	Home/Family	0.193	(0.246)	1.213	-0.002	(0.320)	0.998
Never	Retired	-0.275	(0.396)	0.760	0.223	(0.462)	1.250
	Unemployed	-1.048	(0.876)	0.351	-13.730	(0.849)	0.000
	Sick/Disabled	-0.428	(0.406)	0.652	1.258	(0.574)	3.518
	Home/Family	<i>0.852</i>	<i>(0.516)</i>	<i>2.344</i>	-0.177	(0.623)	0.838
Optimism							
Sometimes	Retired	-0.091	(0.126)	0.913	-0.245	(0.155)	0.783
	Unemployed	-0.015	(0.469)	0.985	<i>0.714</i>	<i>(0.412)</i>	<i>2.042</i>
	Sick/Disabled	0.072	(0.222)	1.075	0.384	(0.314)	1.468
	Home/Family	-0.359	(0.177)	0.698	0.036	(0.209)	1.037
Not Often	Retired	-0.027	(0.214)	0.973	<i>-0.442</i>	<i>(0.253)</i>	<i>0.643</i>
	Unemployed	0.856	(0.534)	2.354	1.307	(0.580)	3.695
	Sick/Disabled	0.304	(0.295)	1.355	-0.456	(0.447)	0.634
	Home/Family	-0.331	(0.308)	0.718	-0.249	(0.359)	0.780

		Wave 1: 2002			Wave 2: 2004		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Never	Retired	-0.054	(0.455)	0.947	-1.053	(0.438)	0.349
	Unemployed	0.618	(0.757)	1.855	-14.339	(1.588)	0.000
	Sick/Disabled	0.582	(0.443)	1.790	-0.860	(0.570)	0.423
	Home/Family	-0.733	(0.586)	0.480	-0.181	(0.532)	0.834
Sociability							
Sometimes	Retired	-0.008	(0.123)	0.992	0.077	(0.148)	1.080
	Unemployed	0.030	(0.320)	1.030	0.281	(0.385)	1.324
	Sick/Disabled	-0.051	(0.166)	0.950	-0.139	(0.245)	0.870
	Home/Family	<i>0.272</i>	<i>(0.148)</i>	<i>1.313</i>	0.286	(0.199)	1.331
Not Often	Retired	0.309	(0.468)	1.362	0.137	(0.509)	1.147
	Unemployed	1.530	(0.636)	4.618	0.722	(0.976)	2.059
	Sick/Disabled	0.286	(0.422)	1.331	0.071	(0.632)	1.074
	Home/Family	-1.187	(0.835)	0.305	0.855	(0.695)	2.351
Never	Retired	-0.642	(0.668)	0.526	0.165	(0.652)	1.179
	Unemployed	0.625	(1.279)	1.868	-11.911	(1.330)	0.000
	Sick/Disabled	<i>-1.095</i>	<i>(0.608)</i>	<i>0.335</i>	0.275	(0.794)	1.317
	Home/Family	0.201	(0.814)	1.223	0.582	(0.980)	1.790
Family-duty							
Sometimes	Retired	<i>0.473</i>	<i>(0.276)</i>	<i>1.605</i>	0.684	(0.321)	1.982
	Unemployed	-0.746	(0.494)	0.474	0.503	(0.876)	1.654
	Sick/Disabled	0.025	(0.295)	1.025	0.843	(0.411)	2.323
	Home/Family	-0.672	(0.257)	0.511	-0.082	(0.317)	0.921
Not Often	Retired	<i>0.513</i>	<i>(0.282)</i>	<i>1.670</i>	0.732	(0.323)	2.079
	Unemployed	-0.312	(0.522)	0.732	0.705	(0.816)	2.024
	Sick/Disabled	0.325	(0.302)	1.384	0.700	(0.436)	2.014
	Home/Family	-0.779	(0.273)	0.459	-0.537	(0.331)	0.584
Never	Retired	0.309	(0.285)	1.362	0.480	(0.325)	1.616
	Unemployed	-0.584	(0.541)	0.558	1.044	(0.873)	2.841
	Sick/Disabled	0.473	(0.300)	1.605	1.098	(0.411)	2.998
	Home/Family	-1.008	(0.277)	0.365	-0.598	<i>(0.339)</i>	<i>0.550</i>
Finance-limits							
Sometimes	Retired	0.268	(0.165)	1.307	0.097	(0.230)	1.102
	Unemployed	-0.898	(0.364)	0.407	-0.670	(0.528)	0.512
	Sick/Disabled	-0.095	(0.186)	0.909	-0.582	(0.290)	0.559
	Home/Family	-0.127	(0.194)	0.881	-0.110	(0.301)	0.896

		Wave 1: 2002			Wave 2: 2004		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Not Often	Retired	0.840	(0.173)	2.316	0.463	(0.236)	1.589
	Unemployed	-0.893	(0.428)	0.409	0.088	(0.514)	1.092
	Sick/Disabled	-0.019	(0.229)	0.981	-0.045	(0.307)	0.956
	Home/Family	0.043	(0.217)	1.044	0.275	(0.303)	1.317
Never	Retired	1.206	(0.190)	3.340	0.875	(0.244)	2.399
	Unemployed	-1.063	(0.570)	0.345	-0.732	(0.721)	0.481
	Sick/Disabled	-0.109	(0.294)	0.897	0.099	(0.372)	1.104
	Home/Family	0.613	(0.224)	1.846	0.565	(0.321)	1.759
Age							
	Retired	0.343	(0.015)	1.409	0.367	(0.020)	1.443
	Unemployed	0.042	(0.034)	1.043	0.008	(0.058)	1.008
	Sick/Disabled	0.077	(0.019)	1.080	0.042	(0.034)	1.043
	Home/Family	0.097	(0.017)	1.102	0.100	(0.026)	1.105
Gender (Female)							
	Retired	0.705	(0.105)	2.024	0.521	(0.125)	1.684
	Unemployed	-1.742	(0.348)	0.175	-0.360	(0.391)	0.698
	Sick/Disabled	-0.159	(0.162)	0.853	-0.391	(0.225)	0.676
	Home/Family	2.901	(0.231)	18.192	2.827	(0.290)	16.895
Income Quintile 2							
	Retired	-0.744	(0.185)	0.475	-0.965	(0.229)	0.381
	Unemployed	-2.150	(0.412)	0.116	-1.868	(0.570)	0.154
	Sick/Disabled	-0.405	(0.230)	0.667	-0.858	(0.342)	0.424
	Home/Family	-0.933	(0.231)	0.393	-0.715	(0.277)	0.489
Income Quintile 3							
	Retired	-1.400	(0.177)	0.247	-1.412	(0.213)	0.244
	Unemployed	-3.242	(0.423)	0.039	-2.781	(0.571)	0.062
	Sick/Disabled	-0.777	(0.224)	0.460	-1.392	(0.330)	0.249
	Home/Family	-1.669	(0.217)	0.188	-1.377	(0.262)	0.252
Income Quintile 4							
	Retired	-1.965	(0.174)	0.140	-1.793	(0.209)	0.166
	Unemployed	-3.936	(0.544)	0.020	-2.642	(0.486)	0.071
	Sick/Disabled	-1.531	(0.239)	0.216	-1.609	(0.351)	0.200
	Home/Family	-2.039	(0.207)	0.130	-1.913	(0.266)	0.148
Income Quintile 5							
	Retired	-2.234	(0.181)	0.107	-2.121	(0.211)	0.120
	Unemployed	-3.460	(0.458)	0.031	-4.382	(0.804)	0.013
	Sick/Disabled	-2.378	(0.313)	0.093	-2.337	(0.392)	0.097
	Home/Family	-2.135	(0.212)	0.118	-2.403	(0.269)	0.090

		Wave 1: 2002			Wave 2: 2004		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
<i>Constant</i>							
	Retired	-20.145	(0.970)		-21.635	(1.262)	
	Unemployed	-1.695	(2.245)		-3.013	(3.436)	
	Sick/Disabled	-7.822	(1.154)		-9.753	(2.160)	
	Home/Family	-7.041	(1.116)		-8.342	(1.706)	
Pseudo R ²		0.3523			0.3552		
Wald χ^2		2225.52			4422.51		
df		184			188		
N		4440			2900		

Notes: Significance is displayed through formatting: $p < 0.10$; **$p < 0.05$** ; and **$p < 0.001$** . The base category for the dispositional variables is Often except for the No-control variable for which it is Never. Income quintiles are listed in reference to base of Quintile 1, the poorest.

Multinomial Logistic Regression Results from ELSA:
Including Dispositions with Labour Market Status (Base Outcome = Employed) (cont'd.)

		Wave 3: 2006			Wave 4: 2008		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Poor Self-Perceived Health							
	Retired	<i>0.302</i>	<i>(0.166)</i>	<i>1.353</i>	0.047	(0.197)	1.048
	Unemployed	0.909	(0.363)	2.482	0.909	(0.428)	2.482
	Sick/Disabled	1.39	(0.271)	4.015	1.523	(0.344)	4.586
	Home/Family	-0.106	(0.225)	0.899	0.093	(0.297)	1.097
Health Limitations Affecting Work							
	Retired	1.466	(0.170)	4.332	1.409	(0.178)	4.092
	Unemployed	1.494	(0.395)	4.455	0.756	(0.468)	2.130
	Sick/Disabled	4.287	(0.396)	72.748	4.284	(0.447)	72.530
	Home/Family	1.671	(0.212)	5.317	1.302	(0.260)	3.677
Educational Qualifications (base=Degree)							
Some	Retired	-0.714	(0.154)	0.490	-0.374	(0.157)	0.688
	Unemployed	0.784	(0.619)	2.190	-0.406	(0.426)	0.666
	Sick/Disabled	0.325	(0.430)	1.384	0.365	(0.534)	1.441
	Home/Family	-0.021	(0.236)	0.979	0.371	(0.272)	1.449
None	Retired	-0.694	(0.208)	0.500	-0.009	(0.221)	0.991
	Unemployed	1.180	(0.741)	3.254	-0.553	(0.583)	0.575
	Sick/Disabled	<i>0.797</i>	<i>(0.469)</i>	<i>2.219</i>	1.288	(0.582)	3.626
	Home/Family	0.206	(0.285)	1.229	0.129	(0.374)	1.138
Training Undertaken in Past Year							
	Retired	-0.602	(0.166)	0.548	-0.609	(0.178)	0.544
	Unemployed	0.223	(0.405)	1.250	-0.346	(0.390)	0.708
	Sick/Disabled	-1.08	(0.385)	0.340	-1.281	(0.445)	0.278
	Home/Family	-1.103	(0.232)	0.332	-0.832	(0.273)	0.435
Marital Status (base=Married)							
Single	Retired	0.219	(0.250)	1.245	0.275	(0.278)	1.317
	Unemployed	<i>0.812</i>	<i>(0.442)</i>	<i>2.252</i>	0.654	(0.536)	1.923
	Sick/Disabled	0.474	(0.416)	1.606	0.642	(0.521)	1.900
	Home/Family	<i>-1.089</i>	<i>(0.597)</i>	<i>0.337</i>	-1.442	(0.701)	0.236
Div/Sep/Wid	Retired	-0.184	(0.155)	0.832	-0.223	(0.156)	0.800
	Unemployed	0.022	(0.426)	1.022	0.280	(0.408)	1.323
	Sick/Disabled	0.094	(0.245)	1.099	0.366	(0.302)	1.442
	Home/Family	-1.343	(0.265)	0.261	-1.179	(0.254)	0.308

		Wave 3: 2006			Wave 4: 2008		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Number of Close Relatives							
	Retired	-0.026	(0.029)	0.974	-0.044	(0.022)	0.957
	Unemployed	-0.149	(0.068)	0.862	-0.145	(0.073)	0.865
	Sick/Disabled	-0.012	(0.041)	0.988	0.075	(0.034)	1.078
	Home/Family	0.010	(0.017)	1.010	-0.007	(0.028)	0.993
Number of Close Friends							
	Retired	-0.002	(0.010)	0.998	-0.014	(0.025)	0.986
	Unemployed	-0.008	(0.028)	0.992	0.036	(0.046)	1.037
	Sick/Disabled	0.017	(0.016)	1.017	-0.011	(0.058)	0.989
	Home/Family	0.003	(0.013)	1.003	0.042	(0.038)	1.043
Organisational Membership							
	Retired	0.251	(0.141)	1.285	0.148	(0.148)	1.160
	Unemployed	0.085	(0.356)	1.089	-0.144	(0.311)	0.866
	Sick/Disabled	-0.136	(0.235)	0.873	0.202	(0.280)	1.224
	Home/Family	0.074	(0.179)	1.077	0.212	(0.223)	1.236
Provides Care							
	Retired	0.523	(0.127)	1.687	0.441	(0.141)	1.554
	Unemployed	0.314	(0.422)	1.369	-0.667	(0.394)	0.513
	Sick/Disabled	0.141	(0.252)	1.151	0.038	(0.320)	1.039
	Home/Family	0.844	(0.174)	2.326	0.790	(0.211)	2.203
No-control (base=Never)							
Not often	Retired	0.544	(0.155)	1.723	-0.031	(0.159)	0.969
	Unemployed	0.598	(0.568)	1.818	0.261	(0.418)	1.298
	Sick/Disabled	0.260	(0.338)	1.297	0.379	(0.393)	1.461
	Home/Family	0.365	(0.220)	1.441	-0.036	(0.281)	0.965
Sometimes	Retired	0.207	(0.190)	1.230	-0.011	(0.190)	0.989
	Unemployed	0.511	(0.711)	1.667	-0.069	(0.449)	0.933
	Sick/Disabled	-0.028	(0.347)	0.972	0.605	(0.426)	1.831
	Home/Family	0.322	(0.253)	1.380	0.463	(0.300)	1.589
Often	Retired	0.652	(0.365)	1.919	0.650	(0.366)	1.916
	Unemployed	1.347	(0.760)	3.846	0.551	(0.588)	1.735
	Sick/Disabled	0.419	(0.468)	1.520	0.988	(0.526)	2.686
	Home/Family	0.599	(0.430)	1.820	-0.147	(0.511)	0.863
Future-plan (base=Often)							
Sometimes	Retired	-0.473	(0.147)	0.623	-0.370	(0.154)	0.691
	Unemployed	-0.549	(0.475)	0.578	0.000	(0.385)	1.000
	Sick/Disabled	-0.054	(0.301)	0.947	-0.054	(0.353)	0.947
	Home/Family	0.240	(0.207)	1.271	0.042	(0.263)	1.043

		Wave 3: 2006			Wave 4: 2008		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Not Often	Retired	-0.759	(0.252)	0.468	-0.589	(0.247)	0.555
	Unemployed	0.556	(0.557)	1.744	0.053	(0.491)	1.054
	Sick/Disabled	-0.355	(0.384)	0.701	-0.142	(0.454)	0.868
	Home/Family	0.440	(0.316)	1.553	-0.013	(0.348)	0.987
Never	Retired	-0.147	(0.352)	0.863	-0.140	(0.272)	0.869
	Unemployed	0.987	(0.725)	2.683	-1.189	(0.808)	0.305
	Sick/Disabled	0.430	(0.456)	1.537	-0.053	(0.597)	0.948
	Home/Family	0.377	(0.411)	1.458	-0.727	(0.520)	0.483
Can-do							
Sometimes	Retired	0.037	(0.141)	1.038	-0.143	(0.151)	0.867
	Unemployed	-0.242	(0.388)	0.785	0.118	(0.390)	1.125
	Sick/Disabled	-0.122	(0.286)	0.885	-0.442	(0.346)	0.643
	Home/Family	-0.496	(0.205)	0.609	0.245	(0.270)	1.278
Not Often	Retired	0.194	(0.290)	1.214	-0.139	(0.290)	0.870
	Unemployed	-0.804	(0.684)	0.448	0.231	(0.600)	1.260
	Sick/Disabled	0.500	(0.371)	1.649	-0.187	(0.459)	0.829
	Home/Family	<i>-0.609</i>	<i>(0.367)</i>	<i>0.544</i>	0.040	(0.412)	1.041
Never	Retired	-0.339	(0.499)	0.712	-1.455	(0.528)	0.233
	Unemployed	0.590	(0.944)	1.804	0.468	(0.770)	1.597
	Sick/Disabled	-0.047	(0.642)	0.954	-0.330	(0.752)	0.719
	Home/Family	-1.526	(0.690)	0.217	0.043	(0.784)	1.044
Energy							
Sometimes	Retired	0.089	(0.154)	1.093	0.000	(0.168)	1.000
	Unemployed	-0.334	(0.481)	0.716	-0.288	(0.473)	0.750
	Sick/Disabled	<i>0.996</i>	<i>(0.577)</i>	<i>2.707</i>	-0.547	(0.542)	0.579
	Home/Family	-0.124	(0.218)	0.883	<i>-0.441</i>	<i>(0.263)</i>	<i>0.643</i>
Not Often	Retired	0.004	(0.232)	1.004	0.263	(0.232)	1.301
	Unemployed	-0.923	(0.581)	0.397	0.181	(0.538)	1.198
	Sick/Disabled	1.264	(0.626)	3.540	0.480	(0.591)	1.616
	Home/Family	0.149	(0.316)	1.161	-0.070	(0.356)	0.932
Never	Retired	0.032	(0.400)	1.033	0.870	(0.379)	2.387
	Unemployed	-1.392	(0.672)	0.249	-0.041	(0.795)	0.960
	Sick/Disabled	<i>1.209</i>	<i>(0.693)</i>	<i>3.350</i>	0.781	(0.721)	2.184
	Home/Family	-0.339	(0.469)	0.712	-0.429	(0.666)	0.651

		Wave 3: 2006			Wave 4: 2008		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
New-things							
Sometimes	Retired	0.229	(0.204)	1.257	-0.344	(0.195)	0.709
	Unemployed	-0.693	(0.566)	0.500	-0.545	(0.492)	0.580
	Sick/Disabled	-0.391	(0.430)	0.676	0.048	(0.579)	1.049
	Home/Family	-0.114	(0.272)	0.892	0.724	(0.369)	2.063
Not Often	Retired	-0.016	(0.229)	0.984	-0.312	(0.215)	0.732
	Unemployed	-0.609	(0.583)	0.544	-0.420	(0.498)	0.657
	Sick/Disabled	-0.711	(0.443)	0.491	0.047	(0.596)	1.048
	Home/Family	0.263	(0.298)	1.301	0.309	(0.413)	1.362
Never	Retired	0.349	(0.330)	1.418	-0.172	(0.347)	0.842
	Unemployed	-0.514	(0.856)	0.598	-0.033	(0.826)	0.968
	Sick/Disabled	-0.297	(0.504)	0.743	-0.214	(0.682)	0.807
	Home/Family	0.653	(0.428)	1.921	1.365	(0.501)	3.916
Opportunities							
Sometimes	Retired	0.137	(0.148)	1.147	-0.066	(0.160)	0.936
	Unemployed	0.279	(0.456)	1.322	0.082	(0.463)	1.085
	Sick/Disabled	0.412	(0.314)	1.510	-0.444	(0.387)	0.641
	Home/Family	-0.247	(0.211)	0.781	0.275	(0.262)	1.317
Not Often	Retired	0.387	(0.230)	1.473	-0.011	(0.230)	0.989
	Unemployed	-0.897	(0.731)	0.408	0.038	(0.669)	1.039
	Sick/Disabled	0.112	(0.385)	1.119	-0.435	(0.445)	0.647
	Home/Family	-0.295	(0.292)	0.745	-0.131	(0.384)	0.877
Never	Retired	-0.317	(0.427)	0.728	0.164	(0.484)	1.178
	Unemployed	-0.167	(0.752)	0.846	-1.309	(1.226)	0.270
	Sick/Disabled	-0.152	(0.544)	0.859	0.423	(0.681)	1.527
	Home/Family	-0.270	(0.519)	0.763	0.363	(0.729)	1.438
Optimism							
Sometimes	Retired	-0.381	(0.160)	0.683	-0.084	(0.171)	0.919
	Unemployed	0.648	(0.541)	1.912	-0.350	(0.539)	0.705
	Sick/Disabled	-0.750	(0.331)	0.472	0.315	(0.399)	1.370
	Home/Family	-0.239	(0.245)	0.787	-0.180	(0.257)	0.835
Not Often	Retired	-0.315	(0.272)	0.730	-0.221	(0.274)	0.802
	Unemployed	0.593	(0.821)	1.809	-1.097	(0.641)	0.334
	Sick/Disabled	0.198	(0.431)	1.219	0.917	(0.501)	2.502
	Home/Family	-0.381	(0.408)	0.683	-0.385	(0.395)	0.680

		Wave 3: 2006			Wave 4: 2008		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
	Never						
	Retired	-0.353	(0.447)	0.703	-0.409	(0.546)	0.664
	Unemployed	0.386	(0.949)	1.471	-0.705	(0.830)	0.494
	Sick/Disabled	-0.010	(0.576)	0.990	0.985	(0.699)	2.678
Sociability	Home/Family	0.664	(0.524)	1.943	-0.322	(0.687)	0.725
	Sometimes						
	Retired	0.177	(0.143)	1.194	0.138	(0.150)	1.148
	Unemployed	0.148	(0.389)	1.160	0.603	(0.380)	1.828
	Sick/Disabled	0.001	(0.258)	1.001	0.362	(0.293)	1.436
	Home/Family	0.349	(0.189)	1.418	0.527	(0.231)	1.694
	Not Often						
	Retired	0.117	(0.511)	1.124	-0.494	(0.455)	0.610
	Unemployed	-0.646	(0.939)	0.524	0.979	(0.693)	2.662
	Sick/Disabled	1.057	(0.485)	2.878	-0.093	(0.560)	0.911
	Home/Family	0.835	(0.499)	2.305	1.307	(0.586)	3.695
	Never						
	Retired	0.724	(0.985)	2.063	1.071	(0.784)	2.918
	Unemployed	-28.833	(1.160)	0.000	-13.025	(1.290)	0.000
	Sick/Disabled	0.959	(0.864)	2.609	-13.675	(1.193)	0.000
Family-duty	Home/Family	-27.493	(1.000)	0.000	1.525	(1.009)	4.595
	Sometimes						
	Retired	-0.135	(0.309)	0.874	0.379	(0.311)	1.461
	Unemployed	0.654	(0.722)	1.923	-0.120	(0.654)	0.887
	Sick/Disabled	0.149	(0.480)	1.161	0.324	(0.557)	1.383
	Home/Family	0.014	(0.326)	1.014	-0.376	(0.350)	0.687
	Not Often						
	Retired	0.041	(0.307)	1.042	0.348	(0.314)	1.416
	Unemployed	0.670	(0.712)	1.954	-1.037	(0.682)	0.355
	Sick/Disabled	0.646	(0.476)	1.908	0.767	(0.563)	2.153
	Home/Family	-0.207	(0.337)	0.813	-0.457	(0.386)	0.633
	Never						
	Retired	0.042	(0.316)	1.043	0.420	(0.322)	1.522
	Unemployed	0.620	(0.758)	1.859	-0.077	(0.717)	0.926
	Sick/Disabled	0.777	(0.483)	2.175	1.662	(0.571)	5.270
Finance-limits	Home/Family	-0.487	(0.364)	0.614	-0.589	(0.428)	0.555
	Sometimes						
	Retired	0.167	(0.218)	1.182	0.344	(0.236)	1.411
	Unemployed	-0.110	(0.446)	0.896	-0.714	(0.369)	0.490
	Sick/Disabled	0.028	(0.286)	1.028	0.407	(0.368)	1.502
	Home/Family	-0.024	(0.267)	0.976	-0.217	(0.287)	0.805

		Wave 3: 2006			Wave 4: 2008		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Not Often	Retired	0.392	(0.230)	1.480	0.670	(0.242)	1.954
	Unemployed	0.022	(0.454)	1.022	-1.233	(0.484)	0.291
	Sick/Disabled	0.058	(0.344)	1.060	0.387	(0.386)	1.473
	Home/Family	0.129	(0.284)	1.138	-0.132	(0.286)	0.876
Never	Retired	0.807	(0.236)	2.241	0.827	(0.254)	2.286
	Unemployed	-1.318	(0.733)	0.268	-0.837	(0.536)	0.433
	Sick/Disabled	0.389	(0.359)	1.476	1.117	(0.520)	3.056
	Home/Family	0.647	(0.297)	1.910	0.277	(0.340)	1.319
Age							
	Retired	0.357	(0.020)	1.429	0.375	(0.023)	1.455
	Unemployed	0.066	(0.039)	1.068	0.063	(0.047)	1.065
	Sick/Disabled	0.067	(0.028)	1.069	-0.007	(0.040)	0.993
	Home/Family	0.041	(0.023)	1.042	-0.007	(0.033)	0.993
Gender (Female)							
	Retired	0.613	(0.125)	1.846	0.790	(0.136)	2.203
	Unemployed	-0.569	(0.384)	0.566	-0.232	(0.315)	0.793
	Sick/Disabled	-0.004	(0.225)	0.996	-0.479	(0.295)	0.619
	Home/Family	2.523	(0.267)	12.466	2.941	(0.383)	18.935
Income Quintile 2							
	Retired	-0.671	(0.215)	0.511	-0.651	(0.231)	0.522
	Unemployed	-2.779	(0.657)	0.062	-0.193	(0.443)	0.824
	Sick/Disabled	-0.587	(0.306)	0.556	-0.361	(0.385)	0.697
	Home/Family	-1.122	(0.275)	0.326	-0.650	(0.308)	0.522
Income Quintile 3							
	Retired	-1.261	(0.204)	0.283	-1.108	(0.210)	0.330
	Unemployed	-3.160	(0.635)	0.042	-0.965	(0.371)	0.381
	Sick/Disabled	-1.567	(0.320)	0.209	-1.140	(0.370)	0.320
	Home/Family	-1.906	(0.283)	0.149	-1.728	(0.313)	0.178
Income Quintile 4							
	Retired	-1.878	(0.204)	0.153	-1.196	(0.215)	0.302
	Unemployed	-2.900	(0.482)	0.055	-2.873	(0.674)	0.057
	Sick/Disabled	-2.052	(0.365)	0.128	-1.924	(0.431)	0.146
	Home/Family	-2.075	(0.254)	0.126	-1.954	(0.306)	0.142
Income Quintile 5							
	Retired	-2.094	(0.207)	0.123	-1.414	(0.215)	0.243
	Unemployed	-3.239	(0.520)	0.039	-3.123	(0.684)	0.044
	Sick/Disabled	-2.315	(0.406)	0.099	-2.349	(0.520)	0.095
	Home/Family	-2.238	(0.261)	0.107	-1.740	(0.289)	0.176

		Wave 3: 2006			Wave 4: 2008		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
<i>Constant</i>							
	Retired	-20.897	(1.259)		-22.300	(1.513)	
	Unemployed	-5.001	(2.456)		-3.057	(2.961)	
	Sick/Disabled	-8.873	(1.762)		-5.665	(2.298)	
	Home/Family	-4.528	(1.515)		-3.897	(2.014)	
Pseudo R ²		0.3821			0.3761		
Wald χ^2		6096.56			2579.21		
df		188			188		
N		3082			2635		

Notes: Significance is displayed through formatting: $p < 0.10$; $p < 0.05$; and $p < 0.001$. The base category for the dispositional variables is Often except for the No-control variable for which it is Never. Income quintiles are listed in reference to base of Quintile 1, the poorest.

Multinomial Logistic Regression Results from ELSA:

Including Dispositions with Labour Market Status (Base Outcome = Employed) (cont'd.)

		Wave 5: 2010			Pooled Waves 1-5		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Poor Self-Perceived Health							
	Retired	0.158	(0.201)	1.171	0.206	(0.100)	1.228
	Unemployed	0.309	(0.483)	1.362	0.533	(0.246)	1.704
	Sick/Disabled	1.713	(0.432)	5.546	1.515	(0.173)	4.550
	Home/Family	-0.304	(0.325)	0.738	0.054	(0.131)	1.055
Health Limitations Affecting Work							
	Retired	1.300	(0.181)	3.668	1.393	(0.097)	4.029
	Unemployed	0.818	(0.450)	2.266	1.053	(0.231)	2.867
	Sick/Disabled	3.915	(0.485)	50.141	4.118	(0.247)	61.406
	Home/Family	1.229	(0.270)	3.417	1.304	(0.125)	3.685
Educational Qualifications (base=Degree)							
Some	Retired	-0.380	(0.154)	0.684	-0.415	(0.098)	0.661
	Unemployed	-0.177	(0.549)	0.838	-0.076	(0.251)	0.927
	Sick/Disabled	0.241	(0.482)	1.273	0.140	(0.259)	1.150
	Home/Family	-0.055	(0.280)	0.947	0.256	(0.174)	1.292
None	Retired	-0.448	(0.223)	0.639	-0.420	(0.131)	0.657
	Unemployed	0.265	(0.666)	1.304	-0.060	(0.331)	0.942
	Sick/Disabled	0.338	(0.558)	1.402	0.326	(0.282)	1.385
	Home/Family	0.669	(0.359)	1.953	0.666	(0.202)	1.946
Training Undertaken in Past Year							
	Retired	-0.759	(0.180)	0.468	-0.666	(0.088)	0.514
	Unemployed	0.324	(0.442)	1.383	-0.225	(0.229)	0.799
	Sick/Disabled	-1.683	(0.591)	0.186	-1.134	(0.222)	0.322
	Home/Family	-1.289	(0.356)	0.276	-0.926	(0.141)	0.396
Marital Status (base=Married)							
Single	Retired	-0.494	(0.462)	0.610	-0.163	(0.308)	0.849
	Unemployed	-0.182	(0.951)	0.834	0.022	(0.490)	1.023
	Sick/Disabled	1.105	(0.642)	3.019	0.083	(0.479)	1.086
	Home/Family	-1.781	(1.103)	0.168	-1.181	(0.889)	0.307
Div/Sep/Wid	Retired	-0.350	(0.158)	0.704	-0.244	(0.096)	0.784
	Unemployed	0.032	(0.421)	1.032	-0.035	(0.232)	0.966
	Sick/Disabled	-0.015	(0.368)	0.986	-0.077	(0.159)	0.926
	Home/Family	-1.192	(0.314)	0.304	-1.285	(0.154)	0.277

		Wave 5: 2010			Pooled Waves 1-5		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Number of Close Relatives							
	Retired	-0.030	(0.020)	0.970	-0.011	(0.012)	0.989
	Unemployed	-0.023	(0.069)	0.978	-0.094	(0.039)	0.910
	Sick/Disabled	-0.072	(0.039)	0.930	0.021	(0.026)	1.021
	Home/Family	0.006	(0.028)	1.006	0.006	(0.015)	1.006
Number of Close Friends							
	Retired	0.012	(0.023)	1.012	-0.004	(0.008)	0.996
	Unemployed	0.083	(0.047)	1.086	0.011	(0.012)	1.011
	Sick/Disabled	0.059	(0.047)	1.060	0.014	(0.012)	1.014
	Home/Family	0.038	(0.043)	1.039	0.014	(0.009)	1.014
Organisational Membership							
	Retired	0.196	(0.145)	1.217	0.253	(0.080)	1.288
	Unemployed	0.605	(0.451)	1.831	0.071	(0.200)	1.073
	Sick/Disabled	0.169	(0.297)	1.184	0.100	(0.140)	1.105
	Home/Family	-0.248	(0.216)	0.780	0.092	(0.108)	1.096
Provides Care							
	Retired	0.834	(0.187)	2.302	0.491	(0.086)	1.634
	Unemployed	-0.536	(0.719)	0.585	0.298	(0.246)	1.347
	Sick/Disabled	-0.048	(0.514)	0.953	0.400	(0.176)	1.492
	Home/Family	1.401	(0.248)	4.059	1.028	(0.105)	2.795
No-control (base=Never)							
Not often	Retired	-0.414	(0.360)	0.661	-0.240	(0.187)	0.787
	Unemployed	-1.525	(0.640)	0.218	-0.462	(0.348)	0.630
	Sick/Disabled	-0.917	(0.454)	0.400	-0.405	(0.211)	0.667
	Home/Family	-0.027	(0.474)	0.973	0.020	(0.248)	1.020
Sometimes	Retired	-0.504	(0.365)	0.604	-0.109	(0.191)	0.897
	Unemployed	-0.960	(0.689)	0.383	-0.250	(0.362)	0.779
	Sick/Disabled	-1.572	(0.524)	0.208	-0.414	(0.233)	0.661
	Home/Family	-0.178	(0.470)	0.837	-0.045	(0.254)	0.956
Often	Retired	-0.679	(0.382)	0.507	-0.339	(0.198)	0.713
	Unemployed	-1.461	(0.861)	0.232	-0.479	(0.381)	0.619
	Sick/Disabled	-1.404	(0.624)	0.246	-0.566	(0.258)	0.568
	Home/Family	-0.548	(0.532)	0.578	-0.348	(0.263)	0.706
Future-plan (base=Often)							
Sometimes	Retired	-0.367	(0.157)	0.693	-0.300	(0.076)	0.741
	Unemployed	-0.423	(0.362)	0.655	-0.306	(0.218)	0.737
	Sick/Disabled	-0.766	(0.406)	0.465	-0.246	(0.172)	0.782
	Home/Family	0.105	(0.271)	1.111	-0.111	(0.114)	0.895

		Wave 5: 2010			Pooled Waves 1-5			
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR	
Can-do	Not Often	Retired	-0.530	(0.251)	0.588	-0.446	(0.124)	0.640
		Unemployed	-0.668	(0.641)	0.513	-0.129	(0.279)	0.879
		Sick/Disabled	-1.902	(0.556)	0.149	-0.246	(0.221)	0.782
		Home/Family	-0.547	(0.404)	0.578	-0.230	(0.175)	0.795
	Never	Retired	0.055	(0.362)	1.056	0.070	(0.158)	1.073
		Unemployed	0.378	(0.741)	1.459	0.485	(0.365)	1.624
		Sick/Disabled	-0.300	(0.615)	0.741	0.071	(0.281)	1.073
		Home/Family	0.395	(0.490)	1.484	-0.035	(0.224)	0.965
	Sometimes	Retired	-0.041	(0.166)	0.960	-0.018	(0.079)	0.982
		Unemployed	-0.090	(0.379)	0.914	0.113	(0.203)	1.119
		Sick/Disabled	0.596	(0.406)	1.815	0.018	(0.162)	1.018
		Home/Family	-0.268	(0.267)	0.765	-0.072	(0.114)	0.930
Not Often	Retired	-0.470	(0.298)	0.625	-0.014	(0.154)	0.987	
	Unemployed	-2.174	(1.032)	0.114	-0.310	(0.409)	0.733	
	Sick/Disabled	<i>1.003</i>	<i>(0.554)</i>	<i>2.726</i>	0.647	(0.213)	1.909	
	Home/Family	-0.233	(0.450)	0.792	0.111	(0.203)	1.117	
Never	Retired	-0.196	(0.402)	0.822	-0.076	(0.211)	0.927	
	Unemployed	1.074	(1.318)	2.926	0.096	(0.561)	1.101	
	Sick/Disabled	<i>1.497</i>	<i>(0.805)</i>	<i>4.469</i>	0.676	(0.335)	1.966	
	Home/Family	-0.018	(0.715)	0.982	-0.054	(0.345)	0.948	
Energy	Sometimes	Retired	-0.017	(0.161)	0.983	-0.042	(0.084)	0.959
		Unemployed	-0.261	(0.423)	0.770	-0.043	(0.241)	0.958
		Sick/Disabled	-0.173	(0.601)	0.841	0.198	(0.313)	1.219
		Home/Family	0.111	(0.283)	1.118	-0.087	(0.123)	0.917
	Not Often	Retired	0.327	(0.250)	1.387	0.114	(0.126)	1.120
		Unemployed	-0.421	(0.540)	0.656	-0.207	(0.318)	0.813
		Sick/Disabled	0.467	(0.673)	1.595	0.458	(0.330)	1.580
		Home/Family	0.537	(0.424)	1.711	-0.024	(0.196)	0.976
	Never	Retired	<i>0.779</i>	<i>(0.417)</i>	<i>2.180</i>	<i>0.376</i>	<i>(0.217)</i>	<i>1.456</i>
		Unemployed	0.478	(0.869)	1.613	0.004	(0.462)	1.004
		Sick/Disabled	0.973	(0.787)	2.647	0.850	(0.384)	2.340
		Home/Family	0.190	(0.652)	1.209	-0.021	(0.298)	0.979

		Wave 5: 2010			Pooled Waves 1-5		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
New-things							
Sometimes	Retired	0.064	(0.201)	1.066	-0.002	(0.105)	0.998
	Unemployed	-0.498	(0.680)	0.608	0.141	(0.321)	1.151
	Sick/Disabled	-0.702	(0.591)	0.496	0.182	(0.272)	1.199
	Home/Family	0.246	(0.373)	1.280	0.217	(0.161)	1.242
Not Often	Retired	-0.032	(0.226)	0.969	-0.035	(0.121)	0.965
	Unemployed	-0.185	(0.702)	0.831	-0.076	(0.342)	0.927
	Sick/Disabled	-0.375	(0.583)	0.687	0.059	(0.281)	1.061
	Home/Family	-0.020	(0.423)	0.980	0.120	(0.185)	1.127
Never	Retired	0.121	(0.338)	1.128	0.191	(0.177)	1.211
	Unemployed	-0.715	(1.025)	0.489	-0.195	(0.494)	0.823
	Sick/Disabled	-0.932	(0.700)	0.394	0.240	(0.314)	1.271
	Home/Family	0.527	(0.515)	1.694	0.743	(0.240)	2.103
Opportunities							
Sometimes	Retired	0.026	(0.153)	1.026	0.004	(0.080)	1.004
	Unemployed	-0.679	(0.456)	0.507	-0.213	(0.229)	0.808
	Sick/Disabled	-0.395	(0.493)	0.673	0.058	(0.190)	1.060
	Home/Family	-0.170	(0.243)	0.844	-0.279	(0.115)	0.756
Not Often	Retired	-0.237	(0.240)	0.789	0.112	(0.127)	1.118
	Unemployed	0.218	(0.516)	1.243	-0.306	(0.315)	0.737
	Sick/Disabled	0.467	(0.522)	1.595	0.205	(0.222)	1.227
	Home/Family	-0.064	(0.379)	0.938	-0.363	(0.177)	0.696
Never	Retired	-0.365	(0.657)	0.694	0.116	(0.259)	1.123
	Unemployed	-1.924	(1.409)	0.146	-0.874	(0.532)	0.417
	Sick/Disabled	0.831	(0.866)	2.295	0.568	(0.324)	1.765
	Home/Family	-0.446	(0.761)	0.640	-0.500	(0.378)	0.607
Optimism							
Sometimes	Retired	-0.209	(0.167)	0.811	-0.269	(0.084)	0.764
	Unemployed	0.482	(0.357)	1.619	0.181	(0.232)	1.198
	Sick/Disabled	0.099	(0.497)	1.104	0.133	(0.190)	1.143
	Home/Family	-0.062	(0.325)	0.940	-0.005	(0.132)	0.995
Not Often	Retired	-0.160	(0.301)	0.852	-0.446	(0.145)	0.640
	Unemployed	0.223	(0.586)	1.250	0.034	(0.359)	1.035
	Sick/Disabled	0.008	(0.573)	1.008	0.215	(0.244)	1.240
	Home/Family	-0.005	(0.501)	0.995	-0.212	(0.222)	0.809

		Wave 5: 2010			Pooled Waves 1-5		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Never	Retired	-0.350	(0.618)	0.705	-0.692	(0.259)	0.500
	Unemployed	1.114	(0.926)	3.048	0.243	(0.498)	1.276
	Sick/Disabled	-0.490	(0.865)	0.613	0.101	(0.337)	1.106
	Home/Family	-0.667	(1.075)	0.513	0.026	(0.347)	1.026
Sociability							
Sometimes	Retired	0.060	(0.160)	1.062	0.086	(0.082)	1.089
	Unemployed	0.935	(0.479)	2.547	0.331	(0.215)	1.392
	Sick/Disabled	-0.185	(0.333)	0.831	0.026	(0.133)	1.027
	Home/Family	0.162	(0.273)	1.176	0.327	(0.118)	1.386
Not Often	Retired	0.219	(0.639)	1.245	0.023	(0.342)	1.023
	Unemployed	0.467	(1.515)	1.594	0.761	(0.488)	2.140
	Sick/Disabled	-0.385	(0.978)	0.680	0.482	(0.354)	1.619
	Home/Family	1.751	(0.746)	5.761	1.506	(0.358)	4.507
Never	Retired	-13.599	(0.652)	0.000	-0.115	(0.658)	0.891
	Unemployed	-10.733	(1.770)	0.000	-9.058	(0.623)	0.000
	Sick/Disabled	0.870	(1.261)	2.387	0.408	(0.833)	1.505
	Home/Family	0.731	(1.440)	2.076	1.126	(0.776)	3.084
Family-duty							
Sometimes	Retired	-0.287	(0.294)	0.750	0.077	(0.157)	1.080
	Unemployed	0.067	(0.662)	1.070	0.039	(0.337)	1.040
	Sick/Disabled	0.137	(0.517)	1.147	0.186	(0.232)	1.204
	Home/Family	-0.465	(0.350)	0.628	-0.185	(0.186)	0.831
Not Often	Retired	-0.118	(0.303)	0.888	0.072	(0.163)	1.075
	Unemployed	0.154	(0.719)	1.166	-0.313	(0.349)	0.731
	Sick/Disabled	-0.273	(0.557)	0.761	0.195	(0.246)	1.215
	Home/Family	<i>-0.726</i>	<i>(0.378)</i>	<i>0.484</i>	-0.475	(0.191)	0.622
Never	Retired	-0.172	(0.314)	0.842	0.097	(0.167)	1.102
	Unemployed	0.099	(0.774)	1.104	0.084	(0.358)	1.088
	Sick/Disabled	0.083	(0.538)	1.087	0.656	(0.245)	1.926
	Home/Family	<i>-0.701</i>	<i>(0.408)</i>	<i>0.496</i>	-0.504	(0.206)	0.604
Finance-limits							
Sometimes	Retired	-0.051	(0.208)	0.950	0.147	(0.116)	1.158
	Unemployed	-1.001	(0.432)	0.368	-0.539	(0.222)	0.583
	Sick/Disabled	0.135	(0.406)	1.144	-0.103	(0.171)	0.902
	Home/Family	-0.006	(0.379)	0.994	-0.036	(0.154)	0.965

		Wave 5: 2010			Pooled Waves 1-5		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
Not Often	Retired	0.421	(0.212)	1.524	0.468	(0.122)	1.596
	Unemployed	-1.229	(0.653)	0.293	-0.653	(0.267)	0.520
	Sick/Disabled	0.558	(0.412)	1.747	0.199	(0.197)	1.220
	Home/Family	0.247	(0.394)	1.280	0.248	(0.165)	1.282
Never	Retired	0.575	(0.236)	1.777	0.765	(0.132)	2.148
	Unemployed	-2.757	(1.184)	0.063	-1.407	(0.393)	0.245
	Sick/Disabled	-0.194	(0.612)	0.824	0.534	(0.238)	1.706
	Home/Family	0.712	(0.409)	2.038	0.614	(0.181)	1.847
Age							
	Retired	0.425	(0.026)	1.530	0.370	(0.013)	1.448
	Unemployed	0.065	(0.067)	1.068	0.081	(0.025)	1.085
	Sick/Disabled	0.020	(0.047)	1.021	0.035	(0.019)	1.036
	Home/Family	0.101	(0.033)	1.106	0.063	(0.015)	1.066
Gender (Female)							
	Retired	0.892	(0.137)	2.441	0.703	(0.085)	2.021
	Unemployed	-0.779	(0.388)	0.459	-0.540	(0.204)	0.583
	Sick/Disabled	-0.187	(0.303)	0.830	-0.267	(0.151)	0.765
	Home/Family	2.527	(0.390)	12.518	2.915	(0.215)	18.458
Income Quintile 2							
	Retired	-0.456	(0.228)	0.634	-0.472	(0.120)	0.624
	Unemployed	-0.615	(0.465)	0.541	-0.990	(0.252)	0.372
	Sick/Disabled	-0.723	(0.457)	0.485	-0.305	(0.186)	0.737
	Home/Family	-0.717	(0.331)	0.488	-0.435	(0.152)	0.648
Income Quintile 3							
	Retired	-0.932	(0.214)	0.394	-1.128	(0.118)	0.324
	Unemployed	-1.736	(0.639)	0.176	-2.079	(0.281)	0.125
	Sick/Disabled	-0.881	(0.408)	0.414	-1.059	(0.181)	0.347
	Home/Family	-1.570	(0.348)	0.208	-1.522	(0.163)	0.218
Income Quintile 4							
	Retired	-1.015	(0.209)	0.363	-1.246	(0.116)	0.288
	Unemployed	-3.085	(0.857)	0.046	-2.427	(0.287)	0.088
	Sick/Disabled	-1.341	(0.486)	0.262	-1.273	(0.205)	0.280
	Home/Family	-1.462	(0.358)	0.232	-1.544	(0.152)	0.213
Income Quintile 5							
	Retired	-1.570	(0.214)	0.208	-1.729	(0.119)	0.177
	Unemployed	-3.590	(0.820)	0.028	-2.840	(0.336)	0.058
	Sick/Disabled	-1.948	(0.553)	0.143	-2.304	(0.274)	0.100
	Home/Family	-1.324	(0.316)	0.266	-1.712	(0.159)	0.180

		Wave 5: 2010			Pooled Waves 1-5		
		Coeff.	Rob. SE	RRR	Coeff.	Rob. SE	RRR
<i>Constant</i>							
	Retired	-25.278	(1.617)	0.000	-22.176	(0.809)	0.000
	Unemployed	-3.870	(3.981)	0.021	-5.464	(1.540)	0.004
	Sick/Disabled	-4.191	(2.842)	0.015	-7.297	(1.181)	0.001
	Home/Family	-8.772	(2.157)	0.000	-7.020	(1.011)	0.001
Pseudo R ²		0.3592			0.3273		
Wald χ^2		1829.45			4530.66		
df		188			188		
N		2359			10,172		

Notes: Significance is displayed through formatting: $p < 0.10$; $p < 0.05$; and $p < 0.001$. The base category for the dispositional variables is Often except for the No-control variable for which it is Never. Income quintiles are listed in reference to base of Quintile 1, the poorest.

Appendix 3: Values of Macro-level Variables Used in Chapter 7

WAVE 1 (2004)

Country	ALMP	EPL	Age Discrim.	Official Retirement Age - Men	Official Retirement Age - Women	Effective Retirement Age - Men	Effective Retirement Age - Women	Net Pension Replacement Rate	Flexible Working Hours	Lifelong Learning
	% of GDP	OECD Score	% Reporting AD Widespread	Years	Years	Years	Years	% of Pre-retirement Income from Public Pensions	% of workers aged 50-64	% of People 55-64
Austria	0.433	2.621		65	60	59.0	58.4			6.2
Belgium	0.466	2.757		65	63	58.8	57.1			3.6
Denmark	1.492	2.561		65	65	63.4	61.2			16.1
France	0.732	2.727		60	60	58.7	58.8			2.2
Germany	0.857	3.085		65	65	61.3	60.6			2.4
Greece	0.141	2.930		57	57	62.6	61.3			0.2
Italy	0.540	3.151		65	60	60.5	61.6			1.9
Netherlands	0.917	2.918		65	65	60.5	59.0			7.4
Spain	0.549	2.755		65	65	61.4	63.1			1.2
Sweden	0.857	2.577		65	65	63.6	61.6			30.1
Switzerland	0.610	2.175		65	63	66.0	64.4			20.1

Note: Official Retirement Age for Greece reflects rules allowing retirement based on years of work and contributions.

WAVE 2 (2006/7)

Country	ALMP	EPL	Age Discrim.	Official Retirement Age - Men	Official Retirement Age - Women	Effective Retirement Age - Men	Effective Retirement Age - Women	Net Pension Replacement Rate	Flexible Working Hours	Lifelong Learning
	% of GDP	OECD Score	% Reporting AD Widespread	Years	Years	Years	Years	% of Pre-retirement Income from Public Pensions	% of workers aged 50-64	% of People 55-64
Austria	0.538	2.621	46	65	60	59.5	59.1	90.271	43.804	6.5
Belgium	0.463	2.757	42	65	64	59.0	57.8	63.729	27.024	3.5
Czech Republic	0.125	2.968	63	62	59	61.6	58.4	64.133	19.341	2
Denmark	1.201	2.561	37	65	65	63.9	62.2	91.321	54.785	21.8
France	0.688	2.727	50	60	60	58.4	59.2	65.651	30.078	2.2
Germany	0.581	3.085	34	65	65	61.8	60.8	61.318	40.221	2.5
Greece	0.154	2.930	47	58	58	62.5	61.2	110.754	9.534	0.2
Italy	0.417	3.151	49	65	60	61.0	60.9	74.813	31.601	1.8
Netherlands	0.724	2.918	53	65	65	61.8	60.9	103.205	19.809	7.9
Poland	0.359	2.414	40	65	60	61.3	57.6	74.853	16.664	0.8
Spain	0.626	2.755	45	65	65	61.6	63.2	84.662	13.825	4.7
Sweden	1.002	2.577	36	65	65	64.7	62.7	64.133	56.828	11.9
Switzerland	0.500	2.175	46	65	64	64.8	63.7	64.483	41.038	14.9

Notes: Retirement ages are taken from 2007 data. The age discrimination value for Switzerland is approximated from 2008 data and the trends observed among the other countries from data in 2006, 2008, and 2012. Flexible working hours reflects 2004 data, but is applied to this wave for use in the longitudinal analysis. The rest of the indicators reflect 2006 data except in Greece and the Netherlands, as the survey year was 2007; the only other exception is the net pension replacement rate where all data come from 2006.

WAVE 4 (2011)

Country	ALMP	EPL	Age Discrim.	Official Retirement Age - Men	Official Retirement Age - Women	Effective Retirement Age - Men	Effective Retirement Age - Women	Net Pension Replacement Rate	Flexible Working Hours	Lifelong Learning
	% of GDP	OECD Score	% Reporting AD Widespread	Years	Years	Years	Years	% of Pre-retirement Income from Public Pensions	% of workers aged 50-64	% of People 55-64
Austria	0.571	2.621	33	65	60	60.4	58.4	89.946	42.722	6.5
Belgium	0.647	2.893	42	65	65	59.6	59.0	63.824	20.537	3.9
Czech Republic	0.178	2.787	68	62.33	61	62.6	59.1	64.782	25.554	5.1
Denmark	1.538	2.392	32	65	65	63.5	61.4	86.918	41.979	24
France	0.673	2.668	56	65	65	59.3	59.6	60.680	34.401	2.3
Germany	0.446	3.085	35	65	65	61.9	61.4	58.524	39.483	2.9
Italy	0.312	3.151	46	65	60	60.8	59.2	92.399	36.762	2.4
Netherlands	0.725	2.872	42	65	65	63.6	62.0	100.695	23.263	8.4
Poland	0.333	2.414	44	65	60	61.5	59.4	59.857	12.890	0.8
Spain	0.708	2.653	45	65	65	62.3	63.4	80.051	10.718	5
Sweden	0.934	2.577	45	65	65	66.3	64.4	53.630	44.721	17.4
Switzerland	0.470	2.175	40	65	64	65.5	64.1	65.355	--	22.5

Notes: The age discrimination value for Switzerland is approximated from 2008 data and the trends observed among the other countries from data in 2006, 2008, and 2012; for the rest of the countries, the data come from 2012. The measures for flexible working hours and net pension replacement rate reflect 2010 data.