Recommodification of the Social Determinants of Health

FARRANTS, LINDA, KRISTIN, OSTLUND

How to cite:
FARRANTS, LINDA, KRISTIN, OSTLUND (2016) Recommodification of the Social Determinants of Health, Durham theses, Durham University. Available at Durham E-Theses Online: http://etheses.dur.ac.uk/11375/

Use policy
This work is licensed under a Creative Commons Attribution Non-commercial Share Alike 3.0 (CC BY-NC-SA)
Recommodation of the Social Determinants of Health

Welfare Policy Changes and Health Inequalities in Sweden and England

Kristin Farrants

Thesis submitted for the degree of Doctor of Philosophy

School of Medicine, Pharmacy and Health, Durham University

September 2015
Abstract

Background

Decommodification is the extent to which living standard is independent of market position. In recent decades, some states have embarked on a process of recommodification, restricting the alternatives to participating in the market. This study has investigated how recommodification of unemployment healthcare and pensions are correlated with health inequalities.

Methods

Using Health Survey for England and the Swedish Living Conditions Survey, this study computes the magnitude of health inequalities in Sweden and England and correlates the magnitude of inequalities with measures of recommodification. In stage 1, the odds ratio of Not good health/having visited a doctor was computed using logistic regression for each year, using the employed and the high educated as the reference categories. In stage 2, the log (odds ratios) of poor health or doctor visits computed in stage 1 were correlated with the net replacement rate/price of primary care using linear regression.

Results

Health inequalities between the employed and the unemployed were significantly higher in both England and Sweden in 2011 than in 1991, a period during which unemployment benefit was recommodified in both countries. The association between health inequality and net replacement rate was much stronger in Sweden.

Health inequalities increased slightly among English pensioners, while those of the Swedish sample remained steady. This is not what we would expect from the development of recommodification in the two countries: Sweden recommodified while England did not.
For groups with similar needs, the higher educated are more likely to seek healthcare. There were no trends in inequality in access to healthcare in Sweden.

**Conclusion**

This study has shown that recommodification is associated with health inequalities, especially in Sweden, and that inequalities in replacement rates are associated with health. However, the links between recommodification and health are context-dependent.
Table of Contents

Abstract ............................................................................................................................. 2
List of Tables .................................................................................................................... 9
List of Illustrations ........................................................................................................... 10
Statement of Copyright ................................................................................................... 11
Acknowledgements .......................................................................................................... 12
Chapter 1: Introduction .................................................................................................... 13
  1.1 Background and Rationale .................................................................................... 13
    1.1.1 Background ..................................................................................................... 13
    1.1.2 Justification and statement of originality ....................................................... 18
  1.2 Aims and Research Questions ............................................................................... 21
  1.3 Structure of Thesis ............................................................................................... 22
Chapter 2: Literature Review .......................................................................................... 23
  2.1 Introduction ............................................................................................................ 23
  2.2 Commodification, Decommodification and Welfare Regimes ............................. 23
    2.2.1 Commodification ............................................................................................ 23
    2.2.2 Decommodification and the welfare state ...................................................... 25
  2.3 The Social Determinants of Health, Health Inequalities, and Welfare States ...... 35
    2.3.1 The social determinants of health ................................................................. 35
    2.3.2 Theories of health inequalities ....................................................................... 36
    2.3.3 Health inequalities and welfare states ......................................................... 39
  2.4 Neoliberalism and Recommodification .................................................................. 43
    2.4.1 Neoliberalism .................................................................................................. 43
    2.4.2 Welfare states under pressure – a case of recommodification? ...................... 50
  2.5 Unemployment Insurance Reform ........................................................................ 54
  2.6 Healthcare Reform ............................................................................................... 58
Chapter 2: Social Reform

2.6.1 Commodification of healthcare.................................................................58
2.6.2 Healthcare reform in Sweden and England .............................................59
2.7 Pension Reform............................................................................................63
2.8 Recommodification, Health, and Health Inequalities.................................70
2.9 Conclusions and Purpose of the Study.........................................................72

Chapter 3: Methods.............................................................................................74
3.1 Study Design....................................................................................................74
3.2 Data.................................................................................................................74
  3.2.1 Sources.......................................................................................................74
  3.2.2 Comparability.............................................................................................77
3.3 Variables.........................................................................................................80
  3.3.1 Health inequalities between the employed and unemployed.....................80
  3.3.2 Inequalities in access to healthcare............................................................81
  3.3.3 Health inequalities in the retired population.............................................83
3.4 Analysis............................................................................................................86
  3.4.1 Absolute rates and rate differences.............................................................87
  3.4.2 Trend analysis.............................................................................................88
  3.4.3 Stage 1: Computing inequalities in health/access to healthcare..................88
  3.4.4 Stage 2: Association between health inequalities and recommodification....89

Chapter 4: Unemployment Benefit Recommodification and Health Inequalities between the Employed and the Unemployed in Sweden and England, 1991-2011...........................................92
4.1 Introduction......................................................................................................92
4.2 Results..............................................................................................................93
  4.2.1 Absolute rates and absolute rate differences.............................................93
  4.2.2 Stage 1: Health Inequality between employed and unemployed participants ...98
  4.2.3 Stage 2: Association between health inequality and net replacement rates....99
4.3 Summary and Discussion..............................................................................101
4.3.1 Summary........................................................................................................................................101

4.3.2 Recommodification of unemployment and health inequalities between the employed and the unemployed ..........................................................................................................................102

4.3.3 Limitations........................................................................................................................................107

4.4 Conclusions........................................................................................................................................108


5.1 Introduction........................................................................................................................................109

5.2 Results................................................................................................................................................110

5.2.1 Absolute rates and absolute rate differences................................................................................110

5.2.2 Stage 1: Health inequalities by education in the retired population ........................................115

5.2.3 Stage 2: Association between health inequality and net replacement rates ...118

5.3 Summary and Discussion..................................................................................................................123

5.3.1 Summary of results .....................................................................................................................123

5.3.2 Recommodification of pensions and health inequalities in the retired population ........................124

5.3.3 Limitations........................................................................................................................................127

5.4 Conclusions........................................................................................................................................129


6.1 Introduction........................................................................................................................................131

6.2 Results................................................................................................................................................132

6.2.1 Absolute rates, absolute rate difference, and relative rate ratios .................................................132

6.2.2 Stage 1: Inequalities in access to healthcare by education ..........................................................133

6.2.3 Stage 2: Association between inequality in access to healthcare and price of healthcare ..........140

6.3 Summary and Discussion..................................................................................................................143

6.3.1 Summary........................................................................................................................................143
6.3.2 Recommodification of healthcare and inequalities in access to healthcare.... 144
6.3.3 Limitations ........................................................................................................... 148
6.4 Conclusions............................................................................................................. 149

Chapter 7: Discussion .................................................................................................. 150
7.1 Introduction............................................................................................................ 150
7.1.1 Overview of findings .......................................................................................... 152
7.2 Health Inequalities and the Recommodification of Unemployment, Pensions and Healthcare .............................................................................................................. 153
7.2.1 Unemployment .................................................................................................... 153
7.2.2 Pensions ............................................................................................................. 157
7.2.3 Healthcare .......................................................................................................... 160
7.3 Overall Trends and Patterns of Commodification and Health Inequalities ......... 163
7.3.1 Trends in absolute and relative health inequalities ............................................ 164
7.3.2 Health inequalities and social inequalities in an international perspective.... 167
7.3.3 Recommodification and public support .............................................................. 170
7.3.4 Politics versus policies ...................................................................................... 172
7.4 Limitations ............................................................................................................ 176
7.4.1 Data sources ..................................................................................................... 176
7.4.2 Variables ........................................................................................................... 177
7.4.3 Analysis ............................................................................................................ 179
7.5 Implications .......................................................................................................... 180
7.5.1 Implications for future research ....................................................................... 180
7.5.2 Implications for policy ...................................................................................... 181
7.6 Conclusions .......................................................................................................... 182

Chapter 8: Conclusions .............................................................................................. 183
8.1 Summary of Thesis ............................................................................................... 183
8.2 Key Findings ......................................................................................................... 184
Appendix 1: Age and sex adjusted analyses ......................................................... 186

Health Inequalities Between the Employed and Unemployed ........................ 186
  Logistic regression ....................................................................................... 186
  Linear regression ......................................................................................... 187

Health Inequalities in the Retired Population .............................................. 188
  Logistic regression ....................................................................................... 188
  Linear regression ......................................................................................... 189

Inequalities in Access to Healthcare by Education ........................................ 190
  Logistic regression ....................................................................................... 190
  Linear regression ......................................................................................... 191

Appendix 2: Linear regression using absolute risk difference as outcome variable 192

Health Inequalities between the Employed and Unemployed ....................... 192

Health Inequalities by Education in the Retired Population ......................... 193

Inequalities in Access to Healthcare by Education ........................................ 194

Appendix 3: Health inequalities by education in the non-retired population .... 195

Bibliography .................................................................................................. 197
List of Tables

Table 4.1: Prevalence rates and absolute risk differences of the risk of Not good health, and odds ratios and 95% confidence intervals for the risk of reporting Not good health between the employed and the unemployed, controlling for age, Sweden and England, with the employed as reference category ................................................. 94

Table 4.2: Association between health inequalities between the employed and unemployed controlling for age and net replacement rates in the unemployment insurance .......................................................... 97

Table 5.1: Prevalence rates and absolute risk differences of the risk of Not good health, and odds ratios and 95% confidence intervals for the risk of reporting Not good health between the high and low educated, controlling for age, Sweden and England, high educated as reference category ......................................................... 111

Table 5.2: Linear regression results for the relationship between health inequalities in the retired population controlling for age, and minimum net replacement rates in the pension system ........................................ 119

Table 6.1: Proportion who have visited a doctor in the previous 3 months in Sweden ........................................ 130

Table 6.2: The odds ratios and 95% confidence intervals of healthcare usage by education, controlling for age, highest educated as reference, separated by health status ........................................ 132

Table 6.3: Linear regression results for the relationship between inequalities in doctor visits by education, controlling for age, and healthcare prices in 1991 SEK ........................................ 139

Table A1: Odds ratios for Not good health between the employed and unemployed, controlling for age and sex ........................................................................................................................................ 183

Table A2: Linear regression results for the relationship between health inequalities between the employed and unemployed adjusted for age and sex, and minimum net replacement rates in the unemployment insurance ........................................ 184

Table A3: Odds ratios of Not good health in the retired population, controlling for age and sex ................. 185

Table A4: Linear regression results for the relationship between health inequalities controlling for age and sex in the retired population, and minimum net replacement rates in the pension system ........................................ 186

Table A5: Odds ratios for having visited the doctor in the past 3 months, controlling for age and sex .......... 187

Table A6: Linear regression results for the relationship between doctor visits adjusted for age and sex, and user charges for healthcare ........................................................................................................ 188

Table A7: Linear regression results for the relationship between absolute health inequalities between the employed and unemployed and net replacement rates in the unemployment insurance ........................................ 189

Table A8: Linear regression results for the relationship between absolute health inequalities in the retired population and minimum net replacement rates in the pension system ........................................ 190

Table A9: Association between absolute risk differences in access to healthcare and user charges of healthcare, Sweden ........................................................................................................................................ 191

Table A10: Odds ratios of Not good health for the lowest educated compared to the highest, non-retired population . ........................................................................................................................................ 192

Table A11: Odds ratios of Not good health for manual workers compared to non-manual workers, non-retired population . ........................................................................................................................................ 193
List of Illustrations

Figure 4.1: Percentage reporting health as Not good with LOWESS trend lines, separated by employment status and country..................................................................................................................91

Figure 4.2: Absolute Risk Difference in Not good health between the employed and unemployed with LOWESS trend lines, Sweden and England 1991-2011..................................................................................................................92

Figure 4.3: Net replacement rate during unemployment for a single adult, Sweden and England...............96

Figure 5.1: Prevalence of Not good health by education with LOWESS trend lines, Sweden and England.........................................................................................................................................................108

Figure 5.2: Absolute risk difference of Not good health by education with LOWESS trend lines, Sweden and England.........................................................................................................................................................109

Figure 5.3: Odds ratio of Not good health with LOWESS trend lines, high educated as reference category.........................................................................................................................................................113

Figure 5.4: Odds ratio of Not good health with LOWESS trend lines, manual vs. non-manual occupations.........................................................................................................................................................115

Figure 5.5: Net replacement rates for a single pensioner in Sweden and England........................................116

Figure 5.6: Difference between minimum and standard pension net replacement rates, Sweden and England, 1991-2011.........................................................................................................................................................117

Figure 6.1: Odds ratios of doctor visits, with LOWESS trend lines and 95% confidence intervals, high educated as reference, low educated as comparison................................................................................................................133

Figure 6.2: Odds ratios of doctor visits, with LOWESS trend lines and 95% confidence intervals, high educated as reference, intermediate educated as comparison................................................................................................................135

Figure 6.3: Odds ratios of doctor visits, with LOWESS trend lines and 95% confidence intervals, intermediate educated as reference, low educated as comparison................................................................................................................136

Figure 6.4: Mean price for a primary care visit in 1991 prices........................................................................137
Statement of Copyright

The copyright of this thesis rests with the author. No quotation from it should be published without the author's prior written consent and information derived from it should be acknowledged.
Acknowledgements

There are many people without whom I could not have written this thesis. First and foremost, I would like to extend my sincere gratitude to my supervisors, Professor David Hunter, Professor Clare Bambra and Dr Adetayo Kasim, for their guidance throughout this process.

Professor Bo Burström and Dr Lotta Nylén helped me immensely by allowing me access to the ULF data. They, along with the rest of the researchers at Karolinska Institutet Department of Public Health Sciences, made me feel extremely welcome at their institution.

I would also like to thank Dr Alison Copeland, for helping me get to grips with the HSE data.

The SMPH Ph.D. students have worked incredibly hard these last few years to build a community. My experience here would have been a lot poorer if not for the companionship we shared.

Last, but certainly not least, my thanks to my family, George, Anki and Helen, for their unwavering help and support over the last three years, and to Matt.
Chapter 1: Introduction

1.1 Background and Rationale

1.1.1 Background

This thesis concerns the recommodification of the social determinants of health. It comprises a comparative research study between Sweden and England, investigating how recommodification (the extent to which market forces determine people’s living standards and access to resources) of unemployment benefits, pensions, and healthcare is associated with health and health inequalities between 1991 and 2011. There were substantial social policy changes during this period in both countries, which is why I chose to focus my studies on it. For healthcare, the analysis focuses only on Sweden and covers the years 1980-2005. This thesis straddles the fields of social epidemiology, social policy, health geography, and sociology.

The social determinants of health are the material and psychosocial circumstances in which people live and work that affect their health and wellbeing (Bambra, 2011c; Marmot, 2004; Raphael, 2006). They can either protect and promote health, or influence health adversely: it is the social determinants of health that are the cause of health inequalities (Siegrist & Marmot, 2006). Those with higher socio-economic status (SES), whether this is measured by occupation, income, education, housing tenure, material possessions, or any other way of operationalising SES, tend to have lower rates of morbidity and mortality than those with lower SES (Kawachi et al., 2002). This is because the latter tend to be more exposed to adverse social determinants, such as poor working and living conditions, and have

---

1 A note on terminology: in this thesis I refer both to England and to the UK. The data I use come from England, only, and I will therefore use England when discussing my own research and results. However, certain policy situations and developments are the same in Wales, Scotland, Northern Ireland and England, in which case I will use the UK. The exception to this is the English NHS, which is separate, and different, from the Scottish NHS, the Northern Irish NHS and the Welsh NHS.
less access to the protective social determinants, such as preventative healthcare (Siegrist & Marmot, 2006).

Welfare states alter the distribution of resources in a society by providing cash and services to those in need (Pierson & Castles, 2000). This alters the social hierarchy, as well as the distribution of the social determinants of health (Graham, 2009b). In a more egalitarian society, determinants such as income, housing, and working conditions are more equally distributed, and population health tends to be better, both in terms of morbidity and mortality, in these countries (Bambra, 2011b; Marmot, 2004; Wilkinson & Pickett, 2009). For this reason, the welfare arrangements in a society are expected to have an impact on the magnitude of health inequalities. It has previously been shown that health inequalities by income, education and occupational class differ between welfare states (Eikemo et al., 2008a; Eikemo et al., 2008c; Eikemo et al., 2008d).

Welfare states differ in their arrangements towards both service and cash provision. Esping-Andersen (1990) created a typology of welfare regimes, and in doing so popularised the concept of decommodification. Decommodification describes the extent to which individuals and families are able to maintain an acceptable standard of living, regardless of market position. Esping-Andersen based his decommodification scores on the net replacement rates, coverage, duration and contributions of a country’s unemployment insurance, sick pay insurance, and pensions, and created a comparative decommodification index. Decommodification can act as a social determinant of health in its own right – people living in a country with high decommodification are likely to have high living standards and less financial stress, since even those with a weak labour market position are able to maintain an acceptable standard of living (Bambra, 2011b). However, decommodification can also be a property of other social determinants: the extent to which people’s access or exposure to a
particular determinant is independent of their market position can be characterised as the extent to which the said determinant is decommodified. In this thesis, I chose to adopt both approaches: I study decommodification as a determinant of health inequalities between the unemployed and the employed, and of health inequalities in the older population, and I study also the decommodification of healthcare as a determinant of inequalities in access to healthcare. The dual approach was chosen in order to understand decommodification in depth. Decommodification of the social determinants of health, rather than decommodification as a social determinant of health, has been largely ignored in the literature, and this thesis addresses this lack of knowledge.

Since the 1970s, many countries have carried out changes to their welfare arrangements, due to economic crises, globalisation, demographic challenges, and the rise of neoliberalism (Sykes, 2008; Wenzelburger, 2011). Neoliberalism is an ideology that gives primacy to markets over all other ways of organising society (Centeno & Cohen, 2012; Navarro, 2007; Peters, 2012). This includes privatising and/or outsourcing public services, as well as cutting benefit entitlements, in order to make people more dependent on the market for their living conditions (Navarro, 2007). This has led to a process of recommodification, the undoing of previously extended decommodification.

I study the recommodification of three policy domains: unemployment, pensions, and healthcare. The three policy domains chosen mean that I cover both examples of cash benefits and social services, the latter having often been excluded from studies of welfare states, as they have been more difficult to operationalise (Bambra, 2005; Bambra, 2007). This is one of few studies that include both examples of transfers and an example of services in a comparative study of welfare states. All three areas represent a combination of change and continuity, policy-wise (Centeno & Cohen, 2012). They were chosen as they represent large
and public aspects of welfare state activities. Furthermore, they occupy different positions in public consciousness, with pensions and healthcare being far more universal than unemployment, and thus receiving a broader base of public support (Giger, 2011). Therefore, it is expected that unemployment insurance will have been exposed to more recommodification than pensions or healthcare, because it attracts a narrower base of public support.

Unemployment insurance is one of the policy domains that was targeted early and hard by neoliberal policy reforms in many countries (Vis, 2007). It is easier to refer to recipients in terms of “undeserving” when it comes to the unemployed than pensioners or people needing healthcare, as the notions of the “deserving and the “undeserving” poor start to creep back into social policy discourse, as exemplified in the “shirkers” and “strivers” rhetoric of the Conservative Party in the UK (Centeno & Cohen, 2012; Judt, 2010). Work incentives have been increased by making benefits taxable, extending in-work tax credits, making benefits conditional on job-seeking or training, increasing reliance on means-testing, and cutting benefit generosity (Ellison & Pierson, 2003; Evans & Cerny, 2003; Evans & Williams, 2009; Lewis, 2003), all measures to ensure that options to stay outside the labour market are limited. There is thus a clear case for the recommodification of unemployment.

It is harder to say as unequivocally that there has been a recommodification of pensions. While population ageing threatens to put a strain on pension plans and many countries face an urgent need for reform to ensure sustainability of the system, there has been widespread opposition to any change to pension plans in most countries in Europe (Bonoli, 2003; Bonoli & Shinkawa, 2005). Despite comparatively favourable demographic trends, Sweden and the UK have both embarked on extensive reforms of the pension system, with less opposition than in many other countries (Price, 2008; Sundén, 2006). While Sweden’s reforms were a
recommodification of the pension system, by essentially withdrawing the state guarantee for all but the most basic level of income (Belfrage & Ryner, 2009), the UK’s reforms were aimed more at allaying fears about pension adequacy, and while there is substantial private sector involvement in the pension system, the reforms were not intended to increase the role of the market in guaranteeing people’s living standards (Lain et al., 2012).

Decommodification is less easy to apply unilaterally to healthcare: while decommodification of cash benefits refers to the extent to which people can maintain adequate living standards outside the labour market, decommodification of services could either mean the extent to which people’s access to services is independent of their market status, or the extent to which service delivery is independent of market forces (Bambra, 2005). In terms of the former, healthcare operates according to the “inverse care law”, where more care is provided in more socio-economically advantaged areas (Tudor Hart, 1971). However, these are also the areas where there tends to be less need for healthcare, leading to inequalities in healthcare provision. This state of affairs is present in many different countries, although it operates slightly differently in each (Mossialos & Thomson, 2003). User charges for healthcare tend to reduce the consumption of healthcare, especially among those with lower SES; the RAND study (an experimental study by the RAND think-tank of the effects of healthcare prices on the consumption of healthcare) in the US showed a dose-response relationship between high fees and low consumption (Mossialos & Thomson, 2003; Mwabu, 1997; Robinson, 2002). User charges in Sweden have been steadily increasing relative to wages since their introduction in 1970 (Burström, 2009). Since the 1980s, markets have been increasingly involved in the delivery of healthcare services in both Sweden and England, through patient choice reforms to simulate market forces and the opening up of services for private providers (Dahlgren, 2008; Hunter, 2008; Whitehead et al., 1997a). While there has been a recommodification in healthcare in both countries in terms of market
involvement in the delivery of services, only in Sweden has there been noticeable recommodification of healthcare from the patients’ perspective – while there has been intense debate about the effects of patient choice on inequality in healthcare (Blomqvist, 2004; Dixon & Le Grand, 2006), the link between user charges and inequalities in healthcare is not disputed (Mossialos & Thomson, 2003; Mwabu, 1997; Robinson, 2002).

1.1.2 Justification and statement of originality

Since there is a link between commodification and health inequalities, although it is not fully understood, it is expected that the recommodification outlined above will also have an association with health inequalities. Studying changes to health inequalities in both policy domains and countries where there has been extensive commodification, and those where there has been less commodification, can help bring greater understanding of the association between commodification and health.

This is the first research study looking at commodification of the social determinants of health. It is a novel approach that treats commodification not only as a determinant in itself, but also considers the way other determinants of health are commodified. Health inequalities between countries have been compared before (Cavelaars et al., 1998; Espelt et al., 2008; Kunst et al., 1998; Mackenbach et al., 1997; Mackenbach et al., 2005; Mackenbach et al., 2008; Stirbu et al., 2010), and they have been correlated with indicators such as income inequality or welfare regime (Bambra & Eikemo, 2009; Dahl et al., 2006; Eikemo et al., 2008a; Eikemo et al., 2008b; Eikemo et al., 2008c), but net replacement rates have not been used as an explanatory variable to explain the differences in health inequalities. This research is an attempt to operationalise commodification and to isolate the association with health of decommodification from other aspects of welfare states, which is a novel approach to the study of welfare states and health inequalities. Furthermore, with a few exceptions (Avendaño et al., 2009; Fawcett et al., 2005; Kunst et al., 2005), the studies linking the
magnitude of health inequalities with social phenomena tend to be static, providing a snapshot in time. While trends in health inequalities have been compared between countries in previous research, this has not been placed in the context of decommodification and recommodification.

This study also considers both commodification of services and cash benefits in the same study. There has been a lack of studies that incorporate both the service and the cash aspects of welfare states, and even fewer comparing trends in both. This approach provides new insights into the similarities and differences between approaches to cash transfers and service delivery within the same country.

Recommodification is an on-going process in many countries, and we do not yet know its full effects. The health consequences of the austerity packages that numerous governments are implementing due to the economic crisis are only just beginning to be fully understood (Stuckler & Basu, 2013). It is very likely that austerity plays out differently in different contexts. Furthermore, recommodification is not a linear or uniform process: it is often piecemeal and combined with other policy initiatives with competing or contradictory goals. Thus, an in-depth study of recommodification and its association with health and health inequalities over time is important in order to understand the relationship between the social context prevailing in a country and health inequalities. Sweden and England were chosen as examples of two countries whose experiences with recommodification differ strongly: Sweden as a highly decommodified country that underwent fairly extensive recommodification during the 1990s and 2000s, and England as a country with low decommodification that did not undergo extensive recommodification during the study period. This shows how decommodification and recommodification act in different social contexts.
This study is also partly a response to what has been termed the “Nordic puzzle” of health inequalities (Bambra, 2011a; Bremerb, 2012; Mackenbach, 2012). Theories of welfare regimes and of social determinants of health both lead to the expectation that health inequalities should be smaller in the Nordic countries than elsewhere, but this is not borne out by evidence (Brennenstuhl et al., 2012; Dahl et al., 2006; Lundberg et al., 2008a; Lundberg & Lahelma, 2001; Mackenbach, 2012). Until we understand why health inequalities are so much larger in the Nordic countries than expected, we cannot fully understand the interplay between decommodification and health inequalities. By studying decommodification over time in a Nordic country, Sweden, and contrasting it with a non-Nordic country, England, we can obtain a better sense of how decommodification and health inequalities are related in different contexts.

Reducing health inequalities has long been a policy goal of the Social Democratic and New Labour governments in both the UK and Sweden, and in many other countries, both rich and poor (Asthana & Halliday, 2006; Davey Smith & Krieger, 2008). However, most strategies to reduce health inequalities have met with less than spectacular success, and health inequalities have even increased in some cases (Mackenbach, 2010). This has sometimes been put down to a lack of knowledge about what works to tackle health inequalities, but it may also stem from a reluctance to implement policies, such as income and wealth redistribution, that are believed to reduce health inequalities (Asthana & Halliday, 2006; Davey Smith & Krieger, 2008; Graham, 2009b; Mackenbach, 2010). While most policies to tackle health inequalities operate on the micro-level, proximal causes of health inequalities, there is a widespread belief in academia that the most effective interventions target macro, distal causes, even though the evidential base for this kind of intervention is less robust: it is much more difficult to assign credit or blame to distal policies, as there are many other social factors that act as intermediaries (Smith & Kandlik Eltanani, 2014). However, according to
the political economy perspective of health inequalities, macroeconomic conditions and politics are the fundamental causes of health inequalities: if the social determinants of health are characterised as the “causes of the causes” of ill health, political economy studies the “causes of the causes of the causes” (Birn, 2011). Building up the evidence base of how the political economy influences health and health inequalities can increase understanding and thus inform policy, even in the absence of macro-level policies to reduce health inequalities.

1.2 Aims and Research Questions

The aim of this research was to investigate the extent of recommodification of the social determinants of health in Sweden and England over a twenty-year period between 1991 and 2011, as this is a time period of substantial recommodification, although the extent and pace differ by policy domain. I aimed to investigate the magnitude of recommodification in Sweden and England, and the association of recommodification with health inequalities.

I focused my analysis on health inequalities in three policy domains: unemployment, old age pensions, and healthcare, and I set out to answer three questions:

- Have health inequalities between the employed and unemployed in Sweden and England increased between 1991 and 2011, and is this associated with recommodification?

- Have health inequalities in the retired population in Sweden and England increased between 1991 and 2011, and is this associated with recommodification?

- Have inequalities in access to healthcare in Sweden increased between 1980 and 2005, and is this associated with recommodification?
1.3 Structure of Thesis

In Chapter 2 I describe the background and theoretical context of the thesis. Chapter 3 outlines the methods I use. Chapters 4-6 contain my results and discussion of the results specific to each policy domain: Chapter 4 discusses recommodification of unemployment benefits and health inequalities between the employed and unemployed, Chapter 5 discusses recommodification of pensions and health inequalities in the retired population, and Chapter 6 discusses recommodification of healthcare and inequalities in access to healthcare. In Chapter 7 I bring these three policy domains together, compare and contrast my results from Chapters 4-6, link my results back to the theory discussed in Chapter 2, outline the limitations of my approach, and set out some implications for future research and policy. Chapter 8 concludes my thesis.
Chapter 2: Literature Review

2.1 Introduction

This chapter discusses previous research relevant to my study. It describes theories of commodification, decommodification and welfare regimes, theories of the social determinants of health and how they might be linked to decommodification and welfare policy, as well as neoliberalism and how recommodification might be associated with health and health inequalities.

2.2 Commodification, Decommodification and Welfare Regimes

2.2.1 Commodification

The concept of commodification traces its history to Marx and his theory of commodities and value, to explain the political economy of capitalism. A commodity is an object that satisfies human wants and that is produced for the purposes of exchange (Sitton, 2010). The exchange-value (often referred to as just the ‘value’) arises when two products are compared with each other (Marx, 1867; Sitton, 2010). Money is used to standardise the exchange-values (Foley, 1986). The price of the commodity fluctuates around the value – sometimes it is less and sometimes it is more, depending on the relationship between the buyer and seller, and between the levels of supply and demand of the product (Foley, 1986; Sitton, 2010).

Labour-power is a commodity only if it is sold in the market (Pierson, 1997). Commodification is the process that forces workers to sell their labour-power to capitalists for their survival. However, capitalism is unable to secure “genuine” welfare for workers: it secures welfare for capitalists, and diswelfare for the majority (Pierson, 2007).

Unlike Marx, who thought that exploitation was the fundamental experience of capitalism, Polanyi (1944) argued that commodification was the fundamental experience
A market society requires all incomes to be derived through the sale of something, regardless of what is actually sold (Polanyi, 1944). This requires the dissolution of the non-contractual bonds of kinship, community, neighbourhood, profession and creed (Polanyi, 1944). However, this dissolution can never be complete, since the system needs the normative legal and family systems to create social systems (Offe, 1984).

A self-regulating economy can never work, since the internal and external deficiencies (such as the consequences for the poor) are so great that state intervention is inevitable (Stiglitz, 2001). This means that a supportive network of non-commodified support is necessary for a market economy to function, to allow the withdrawal of surplus labour from the labour market (Papadopoulos, 2005).

The concept of decommodification was popularised by Gøsta Esping-Andersen (1990), who used it as one of three main dimensions to construct his typology of welfare state regimes. By decommodification, he meant the extent to which individuals and families are able to maintain an acceptable standard of living, regardless of market position (Bambra, 2004; Bambra, 2005; Bambra, 2011c; Esping-Andersen, 1990). Welfare states can decommodify either through direct provision of cash transfers to those who have little or no market income, or through providing subsidised or free services. Decommodification refers to these transfers and services being rendered as a matter of right (Bambra, 2004; Bambra, 2005; Bambra, 2011c; Esping-Andersen, 1990; Kerem & Põder, 2011).

Decommodification contradicts the logic of the market, and this causes capitalism to try to recommodify (Holden, 2003). The market economy goes through waves of being embedded in society, becoming disembedded (during the industrial revolution, for example) and subsequently becoming re-embedded (Polanyi-Levitt, 2006; Standing, 2007). Polanyi (1944) believed that there would be only one disembedding wave – he considered market
fundamentalism to have been discredited. However, more recent thinkers have identified three waves – a disembedding wave during the 19th century, a stabilising and re-embedding wave from the 1940s to the 1970s with the establishment of the welfare state and Keynesianism, and a third, re-disembedding wave of recommodification, driven by the need to drive down prices in the global economy (Standing, 2007). This third wave is sweeping away the state-guaranteed rights won by the labour movement, and brings with it an intensified commodification (Burawoy, 2007; Burawoy, 2010).

2.2.2 Decommodification and the welfare state

2.2.2.1 Definition of the welfare state

The welfare state is multifaceted, and has many definitions, which vary between countries and times. A wide range of social policies can be included in any definition of the welfare state (Briggs, 1961). The welfare state can be defined narrowly, as a set of income transfers and social services, or more broadly, to include macroeconomic and labour-market policies (Esping-Andersen, 1990).

At its core, the welfare state comprises state-organised efforts to intervene in the market to ensure the welfare of its citizens (Briggs, 1961). This can be done through legislating the actions of various parts of the market (through minimum wage or work-day restrictions, for example), reducing insecurity by insuring against the most common risks (such as old age, sickness and unemployment), or by providing free or subsidised services to its citizens (such as education and healthcare) (Briggs, 1961). The welfare state has progressed over time from providing the “subsistence minimum” to providing “socially acceptable standards of living” (Briggs, 1961).

The state is not the only actor that seeks to provide welfare, and the welfare mix refers to the combination of actors (the state, family, market, voluntary and charitable services, and
social partners) that act in a certain society to secure welfare for citizens. The state, among these actors, is unique in its ability to regulate or subsidise other sources of welfare (Andersen, 2012).

Korpi and Palme (1998) identified what they termed the “paradox of redistribution”: states that target benefits more to the poor actually achieve less redistribution of resources than those that tend to give more universal benefits. They suggest some explanations for this: universal benefits tend to encourage social cohesion and a feeling that everyone is “in the same boat”; states with more universal benefits tend to have higher taxes, leading to a greater amount of money to be redistributed; there is less stigma involved in claiming universal than means-tested benefits; and the political clout of recipients is greater when there is a greater number of them, meaning that it is harder to cut those benefits (Andersen, 2012; Korpi & Palme, 1998).

2.2.2.2 Welfare state regimes

Esping-Andersen (1990) recognised that welfare states decommodify to different extents, and classified states into three types, based on their degree of decommodification, their stratification pattern, and the mix of public and private forms of welfare. The Social Democratic states in Scandinavia decommodify to a great extent, by providing generous benefits, both flat-rate and with an earnings-related component. In this way, these countries ensure continued political support from the middle class. Furthermore, the regime supports full employment through active labour market policies and the provision of subsidised or free care services. The Conservative states in continental Europe and Japan decommodify to a moderate extent, through several corporatist social insurance schemes that provide benefits with differing degrees of earnings-relatedness and generosity. These are, in general, fairly generous. This reinforces market stratification, but means that there is income security for those who find themselves unable to participate in the market. The state operates by the
principle of subsidiarity – stepping in only when the resources of the family have been exhausted, which means that female labour force participation is low. Finally, the Liberal states in countries with an Anglo-Saxon heritage decommodify to a low extent, by providing means-tested benefits of low generosity. The state provides a minimum safety net below which nobody should fall: welfare above that minimum level is provided by the market.

Esping-Andersen’s typology has been both acclaimed and criticised (Arts & Gelissen, 2002). Critics suggest that he misclassified certain countries, and that there are not three worlds of welfare, but four, or perhaps even five: various theorists have argued that Southern Europe, post-Communist Eastern Europe, and the Antipodean countries all make up distinctive regimes (Arts & Gelissen, 2002; Bambra, 2007; Ferragina & Seeleib-Kaiser, 2011). Castles and Mitchell (1993) argue that the UK is not a Liberal country – they place Australia, New Zealand and the UK into a Radical group, in which left-wing and labour power is weak in the state, but strong in the labour market. This means that wages are compressed and employment protection is strong, but state redistribution is minimal and means-tested. Nevertheless, Ferragina and Seeleib-Kaiser (2011) showed that all countries (except the Netherlands) have been consistently assigned to one regime more than 50% of the time, and that this assignment often followed Esping-Andersen’s classification.

Esping-Andersen classifies welfare states solely on cash benefits, ignoring services and market regulation (Arts & Gelissen, 2002; Bambra, 2005; Bambra, 2007; Bambra et al., 2010; Dahl et al., 2006). Furthermore, the generosity of pensions, unemployment benefit, and sickness benefit do not seem to be highly correlated with each other (Scruggs & Allan, 2006). This holds true also for cuts to welfare provision: there is more inconsistency in cuts within a country than between countries (Lindbom, 2007). Nevertheless, the results obtained using an updated decommodification index and data from 1998-99, as opposed to the 1980 data used
by Esping-Andersen, were fairly similar to the results obtained by Esping-Andersen (Bambra, 2004).

2.2.2.3 Varieties of capitalism

Another approach to grouping states in the political economy literature is the “Varieties of Capitalism” approach, which focuses on the broad spectrum of political economy, rather than just state activities (Hall & Soskice, 2001). The forms of coordination in one area of the economy or society support institutions in other areas, leading to overall institutional complementarity. The Varieties of Capitalism approach is especially interested in the actions of firms. Proponents of this theory propose a division between two ideal-type capitalist economies: Liberal Market Economies (LMEs), found in the Anglo-Saxon countries including the UK, and Coordinated Market Economies (CMEs), found in Japan, continental Europe, and the Nordic countries including Sweden. Coordination is market-based in LMEs, and relationships are often formal contractual business relationships. Firms are valued by their market and economic performance. CMEs depend more on non-market forms of coordination through strong business associations and unions. Current profit is less important than long-term business strategy and maintaining a good reputation (Hall & Soskice, 2001). Both systems work according to their own logic of production, but they lead to different outcomes in terms of social protection and equality, with CME coordination leading to greater wage compression and more support for people who, for various reasons, are not working (Estevez-Abe et al., 2001; Korpi, 2006).

Most firms in LMEs produce either unskilled services or mass-produced goods, or they operate using highly skilled radical innovation, which requires general skills developed through university education. General skills do not need much insurance, since their portability is insurance enough. Social insurance would merely serve to raise reservation wages, contrary to the business interests of firms in LMEs. Employers are reluctant to invest
in training in general skills, since this leaves them vulnerable to poaching from other firms (Estevez-Abe et al., 2001).

However, employees are reluctant to invest in learning specific skills, especially if there is a high risk of job loss (Estevez-Abe et al., 2001). Firms that rely on industry-specific or firm-specific skills, developed through vocational training or apprenticeships, need workers to invest in learning these skills. It is in their interests that employees have some form of insurance that their skills investment will pay off, mainly through wage bargaining, employment protection and unemployment protection (Jensen, 2011; Mares, 2001).

While employers in LMEs have an incentive to resist social protection in the face of globalisation and technological change, employers in CMEs need protection to ensure that workers invest in learning the necessary skills. Therefore, there is less pressure to cut benefits, and CMEs are more resistant to the pressures of globalisation, although they too have to adapt (Jensen, 2011). The Nordic and Continental welfare states have responded to globalisation and de-industrialisation in similar ways, for instance by moving bargaining between employers and workers from central branch organisation to local shop floor negotiations, becoming even more alike as they adapt and borrow from each other (Howell, 2003).

2.2.2.4 Development of the welfare state in the UK

While the UK had advanced factory legislation before 1900, it lacked social legislation (Briggs, 1961). Most welfare in the UK before the 19th century was delivered through the Poor Law, deliberately harsh to discourage all but the most desperate from applying, and a plethora of charities, focused on saving individuals and preventing immoral behaviour, rather than tackling the social causes of poverty (Sullivan, 1996). The Poor Law was gradually eroded during the first half of the 20th century as successive groups were removed from its
remit, and as its provisions were replaced by more socially acceptable alternatives (Briggs, 1961; Fraser, 1984).

It is only after the Second World War that the UK can be referred to as a “welfare state” (Briggs, 1961). The war effort introduced a new sense of egalitarianism and solidarity, as it affected everyone, regardless of class or social position, and everyone “did their bit” (Sullivan, 1996). It acted as a catalyst that accelerated pre-war developments, and allowed for the final repeal of the Poor Law (Fraser, 1984; Sullivan, 1996). A large-scale reorganisation, rationalisation and universalisation of social services and social security took place after the war (Thane, 1996). What was new about the post-war developments was that they extended provision much further, not just to the poor, but to everyone, and that they aimed to provide subsistence levels of benefits, at the accepted social standards (Baldwin, 1990).

The Labour governments of the 1960s and 1970s introduced some earnings-related schemes, with the aim of protecting against income loss and thereby tying the loyalties of the middle class to the welfare state, but these never gained a foothold, and were easily phased out by the Conservative governments in the 1980s (Clasen, 2003). The Conservative government headed by Margaret Thatcher was heavily influenced by neoliberalism, and it believed that the welfare state should be as small as possible (Bone, 2012). During this time, the government systematically dismantled the post-War Keynesian consensus regarding the social wage, full employment, the corporatist state and the social standing and role of the public sector (Scott-Samuel et al., 2014). However, due to a rise in unemployment and the expansion of other groups in need of support (such as single parents), social expenditure rose during the 1980s, despite cuts in generosity (Clasen, 2003).

The Labour Party won the election in 1997 under the guise of “New Labour”, which differed from old Labour in that it accepted the neoliberal equilibrium. Nevertheless, it tried
to graft social policies onto the basis of neoliberal economic policy (Bone, 2012; Grimshaw & Rubery, 2012). This meant that it was trying to combine several objectives that sometimes conflicted (Grimshaw & Rubery, 2012).

The Conservatives were re-elected in 2010, although this time they did not have an overall majority and were compelled to form a coalition with the Liberal Democrats. They were committed to outright neoliberal policies, and their way out of the economic crisis that had followed the global financial collapse in 2008 was with an austerity package that hit local government especially hard (Bone, 2012). In 2015, the Conservatives were elected with a slender majority government, and continued their commitment to implementing austerity policies.

2.2.2.5 Development of the welfare state in Sweden

Sweden has a long history of state involvement in welfare. The state took over most of the duties of the Catholic Church after the Reformation, including caring for the old and the sick (Elmér, 2000; Lundström & Svedberg, 2003). Another feature of pre-industrial Sweden was a strong peasant class, with political representation in the Parliament of the Estates (along with representatives from the clergy, bourgeoisie, and nobility) (Lundberg et al., 2008a). Industrialisation took place in Sweden mainly during the first half of the 20th century, and brought with it the breaking up of the multi-generational families. The shift from multi-generational to nuclear families increased the number of elderly people who were reliant on public support (Nasenius & Ritter, 1974). The Swedish Poor Law, like the English Poor Law, was designed with deliberately harsh consequences to deter people from seeking help, and it was built upon a founding principle of sorting the “deserving” poor from the “undeserving” (Elmér, 2000).
The economic slump that followed the international stock market crash in the late 1920s helped the Social Democratic Party to government in 1932, where it would remain until 1976 (Thane, 1996). The party was supported by the Agrarian party (*Bondeförbundet/Center-partiet*), which meant that most benefits covered not just workers, but the whole population, to cater to farmers’ demands. Since Sweden was still in the early stages of industrialisation, the farmers were still a large and influential segment of society, in contrast to the UK. A similar coalition strategy was followed later regarding the middle class (Lundberg et al., 2008a). The Social Democrats embraced Keynesian ideas of counter-cyclical investment and maintaining an unbalanced budget to steer Sweden through the Great Depression (Lundberg et al., 2008a; Nasenius & Ritter, 1974). The goal of the Social Democratic government was to ensure economic and social security for all the population, from cradle to grave in the “people’s home” (*folkhemmet*). Their strategy rested on a large economic investment in social welfare, evening out inequalities, and strengthening solidarity between groups. The aim was to replace class solidarity with society-wide solidarity (Nasenius & Ritter, 1974).

Sweden was neutral during the Second World War, and emerged after the war as one of the richer countries in Europe (Lundberg et al., 2008a; Thane, 1996). A universal flat-rate pension and universal child allowances were introduced immediately after the war (Thane, 1996). As the risk of poverty was highest in the elderly and families with children, these two reforms together drastically reduced the need of the Poor Law (Elmér, 2000). Expansion of social policies continued through the 1950s and 1960s. The Social Democrats also introduced income-related benefits in the sickness benefits, unemployment insurance, and pensions (Elmér, 2000; Nasenius & Ritter, 1974; Thane, 1996). The public sector expanded rapidly during this period (Nilsson, 2010). Earnings-related benefits were consolidated and extended during the 1970s and 1980s (Elmér, 2000; Nasenius & Ritter, 1974; Thane, 1996).
Sweden underwent a severe economic crisis in the 1990s, with the state’s finances spiralling out of control (Bergh, 2004). Unemployment rose from 2% in 1991 to 12.5% in 1993 (Lindbom, 2001). A conservative/liberal coalition government was elected in 1991, headed by the Conservative party, which was in an excellent position to cut welfare, as the political consensus was that Sweden could not afford to raise its taxes. Nevertheless, the government did not drastically reduce welfare, preferring instead to seek broad cross-party agreements with the Social Democrats (Dahlström, 2009). The Social Democrats returned to government in 1994, continuing the cuts begun by the conservative/liberal government. Some of these cuts were reversed once the crisis was over, and the public funds were again in surplus (Ginsburgh & Rosenthal, 2004; Lindbom, 2008).

In practice, few benefits in Sweden are truly universal: only family payments and the basic pension are available to everyone, regardless of contributions or means tests. The universality of the Swedish welfare system was a consequence of the almost universal employment in Sweden, and with the decline of full employment, the number of people reliant on means-tested social assistance has increased (Clayton & Pontusson, 1998). The Swedish universality of employment was a fundamental aspect of the universality of Swedish welfare, and the abandonment of universal employment exposed the ways in which the welfare state was not truly universal (Clayton & Pontusson, 1998). To Clayton and Pontusson (1998), the abandonment of full employment thus marks a fundamental change of the Swedish welfare state, and an abandonment of universal welfare. In addition, the maximum amounts of the benefits (both unemployment and sickness insurance) have not been updated in line with earnings, which impacts middle and high earners, undercutting the earnings-relatedness of the benefits and making them more flat-rate (Ferrarini et al., 2010).
The conservative/liberal coalition was re-elected in 2006, and again in 2010. The Conservative party positioned itself as the defender of the welfare state, and campaigned under the slogan “the new labour party” (Agius, 2007). However, it still wanted to make adjustments to the welfare state, and emphasised individualism (Agius, 2007). It introduced some cuts in welfare, by increasing, for example, the part of unemployment insurance that was tied to contributions, and by decreasing state subsidies and cutting replacement rates in sickness insurance. It had initially wanted to limit the duration of sickness insurance, but a political scandal arose when terminally ill cancer patients found themselves relying on social assistance, facing a strong obligation to seek and accept work, and having benefits withdrawn if they did not comply (Stakston, 2010). The government was compelled to carry out a review, whereby all people on sickness insurance must have a doctor confirm the continued need for sickness benefits each year. In 2014, a coalition government of the Social Democrats and the Green Party was elected, and while it did not reverse the policies implemented by the conservative/liberal coalition, it halted implementation of the cuts.

The UK and Sweden developed along similar pathways up to the 1930s, with small and gradual expansion of schemes that made it unnecessary for the most deserving poor to rely on the harsh and stigmatising Poor Law (Elmér, 2000; Fraser, 1984; Sullivan, 1996). However, the system of proportional representation used to elect Sweden’s parliament ensured that the Social Democrats needed to form coalitions with other interest groups: first farmers and then the middle class (Lockhart, 2012). This meant that Sweden’s tax structure was progressive rather than flat-rate (to satisfy the farmers), and later that benefits were tied to contributions (to satisfy the middle class) (Lockhart, 2012). In contrast, the UK’s Labour Party settled on flat-rate contributions and benefits, to allow room for private provision above the subsistence level, thus encouraging people to make their own arrangements (Brown, 1995; Thane, 1996). Although the Labour Party tried to introduce earnings-related benefits, they never were as
firmly established, and were easily phased out by the Conservative government (Clasen, 2003). Social security in the UK never managed to get much beyond a residual minimum-level safety net (Clasen, 2003).

Both the UK and Sweden have shifted from social insurance towards social assistance in their welfare provision, although this is more obvious in the UK, where public earnings-related benefits have been almost entirely abolished (Clayton & Pontusson, 1998; Kananen, 2012). While there was a philosophy among politicians and policymakers, especially in Scandinavia, that social insurance should cover everyone, there is now a hierarchy among welfare recipients, which has been suggested to lead to an insider-outsider dichotomy (Bambra, 2011a; Kananen, 2012). One difference between the two countries is that in the UK this was done during the 1980s for mainly ideological reasons, whereas in Sweden in was done during the 1990s, largely as a response to an economic crisis (Bone, 2012; Dahlström, 2009).

2.3 The Social Determinants of Health, Health Inequalities, and Welfare States

2.3.1 The social determinants of health

It is the unequal distribution of the social circumstances known as the social determinants of health that leads to unequal health outcomes between socioeconomic groups, ethnic groups, and genders (Graham, 2007). Lower socioeconomic status (SES) leads both to lower access to the resources that protect health, and to increased exposure to health risks, leading to higher rates of morbidity and mortality in people with lower SES (Graham, 2009a). Differences in exposure, in vulnerability, and in the consequences of ill health all lead to inequalities in health (Whitehead et al., 2009b). This is not just a matter of the most disadvantaged – even relatively advantaged groups have poorer health than those more advantaged. Inequalities in health persist over a gradient, with each group having slightly
better health than the groups below them, and slightly poorer health than those above them (Marmot, 1999; Marmot, 2004).

Link and Phelan (1995) see social conditions as fundamental causes of disease. They suggest that, although a disease or the risk factors for a disease may be of biological origin, it is the social structure that determines who is and who is not exposed to diseases and the risk factors thereof (excluding the few diseases that are purely genetically determined). Thus the connection between social status and health remains, even when the disease patterns and risk factors change (Graham, 2009a; Link & Phelan, 1995; Mackenbach, 2006). This is because those with more resources (money, power, prestige, knowledge and status) are more able to avoid the known risk factors of disease, and more able to cope with the effects of ill health than those who lack these resources (Link & Phelan, 1995).

2.3.2 Theories of health inequalities

There are many theories of how health inequalities arise. Despite some debate in the past, it is now recognised that the various theories put forward are not mutually exclusive, and that it is, in fact, very difficult to disentangle the effects of any one pathway from the effects of others (Kawachi et al., 2002; Siegrist & Marmot, 2006).

One of the explanations put forward in the Black Report (a report on health inequalities published by the British Department of Health and Social Security in 1980, often credited with bringing health inequalities back into the public consciousness and onto the public agenda) is that of health selection, or reverse causation – that those who have poorer health end up in lower socioeconomic groups due to their ill health (Bartley, 2003; Davey Smith & Krieger, 2008; Graham, 2007). However, although health selection does play a role, by far the most important causal direction is from socioeconomic status to health outcomes. This has been shown by research that used longitudinal methods, or exogenous events such as
plant closures (where it cannot be said that ill health causes unemployment), to evaluate the
effects of socioeconomic status on health (Graham, 2009a; Marmot, 1999; Siegrist &
Marmot, 2006).

The Black Report favoured the materialist model (Bartley, 2003). According to this
model, the factors that influence health are the material conditions and health hazards to
which a person is exposed, such as cold and damp housing, environmental pollution,
hazardous work environments, and inadequate diet (Bartley, 2003). Material factors can
influence health directly, and they can have indirect impacts through behaviour and
psychosocial risk factors of ill health that have their roots in material inequalities (Marmot,
1999).

Differences in behaviour is another proposed explanation for health differences. People
in lower socioeconomic groups are more likely to drink excessive alcohol and to smoke, are
less likely to eat the recommended amounts of fruits and vegetables, and less likely to take
daily exercise – all of which have an impact on health. However, differences in behavioural
risk factors seldom account for more than approximately 25% of health inequalities (Bartley,
2003).

It is also believed that psychosocial factors make an independent contribution to health
inequalities (Bartley, 2003; Marmot, 1999). The Whitehall studies of British civil servants by
Michael Marmot and colleagues found that those in lower grades in the civil servant
hierarchy have poorer health than those in higher grades, even when the traditional material
and behavioural risk factors are accounted for (Marmot, 1999; Marmot, 2004). The
psychosocial model rests on the biological responses of the body to stress. The fight or flight
mechanism is triggered in stressful situations, and stress hormones are released into the
bloodstream (Marmot, 2004). Long-term exposure to these stress hormones, such as may
arise during periods of chronic stress, increases the risks of heart failure, and affects the immune system (Bartley, 2003; Marmot, 2004). Low-grade chronic stress also induces wear and tear in the body that speeds up the ageing process, leading to an earlier onset of age-related diseases (Glasgow Centre for Population Health, 2013). The psychosocial model explains the health gradient better than the materialist model, since it recognizes that relative income is more important than absolute income, and that relative status in a hierarchy influences psychosocial wellbeing (Marmot, 2004).

The *life course model* combines the three previous models, and overcomes the limitations of each (Bartley, 2003). The life course model views health as the result of a complex combination of factors over time (Bartley, 2003). This means that health is not just a product of current circumstances, but that each stage of life is influenced by what came before it (Blane, 1999). Furthermore, the model sees health as the result of cumulative exposures during the life course (Bartley, 2003). Those who are exposed to health hazards in one area of life are often exposed to health hazards in another area (Blane, 1999). This makes it difficult to distinguish between the effects of material, behavioural, and psychosocial health hazards, since they tend to cluster (Bartley, 2003; Blane, 1999; Siegrist & Theorell, 2006). The life course model can explain why social mobility, rather than increasing health inequalities through health selection, can decrease health inequalities. Since health is affected also by health circumstances in early life, those who are downwardly mobile have poorer health patterns than people in their class of origin, but better health than those of their destination class. Likewise, those who are upwardly mobile have better health than those they leave behind, but poorer health than those who are born into the higher class they move to (Bartley & Plewis, 2007).
2.3.3 Health inequalities and welfare states

Social circumstances have a profound effect on health, and thus it is natural that states and societies influence population health profoundly. Social structures change over time, and are changed by the deliberate actions of governments (Graham, 2007). Although there is a health gradient in all societies, the shape of the gradient differs between societies and is directly related to the social, economic, and cultural institutions in a society (McLeod et al., 2012). Governments have the power to redistribute income and other resources through the tax and benefit system, and by the provision of social services. They also have the ability to regulate industry, working conditions and the labour market to influence labour relations (Graham, 2009b). There are many points at which policy can influence the social determinants of health: policy can influence the exposure to hazards (such as poverty, unhealthy housing, dangerous working conditions, and nutritional deficiencies), the vulnerability to certain determinants (either reinforcing or cushioning the impact of exposure to a certain determinant), and the consequences of ill health (for example by income maintenance policies, labour market regulations, and vocational rehabilitation) (Graham, 2007; Whitehead et al., 2009b). More collectivist societies, as a rule, have better population health and longer life expectancy than more individualist societies (Bambra, 2011b; Marmot, 2004). Wilkinson and Pickett (2009) show that a range of social indicators, including health across all subsections of society, are better when resources are distributed more equally in society. However, in order to decrease health inequalities, and not just improve population health in general, it is important not only to improve general access to resources and protection against risks, but also to tackle the distribution of resources and risks. Otherwise, it is possible that improvement in population health is faster at the top of the socioeconomic hierarchy than lower down, and that would lead to increased health inequalities (Graham, 2007; Graham, 2009b; Wilkinson, 1999).
Despite the differences in social organisation and the measures taken to reduce health inequalities by several governments, the magnitudes of health inequalities differ remarkably little between countries (Mackenbach, 2006). It is especially surprising that the more egalitarian Nordic countries do not have smaller health inequalities than countries with larger social and income inequalities (Brennenstuhl et al., 2012; Dahl et al., 2006; Lundberg et al., 2008a; Lundberg & Lahelma, 2001; Mackenbach, 2012). Current theories cannot fully explain the presence of large health inequalities in egalitarian societies (Avendaño et al., 2009; Bambra, 2011a; Hurrelmann et al., 2010; Lahelma & Lundberg, 2009). It is possible that the social determinants of health are not as equally distributed as previously thought in the Nordic countries (Mackenbach, 2012). Decommodification may be necessary, but not sufficient, for achieving small health inequalities (Mackenbach et al., 2008; McLeod et al., 2012; Starfield & Birn, 2007). While income inequality is low and decommodification high in the Nordic countries, it may be that other determinants, particularly access to services or psychosocial determinants that arise from relative deprivation, are less equally distributed (Bambra, 2011a; Eikemo et al., 2008a).

It may also be that there are larger behavioural differences between the higher and lower socioeconomic groups in Sweden. Although there is no evidence that this is the case for diet, exercise or obesity, there are large class differences in smoking in the Nordic countries (Bambra, 2011a; Huijts & Eikemo, 2009). The Nordic countries have a long history of universalism, yet universal health messages are more effective in higher socioeconomic groups (Bambra, 2011a). The results may also be artefacts of the data: that the large health inequalities in the Nordic countries stem from the way socioeconomic status and health are measured, or due to cultural differences in reporting self-rated health (Bambra, 2011a). It is possible that since Nordic data are linked to population registries and tax information, they are more precise than data from other countries (McLeod et al., 2012).
Another artefactual explanation rests on how data are analysed. The Nordic countries have very low rates of morbidity and mortality, and thus small absolute differences may appear as large relative differences, which gives an artificially high appearance of health inequalities (Dahl et al., 2006; Kaplan, 2007). While an egalitarian would always prefer smaller relative inequalities, a pragmatist would accept fairly large relative inequalities, provided that the absolute inequalities were small, as it is the absolute rates and absolute inequalities that matter for the health of those with low SES (Bambra, 2011a; Mackenbach, 2012). The working class in the Nordic countries (excluding Finland) have the best health in Europe, compared to their peers (Bambra, 2011a; Burström, 2012; Lundberg, 2008; Lundberg et al., 2008a; Mackenbach et al., 2002; Vågerö & Eriksson, 1997). However, there is no consistent evidence that absolute differences are smaller in the Nordic countries than elsewhere (Hoffman, 2011; Mackenbach, 2012; Mackenbach et al., 2008; Silventoinen & Lahelma, 2002). A systematic review by Eikemo et al. (2009) found that low mortality rates do correlate with high risk ratios (a relative measure of health inequalities), lending support to the hypothesis that the high relative inequalities in the Nordic countries are an artefact of the low mortality rates in these countries. However, the effect for self-rated health was much smaller (Eikemo et al., 2009). Popham et al. (2013) examined total inequality (which encompasses both within-group and between-group inequalities) in mortality rather than examining differences in the averages for different socioeconomic groups, and found that the Nordic countries had smaller inequalities in infant and working-age mortality, and higher inequalities in old-age mortality.

Social selection may also play a role, as the Nordic countries are especially meritocratic, which means that people may rise or fall in status according to their health or health-related characteristics (Cavelaars et al., 1998; Dahl et al., 2006; Lundberg & Lahelma, 2001; Mackenbach, 2012; Mackenbach et al., 2002). This would mean that health and social
status are more tightly entwined in the Nordic countries, implying that the consequences of ill health are more severe in the Nordic countries than others. This is made less likely, however, by the high social protection and support given to people with illnesses or disabilities in the Nordic countries (Bambra, 2011a). Furthermore, intergenerational mobility patterns are similar across Europe, making this explanation unlikely (Dahl et al., 2006; Kunst et al., 1998).

The life course model has also been presented as a theory: health inequalities are a product of socioeconomic circumstances of the past, as well as current ones, so the development of the welfare state over time must be taken into account (Bambra et al., 2010; Beckfield & Krieger, 2009; Mackenbach, 2010; Mackenbach, 2012; Silventoinen & Lahelma, 2002). A further possibility is that while health inequalities are of similar magnitudes in different countries, the mechanisms that generate them are different (Åberg-Yngwe et al., 2001; Brennenstuhl et al., 2012). The relative importances of material, psychosocial and behavioural determinants depend on the context, and this changes over time and between countries (Aldabe et al., 2010; Beckfield & Krieger, 2009). The degree of social stratification differs between countries, as does the impact that stratification has on an individual’s life chances, and how this impact translates into health outcomes (Burström et al., 2010; Jones et al., 2006; Olafsdottir, 2007; Whitehead et al., 2000). Income, for example, is more important to health in the UK than in Sweden (Burström et al., 2010; Whitehead et al., 2000). This observation supports the view of Link and Phelan (1995) that social stratification is a fundamental cause of health inequalities, and that the mechanisms linking social status to health are less important for health than social status in itself.

Although the Nordic countries do not have smaller health inequalities than other European countries, the size of the inequalities remained fairly stable during the 1990s,
Despite far-reaching recessions, especially in Finland and Sweden. This has led to the theory that a generous welfare state and decommodification are not enough to reduce health inequalities, but may serve as a protective buffer during times of crisis (Beckfield & Krieger, 2009; Lahelma et al., 2001).

It is possible that specific policies are more important to the health of a country’s population groups than regimes in general (Lundberg et al., 2008b). Child health, for example, depends more on the existence of family-friendly policies that promote dual-earner families, and health in old age depends more on the existence of generous, non-means-tested pensions than on the general policy regime. Universal policies are in general better for health than residual policies (Lundberg et al., 2008a; Lundberg et al., 2008b). Studying specific social policies and how they affect the health of specific groups opens up the “black box” of welfare state regimes, and raises the question of what it is in social policies that promotes health (Lundberg et al., 2008a).

2.4 Neoliberalism and Recommodification

2.4.1 Neoliberalism

2.4.1.1 The rise of neoliberalism

The years between 1945 and the 1970s were dominated by the “post-War consensus”. This was the idea that states should apply Keynesian macroeconomic strategies of countercyclical spending and full employment, and provide social security, housing, and health through taxation and investment (Ilcan, 2009). After two global wars in the first half of the 20th century, separated by a world-wide depression in the 1930s, people wanted the state to provide security, and to protect them from risks that could strike anyone, regardless of social position (Judt, 2010). There was a widespread belief that markets were not suitable for the provision of collective goods (Judt, 2010).
Between 1945 and the 1970s, the welfare state had almost universal support among workers, and was reluctantly accepted by businessmen and politicians in both Sweden and the UK (Bone, 2012). Universal services and generous benefits meant that the middle classes also drew advantage from, and valued, the welfare state (McKee & Stuckler, 2011). The welfare state provided social protection as a matter of right – protection that did not depend on the deservedness of the recipient (Hasenfeld & Garrow, 2012).

As the post-war boom began to wind down, unemployment rose and the tax base of the various social protection schemes became more fragile (Judt, 2010). The oil crises of the 1970s, in particular, showed how vulnerable the welfare state was to a slowdown in economic growth. State bureaucracy was partly blamed for the slowdown (Centeno & Cohen, 2012; Crouch, 1997). Economic stagnation was coupled with high rates of inflation, which ran counter to Keynes’ theory that high inflation was due to an overheated economy (Centeno & Cohen, 2012). Keynesian economics became discredited and largely abandoned (Crouch, 1997). The loss of Keynesian macroeconomic functions also constrained policy in other policy areas (Leys, 2003).

The manufacturing class shrank as mass consumption and production gave way to rapid technological innovation and service consumption (Crouch, 1997; Judt, 2010). Post-Fordist models of organisation rose to prominence both in the private sector and the public sector (Ferlie et al., 1996). These models favour labour market flexibility, supply-side management, welfare pluralism, and minimum social expenditure (Bambra, 2011c).

The proponents of neoliberalism proceeded under the slogan “TINA” – “There is no alternative”. This was used both by Margaret Thatcher in the 1980s, and by the Swedish Prime Minister Carl Bildt in the early 1990s (Agius, 2007; Judt, 2010). When the economic crises of the 1970s discredited Keynesian economics, the political Left was unable to propose
credible alternatives to neoliberalism, and were thus forced to accept reluctantly the basic tenets of neoliberalism and constrain their policies to meet with market approval (De Vogli, 2011; Navarro, 2007).

The spread of neoliberalism and capitalism became global in the early 1990s as the Soviet Union fell, and China opened its borders to international trade, which meant there was no major country in the world that did not adhere to market principles (Centeno & Cohen, 2012; Leys, 2003). It is costly for states not to conform to the global order (Leys, 2003). If they do not attract investment and business from private capital, they lose revenue and jobs, which means that welfare will have to be cut anyway (Bobbitt, 2002).

2.4.1.2 Neoliberal ideology

Neoliberalism is an ideology and a theory of economics that rose to prominence during the late 1970s and 1980s as a consequence of changes in macroeconomic organisation. It favours the primacy of markets over everything else, and is opposed to interventions in the workings of the market (Cook, 2012; Schrecker & Bambra, 2015). It redefines the role of the state, from protecting society from the workings of markets, to protecting markets from the interference of society (Cohn, 1997). According to neoliberal ideology, markets are more efficient and moral than the state, since they give everyone a chance to rise or fall by their own talents and hard work. This means that the goods of a market-run society will, according to neoliberalism, become distributed according to individual merit (Cook, 2012). The ideology rejects the idea of social rights – that everyone has the right to a certain standard of living, regardless of their circumstances (Hasenfeld & Garrow, 2012).

Since the blame for the international slow-down in the 1970s was laid on the growth of government infrastructure and interference, the solution was seen to be fiscal austerity, market-dominated interest rates and exchange rates, free trade, market deregulation, low
levels of corporate tax and income tax, privatisation, and the protection of private property (Centeno & Cohen, 2012; Navarro, 1987). However, there is no evidence that a high tax burden is a disincentive for economic growth, and it is possible that high taxes kept wage demands down and thus somewhat curtailed inflation (Centeno & Cohen, 2012; Ferlie et al., 1996). The reforms gave price stability, at the expense of exacerbating the economic downturn and increasing inequality, clearly favouring the dominant interests (Centeno & Cohen, 2012; Muntaner et al., 2010a; Navarro, 2007). Due to the institutional structures in place, implementing pure neoliberalism is difficult, but many countries have neoliberalised their institutions, often through composite and contradictory renegotiated settlements (Belfrage & Ryner, 2009).

The US has always been more liberal in its approach to social policy than most countries in Europe, and markets have had a greater role to play in the provision of welfare. McKee and Stuckler (2011) argue that this is because white Americans felt more secure about their position, and did not fear falling to the bottom of the social hierarchy, since that position was occupied by African Americans. This meant that many Americans saw welfare not as insurance for themselves and their families, but as payments to people with whom they had little in common (McKee & Stuckler, 2011). It has been suggested that this feeling has grown stronger since the 1970s, and has spread to other parts of the world (McKee & Stuckler, 2011).

Neoliberal ideas are based mainly on economics, but there is a view of morality embedded in neoliberal ideology. In this ideology, local, voluntary and family provision is seen not only as a more efficient way of providing services, but also as a more moral way (Bone, 2012). Individuals are increasingly expected to govern themselves, and are constituted as “active participants” in government and service delivery, as the state withdraws from its
responsibilities (Ilcan, 2009). There is a belief that the state should not help people who are experiencing hardship, even if it can, since helping fosters dependency and gives people an opportunity to be lazy (Bobbitt, 2002; Ilcan, 2009). After the trends of increasing welfare and collectivism in the post-war period, there is currently an increasing trend towards self-interest. Self-interest has become a virtue in the new economic and social climate (Judt, 2010). This legitimises anti-welfare legislation, since individuals are responsible for their own happiness (Coburn, 2000; Peck, 2002), and everyone is encouraged to be enterprising and aspirational, even the poor (Kamat, 2004). Social welfare is provided less as a matter of right, and more according to the principles of reciprocity and desert (Harrow, 2002).

Poverty, unemployment and underemployment are seen as caused by individual failings, and thus it is the responsibility of the individual to deal with them (Ilcan, 2009; Peck, 2002). A new “Poor Law” style of state benefits has been instituted, especially in the Liberal welfare states, in which those who need help are divided into the “deserving” and the “undeserving” (for instance the unskilled, those with a criminal past, previous drugs users, and single parents). The undeserving poor are to be punished (Centeno & Cohen, 2012; Judt, 2010).

In the same light, taxes are seen as uncompensated loss of income, not as a way of providing collective goods (Judt, 2010). In fact, many neoliberals go so far as to see any level of taxation as theft (Cohn, 1997). Related to this, there is no such thing as unfair profit (Cohn, 1997). The neoliberal idea is that each person can ensure his or her own social and economic advancement by taking all opportunities offered, no matter how unfair or unjust (Ilcan, 2009). Social ills are believed to be ameliorated, not by deliberate state efforts, but by general economic growth that trickles down. In practice, however, the benefits that arise from economic growth are disproportionately distributed in favour of the wealthy and powerful (Judt, 2010; Navarro, 2007).
2.4.1.3 New Public Management and the “hollowed-out state”

The changes to the state have led to what Rhodes (1994) calls the “hollowed-out state”, in which privatisation and limitations to the forms of public intervention have weakened the powers of government. The doctrine of “New Public Management” (NPM) rose to prominence in the administration of public services. New Public Management is a global movement that originally drew on neoliberal ideology, but its sphere of influence has grown to attract experts, civil servants and politicians also from the left wing of the political spectrum (Bergmark, 2008; Clark, 2000). The key idea of NPM is that public services can be improved by the use of market mechanisms such as performance management, decentralization, service-orientation, outsourcing, contractual relationships, discipline and parsimony in resource use, and, if possible, competition in internal or external markets (Clark, 2000; Ferlie et al., 1996; Harrison & Calltorp, 2000). Together, these trends systematically challenge collectivism (Ferlie et al., 1996). Utilities and infrastructure have been privatised, and quasi-markets have been created in services that cannot be privatised (Ferlie et al., 1996).

This is not to say that the state has been rendered impotent during the past 30 years, but the changes that have occurred constrain the options that states can take (Leys, 2003). They need to conform to what the market deems is good for business, or risk losing critical investment (Bobbitt, 2002; Leys, 2003). Such conformation involves a combination of appealing policies, educating the workforce, providing tax-friendly havens, and assuring legal and financial stability (Bobbitt, 2002). This means that the state has limited abilities to tackle the causes of inequality, poverty, crime, ill health and racism (Leys, 2003). The state has shed responsibilities it previously had, by reducing social welfare and security, increasing enterprise and responsibility initiatives, and increasingly promising “law and order”, especially in the UK, US and Australia (Ilcan, 2009).
2.4.1.4 Differences in the response to neoliberalism

States met the changes in the economic landscape during the 1970s differently (Cohn, 1997). Macroeconomic conditions are not automatically translated into policies; they are filtered through social, cultural and institutional contexts (Flynn, 2002). Although welfare states have retrenched, governments have increased their efforts in surveillance, security, controlling epidemics and environmental protection, although at different times and to different extents (Bobbitt, 2002; Judt, 2010; Navarro, 2007). One way of retrenching the welfare state has been to introduce means tests for many benefits, which erodes middle-class support for those benefits (Judt, 2010; McKee & Stuckler, 2011).

Although some have gained from the new circumstances, inequality and insecurity have increased (Muntaner et al., 2010a). Income inequality decreased until the 1970s, but this trend has been reversed in many countries, although at different times and at different rates (Graham, 2009b; Judt, 2010). Jobs created in the new economy are either very highly paid or very poorly paid (Judt, 2010). Shifting from progressive forms of taxation, such as income tax and corporate tax, to regressive forms, such as consumption tax, exacerbates inequality beyond the levels of wage inequality (Leys, 2003).

Since traditional left-wing politics have been rejected by global markets, many left-wing and centre-left political parties, including New Labour in the UK and the Social Democrats in Sweden, adopt “Third-way” politics (Centeno & Cohen, 2012). Third-way politics attempt to combine diverse and incompatible objectives: high social investment without raising taxation, social security without undermining incentives to work and save, and low poverty without necessarily affecting inequality. When the objectives collide, it is likely that neoliberalism will be prioritised over collectivism (Grimshaw & Rubery, 2012). Indeed, Social Democratic and Labour parties may have more leeway to implement neoliberal reforms, since they will not be suspected of doing so for ideological reasons (Agius, 2007).
A stock market crash in 2007-2008 led to a world-wide recession, and spawned fears that a new Great Depression was imminent. The main cause of the crisis was the deregulation of financial markets (Bone, 2012). This crash came as a surprise to many people who believed that markets were self-correcting (De Vogli, 2011). As governments rapidly gave banks large bailouts and initially implemented counter-cyclical stimulus measures, it was believed that Keynesianism was in revival. However, governments then proceeded to pursue austerity programmes, and the neoliberal consensus prevailed (Bone, 2012). In the 1930s and 1940s, when the foundation for the welfare state was laid, there was a century-long history of collective struggle and organisation behind Social Democratic policies and Keynesianism, which meant that the 1929 stock market crash was used as an opportunity. However, there is currently no collective struggle for social rights, and as Leys (2003) correctly predicted, the economic crisis did not lead to a return to decommodification and extensive welfare policies.

2.4.2 Welfare states under pressure – a case of recommodification?

A strong welfare state is not compatible with neoliberalism, and this has put the welfare state under pressure. States also face increasing pressure from globalisation, ageing populations, increasing female labour force participation, changing household structures, de-industrialisation, and rising unemployment (Evans & Cerny, 2003; Pierson, 2002; Sainsbury, 2001; Sykes, 2008; Vis, 2007). Furthermore, welfare spending has increased year after year, sparking a debate on the sustainability of the welfare state (Bosanquet, 2012). This has led many states to take measures such as cutting replacement rates in benefits, tightening eligibility, reforming social security (especially pensions), decentralising and privatising services, and introducing market-oriented reforms in those services that remain publicly funded and publicly provided (for example, the creation of the internal market in the NHS) (Bosanquet, 2012; Clayton & Pontusson, 1998; Ellison & Pierson, 2003; Evans & Cerny, 2003; Peters, 2003; Sainsbury, 2001).
Most industrial countries have seen an increase in income inequality during the past 20 or 30 years. This is not only a result of increasing earnings inequalities, but also a consequence of increasing unemployment, combined with cuts to benefits (Clayton & Pontusson, 1998; Evans & Williams, 2009). The most recent austerity measures across Europe (post-2008) have further increased inequality, as they have had a disproportionate impact on the poor and on women, who rely most strongly on benefits and services (Clarke & Newman, 2012). However, the changes have not been uniform – there is still scope for states to choose their response (Ellison & Pierson, 2003; Sainsbury, 2001; Sykes, 2008). The responses tend to cluster by welfare state regime – many Liberal states have chosen to focus on recommodification and cost-containment, cutting benefits, and an increasing emphasis on the targeting of benefits according to need. Conservative states, on the other hand, have focused on recalibrating the welfare state and cost-containment, by encouraging early exit from the labour force and increasing the role of the family. Social Democratic states have focused on keeping their universalism and extending their pre-existing active labour market policies, while at the same time containing costs (Bambra, 2004; Clasen, 2003; Kerem & Põder, 2011; Olaskoaga-Larrauri et al., 2010; Pierson, 2002).

Neoliberalism has had different impacts in different policy domains. There are several reasons why some policy domains have been cut (by, for example, the cutting of replacement rates, tightening of eligibility criteria, or the increase or introduction of user charges), and others not. The most important reasons are institutional path-dependency, electoral support, and the presence of interest groups (Ellison & Pierson, 2003; Pierson, 2002; Vis, 2007). Retrenchment is more likely to occur if public opinion is not mobilised against it (Starke et al., 2008). It is far easier to cut programmes if there are opportunities to do so unnoticed, by, for example, non-decisions to not uprate benefits in line with inflation, or complex changes to indexation rules, or if the changes only affect a small number of people (Lindbom, 2007).
However, people may readily accept quite severe cuts during times of economic crisis, as occurred in Sweden during the 1990s, especially against the background of concern about long-term sustainability, or if welfare state spending is blamed for the crisis in the first place (Lindbom, 2007; Schokkaert & Van Parijs, 2003; Vis et al., 2011). However, unlike the economic crises of the 1970s and 1980s (or the 1990s crisis in Sweden), the 2007/8 crisis was not blamed on excessive state spending – in fact the welfare state was seen to cushion the impact of the global market, so this crisis did not undermine support for the welfare state to the same extent (Vis et al., 2011). However, in the UK, excessive state spending by Labour was believed to have deepened the crisis, and this was one of the reasons the Conservative Party won the 2010 election and was able to implement its austerity package (Hellwig & Coffey, 2011).

Public support for redistribution differs between individuals and countries and varies over time (Hjerm & Schnabel, 2012; Svallfors, 2012). Attempts to identify factors that influence public support for taxation and redistribution have given inconclusive and conflicting results (Hjerm & Schnabel, 2012). Whether or not an individual supports welfare state spending seems to depend more on individual factors than country-level factors (Hjerm & Schnabel, 2012). Some differences, however, have been recognised (Svallfors, 2012). Indeed, some research has shown that there is less citizen support for taxation and public spending in countries that already have high levels (Koster & Kaminska, 2012), although these results are not uncontested (Paskov & Dewilde, 2012; Svallfors, 2012).

Public attitudes to taxation, redistribution, and social spending in Sweden have remained fairly stable since the 1980s, with a slight decrease between the mid-1990s-2002, but increasing again until 2010 (Svallfors, 2010). Suspicion of abuse in the system has decreased, despite an at times intensive political and media debate (Svallfors, 2010; Svallfors, 2011).
The working class in Sweden is more supportive of welfare spending than the middle class, but middle class support increased during the crises in the 1990s and 2008-2011 (Svallfors, 2011).

In the UK, there has been a sharp decline in public support for taxation and public spending, in particular spending on unemployment benefits and spending to finance employment policies (Edlund & Svallfors, 2009). Support has decreased in all socioeconomic classes, but more markedly among the working class, leading to decreased class differences in attitudes to public spending (Edlund & Svallfors, 2009).

Support for welfare policies tends to depend on perceived need and direct effects, but the perceived need does not need to be in one’s own subgroup (Giger, 2011). Support can be either selfish, altruistic, or a combination (Bergmark, 2000). Economic strain does tend to increase support for welfare spending, either if the individual respondent is under economic strain, or if many people in the country are experiencing it (Blekesaune, 2012). It is especially easy to cut non-indexed welfare provisions, since they can be cut simply by failing to increase the rates in line with inflation (Lindbom, 2007). In Sweden, pensions and social assistance benefits are indexed, whereas the maximum unemployment benefit, housing allowance and child allowance are not (Lindbom, 2007). Benefits in the UK are typically indexed in line with inflation (Brewer et al., 2011), although unemployment benefits have not increased in line with wages since the 1970s (Kenway, 2009). Partisan governments have some impact on the probability of retrenchment: right-wing governments are more likely to cut unemployment benefits than left-wing governments. However, this is not true for healthcare services (Klitgaard & Elmelund-Præstekær, 2013).

Healthcare is one of the more popular areas of welfare provision (Giger, 2011). There are user charges for primary care, secondary care, dentistry, and prescription drugs in the
Swedish healthcare system, whereas the English NHS is free at the point of use (excluding ocular care, dentistry, and prescriptions). The British are far more protective of the NHS than they are of unemployment benefits (Vis et al., 2011). While public support for the NHS has always been high, social security tends to be met with suspicion and rhetoric about “scroungers” and “cheats”, even though unclaimed benefits and stigma are far more serious problems than fraudulently claimed benefits (Jones et al., 2006). Tax evasion and tax avoidance are also major problems (Dorling, 2014). While the NHS provides universal coverage, and therefore has high approval ratings, it is easier to cut the non-universal social security, as the recipients are seen as “unworthy” of protection (Jones et al., 2006).

2.5 Unemployment Insurance Reform
The main objectives of unemployment policy have changed, from compensating for the problems created by the market and protecting against social risks, to underpinning the market and getting people back to work (Bosanquet, 2012; Clasen, 2003; Peters, 2003). Work incentives have been increased by making benefits taxable, extending in-work tax credits, making benefits conditional on job-seeking or training, increasing reliance on means-testing, and cutting benefit generosity (Ellison & Pierson, 2003; Evans & Cerny, 2003; Evans & Williams, 2009; Lewis, 2003). The focus lies squarely on employability, not employment: states no longer guarantee full employment (Bambra, 2011c; Bosanquet, 2012; Clarke, 2008; Lewis, 2003). The emphasis on work incentives in the benefit structure may come at the cost of ensuring that even means-tested benefits are able to provide the recipient with an adequate living standard (Lewis, 2003). The stigma of unemployment increases, even as the unemployment rate soars (Judt, 2010). Work tests are rolled out for groups who previously were exempted, such as single parents and the ill or disabled (Cook, 2012). Aid is given in return for contributions (most often work), not as a universal right (Hasenfeld & Garrow,
The principle that universal receipt should depend solely on need is in this way eroded.

In Sweden, the percentage of the previous salary paid by the unemployment insurance was lowered during the 1990s, from 90% to 80%. Furthermore, the maximum payable amount in the unemployment insurance has not been increased in line with earnings (Arbetslöshetskassornas samorganisation, 2006). By 2002, less than half of the unemployed received 80% of their previous salary in compensation (Arbetslöshetskassornas samorganisation, 2006). Work tests have been tightened in both the unemployment insurance and the social assistance (a means-tested system that caters for those without recourse to social insurance) (Kildal, 2001; Kuivalainen et al., 2010). Sweden’s high replacement rates allow for a longer and potentially more effective job-search, leading to better matches between the skills of the employee and the skills required by the employer (Huo et al., 2008). They also act as an incentive to invest in skills, and may prevent the unemployed or sick from leaving the workforce altogether – facilitating a temporary exit from work, in order to ensure that people are able to return once their circumstances change (Huo et al., 2008). There has always been a strong emphasis on work in Swedish welfare, with active labour market policies, an expectation that people attempt to find work, and obligations to accept activation offers and jobs (Kvist et al., 2012). The Social Democratic model is less well equipped to deal with long-term unemployment, and thus there are wide and encompassing activation measures embedded into the system (Huo et al., 2008). However, there are concerns that the activation measures are becoming what is known as “workfare” (Kildal, 2001). The line between workfare and active labour market policy is blurred, but the clearest distinction is that workfare forces people to accept work-like activities at conditions that are worse than those in the regular labour market (Kildal, 2001). While workfare and active labour market policies often overlap, they tend to emphasise different aspects: increasing obligations, or
increasing employability services (Dingeldey, 2007). Active labour market policies are a means of commodification – an attempt to help people find work and get back to the market (Furåker et al., 1990). However, if these active labour market policies allow people to turn down jobs and still keep their benefits, they are less a means of commodification, and more a means of decommodification (Furåker et al., 1990). This ability to turn down jobs and retain benefits has been curtailed in both Sweden (Kananen, 2012; Kildal, 2001) and the UK (Petrongolo, 2008).

In the UK, the Job-Seeker’s Allowance (JSA) replaced both the means-tested Income Support and the contributions-based Unemployment Benefit. The JSA came with much stricter work tests and benefit sanctions than the previous systems (Petrongolo, 2008). The value of the JSA has not kept up with wages, meaning that the unemployed are financially worse off relative to the employed now than 20 years ago (Kenway, 2009). For example, the replacement value of unemployment benefit decreased from 45% of average wages in 1980 to just 16% in 1999 (Scruggs & Allan, 2006). New Labour introduced a series of active labour market policies under the banner of “New Deal” (New Deal for Young People, New Deal 25+, New Deal 50+, New Deal for Lone Parents, and New Deal for the Disabled) (Ellison & Pierson, 2003; Evans & Williams, 2009). While the New Deals came with strict job-searching requirements and benefit sanctions, they also provided training, job-search support and placement opportunities, aimed at helping people find work (Jones et al., 2006). The New Deals were withdrawn by the Conservative/Liberal Democrat coalition government in 2011 and replaced by the Work Programme, run by private and third-sector organisations. This programme offers interviews, training and work placements for benefit recipients (Department for Work and Pensions, 2011). Further Coalition government reforms have included the increased use of sanctions (Department for Work and Pensions, 2011). The strict use of sanctions makes both the New Deals and the Work Programme more similar to
workfare programmes, and thus makes them a recommodifying measure, since participants in the programmes are not able to turn down offers from the market. Although the New Deals had aspects of recommodification (by withdrawing benefits from those who did not participate in training or placements, for example), they were also activation measures (by providing training and placements), something that the UK does not have as long a history of as Sweden (Kvist et al., 2012).

A new economy of minimum-wage jobs has been created through several mechanisms, including joblessness, the smaller risk pool of the welfare state, the stagnation of wages for low-income and middle-income groups, and sanctions for refusing to take a job, all of which increase labour market flexibilisation and insecurity (Bone, 2012; Judt, 2010). By taking away benefits from those who do not seek and accept jobs, the ability of employers to set wages unilaterally has increased (Judt, 2010). A weak workforce is likely to be exploited (Bone, 2012). High unemployment means that those who are still in work (who are more likely to be highly skilled) face an increased tax burden, which leads to resentment of the unemployed and unskilled (Judt, 2010). There has also been an increase in the use of food banks in the UK, an emergency relief measure for people who cannot afford food, and this has been linked to austerity measures and welfare reform (Garthwaite & Bambra, 2015).

Previous research has found that generous unemployment benefits affect the mental health of both the employed and the unemployed. Generous benefits result in better mental health of the unemployed, who have better financial stability, and they may also improve the mental health of employees, who are less worried about job loss (O'Campo et al., 2015). They may also lead to less underemployment, which may arise when people take jobs for which they are overqualified, rather than waiting for a better match (O'Campo et al., 2015; Rosenthal et al., 2012). However, generous unemployment benefits do not protect against the
stigma, social exclusion, loss of self-esteem and loss of status that often come with
unemployment (O'Campo et al., 2015). Furthermore, the effect of unemployment benefits on
employees is contested: while some studies have shown that high unemployment benefits can
reduce health inequalities among employees, since they give a measure of security to workers
with insecure jobs (Benach et al., 2004; Benavides et al., 2000), other studies have found no
evidence that low-income workers are more strongly affected by job insecurity than high
income workers (D'Souza et al., 2005).

Rodriguez (2001) and Rodriguez et al. (2001) have shown that benefits that are linked to
contributions or are universal protect health during unemployment better than means-tested
benefits, possibly due to the higher levels of remuneration, or the lesser stigma that is
attached. It is thus very likely that the increased use of means-testing will have had impacts
on the health of the unemployed.

2.6 Healthcare Reform

2.6.1 Commodification of healthcare

The term “decommodification”, in the way it is most often used in social policy studies,
refers to the extent to which individuals and families are able to maintain an acceptable
adapted this to healthcare, and constructed a similar decommodification index based on the
proportion of private funding, the proportion of private provision of healthcare, and the rates
of public coverage. This, then, refers to the degree of market involvement in healthcare.

Markets are not simply another method of delivery: in order for a market to work, there
must be a commodity (Leys, 2003). The establishment of market mechanisms in healthcare
thus commodifies healthcare (Leys, 2003). However, from a patient’s point of view, market
involvement in the healthcare system might not necessarily be commodifying, if the rates of
private funding are low and public coverage high. If people can access private healthcare on an equal basis, regardless of their market position, the system can still be characterised as “decommodified” from a patient’s perspective.

Price is far from the only factor that influences access to healthcare. The characteristics of the population explain the propensity to use services. Such characteristics are demographic (such as age, sex and marital or cohabitation status), socio-economic (such as income, education, occupation, ethnicity, and social relationships), and mental (such as personal beliefs, knowledge, attitudes, values, and previous experience) (Åhs & Westerling, 2006; Babitsch et al., 2012; Gold, 1998; Gulliford et al., 2002). Impediments to access can come as either the costs of accessing the service or structural impediments. “Costs” refers not just to direct costs, but also indirect costs of transport or opportunity costs of time lost (Dixon-Woods et al., 2006; Gold, 1998; Gulliford et al., 2002). The costs of access affect different groups differently (Burström, 2009; Gulliford et al., 2002).

2.6.2 Healthcare reform in Sweden and England

Sweden has strong local government with tax-raising capabilities (Diderichsen, 1999). There are 190 municipalities, organised into 20 county councils (reduced from 26 in a series of mergers in the 1980s and 1990s) (Rae, 2005). The county council income tax rate is essentially proportionate, neither regressive nor progressive (Anell, 1996; Rae, 2005). The county councils own and run both hospitals and primary care clinics, although some county councils have sold their primary care clinics to the private sector (Diderichsen, 1999; Rae, 2005).

The county councils were made responsible for primary care in 1963, and the first primary care clinic (vårdcentral), the aim of which was to collect many primary care services under one roof, was opened in 1968 (Swartling, 2006). User charges were introduced in 1970.
They were initially set at SEK 7, and are now substantially higher, ranging from SEK 100 to SEK 300 for a primary care physician. Charges may be up to 400 SEK for visits to specialists (Anell, 2005; Swartling, 2006).

The system was devolved during the 1980s, and the county councils were made responsible for ensuring the efficiency, accessibility and equity of the system. The objective of the devolution was to match local priorities, values and needs in the healthcare system more accurately to resources (Diderichsen, 1999). However, the county councils had different access to resources and different levels of need: the inverse care law led to those with less need having more resources, and those with more need having less resources (Diderichsen, 1999).

Some attempts to recentralise the system were carried out during the 1990s, and the National Board of Health and Welfare was given more authority to regulate the behaviour of public and private providers (Saltman & Bergman, 2005). At the same time, the Ädel reform devolved the responsibility for care for the elderly, social services, home care, disability services, and mental health and psychiatric services to the municipalities (Bäärnhielm et al., 2005; Swartling, 2006). Both user charges for healthcare and prescription charges were increased during this time (Burström, 2002). User charges were set centrally until 1991, after which the decision was devolved to the local level. Between the 1970s and 1998, user charges in healthcare have increased faster than the consumer price index (Elofsson et al., 1998).

User charges are mainly a measure to control consumption, and contribute a very marginal part of the financing of the healthcare system (Elofsson et al., 1998). A limit to the charges that any one user pays in any one calendar year has been implemented, so as to not place an undue burden on the chronically ill: once a person has reached the ceiling, any
further healthcare during that year is free (Robinson, 2002). Nonetheless, more people in disadvantaged areas than in prosperous areas report that they have not sought needed care for economic reasons (Burström, 2009).

Alongside user charges and a system reorganisation, patient choice in primary care was introduced in many country councils through the 1990s and 2000s (Burström, 2009; Dahlgren, 2008; Dahlgren, 2012). The main stated purpose of this reform was to increase freedom of choice, not equity. There is little evidence that greater freedom of choice increased equity in Sweden, as the more affluent and educated patients were more able to exercise their right to choose (Burström, 2009; Dahlgren, 2012).

The pendulum had swung back again by the end of the 1990s and the early 2000s, and there was more coordination and cooperation between purchasers and providers, focusing on long-term planning and more stable contracting patterns (Andersen et al., 2001; Bergmark, 2008; Blomqvist, 2004; Dahlgren, 2008; Dahlgren, 2012; Harrison & Calltorp, 2000; Whitehead et al., 1997b). However, patient choice and the free right to establish private practices were made mandatory for all county councils in 2010 (Dahlgren, 2012; Häkkinen & Jonsson, 2009).

The Swedish healthcare system had a pro-poor bias during the 1980s, and people on low incomes were more likely to visit the doctor. By the 1990s, however, there was no difference in consumption rates by income (Burström, 2002; Burström, 2009). Similarly, in 1988/89 there were no significant differences in reported unmet care needs, while by 1996/97 people in lower-income quintiles had higher odds of reporting having care needs for which they had not sought help (Burström, 2002).
The changes to the Swedish healthcare system can be thought of in terms of recommodification, both in the sense of increased market involvement in healthcare and in the sense that a person’s market position determines his or her access to healthcare.

In England, some ideas from the New Public Management doctrine were adopted in the National Health Service during the 1980s. These ideas included the appointment of business-like general managers of hospitals, performance management, and income generation (through the use of pay beds, parking charges, and letting space for retail units, for example) (Ham, 2004). In 1991, a system of market competition between healthcare providers was implemented in the face of fierce opposition from the public, the Labour party and the medical profession (Baggott, 2004; Ham, 2004; Harrison & McDonald, 2008; Hunter, 2008; Klein, 2006; Timmins, 2012). There was no real patient choice – the purchasers (GPs and local Health Authorities) chose on behalf of patients (Baggott, 2004; Dixon & Robertson, 2011; Ham, 2004; Le Grand et al., 1998). Funds in the system were set annually by the government, and the activities in which the various parts could engage were heavily proscribed by the state (Dawson & Dargie, 2002). When New Labour was voted into power in 1997, the emphasis in the relationship between purchasers and providers was shifted from competition to collaboration, long-term contracting and planning (Baggott, 2004; Baggott, 2007; Ham, 2004; Harrison & McDonald, 2008; Klein, 2006). However, by the 2000s, New Labour had changed its ideas, and reintroduced competition. Patients were given the choice of at least four providers for elective surgery, at least one of which had to be private (Dixon & Robertson, 2011; Ham, 2004; Klein, 2006). The choice reform seemed to result in increased inequity in access, in favour of those living in less deprived areas (Brereton & Vasoodaven, 2010). Although the Conservative/Liberal Democrat Coalition government that took office in 2010 promised that it would make no radical “Big Bang” changes to the NHS during its term in office, it was not long before it revealed arguably the biggest structural
reform since the implementation of the NHS in 1948 (Hunter, 2011). The Health and Social Care Act 2012 was passed with the intentions of increasing competition between healthcare providers and increasing the amount of care carried out by private providers, and it opened up healthcare provision to EU competition laws (Hunter, 2013; Krachler & Greer, 2015).

Although there are differences in detail and implementation, the stories of the two countries are remarkably similar. They both experimented with New Public Management in healthcare in the 1980s, pushing it to its most extreme form of competition in a market in the early 1990s. The reforms had some of the desired effects, but also many unforeseen side-effects, and were rolled back and de-emphasised in the later 1990s, only to be reintroduced in the 2000s (Dahlgren, 2008; Dahlgren, 2012). The key differences are that the Swedish reforms were always choice-driven, whereas this was only a real feature of the later reforms in England. Furthermore, the Swedish system was already de-centralised, and care decisions were taken at the county level. It was only in 2010 that choice and competition were made mandatory in all counties, and there are still variations in how they are implemented. Although care is still publicly funded and delivered according to need in both countries, the market has been opened up for actors wishing to make a profit on delivering healthcare. Free choice may also allow people to opt out of the existing public system (Fenger, 2009). There is no option to not pay taxes for public care in either country, but the proportion of care paid for by private means is increasing in both countries (Fenger, 2009).

2.7 Pension Reform

Old age does not simply reproduce class patterns of previous experience: new patterns are formed as people outlive their resources (they might find their resources depleted through, for example, widowhood, sickness, and charges for elderly care homes (Walker & Foster, 2006)). Changing class patterns (such as the reduction of blue-collar jobs, increased female labour force participation, and destandardised employment patterns) will have an impact on
the pensions that people receive (Walker & Foster, 2006). There is evidence that a generous universal public pension results in a lower mortality rate among older adults (Fors et al., 2012).

There are two kinds of public pension system: social insurance (also known as Bismarckian) and multi-pillar (also known as Beveridgean), (Neugschwender, 2011). Pure Bismarckian systems are entirely earnings-related, whereas pure Beveridgean systems are entirely flat-rate, but the pure forms are non-existent (Neugschwender, 2011). By the late 1970s, both social insurance and multi-pillar systems had successful strategies of both poverty alleviation and income maintenance (Bonoli, 2003). However, there have been increasing concerns about the sustainability of pensions in both systems (Bonoli & Shinkawa, 2005; Sinclair et al., 2014).

The pressure to reform is greater in social insurance systems (Bonoli & Shinkawa, 2005). The pay-as-you-go (PAYG) method of funding makes the consequences of population ageing more obvious, as the working population pays directly for the current pensions. Furthermore, switching to funded pensions poses problems: if the switch happens for the current generation of retirees, they will not have saved enough to make their pension annuities adequate, whereas if the switch is for a future generation, this imposes double payment on the working age population, as they have to save for their own pensions and pay for the current retirees’ pensions at the same time (Belfrage & Ryner, 2009).

In multi-pillar systems, on the other hand, the basic state pension is small, and pensions are more at the control of the fund manager and the development of the stock market, so retrenchment is less politically sensitive. Increases in contributions required for the same level of pensions might not be blamed on the state, but on technical problems, the competency or lack thereof of the fund manager, general stock market performance, and pure
luck (Bonoli & Shinkawa, 2005). However, if there is active state involvement and regulation of private and occupational pensions, or the people feel that ensuring an adequate living standard in old age is the responsibility of the state, there will be similar political problems as those experienced in social insurance systems (Bonoli & Shinkawa, 2005).

Pensions tend to be popular, as the general feeling is that people have earned their pensions through contributions throughout their adult lives in both multi-pillar and social insurance systems (Bonoli, 2003; Bosanquet, 2012). This means that cuts to pensions are unlikely to be popular (Belfrage & Ryner, 2009; Bonoli & Shinkawa, 2005).

Especially in England there have been concerns about the adequacy of the pension amount, which would make any cuts to the pension system very hazardous to politicians’ careers (Price, 2008). This is less the case in Sweden (Belfrage & Ryner, 2009). There have been some concerns quite recently (Svallfors, 2010), and as the net replacements are declining in Sweden, it is quite likely that these concerns will become more prominent in the future. Pensioners often have strong organisations to catch the attention of the media and promote pensioner interests, while unions are often more fragmented and must balance several competing interests (Lindbom, 2007).

Sweden underwent a radical pension reform in the 1990s, despite the political risks that such an act carries (Anderson, 2005). Sweden has a long tradition of public earnings-related pensions, with the state accounting for approximately 75% of pension benefits (Sundén, 2006). The Swedish earnings-related state ATP pension was introduced in 1957 after a protracted and occasionally virulent debate (Anderson, 2005), and it was considered “the jewel in the crown” of the Social Democratic state (Sundén, 2006). It combined a flat-rate pension with almost universal earnings-related pensions (the exception being those, mainly women, who had never worked) (Sundén, 2006).
It became obvious in the 1980s that the ATP system had some weak points. It was sensitive to economic growth and demographic change; the link between wages and pension was eroded as the benefit amount was indexed to prices rather than wages, which threatened to make the system unintentionally flat-rate; and the weak link between contributions and benefits led to unforeseen inequalities, as the system favoured people with short working histories and rising earnings (a career profile found more often among the highly educated) over those with long working histories and stable earnings (a career profile found more often among blue-collar workers) (Anderson, 2005; Sundén, 2006). Sweden had an ageing population, and this fact, in conjunction with the deep economic crisis of the 1990s, served to highlight the unsustainability of the system (Anderson, 2005; Sundén, 2006). While there had been thoughts about incremental pension reform since the 1980s, the 1990s crisis led to a consensus in favour of a complete overhaul (Sundén, 2006).

The reform was one of the most radical in Europe, even though Sweden has a more favourable demographic profile than many other European countries (Vidlund, 2006). As the credibility of the Social Democratic party was closely tied to the pension system, the reform was framed in Social Democratic rhetoric as commensurate with the previous system, by merely adding a funded element on top of the universal flat-rate pension and ATP, when in reality the reform went a long way towards transforming the system into a multi-pillar system (Belfrage & Ryner, 2009). The technical nature of the reform meant that it was difficult for the public to understand its full extent (Belfrage & Ryner, 2009).

One of the main changes was that instead of guaranteeing a set pension level, pensions would be paid out on the basis of how much had been contributed and how well the pension fund had done on the stock market. Furthermore, a fully funded mandatory Premium Pension was introduced, wherein people make their own choices of funds to invest their pension in
People are discouraged from staying in the default fund (Belfrage & Ryner, 2009). However, the default fund has performed better than the average chosen portfolio (Sundén, 2006). Contributions are split evenly between the employer and employee, although there is an upper limit to the contributions paid by the employee, while the employer pays contributions on the full salary (Anderson, 2005; Sundén, 2006).

Sweden’s reform improved the situation for many low-income pensioners, but it was also a recommodifying reform, tying pension income more closely to the market. Although it forms only a small part of the overall pension, the introduction of the Premium Pension means that the government no longer guarantees income maintenance, as the benefit amount depends on how well the chosen funds perform on the stock market (Belfrage & Ryner, 2009). Approximately 50% of respondents in one survey feared that their pension income would not be enough (Svallfors, 2010).

The English pension system is built on two parallel pensions – a public system that covers the poorest two thirds of the population, and occupational pensions for mainly administrative, managerial and professional occupations, thus contributing to occupational inequalities even after retirement (Walker & Foster, 2006). The UK state pension has always been comparatively weak, and earnings-related pensions were introduced relatively late, in 1978 (Lain et al., 2012; Taylor-Gooby, 2005). During the 1970s, there was increasing recognition that many occupational pensions were below subsistence level, not all pensioners had occupational pensions, and there was a high penalty for early retirement, which led to the introduction of SERPS, the State Earnings-Related Pension System, on a PAYG basis (Taylor-Gooby, 2005). SERPS was designed to leave room for the private market, and people who had occupational pensions with more favourable terms than SERPS were allowed to opt
out (Neugswender, 2011; Taylor-Gooby, 2005). However, people can still expect a meagre pension if they have only the basic state pension and SERPS, without any private provision (Neugswender, 2011).

The Thatcher government wanted to expand private provision from being the dominant form of pensions for high earners to being the dominant form for everyone (Taylor-Gooby, 2005). SERPS was reformed in 1986 – people could opt out of SERPS in favour of private pensions, not just occupational pensions, and the tax incentives to opt out were increased, as SERPS was made less advantageous. The uptake of private pensions was much greater than expected (Taylor-Gooby, 2005). The popularity of the private funds decreased slightly when it came to light that several people had been talked into accepting a private pension when it was not advantageous for them to do so by over-eager sellers on commission (Taylor-Gooby, 2005).

There is marked income inequality among pensioners, and during the 1980s, the gap between state and occupational pensions grew (Taylor-Gooby, 2005; Walker & Foster, 2006). Despite this, many pensioners are better off now than pensioners 50 years ago, and the minimum pension guarantee means that the poorest decile among pensioners is slightly better off relative to the rest than the poorest decile in the general population (Neugswender, 2011). However, the de-indexation of the basic state pension during the 1980s means that if people do not have occupational or private pensions, they face financial precariousness (Walker & Foster, 2006).

New Labour kept the basic set-up of the pension system, but expanded the means-tested pension credit in response to concerns that pensions were inadequate (Taylor-Gooby, 2005). They also introduced a range of benefits tied to the pension age, such as a free TV license, free bus pass, and Winter Fuel Payments to cover energy costs. However, there are arguments
over the feasibility of giving these benefits to all pensioners, and some argue that they should also be means-tested (Sinclair et al., 2014). This is in line with the general New Labour Third-way ideology of security for those who cannot make their way in the market, but only for those (Taylor-Gooby, 2005). SERPS was replaced by the State Second Pension (S2P) in 2002, which will become increasingly flat-rate as the years pass, until the earnings-related component is taken out entirely (Taylor-Gooby, 2005). This means that all earnings-related provision will be through the private sector and not through the public sector (Price, 2008).

In 2005, the government published a White Paper called *A New Pension Settlement for the 21st Century*. The changes outlined therein were adopted in 2007, at first on an incremental basis, but with radical changes in 2010 and 2012 (Price, 2008). As in Sweden, the pension reform is one of the most far-reaching in Europe, even though the UK has a comparatively favourable demographic trend (Vidlund, 2006). The basic state pension was set at a level below subsistence level, which meant that a large proportion of the retired were forced to rely on means-tested benefits to make ends meet (Ginn, 2001; Price, 2008). In 2005/06, approximately 50% of retired people were entitled to means-tested benefits, and it was projected that the figure would be approximately 75% by 2020 (Price, 2008). The reform was aimed to improve pension adequacy and decrease the number of pensioners reliant on means-testing (Lain et al., 2012; Price, 2008). While there were concerns that an overly generous basic pension will be a disincentive to private pension saving, it was felt that the means-test was a stronger disincentive (Price, 2008; Taylor-Gooby, 2005).

The UK pension reform cannot be spoken of in terms of recommodification, it is rather a recalibration of a fairly commodified system (Lain et al., 2012). The reforms do not leave people more dependent on the market, in fact, by increasing the generosity of the basic
pension, people are less dependent on the market and means-tested supplements for their income in old age.

2.8 Recommodification, Health, and Health Inequalities

Neoliberalism spread as a response to the economic and social crises of the 1970s and 1980s, undercutting welfare provision and increasing income inequalities. Most research demonstrates that neoliberalism is bad for health (Mooney, 2012; Schrecker & Bambra, 2015). Neoliberalism in both poor and rich countries is associated with higher poverty, poorer health, poorer health-determining social determinants, and poorer health-related behaviours (De Vogli, 2011; Schrecker & Bambra, 2015). Plausible explanations for these links are psychosocial, in that social inequality is greater under neoliberalism, and that neoliberalism results in an under-investment in the human-related resources of healthcare, education, and general welfare (De Vogli, 2011). Factors that are strongly related to health are material deprivation, social exclusion, financial stress, and the level of rewards at work (Aldabe et al., 2010). At least two of these, financial strain and material deprivation, are related to cash benefits from the welfare state. Lundberg et al. (2008b) found that universal policies tend to be better for health than residual ones. However, despite the health benefits of universal generous policies, there has been a tendency to cut entitlements and the generosity of social policies in many states (Vis et al., 2011).

Policy responses differ between countries in reaction to crises (Stuckler & Basu, 2013; Thomson et al., 2014). An economic crisis is often, but not always, used to implement austerity measures (Clarke & Newman, 2012), which tend to slow down economic growth, whereas stimulation measures tend to increase recovery (Stuckler & Basu, 2013). Stuckler and Basu (2013) argue that it is not recessions per se that cause ill health, but rather the austerity measures implemented in the wake of them, and that the negative health consequences of recessions can thus be avoided if austerity measures are not implemented.
Sweden was less affected by the economic crisis of 2008, and did not adopt austerity measures, unlike the UK (Thomson et al., 2014). Population health improved in countries such as Sweden, Iceland, Norway and Canada that did not adopt austerity, whereas it declined in countries such as Spain, Greece, and the UK that did (Stuckler & Basu, 2013).

Health outcomes are a product of the interplay of between cumulative exposures, susceptibility and resistance to the social determinants of health (Beckfield & Krieger, 2009). The welfare state plays a huge role in modifying and mediating the relationship between an individual’s status and his or her access to the social determinants of health (Bambra, 2011c), so changes in the welfare state are reflected in changes in the social determinants of health. However, the link between political systems and health is not simple – egalitarian, decommodifying Social Democratic countries do not have the smallest health inequalities, although they do have the most healthy populations and the longest life expectancy for poorer groups (Bambra, 2011c; Beckfield & Krieger, 2009; Borrell et al., 2007; Brennenstuhl et al., 2012; Hurrelmann et al., 2010).

Decommodification of labour mediates the extent of class and income inequalities, and can thus be seen as a social determinant of health in its own right, as it is inversely related to socioeconomic hardship (Bambra, 2006; Brennenstuhl et al., 2012). However, the logic of decommodification can also be extended to other social determinants of health – how much an individual is exposed to various determinants of health depends on his or her market position. The strength of the connection between the market position of an individual and his or her exposure to a certain determinant will be referred to in terms of how “commodified” that determinant is. When access to resources, in the form of either cash transfers or services, is provided as a matter of right regardless of market position, access and exposure to the social determinants of health are more decommodified. However, the changing balance
between rights and responsibilities, and the squeezing of public services, lead to an increased emphasis on several factors, including means-testing, the tightening of eligibility criteria, and increased work incentives for benefits. When this happens, access and exposure to the social determinants of health become more strongly influenced by an individual’s market position. This is expected to have consequences, not only for population health, but also for health inequalities, as access and exposure to the social determinants of health change for individuals and groups.

Empirical investigations into the link between welfare policy and health inequalities have not been conclusive, but the evidence suggests that neoliberal market reforms in welfare states either exacerbate or entrench health inequalities – they certainly do not reduce them (Beckfield & Krieger, 2009). As the universality and generosity of benefits and services decrease, population health is expected to deteriorate, or at least not improve. However, not all countries have reduced universality and generosity to the same extent – some, in fact, have extended them. The correlation with health and health inequalities is expected to be greater in those countries that recommodify to the greatest extent. Similarly, health inequalities are expected to widen following recommodification, as people with more market resources are more able to access the health-promoting determinants and avoid exposure to the health-damaging determinants than those with fewer market resources.

2.9 Conclusions and Purpose of the Study

In summary, recommodification is expected to be linked to both population health and health inequalities, and the relationship is expected to be stronger in locations in which recommodification has been stronger. Empirical studies will be required in order to understand the consequences of this trend, so that politicians understand the choices available to them in a shrinking welfare state, and understand the consequences to health and health inequalities of the options chosen in various contexts. Recommodification is not a uniform
process, and developments may sometimes be contradictory. This means that the association with health and health inequalities are not always easy to predict, even when factoring in all of the other aspects of society that play a role. This is why my study investigates welfare state reform to determine how welfare policy, recommodification of social determinants, and health inequalities are correlated. By focusing on three areas – healthcare, pensions and unemployment – I can go beyond previous research, which has so far focused very broadly on welfare regimes or countries, ignoring the differences in policy within countries. I investigate in depth how different benefits and levels are associated with the health of the unemployed and old age pensioners. I track changes to these over time, and correlate the results with the health gap between the employed and the unemployed, as well as health inequalities in older age. I also investigate the role of user charges in healthcare, whether increasing user charges are related to inequalities in access to healthcare. However, due to data limitations, this could not be done as a comparison between Sweden and England, so Chapter 6 will be in the form of a case study of Sweden. This will allow for a more thorough understanding of recommodification and health inequalities, and hopefully add to existing knowledge of the interplay between social policy and health inequalities.
Chapter 3: Methods

3.1 Study Design
This study is a comparative retrospective study of health inequalities and recommodification over time. Repeated cross-sectional studies were used to compute the level of health inequalities by socio-economic status, and the level of health inequality was then correlated with indicators of recommodification. As the data is of repeated cross-sectional structure, this study only addresses correlation, and makes no causal inferences. Three policy domains – unemployment, healthcare and pensions – were chosen for theoretical reasons, as they are areas that have seen different trends in recommodification. They are also major policy domains of the welfare state, and developments in these areas have direct and tangible impacts on people’s living standards and wellbeing. The policies in these domains changed not only within a country, but also between countries over the study period, as discussed in Chapter 2. They thus represent different case studies of how recommodification is linked to health inequalities in different circumstances.

The study was funded by Durham University, where a parent study, funded by BUPA, is investigating the relationship between recessions and health inequalities in Sweden and England. Ethical approval was obtained from Durham University’s School of Medicine, Pharmacy and Health and from the Stockholm Regional Ethical Review Board.

3.2 Data

3.2.1 Sources
The data used came from the Health Survey for England (HSE) and the Swedish Living Conditions Survey (ULF) for the years 1991-2011, or 1980-2005 for access to healthcare. This time period was chosen because it was a time of substantial change in social policies in both countries, and I expected this to be reflected in health inequalities between the employed
and unemployed, health inequalities in old age, and access to healthcare. Ideally, I would have liked to go further back than this, as the process of recommodification arguably started in the late 1970s in the UK, and in the late 1980s in Sweden. Data for the period prior to 1990, however, are scarce, and difficulties arise in comparing countries. The HSE was launched in 1991, which is why that particular year was chosen as the starting point for this investigation. The data relating to access to healthcare were exclusively from ULF and covered the years 1980-2005.

The HSE and ULF were chosen as they are two data sources that are comparable with each other: they share a similar methodology and ask similar questions about socio-economic status and health. An alternative to the HSE is the British Household Panel Study (BHPS). This is compared to ULF in many studies, and both the BHPS and ULF feed into the EU Survey on Income and Living Conditions (SILC) project, which is intended to provide comparable large-scale surveys of income and living conditions. However, the BHPS is a longitudinal study, so the methods of sampling and data collection differ between it and ULF. While this can be overcome by simply treating the BHPS as a random cross-sectional sample, rather than a longitudinal one, this approach ignores an important aspect of the BHPS study design, by treating the same sample of people through the years as though it is a new sample each time. A repeated cross-sectional study will have a new sample each time the study is run, and thus give a more representative sample than a cohort study. Furthermore, we already had ethical approval to use the HSE to study the prevalence and trends in health inequalities in England and Sweden for the parent study, so the HSE was chosen as access was immediately available.

The HSE does not contain an adequate measure of healthcare usage. Although it asks when the respondent last visited the doctor, this information is available for less than half the
years covered by the survey. Furthermore, the HSE asks whether the respondent has seen a GP during the past two weeks, which is insufficient to capture people’s access to healthcare, since even people who have a chronic condition and who therefore access healthcare regularly might not do so as frequently as every two weeks. This grossly underestimates people’s use of healthcare.

Other datasets than the HSE were considered for healthcare access in England. The British Household Panel Survey (BHPS) asked the same question as the HSE, whether the respondent had been to the GP in the past two weeks, and was therefore rejected for the same reasons. The Quality and Outcomes Framework (QOF) in primary care, was started in 2004. Since the Swedish data were available between 1980 and 2005, this meant that the time scales did not overlap, and no comparison could be made. Furthermore, the QOF contains information on the level of an individual GP’s practice on what diseases are presented and how they are treated, but it does not contain any information on the socio-economic status of individual patients. While it would have been possible to find out the general socio-economic status of the area by checking the location of the practice against such indexes as the Multiple Deprivation Index, this would have led to ecological fallacies, and would not tell us the extent to which individuals’ access to healthcare was influenced by their socio-economic status. The same was true of the Hospital Episodes Statistics (HES). As a last resort, I considered using admissions figures for Accidents and Emergency departments as an indicator of inequalities in access to primary healthcare, since many A&E admissions are the result of receiving no or insufficient primary care. However, this is a crude measure at best. This would also have led to an even greater danger of ecological fallacies, since the catchment areas of hospitals are much greater than those of GP practices. I concluded that the imprecision in socio-economic indicators was unacceptable.
However, since England has yet to introduce user fees in primary or secondary care (although, as in Sweden, there are prescription charges), an argument can be made that the NHS has not yet recommodified from a patient’s perspective, since healthcare on the NHS is not a commodity. This presupposes that the NHS can provide adequate healthcare, and that people do not need to resort to private insurance to get their healthcare needs met. However, as discussed in Chapter 2, the rise of private insurance can be considered to be a recommodifying trend in healthcare, if people take out private insurance to meet care needs that are not met by the NHS. This would mean that someone’s access to healthcare depended on his or her market position (whether or not the individual or the employer can afford private health insurance).

Thus, the chapter on healthcare is a case study of Sweden alone, rather than a comparison between England and Sweden. A comparison between two countries in which two different policy decisions were taken can serve as a natural experiment, with one country acting as a “counterfactual”, and this is the approach taken in the rest of the thesis, comparing what happens when net replacement rates rise and fall. In the context of the healthcare system, it can be argued that such a comparison is invalid, due to the complex nature of the systems in both countries. Comparing trends of inequality in usage in a system in which a fee is levied for healthcare with usage in a system in which there is no fee may give a false sense of validity to the findings, since it gives the appearance of greater comparability than actually exists.

3.2.2 Comparability

The questions used in this study are comparable between the two surveys. However, the extent to which self-reported measures of health and socio-economic status are comparable between the countries must be considered, as people may have different reference points against which they judge their health, and response categories may have different
connotations (Jürges, 2007). There may be cultural differences between Sweden and England, or between different socio-economic groups, in the way in which people value their health (Bambra, 2011a). In general, self-rated health serves as a strong predictor of subsequent mortality (Idler & Benyamini, 1997), but there are some differences. Jürges (2007) found that people in Sweden and Denmark tended to report slightly better health than people in other countries in mainland Europe with the same illnesses and physical health conditions. However, England was not included in this study, and no study has looked at whether the English and Swedish estimate their health differently. In Sweden, there are differences between how the more highly educated and lower educated people value their health status: the link between self-rated health and mortality is stronger in higher socio-economic groups (Burström & Fredlund, 2001). Systematic socio-economic differences in over-estimating or under-estimating health status have not been studied, so we do not know whether the ways in which people report their health are truly comparable between Sweden and England, nor whether the ways in which the various socio-economic groups report their health are truly comparable. I have not compared the levels of ill health between the two countries; I compare health inequalities between groups in the same country. This means that I am not relying on similar levels of reporting between Swedish and English people, but on there being no systematic differences between how the groups I am comparing value their health, or if there is, that this systematic difference is the same in the two countries.

Comparing socio-economic status across countries and at different times presents some pitfalls that must be discussed. Occupational position is classified differently in the Swedish and English surveys. The Swedish data have four response categories (Higher Non-manual, Lower Non-manual, Skilled Manual, and Unskilled Manual), whereas the English data have six (Professional, Managerial & Technical, Skilled Non-manual, Skilled Manual, Semi-skilled Manual, and Unskilled Manual). Some of the groups in the English data overlap with
several groups in the Swedish data (for instance, occupations that are classified as Managerial & Technical in the English data can be either Higher Non-manual or Lower Non-manual in the Swedish data, and Semi-skilled Manual occupations in the English data can be either Skilled or Unskilled in the Swedish data, depending on what exactly the job entails). Therefore, the finest gradation that could be used when making comparisons was manual versus non-manual occupations, since these categories contain mostly the same occupations in both countries. However, manual versus non-manual occupations is a rather crude measurement, and especially in recent decades, unskilled non-manual work may have a social status that is more similar to that of manual work than professional work (Borrell et al., 2004).

Even if the same measurement with the same categorisation is used in both countries, educational level and occupational class might have different implications for social status in different countries. For instance, there are substantial cross-generational differences in the job prospects and status of educational qualifications. Having no form of educational qualification is quite common among the older population, who managed to find employment regardless, whereas in recent decades the group of people with no educational qualifications is much smaller, and much worse off than those with school-level or higher education qualifications (Vincent, 1995). There are also differences between countries in the significance of education – in Liberal Market Economies such as the UK, more value is placed on transferable skills such as those gained from university degrees, whereas in Coordinated Market Economies such as Sweden and Continental Europe, industry-specific skills such as vocational qualifications are also valued highly (Mares, 2001).
3.3 Variables

3.3.1 Health inequalities between the employed and unemployed

The outcome variable of interest was self-rated health adjusted for age. In ULF, the question is formulated as: “How would you assess your general health?” Between 1991 and 1995, the response scale had three categories (Good, Poor, or Something in between), which was changed in 1996 to a five-point scale (Very good, Good, Fair, Poor or Very Poor). In the HSE, the question is formulated as “How is your health in general?” and a 5-point scale was used throughout the period under investigation. In both cases, the response was dichotomised into Good (Very good or Good) and Not good (Something in between, Fair, Poor or Very poor), to make comparison easier.

Limiting long-standing illness is another concept that can be used to measure ill health. Like self-rated general health, it relies on self-reporting rather than an official diagnosis. While it is true that whether an illness limits someone’s daily activities is a subjective assessment, the method does provide some criteria against which to make the assessment, unlike self-rated health. However, this question was not available in HSE until 1996, which is why it was not included in the analysis.

Employed persons included both full-time and part-time employees. Unemployed persons were defined as currently not in employment but seeking employment or claiming benefits aimed at job-seekers. Thus, people outside the labour market (students, homemakers, the retired, and people on sick pay or disability pay) were excluded from the analysis, since these groups differ in systematic ways from those who actively seek work. The Swedish data comprised 76,226 employed people, 5,959 unemployed people, and 48,880 excluded. The English data comprised 110,495 employed people, 6,773 unemployed people, and 81,072 excluded.
Decommodification was measured by the net replacement rate in the unemployment insurance. This data were gathered from Scruggs et al. (2014) Comparative Welfare Entitlements Database. I used the net replacement rate for a single adult. Net replacement rate is calculated as the fraction of an average production worker’s salary that is replaced by social insurance during the first 6 months, net of any taxes or transfers (Esping-Andersen, 1990). This depends on the development of average wages, and on changes in social policy, and therefore captures the position of those who receive social security relative to the rest of the population. An increase in the amount of benefit can still result in a decrease in the net replacement rate, if this is not in line with inflation, or if other policies in the tax and benefit system change at the same time. Further, other aspects of recommodification, such as the increased use of sanctions or a reduction in welfare to increase work incentives, cannot be captured quantitatively.

Net replacement rate captures only one aspect of decommodification, although it is a major one. Decommodification includes other aspects, such as population coverage, duration of benefits, and own contributions towards benefits. However, the decommodification index defined by Esping-Andersen (1990) could not be used, as it is a comparative index: a country’s decommodification index can change relative to other countries, without its decommodification level changing.

3.3.2 Inequalities in access to healthcare

It is difficult to measure inequalities in access to healthcare. People access healthcare in different amounts, but this may be due to differences in need, not due to any difficulties in accessing healthcare. Even in the absence of user charges for healthcare, there are still socio-economic differences in the access to care, and the “inverse care law” may still operate. This law has been described by Tudor Hart (1971), and points out that the provision of care is greatest where it is least needed.
ULF asks whether the respondent has seen a doctor during the past three months, and I used this to measure access to healthcare. The respondent was also asked about visits to an outpatient clinic and overnight stays in a hospital, but I selected only the question of whether a respondent had seen a doctor. The Swedish healthcare system is organised differently in each county. These differences include the kind of care that is given at the primary and secondary levels of care, and whether respondents can go directly to see a specialist or whether they need a referral from their primary care clinic. Therefore, respondents in some areas will be more likely to have visited a hospital than respondents in other areas, without this necessarily implying any difference in the care actually provided. Without any area information about the respondents, this was impossible to ascertain.

Education was used to indicate socio-economic status. This was categorised into three levels – those with low education (primary education or no qualifications), intermediate education (secondary school qualifications), and higher education (university level qualifications or above). Income was not available in the data used, which is likely to correlate more strongly with an aversion to user fees, and would thus be a better measure of the extent to which user fees have contributed to socio-economic inequalities in access to healthcare. However, education is correlated with income, and it provides useful information about people’s social status. Furthermore, it also influences access to healthcare, via knowledge of the healthcare system and the ability to negotiate with healthcare personnel.

Nevertheless, there are some issues. The elderly population tends to have fewer qualifications than the younger population, and the elderly population tends to access healthcare more. This may give an artificial correlation between education and healthcare usage, since both depend on age. In order to combat this, age was used as a control variable in all models. 92,649 people were included in the analysis.
Healthcare decommodification was measured as the average user fee in primary care. This information was provided by the Swedish Association of Local Authorities and Regions, which keeps a record of the user fees reported to it by the various counties. Unfortunately, it was unable to find user fee figures from 1992 and 1993 in the archives. The mean of the 1991 and the 1994 values was used for those two years instead. The difference between 1991 and 1994 was approximately SEK 7, using 1991 SEK as a baseline. The maximum difference between the estimated amount and the actual amount is a matter of a couple of SEK. Given that the user fees increased by over 80 SEK during the time period studied, the estimate of fees for 1992 and 1993 should make very little difference to the results.

The average user fees were converted to their 1991 values using the Consumer Price Index, available at Statistics Sweden. This made them comparable and removed the effects of inflation.

3.3.3 Health inequalities in the retired population

The population under study was old-age pensioners. The age of retirement in Sweden is 65, while in the UK it is 65 for men and 60 for women for those in this dataset (it will be gradually increased to 65 also for women between 2016 and 2018). I selected my sample as those above the age of retirement who report their economic activity as “retired”. This is regardless of whether they had taken early retirement due to health or if they had retired because of age, as I did not have access to this information. The sample in HSE included 42,295 people, of whom 7,060 were excluded due to still being in employment. In ULF, 26,979 people were included, and 1,377 were excluded due to still being in employment.

The measure of health inequalities was again self-rated health dichotomised into Good and Not good, for the same reasons as discussed earlier. Again, this was adjusted by age, as
the risk of ill health increases with age. This is particularly relevant for the older population, where ill health is highly prevalent.

Researchers have long considered how to measure socio-economic status in the older population, and a satisfactory answer is yet to be given (Grundy & Holt, 2001). No single measure of SES can adequately capture the entire picture (Grundy & Holt, 2001; Huisman et al., 2003). Educational distribution is skewed at older ages, occupation is problematic for the non-working population, and income is subject to problems of reverse causation (Huisman et al., 2003). Measures of SES are interrelated, but they capture slightly different dimensions of advantage and disadvantage, and lend themselves to different explanations of health inequality. Income is closely related to material living standard, while education is related more closely to cultural and behavioural factors. Occupational status is linked to previous experiences of working conditions (Grundy & Holt, 2001). However, there is a strong correlation between education and income among pensioners, and this is expected to become stronger in the future as the expansion of higher education leads to cohorts that are more finely graded by education (Walker & Foster, 2006).

Income is strongly tied to work, and reverse causation must also be considered: people who are severely ill or disabled receive extra income (Grundy & Holt, 2001). In addition, income during old age is often strongly related to income during working life, which is, in turn, influenced by health status, although income has less influence on health during retirement (Huisman et al., 2003; Smith & Kingston, 1997). Using income as a measure fails to account for the accumulation or erosion of assets over time, something that is particularly relevant to the older population (Layte et al., 2001). Poor health may also influence the ability to save for retirement (Smith & Kingston, 1997). Further, income data are often difficult to obtain, since people derive income from many different sources, and older people tend to
receive also in-kind benefits or other benefits that are not counted as income (such as housing benefit or free public transport). Such benefits, nevertheless, increase the resources of the elderly (Grundy & Holt, 2001). The income distribution in old age is more compressed than in working-age populations, since public pensions are subject to upper and lower limits (Fors et al., 2012).

Education is far less sensitive to reverse causation, since it is often achieved early in life, before the onset of many health conditions (Grundy & Holt, 2001). It is also applicable independently of employment status, which means that it can be useful for homemakers and the retired population, whose occupational class is difficult to measure (Valkonen, 1989). However, education is also a problematic measure in the older population, as the distribution of education is skewed among the elderly: many left school without qualifications, or with only primary school qualifications. This makes it hard to distinguish anything more finely than the most advantaged compared to the rest (Grundy & Holt, 2001; Huisman et al., 2003). The importance of education for SES is increasing, due to a reduction in unskilled jobs, an increased need for literacy in the information society, and a stronger link between education and health behaviours (Rognerud & Zahl, 2006). Education also influences health through indirect pathways, such as lifestyle and behaviour, nature of employment and occupation, and income (Jürges, 2007).

Members of the retired population are generally not active in the labour market, so capturing their socio-economic status by occupation poses problems (Grundy & Holt, 2001; Huisman et al., 2003). One study, however, showed that occupational class is the most important predictor of health in later life (McGovern & Nazroo, 2015).

Wealth has been identified most often as the most useful indicator of SES in the older population, as it reflects most accurately current social status, rather than social status during
the working life. Further, it is a more accurate measure of access to resources, and has a stronger relationship with health than income (McMunn et al., 2009; Niedzwiedz et al., 2014; Smith & Kingston, 1997). It has also been suggested that subjective financial well-being is the main mechanism through which income and wealth affect health, and is more important than objective levels of wealth and income (Arber et al., 2014).

I have chosen to use education, as it is more comparable than occupational status or income as measured in the two studies that provided the data in this study. Furthermore, I do not have access to income data in HSE before 1997, nor to occupational status in ULF after 2005. Education is less subject to the problem of reverse causality than income, although the correlation between education and pension income is not as strong as total income, which is what I aim to study when I study the recommodification of pensions. Unfortunately, I did not have access to any indicators of wealth, nor did I have access to income data in ULF.

3.4 Analysis

A two-stage binomial-normal approach using generalised linear models was used, since it was able to accommodate the different data structures in the health survey and recommodification data. While the health survey is nested within the years at individual level, the recommodification data were only available by year. This means that fitting a one-stage generalised linear model assumes that the value of recommodification is the same for all samples in any one year. To examine the research question of the association between health inequality and recommodification, this model would require a complicated interaction term between recommodification and the years, and this risks losing the intuitive and contextual interpretation of the results. Classical methods, such as multilevel models and repeated-measure ANOVAs, are also not suitable for the analysis of repeated cross-sectional data because each set of cross-sectional data contains different individuals. In this case, the
assumption of intra-person correlation or similarity between data from the same person does not hold.

Similar procedures were followed for all analyses. The main method is a two-stage binomial-normal distribution model using a generalised linear model. In the first stage, logistic regression models were fitted to estimate the magnitude of health inequalities as odds ratios between socio-economic statuses. The magnitudes of health inequalities were estimated per year because of the lack of a constant relationship between self-rated health and time. In the second stage, the estimated magnitudes of health inequalities were correlated to measures of recommodification using linear regression models. This allowed us to estimate changes in health inequalities due to a unit change in recommodification. In the chapters that discuss unemployment and pensions, the outcome variable for the logistic regression model was self-rated health, and in the chapter that discusses access to healthcare, the outcome variable was having made a visit to the doctor in the previous 3 months. In the chapters that discuss healthcare and pensions, the outcome variable for the linear regression model was inequalities between the high educated and low educated, while in the chapter that discusses unemployment, the outcome variable was inequalities between the employed and unemployed.

3.4.1. Absolute rates and rate differences

Presenting only relative inequalities without absolute rates may give a misleading picture (Eikemo et al., 2009). Relative differences are the ratios of the rate of one group to the rate of another group, whereas absolute differences are the differences between the rates. This means that if the absolute values are low, as mortality rates in most Western countries are, small absolute differences may appear as large relative rates. Therefore the proportions of the outcome variable in each group and the absolute difference in risk between the two groups
were computed. The absolute difference in risk was calculated by subtracting the rates of one
group from another.

3.4.2 Trend analysis

The prevalence rates over time were analysed using a non-parametric regression model,
known as the locally weighted scatterplot smoothed model (LOWESS). This fits a line
through a scatterplot by weighting points that lie close to the regression line more heavily
than those that lie far away. LOWESS is independent of the distribution and makes no
assumption about the linearity of the relationship between the variables. It fits a local line of
best fit based on a pre-specified moving window, as opposed to a global line, and the shape
of the relationship is allowed to vary over the course of the plot.

3.4.3 Stage 1: Computing inequalities in health/access to healthcare

In the first stage of the two-stage approach, I set out to map the trends of health
inequalities and inequalities in access to healthcare. The odds ratio of Not good
health between employed and unemployed was computed with Employed as the reference category.
Similarly, the odds ratio of having visited a doctor between educational categories was
computed with Highly educated as the reference category. Since the trends in both countries
were non-linear, imposing a linear relationship with a constant odds ratio was inadequate for
the data. A logistic regression was used to estimate the odds ratios for each year separately.
The odds ratios were then locally smoothed for trend analysis.

I used a similar model in all the analysis chapters, but with separate models for England
and Sweden. The logistic regression model for self-rated health in England was formulated as

\[
\text{logit}(p(\text{Not good health} = 1)) = \sum_{j=1}^{M} \beta_j \ast \text{Employed}_i
\]
where $M = 11$ is the number of years and $j = 1, 2, ..., M$ is an index for each year. For example, $j = 1$ for 1991 and $j = 11$ for 2011. Employed is a dummy coded variable for unemployment status with 1 for unemployed and 0 for employed (reference category). Note that this is a “no intercept” logistic regression model in order to estimate health inequality for every year.

Since this procedure involved testing inequalities between employment/educational categories for multiple years, there is need to adjust the p-values for multiple testing in order to minimise false positives. This was done by calculating the false discovery rate (FDR), as this is more suitable than the Bonferroni correction and the familywise error rate (FWER) when a large number of observations is to be analysed (Benjamini & Hochberg, 1995). The FWER and the Bonferroni correction require that all observed differences are significant, in order for the null hypothesis to be rejected, whereas the FDR provides an expected proportion of false discoveries. This makes it possible to reject the global null hypothesis, even if one or two tests in the family are non-significant (Benjamini & Hochberg, 1995). This preserves the statistical power, which is lost to a large degree in the FWER. The FDR ranks the $p$-values in ascending order of magnitude, and then classifies the $p$-values by their rank (Benjamini & Hochberg, 1995).

3.4.4 Stage 2: Association between health inequalities and recommodification

In the second stage of the two-stage approach, I wanted to calculate the extent to which trends in inequality correlate with net replacement rates in the unemployment insurance and pensions, and the average price of healthcare. The estimated log (odds ratios) of poor health or doctor visits computed in the first stage were correlated with the net replacement rate. In this case, a simple linear regression model was appropriate, since the relationship between decommodification measures and health inequalities was close to linear. I used log (odds ratios) instead of odds ratios, since log (odds ratios) is the natural output from logistic
regression. Unlike the odds ratio that is bounded by 0 and $+\infty$, log (odds ratio) is unbounded and can range from $-\infty$ to $+\infty$.

I used a similar model in all the analysis chapters. The second-stage simple linear regression model was formulated as:

$$\log(OR)_j = \beta_0 + \beta_1 \times decommodification_j + \epsilon_j$$

Where $\log(OR)_j$ denotes log (odds ratio) from the logistic regression stage, $\beta_0$ is the intercept term, $\beta_1$ denotes the decommodification slope and $\epsilon$ signifies the error term. Note that $j = \{1...11\}$ represent the years, which are the units of the regression analysis.

A de-trended analysis was performed with “Year” as the third variable in the model, since both net replacement rates/healthcare prices and health inequalities vary with time. De-trending is used when both the independent and dependent variables vary over time, and may cause a spurious correlation between two unrelated variables. In order to combat this, I held the year constant as a control variable, and explored how the output of the model changed. A decrease in $r^2$ (a measure of the extent to which changes in the outcome variable are the effect of changes in the explanatory variables) or in the $\beta$ coefficients (measures of how much an outcome variable changes with a change in one explanatory variable) is a sign that the correlation is due to other time-varying factors. The de-trended analysis was defined as:

$$\log(OR)_j = \beta_0 + \beta_1 \times decommodification_j + \beta_2 \times Year_j + \epsilon_j$$

Where $\log(OR)_j, \beta_0,$ and $\beta_1$ are as previously defined, $\beta_2$ denotes the linear change over time, and $\epsilon$ signifies the error term.

As a sensitivity analysis, the absolute rate difference was also used as an outcome variable for the simple linear regression model. The two-stage approach was also applied to
age-adjusted and gender-adjusted health inequalities. The results of the sensitivity analyses are presented in the appendix.

All analysis was done using the “R” software package.
Chapter 4: Unemployment Benefit Recommodification and Health Inequalities between the Employed and the Unemployed in Sweden and England, 1991-2011

4.1 Introduction

In this chapter I present the results from analysing health inequalities between the employed and the unemployed. I investigate whether there is any correlation between health inequalities and the recommodification of labour between 1991 and 2011 in Sweden and England. The methods used are explained in Chapter 3.

The unemployed are at a higher risk of ill health than the employed. Unemployment benefits are designed differently in Sweden and the UK, with Sweden incorporating an aspect of earnings-relatedness that is absent in the UK. Thus, the conditions for the unemployed in the two countries are different, and this is likely to be related to the health of the unemployed. Unemployment is also a policy domain that has been identified as being at significant risk of recommodification (Vis et al., 2011). Therefore, studying health inequalities between the unemployed and employed in Sweden and England during this period of recommodification can help us understand how recommodification of unemployment benefits are related to the health of the unemployed.

This chapter is based on the hypothesis that unemployment benefits will be recommodified in both countries, however, they will be more recommodified in Sweden. This means that health inequalities will be smaller in Sweden than in England at the start of the period, and this difference will decrease during the period, following increased recommodification.
I found that the health of the Swedish unemployed was better than the English, and health inequalities were smaller in Sweden. While health inequalities increased in both countries, the increase was greater in Sweden. The increase in health inequalities in Sweden was also more closely related to recommodification. This may be because Sweden recommodified more than England during this period, but it may also be because England’s low level of decommodification never served to protect the health of people during unemployment.

4.2 Results

4.2.1 Absolute rates and absolute rate differences

The health of the employed was better than the health of the unemployed in both countries, as shown in Figure 4.1.

![Prevalence of Not good health, Sweden](image1)

![Prevalence of Not good health, England](image2)

Figure 4.1: Percentage reporting health as Not good with LOWESS trend lines, separated by employment status and country. The shaded areas represents 95% confidence intervals. Non-overlapping confidence intervals means that the difference between the two groups is significant, while overlapping confidence intervals means that it is not significant.
Figure 4.2 shows that the absolute risk difference between the employed and the unemployed increased in both Sweden and England. England had a higher absolute risk difference than Sweden in the period 1995-2005. By 2008, Sweden had an absolute risk difference that was similar to that in England. The confidence intervals of the absolute risk differences of Sweden and England overlapped at the start of the study period, and again at the end.

Figure 4.2: Absolute risk difference in Not good health between the employed and unemployed with LOWESS trend lines, Sweden and England 1991-2011. The shaded areas represent 95% confidence intervals. Non-overlapping confidence intervals means that the difference between the two groups is significant, while overlapping confidence intervals means that it is not significant.
<table>
<thead>
<tr>
<th>Year</th>
<th>Not good health in Sweden</th>
<th></th>
<th>Not good health in England</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Risk Estimates for Employed (%)</td>
<td>Risk Estimates for Unemployed (%)</td>
<td>Absolute Risk Difference</td>
<td>Odds ratio</td>
</tr>
<tr>
<td>1991</td>
<td>17.1</td>
<td>21.4</td>
<td>4.3</td>
<td>1.32 [0.86, 1.97]</td>
</tr>
<tr>
<td>1992</td>
<td>19.2</td>
<td>26.0</td>
<td>6.8</td>
<td>1.48 [1.11, 1.96] **</td>
</tr>
<tr>
<td>1993</td>
<td>18.3</td>
<td>28.2</td>
<td>9.9</td>
<td>1.75 [1.38, 2.20] **</td>
</tr>
<tr>
<td>1994</td>
<td>15.6</td>
<td>23.9</td>
<td>8.3</td>
<td>1.70 [1.31, 2.20] **</td>
</tr>
<tr>
<td>1995</td>
<td>16.0</td>
<td>23.0</td>
<td>7.0</td>
<td>1.57 [1.19, 2.04] **</td>
</tr>
<tr>
<td>1996</td>
<td>14.5</td>
<td>28.5</td>
<td>11.3</td>
<td>2.05 [1.60, 2.61] **</td>
</tr>
<tr>
<td>1998</td>
<td>15.4</td>
<td>23.0</td>
<td>7.6</td>
<td>1.65 [1.24, 2.17] **</td>
</tr>
<tr>
<td>1999</td>
<td>17.5</td>
<td>25.3</td>
<td>7.8</td>
<td>1.60 [1.17, 2.15] **</td>
</tr>
<tr>
<td>2000</td>
<td>16.5</td>
<td>24.7</td>
<td>8.2</td>
<td>1.66 [1.20, 2.25] **</td>
</tr>
<tr>
<td>2001</td>
<td>17.1</td>
<td>34.8</td>
<td>17.7</td>
<td>2.59 [1.93, 3.46] **</td>
</tr>
<tr>
<td>2002</td>
<td>16.6</td>
<td>30.3</td>
<td>13.7</td>
<td>2.18 [1.59, 2.96] **</td>
</tr>
<tr>
<td>Year</td>
<td>Not good health in Sweden</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>--------------------------</td>
<td>----------------</td>
<td>----------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td></td>
<td>Risk Estimates for</td>
<td>Risk Estimates for</td>
<td>Absolute Risk Difference</td>
<td>Odds ratio</td>
</tr>
<tr>
<td></td>
<td>Employed (%)</td>
<td>Unemployed (%)</td>
<td>(%)</td>
<td>(%)</td>
</tr>
<tr>
<td>2003</td>
<td>17.3</td>
<td>28.8</td>
<td>11.5</td>
<td>1.93 [1.42, 2.61] **</td>
</tr>
<tr>
<td>2004</td>
<td>18.5</td>
<td>29.1</td>
<td>10.6</td>
<td>1.81 [1.35, 2.41] **</td>
</tr>
<tr>
<td>2005</td>
<td>15.3</td>
<td>24.6</td>
<td>9.6</td>
<td>1.83 [1.46, 2.28] **</td>
</tr>
<tr>
<td>2006</td>
<td>14.8</td>
<td>38.1</td>
<td>17.0</td>
<td>2.67 [1.96, 3.60] **</td>
</tr>
<tr>
<td>2007</td>
<td>14.0</td>
<td>29.6</td>
<td>15.6</td>
<td>2.59 [1.86, 3.56] **</td>
</tr>
<tr>
<td>2008</td>
<td>13.2</td>
<td>32.7</td>
<td>19.5</td>
<td>3.19 [2.41, 4.19] **</td>
</tr>
<tr>
<td>2009</td>
<td>11.8</td>
<td>25.5</td>
<td>13.7</td>
<td>2.55 [1.96, 3.31] **</td>
</tr>
<tr>
<td>2011</td>
<td>12.6</td>
<td>28.6</td>
<td>16.0</td>
<td>2.77 [2.07, 3.67] **</td>
</tr>
</tbody>
</table>

** Adjusted p<0.05

Table 4.1: Prevalence rates and absolute risk differences of the risk of Not good health, and odds ratios and 95% confidence intervals for the risk of reporting Not good health between the employed and the unemployed, controlling for age, Sweden and England, with the employed as reference category.
4.2.2 Stage 1: Health Inequality between employed and unemployed participants

In the first stage of the two-stage process, logistic regression was used to compute the odds ratios of Not good health for the employed and unemployed for each year. Table 4.1 shows that the gap between the employed and the unemployed was smaller in Sweden than in England for most years. The wide confidence interval for 1994 in England was due to an oversampling of the retired population, leaving a very small sample of unemployed and employed persons once the labour-market inactive populations had been excluded.

The odds of Not good health were 60-80% higher for the unemployed than the employed participants in Sweden during the period 1991-2000. The gap between unemployed and employed participants widened during the period 2006-2011, where the odds of Not good health for the unemployed was more than twice the odds of Not good health for the employed. In England, however, the odds of Not good health for the unemployed was consistently more than twice the odds of Not good health for the employed in the period 1992-2011. While the unemployed in England suffered greater health disadvantage than the unemployed in Sweden, inequality between the unemployed and the employed increased in Sweden and became similar to that in England, especially towards the end of the period.
4.2.3 Stage 2: Association between health inequality and net replacement rates

![Net replacement rates over time](image)

**Figure 4.3: Net replacement rate during unemployment for a single adult, Sweden and England**

Figure 4.3 shows the net replacement rates in unemployment insurance in Sweden and England. The net replacement rate was dramatically reduced in Sweden during the period 1991-2011, from just under 90% of an average salary to 60% of an average salary. The net replacement rate started at a much lower level in England than in Sweden (just over 20%), and the reduction that took place was less dramatic than it had been in Sweden, especially during the latter half of the period studied here. The rate remained close to 20% throughout the period studied. This indicates that the process of recommodification was more radical in Sweden than in England, although given the starting points of the two countries, decommodification is still higher in Sweden.

A linear regression model was fitted to test the relationship between net replacement rates and health inequalities (Table 4.2). Health inequality is measured by the odds ratios from the logistic regression model in Stage 1.
<table>
<thead>
<tr>
<th></th>
<th>Unadjusted results</th>
<th></th>
<th>Adjusted results for time-varying effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>Net replacement rate</td>
<td>$R^2$</td>
<td>Constant</td>
</tr>
<tr>
<td>England</td>
<td>2.388</td>
<td>-6.805</td>
<td>0.228</td>
<td>7.962</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.452</td>
<td>-2.194</td>
<td>0.438</td>
<td>-43.567</td>
</tr>
<tr>
<td></td>
<td>[1.624, 3.282]</td>
<td>[-1.067, -0.322]**</td>
<td></td>
<td>[-90.981, 3.847]</td>
</tr>
</tbody>
</table>

**Adjusted $p<0.05$**

Table 4.2: Association between health inequalities between the employed and unemployed controlling for age, and net replacement rates in the unemployment insurance.
The linear regression model confirmed that the correlation between health inequality and net replacement rate, as measured by the r value (a measure of the strength of the correlation between two variables), was stronger in Sweden (r=-0.682) than in England (r=-0.519). The r² value (a measure of the fit of the model to the dependent variable) was also higher in Sweden (r²=0.438) than in England (r²=0.228). This means that net replacement rates explain over 40% of the variation in health inequalities in Sweden, but only about 20% of the variation in England.

Partial correlation tests controlling for time were used to de-trend both health inequality and net replacement rates. In England, the r² diminished to 0.184 and the model was insignificant at the 0.05 level. In contrast, the de-trended r² increased to 0.518 in Sweden. This means that the decreased net replacement rates explain approximately half of the increased health inequalities between the employed and the unemployed in Sweden, when adjusted for year. In England, changes in net replacement rates did not have an impact on health inequalities between the employed and the unemployed, and the relationship may be due to other time-varying confounding factors.

4.3 Summary and Discussion

4.3.1 Summary

My results show that the absolute and relative health inequalities between the employed and the unemployed were significantly higher in 2011 than in 1991 in both England and Sweden, and that unemployment benefit was recommodified in both countries during this period. However, the association between health inequality and net replacement rate was much stronger in Sweden. The correlation between net replacement rate and health inequality disappeared entirely in the English data when I controlled for time, but remained in the data from Sweden. This means that recommodification has had a greater association with health inequalities between the employed and the unemployed in Sweden than in England.
4.3.2 Recommodification of unemployment and health inequalities between the employed and the unemployed

My study found that recommodification has taken place in both countries, although to a greater extent in Sweden (which started from a position of much higher decommodification). Health inequalities between the employed and the unemployed increased in both countries: again, to a greater extent in Sweden. The correlation between net replacement rate and health inequality was also stronger in Sweden. The high replacement rates (90%) in Sweden in the early years of my study protected people from deteriorating health during unemployment, but this protection diminished as the replacement rate was decreased to 60% by 2011 (just over the European poverty threshold, which is defined as 60% of the average wage). However, in England, there never was very much protection during unemployment, with replacement rates that were never above 20% and consistently well below the European poverty threshold. The levels of decommodification in England were never high enough to provide significant protection against ill-health during unemployment.

Recommodification is one of several political changes that may explain the findings presented here. Decommodification in Social Democratic welfare states facilitates a temporary exit from the labour market during unemployment, sickness, or when forming a family, but the system is designed to facilitate also re-entry into the labour force (Huo et al., 2008). High replacement rates allow for a longer – and therefore possibly more effective – job search, and act as a disincentive against leaving the labour market entirely (Huo et al., 2008). Furthermore, they safeguard against accumulating disadvantage when out of a job, by facilitating recovery and re-employment (Huo et al., 2008). However, Social Democratic states are less well equipped to handle rising long-term unemployment, as the amount the government must pay out increases at the same time as tax revenues decrease. This is why social security was cut in Sweden in several ways during the 1990s, as the state finances
needed to be brought back into balance (Huo et al., 2008). The rise of long-term unemployment is also likely to have affected the health of the unemployed, since health deteriorates more during periods of long-term unemployment than during terms of temporary unemployment.

I expected that England would initially have had greater health inequalities, due to its much lower decommodification, and that the gap between the two countries would have diminished over time due to extensive recommodification in Sweden. While health inequalities did increase to a greater extent in Sweden than in England, my expectation of higher inequalities in England was largely unmet, except during the very earliest years of the 1990s. This is in line with previous research, which has found that health inequalities are not systematically smaller in the more egalitarian Nordic countries (Bambra & Eikemo, 2009; Dahl et al., 2006). The reasons for this are unknown. Theories to explain this state of affairs include artefacts of the data or methods, inequalities in health behaviour, social mobility effects, and the influence of other social determinants than welfare policy (Bambra, 2011a).

The English welfare state has always had a less pronounced buffering property than the Swedish. Health inequalities in England are, despite this, not much larger than in Sweden. It may be that the situation of the employed is worse in England – England has a higher proportion of people in precarious employment, and the health profile of those workers might be more similar to that of the unemployed. Such an effect would dilute the health-protecting effect of employment and make health inequalities smaller. Being employed is less likely to protect against poverty in the UK than in Sweden (Jones et al., 2006), and it is possible that low-paid, insecure employment that is more prevalent in the UK is less effective in providing an identity and protecting against stigma. Health inequalities do not follow the trend of the net replacement rate in England. This may be because the main English reforms to
unemployment benefits (such as the introduction of the All Works test and the Job Seeker’s Allowance (JSA) in 1986) occurred in the 1980s, outside of the period I have studied.

My results did not reveal many noticeable links with recession. There was a slight decrease in inequalities between the unemployed and the employed in England in 2008, but this was more a halting of increasing inequalities, as the magnitude fluctuated around an odds ratio of 3 from about 2006 onwards. This is in line with previous research on the effects of the recession in Sweden in the early 1990s, which found that health inequalities had remained stable (Kunst et al., 2005; Lahelma et al., 2001). Income inequalities increased in Sweden even before the crisis of the 1990s, and have continued to do so since (Bergmark, 2000; Burström, 2015b). In contrast, health inequalities by education increased in both England and Sweden during recessions (Copeland et al., 2015), although driven by different mechanisms. In Sweden, the health of all improved, but improved faster among those with higher education. In England, the health of those with higher education improved, whereas the health of those with lower education worsened, despite government policy being focused on improving the health of the poorest groups at a faster rate than the rate at which it improved for others. Cutler et al. (2015) found that the link between education, employment and health is stronger in recessions. Previous research has confirmed that recessions have an ambiguous effect on health inequalities (Bonamore et al., 2015). Unemployment and the fear of unemployment are two of the major driving forces of poor health in economic crises (Stuckler & Basu, 2013). The absence of any increase in health inequalities between the unemployed and employed may be a result of the health consequences of unemployment and the fear of unemployment being of similar magnitudes – the employed and the unemployed had been equally affected by the recession.
The adverse health effects of unemployment stem not just from loss of income, but also from the stigma and isolation of unemployment (Broom et al., 2006; Garcy & Vågerö, 2012). Sweden has a long tradition of active labour market programmes designed, in part, to counteract the isolation of unemployment, and to help the unemployed back into work. These programmes include not only job-search help but also training and education. Furthermore, unemployment is as much, if not more, stigmatised in the UK as it is in Sweden. In general, the social situation of the unemployed is better in Sweden (Jones et al., 2006), so it is puzzling that the differences are not larger. The UK has also tried to increase its provision of policies that aim to reduce long-term unemployment and skill deterioration during spells of unemployment. I have shown that the inequalities became smaller after 1998. New Labour came into power in 1997, and although the New Deals had aspects of recommodification (by withdrawing benefits to those who did not participate in training or accept placements, for example), they included also activation measures (by providing training and placements).

Social assistance in Sweden operates much more like the JSA in the UK, providing a means-tested, bare minimum amount. This is available for those who have exhausted their unemployment insurance, and for those who never qualified for it in the first place due to lack of contributions. The people who receive unemployment insurance and those who rely on social assistance tend to differ in terms of their income and circumstances prior to unemployment, and face different degrees of stigma from the rest of society. Studying all unemployed people as one group might miss distinctions between these two groups. In the future, it might be worth separating the two groups, to see if there are any differences in health that can be related to the kind of benefit received. However, this information is not available in ULF, so another dataset would have to be used.
The unemployment rate increased in both countries during the period studied, meaning that the composition and demographic features of the unemployed may have changed. This may have affected the results. It is possible that health differences between the unemployed and the employed are smaller when unemployment is higher, since the healthy are also at an increased risk of job loss (Lahelma et al., 2001). However, others have argued that recessions tend to hit the people with poor health and low social status first and hardest, which is likely to exacerbate health inequalities (Brenner & Mooney, 1983). The impact that the different compositions of the pools of the unemployed had on my results is thus unknown.

How people with poor health are treated also makes a difference to the composition of the unemployed. There may be differences between the two countries in terms of who qualifies for sick and disability pay, which would mean that the two groups are different. Furthermore, there are more people in employment with a limiting longstanding illness in Sweden than in the UK, due to the more extensive active labour market policies and support services available in Sweden (Burström et al., 2000; Whitehead et al., 2009a). Since the employment prospects for people with poor health are better in Sweden, there are different selection effects between joblessness and health in the two countries. If these different effects translate over to the unemployed, and not just those who receive sickness or disability benefits, they influence my results.

The social insurance system has been changed in Sweden during the period investigated. A conservative-liberal coalition government was elected in 2006. This government pursued rather aggressive neoliberal, recommodifying policies, by, for example, increasing the amount people must contribute to unemployment insurance, and introducing stricter work tests to qualify for sickness insurance. These policy changes were pushed through quickly at the start of the parliamentary term, and had been advertised in advance. This may have led to
a psychological expectation of “hard times to come”, which resulted in rising stress and anxiety among the unemployed. The coalition government also introduced stricter work tests to qualify for sickness insurance. This may have led to the health profile of the unemployed becoming poorer, since this category now includes many people who would previously have been classified as sick or disabled, rather than unemployed. It is also possible that the effects of the economic crisis of the 1990s, notably welfare cuts and rising unemployment, had a delayed effect, and did not become fully visible until the 2000s. It is also possible that the continuing recommodification eroded the buffering effect that had been in place during the 1990s. While the reform of social policy was gradual in the 1990s, reform after 2006 has been much more rapid (Davidsson & Marx, 2013). My results are compatible with this, and show that health inequalities increased slowly during the 1990s and early 2000s, and more rapidly after 2006. If the buffering effect of the welfare state has been eroded, I would expect health inequalities to increase continuously from 2006, especially since current policies are doing nothing to reverse the erosion of the welfare state buffer.

4.3.3 Limitations

Limitations that apply to the entire study are discussed in Chapter 7. I present here a discussion of the limitations that apply specifically to the investigation of recommodification of unemployment insurance and health inequalities between the employed and the unemployed.

I have used a very narrow definition of unemployment, excluding those on sick or disability pay, the retired, home-makers, students and others who are inactive in the labour market, since they are likely to have a different health profile than those who are actively looking for work. However, it may well be that I have missed many unemployed, the so-called “hidden unemployed”, who may want to work, yet state their employment status as “Otherwise”. This is especially likely to be the case with home-makers and those on sick or
disability pay. Furthermore, the definition of unemployment has changed over time. In this study, a clear example is the adjustment of the requirements to qualify for sickness insurance in Sweden in 2006. This meant that many of those who had previously claimed sickness insurance claimed unemployment insurance after 2006, which may be the driving force behind the rise of health inequalities between the unemployed and the employed that occurred after 2006 in Sweden. Thus, the policy change did not make the unemployed sicker, but redefined the unemployed population to include sicker individuals.

4.4 Conclusions

Health inequalities between the employed and the unemployed increased in both Sweden and England between 1991 and 2011, but this change was more closely associated with the recommodification of unemployment benefits in Sweden. Sweden recommodified more extensively during this period, while England started from a position of lower decommodification. Political developments in both countries were related to changes in the trajectory of health inequalities: inequalities stabilised in England after the election of New Labour in 1997 and the subsequent introduction of active labour market policies, while they increased substantially in Sweden after the election of the conservative-liberal coalition government in 2006. I suggest that recommodification has been accompanied by increasing health inequalities between the employed and the unemployed. I would therefore expect that further recommodification, as experienced under the banner of “austerity”, would be associated with increasing health inequalities between the unemployed and the employed, both in England and in Sweden.
Chapter 5: Pension Recommodification and Health

5.1 Introduction

This chapter presents an analysis of health inequalities in the retired population. I define the retired population as those who are over the legal retirement age (65 for people in Sweden and English men, and 60 for English women), and state their main economic activity as retired. I analyse health inequalities by educational achievement, and investigate whether there is any correlation between health inequalities and pension recommodification between 1991 and 2011 in Sweden and England. I also present results for health inequalities by manual vs. non-manual occupation to back up the analysis by educational achievement, although the data here stop in 2005 for Sweden. The methods used are described in Chapter 3.

Pensions are an important aspect of decommodification, as they allow people to withdraw from the market in old age, and still maintain their living standards. England and Sweden have different pension regimes, and different pension trajectories, so understanding the different ways recommodification impacts health in old age can help us understand better the links between welfare provision and health inequalities. Some researchers posit that since Sweden was more decommodified in the past, the older population, who have lived more of their lives in a decommodified context, should have smaller health inequalities (Bambra et al., 2010). However, this changes over time, as those who retire now will have been more exposed to the more recommodified Sweden of the past decades. Therefore, comparing trends over time can show the associations between changing welfare systems and the life courses of populations.
The hypothesis this chapter is based on is that pensions will be recommodified in both countries, however, they will be more recommodified in Sweden. Sweden will start out with smaller health inequalities than England, but the difference will decrease over time due to recommodification.

I found that the health of Swedish pensioners was better than that of English pensioners, and health inequalities were smaller in Sweden, as expected. However, this was not linked to the recommodification of pensions, as Sweden had increasing recommodification and stable health inequalities, while England had increasing decommodification and increasing health inequalities. This runs counter to what I expected. It may be that Sweden’s pensions are of a high enough level to buffer against immediate health effects of decreasing net replacement rates. There was a relationship between the difference between minimum and standard pensions in England, but not in Sweden. Sweden had stable health inequalities despite the decreasing difference between minimum and standard pensions, whereas both health inequalities and the difference between standard and minimum pensions increased in England. I expected that the difference between standard and minimum pensions would increase in Sweden but decrease in England, and that the health inequalities would follow the same trend.

5.2 Results

5.2.1 Absolute rates and absolute rate differences

There were clear differences in the health status of the retired population related to education. Figure 5.1 shows that the pensioners with lower education had higher rates of Not good health in both countries. However, the rates of Not good health were higher in England than in Sweden, for both the higher and lower-educated pensioners. In Sweden, the rates of Not good health declined in both groups during the period studied, whereas in England, they remained steady or increased slightly.
Figure 5.1: Prevalence of *Not good health* by education with LOWESS trend lines, Sweden and England. The shaded areas represent 95% confidence intervals. Non-overlapping confidence intervals means that the difference between the two groups is significant, while overlapping confidence intervals means that it is not significant.

Figure 5.2 shows the absolute difference in the prevalence of *Not good health* between higher-educated and lower-educated pensioners in Sweden and England. The level of absolute risk difference is quite similar between the countries. While the absolute risk difference was slightly greater in Sweden than in England at the start of the period, the difference increased in England and decreased in Sweden, so that the pattern had been reversed by 2011.
Figure 5.2: Absolute risk difference of *Not good health* by education with LOWESS trend lines, Sweden and England. The shaded areas represent 95% confidence intervals. Non-overlapping confidence intervals means that the difference between the two groups is significant, while overlapping confidence intervals means that it is not significant.
<table>
<thead>
<tr>
<th>Year</th>
<th>Not good health in Sweden</th>
<th></th>
<th></th>
<th>Not good health in England</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Risk Estimates for High Educated (%)</td>
<td>Risk Estimates for Low Educated (%)</td>
<td>Absolute Risk Difference</td>
<td>Odds ratio</td>
<td>Risk Estimates for High Educated (%)</td>
<td>Risk Estimates for Low Educated (%)</td>
</tr>
<tr>
<td>1991</td>
<td>14.2</td>
<td>34.2</td>
<td>20.0</td>
<td>1.78 [1.16, 2.76]</td>
<td>25.0</td>
<td>47.3</td>
</tr>
<tr>
<td>1992</td>
<td>15.9</td>
<td>39.7</td>
<td>23.8</td>
<td>1.49 [0.99, 2.28]</td>
<td>26.9</td>
<td>40.2</td>
</tr>
<tr>
<td>1993</td>
<td>19.4</td>
<td>37.7</td>
<td>18.3</td>
<td>1.53 [1.04, 2.26] **</td>
<td>27.7</td>
<td>46.3</td>
</tr>
<tr>
<td>1994</td>
<td>13.6</td>
<td>36.3</td>
<td>22.7</td>
<td>2.78 [1.76, 4.50] **</td>
<td>23.1</td>
<td>48.1</td>
</tr>
<tr>
<td>1995</td>
<td>14.1</td>
<td>37.8</td>
<td>23.7</td>
<td>1.84 [1.21, 2.82] **</td>
<td>31.5</td>
<td>46.1</td>
</tr>
<tr>
<td>1996</td>
<td>13.7</td>
<td>34.6</td>
<td>20.9</td>
<td>2.47 [1.59, 3.13] **</td>
<td>27.8</td>
<td>48.9</td>
</tr>
<tr>
<td>1997</td>
<td>12.7</td>
<td>34</td>
<td>21.3</td>
<td>1.85 [1.23, 2.79] **</td>
<td>27.4</td>
<td>48.5</td>
</tr>
<tr>
<td>1998</td>
<td>13.9</td>
<td>33.4</td>
<td>19.5</td>
<td>1.61 [1.06, 2.50] **</td>
<td>23.6</td>
<td>50.0</td>
</tr>
<tr>
<td>1999</td>
<td>15.7</td>
<td>35.2</td>
<td>19.5</td>
<td>1.62 [1.09, 2.44] **</td>
<td>25.2</td>
<td>50.5</td>
</tr>
<tr>
<td>2000</td>
<td>14.6</td>
<td>34.7</td>
<td>20.1</td>
<td>2.04 [1.37, 2.07] **</td>
<td>24.8</td>
<td>49.9</td>
</tr>
<tr>
<td>2001</td>
<td>17.4</td>
<td>36.3</td>
<td>18.9</td>
<td>1.35 [0.92, 1.98]</td>
<td>28.7</td>
<td>53.0</td>
</tr>
<tr>
<td>2002</td>
<td>16.8</td>
<td>37.9</td>
<td>21.1</td>
<td>2.89 [2.02, 4.18] **</td>
<td>30.7</td>
<td>52.6</td>
</tr>
</tbody>
</table>
### Table 5.1: Prevalence rates and absolute risk differences of the risk of Not good health, and odds ratios and 95% confidence intervals for the risk of reporting Not good health between the high and low educated, controlling for age, Sweden and England, high educated as reference category.

<table>
<thead>
<tr>
<th>Year</th>
<th>Not good health in Sweden</th>
<th></th>
<th></th>
<th></th>
<th>Not good health in England</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Risk Estimates for High Educated (%)</td>
<td>Risk Estimates for Low Educated (%)</td>
<td>Absolute Risk Difference</td>
<td>Odds ratio</td>
<td>Risk Estimates for High Educated (%)</td>
<td>Risk Estimates for Low Educated (%)</td>
<td>Absolute Risk Difference</td>
<td>Odds ratio</td>
</tr>
<tr>
<td>2003</td>
<td>16.3</td>
<td>36.7</td>
<td>20.4</td>
<td>2.14 [1.54, 3.00] **</td>
<td>29.2</td>
<td>50.5</td>
<td>21.3</td>
<td>2.35 [1.88, 2.96] **</td>
</tr>
<tr>
<td>2004</td>
<td>16.5</td>
<td>36.8</td>
<td>20.3</td>
<td>2.08 [1.42, 3.08] **</td>
<td>27.5</td>
<td>51.3</td>
<td>23.8</td>
<td>2.69 [1.99, 3.66] **</td>
</tr>
<tr>
<td>2005</td>
<td>17.0</td>
<td>32.8</td>
<td>15.8</td>
<td>1.73 [1.29, 2.33] **</td>
<td>28.7</td>
<td>52.9</td>
<td>24.2</td>
<td>2.68 [2.24, 3.22] **</td>
</tr>
<tr>
<td>2006</td>
<td>15.1</td>
<td>31.7</td>
<td>16.6</td>
<td>1.99 [1.38, 2.89] **</td>
<td>29.2</td>
<td>53.1</td>
<td>23.9</td>
<td>2.57 [2.11, 3.14] **</td>
</tr>
<tr>
<td>2007</td>
<td>13.4</td>
<td>29.2</td>
<td>15.8</td>
<td>1.53 [1.09, 2.18] **</td>
<td>27.1</td>
<td>53.4</td>
<td>26.3</td>
<td>2.87 [2.14, 3.90] **</td>
</tr>
<tr>
<td>2008</td>
<td>13.7</td>
<td>33.4</td>
<td>19.7</td>
<td>1.72 [1.27, 2.33] **</td>
<td>28.8</td>
<td>51.9</td>
<td>23.1</td>
<td>2.48 [2.05, 3.00] **</td>
</tr>
<tr>
<td>2009</td>
<td>11.9</td>
<td>32.9</td>
<td>21.0</td>
<td>2.47 [1.82, 3.38] **</td>
<td>23.6</td>
<td>49.9</td>
<td>26.3</td>
<td>3.12 [2.21, 4.45] **</td>
</tr>
<tr>
<td>2010</td>
<td>12.6</td>
<td>33.6</td>
<td>21.0</td>
<td>2.10 [1.57, 2.83] **</td>
<td>28.0</td>
<td>51.9</td>
<td>23.9</td>
<td>2.62 [2.05, 3.37] **</td>
</tr>
<tr>
<td>2011</td>
<td>12.3</td>
<td>32.9</td>
<td>20.6</td>
<td>1.97 [1.44, 2.69] **</td>
<td>31.0</td>
<td>52.1</td>
<td>21.1</td>
<td>2.27 [1.78, 2.78] **</td>
</tr>
</tbody>
</table>

** Adjusted p<0.05
5.2.2 Stage 1: Health inequalities by education in the retired population

Table 5.1 presents the data for Figures 5.1 and 5.2 (absolute risk of Not good health, and absolute risk differences of Not good health) as well as the odds ratios and 95% confidence intervals for the risk of Not good health by education, with the highest educated as reference category. England has consistently higher odds ratios than Sweden. The odds ratios in England are always above 2, and sometimes above 3, meaning that the lower educated in England have a 2-3 times higher odd of Not good health than the higher educated. The odds ratios in Sweden are usually between 1 and 2, and never above 3. In neither country is there a tendency to either consistently increasing or decreasing odds ratios over time. Figure 5.3 shows the smoothed trend of odds ratios in the two countries.
Both countries had a very slight tendency to increased health inequalities during the 20 years under study. The main increase in England occurred between 1991 and 2000, after which the trend was fairly stable, with a slight dip in the mid-2000s. In Sweden, in contrast, there was a very slight steady increase over the entire period, with a dip in inequalities in the late 1990s. In England, the Pension Credit was introduced in 2003, aiming to guarantee a minimum income for low-income pensioners, which may account for the decrease in health inequalities seen in the mid-2000s. However, the dip in Sweden is most likely due to factors...
outside the pension system, as the pension reform in Sweden was not decided upon until 1999, and was implemented gradually in the early- to mid-2000s.

Figure 5.4 presents the same analysis for manual and non-manual occupations. While data were available in Sweden only until 2005, the graph shows that health inequalities increased in England, but not in Sweden. The trend line for manual class health inequalities was very similar to that for educational health inequalities in both countries, although there were some deviations in the later years under study. There was a dip in inequalities from approximately 2003-2005 in Sweden’s health inequalities that was not seen for education. Since I had no access to information about occupation after 2005, I had no way of testing if this was an aberration or if it was a real trend. In England, there was a very slight decrease in the magnitude of educational inequalities in 2009-2010 that was not reflected in the trend of occupational class, but again, due to lack of data after this point, there is no way of knowing whether this downturn was a fluctuation or the beginning of a greater change. Figure 5.4 shows that health inequalities in Sweden and England follow a similar curvilinear pattern, with a delay in Sweden of approximately 5 years. However, since I did not have data after 2005 in Sweden, it is not possible to determine whether the increase in inequality seen in England happened also in Sweden.

Tables A10 and A11 in the appendix show the corresponding odds ratio figures for the non-retired population, for comparison.
5.2.3 Stage 2: Association between health inequality and net replacement rates

Figure 5.5 presents the trend of net replacement rates for pensions in the two countries under study, both the minimum pension, which is means-tested in both countries, and the state-supported contributions-related pension schemes.
Net replacement rates were higher in Sweden than in England at the start of the period, but in both pension forms, the Swedish replacement rates decreased over time, whereas the English pension replacement rates increased.
The difference between the minimum and standard pensions decreased in Sweden, whereas it increased in England, as shown in Figure 5.6. This means that the Swedish earnings-related pension replacement rates have declined at a faster rate than the minimum pension replacement rate, but that the English standard pensions have increased faster than the minimum pensions. Thus, the income gap between the poorest pensioners and the rest is becoming larger in England and smaller in Sweden. This may also be associated with the level of health inequalities. The English standard pensions comprise mandatory second-tier pensions, including the state schemes SERPS and S2P, and private and occupational pensions, whereas the Swedish standard pensions comprise the state ATP and the Income Pension that replaced it.

The trends in net replacement rates did not correlate with the trends in inequalities. Sweden had declining replacement rates and slightly increasing relative health inequalities,
which is what we would expect. However, England had increasing replacement rates, with no corresponding decline of relative inequalities. Furthermore, as presented earlier, absolute inequalities decreased in Sweden, while they increased in England, which runs counter to the direction we expect if higher pension replacement rates are associated with lower inequalities in health.
Table 5.2: Linear regression results for the relationship between health inequalities in the retired population controlling for age, and minimum net replacement rates in the pension system.

<table>
<thead>
<tr>
<th></th>
<th>Unadjusted Results</th>
<th>Adjusted results for time-varying effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>Net replacement rate</td>
</tr>
<tr>
<td>England</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.939</td>
<td>-0.069</td>
</tr>
<tr>
<td></td>
<td>[0.230, 1.648]</td>
<td>[-2.344, 2.206]</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.952</td>
<td>-0.817</td>
</tr>
<tr>
<td></td>
<td>[-0.112, 2.107]</td>
<td>[-3.647, -2.014]</td>
</tr>
</tbody>
</table>

** Adjusted p < 0.05
Table 5.2 shows a linear regression analysis of the relationship between minimum pension replacement rates and health inequalities among pensioners. It confirms the results from the plots: that there is very little relationship between net replacement rates and health inequalities among the retired population.

It may be that there are other time-varying factors (both economic and social conditions) that affect both the trends of net replacement rates and health inequalities in the older population, albeit in different directions. In order to test this, we ran the model a second time, controlling for time. In Sweden, this had little effect on both the coefficient for net replacement rate, and the $r^2$ of the model, which suggests that pension generosity is unrelated to health inequalities in older age even when time is controlled for. However, in England, both the $r^2$ and the coefficient for net replacement rate changed, and the coefficient for net replacement rate became significant. This means that there is a negative relationship between net replacement rates and health inequalities in England, when other time-varying factors are held constant.

5.3 Summary and Discussion

5.3.1 Summary of results

The health of both lowest and highest educated Swedish pensioners has improved, while the health of English low educated pensioners has deteriorated. It has remained stable in the high educated group in England. This is reflected in slightly increasing health inequalities in the English pensioners, while those of the Swedish sample have remained steady. This is not what we would expect from the development of net replacement rates in the two countries: those in Sweden have declined during the period studied, whereas the English net replacement rates have increased.
5.3.2 Recommmodification of pensions and health inequalities in the retired population

While there have been clear tendencies towards recommodification of the Swedish pension system, with a growing proportion of private pensions, and shifting from paying out a set amount to paying out a share of the pension pot dependent on contributions in the public pensions, the English system has not been similarly recommodified in its structure (Belfrage & Ryner, 2009; Lain et al., 2012). This is borne out by the trends in net replacement rates, as the Swedish net replacement rates have decreased, while they have increased in England. However, it is not borne out by the growing gap between the minimum pensions and standard pensions in England, nor by the shrinking gap in Sweden. Recommmodification is not a uniform process, and developments may sometimes be contradictory. This means that the associations with health and health inequalities are not always easy to predict, even when factoring in all of the other aspects of society that play a role, in addition to the net replacement rates of welfare payments. This is especially the case with the population under study, the retired population, as health is a product of both past and present circumstances. I compare and contrast developments in pension recommodification with developments in unemployment and healthcare recommodification further in Chapter 7.

Decommodification is not simply about net replacement rates, although they are an easy way to measure one aspect of decommodification. Decommodification depends also on such factors as the coverage of the population, and how much people are required to contribute towards their own pensions. While the Swedish net replacement rates declined fairly steadily, without a noticeable dip after the introduction of the 1999 reforms (in fact, the minimum pension net replacement rates increased slightly between 2001 and 2003 during the transition period as AP funds were used to cover the shortfall in the Pension Guarantee), that does not mean that the pension reform did not have recommodifying consequences. Two processes – the shift away from guaranteeing a pension amount, and making part of the pension dependent
on people’s own investment choices – tie income when retired more closely to market position and market development during one’s working life (Anderson, 2005; Sundén, 2006). It is too early to see the effects of the 2007 reform in England in the results, as it was only phased in from 2010 onwards, which means that they would have limited effect on this study.

The magnitude of inequalities was marginally greater in the non-retired population than in the retired population for most years, in both countries, both by manual work and by education. The difference between the retired and non-retired populations was greater in Sweden than in England. There are several reasons why the retired population might have smaller inequalities – it may be due to mortality selection effects (weeding out the sicker individuals in the more disadvantaged groups earlier), or it may be related to the suppression of income inequalities that occurs during old age due to the floor and cap in public pension incomes (Fors et al., 2012; Grundy & Sloggett, 2003; McMunn et al., 2009). The differences within the retired population were greater than in the non-retired population, which supports the theory of suppressed incomes over that of selective mortality, as there is no systematic evidence that Sweden has greater mortality inequalities than England, while there is evidence that pension inequality is smaller in Sweden (Huisman et al., 2003; Sundén, 2006; Taylor-Gooby, 2005).

The role of private pensions is not fully captured in this analysis, but private pensions influence decommodification: the more someone’s living standard in old age depends on whether or not he or she has a private pension, the less decommodified pension provision is. Mandatory private pensions, such as those included in the measure of standard pensions in the UK, occupy a half-way position between voluntary private and state pensions – by making them mandatory, the state does indirectly ensure an income in old age, yet the conditions and generosity of that income are market-dependent (Neugschwender, 2011). Furthermore, there may also be important differences in how social care is financed, as it is financed by public
means to a greater extent in Sweden than England – a simple study of net replacement rates cannot capture this dimension. Having to pay for social care with private means makes a considerable dent in the income and wealth of the retired population, and the same value of pension leaves individuals who have to pay for their social care worse off than those who do not (Walker & Foster, 2006).

The trends in net replacement rates cannot be fully explained by pension reforms, as the trends in both countries were fairly continuous, regardless of whether there had been a recent reform or not, although there was a slight increase in the minimum pension in the UK following the introduction of Pension Credit in 2003. It is, therefore, interesting to consider why pensions increased in value in England, and decreased in Sweden, in the absence of overt reform. This is contrary to what we would expect from the literature (Price, 2008; Sundén, 2006). The elderly are a group that tends to have high rates of voter turnout, and thus more political influence, as wooing older people is a priority for political parties wishing to be elected (Pierson, 2007). As general election turnout is much lower in the UK than in Sweden, it may be that proportionally, older people make up a larger share of the voting population in the UK than they do in Sweden: this would mean that the extent to which their interests are better protected relative to the rest of the population is thus greater in the UK.

In the UK, concerns have long been expressed about the adequacy of the means-tested pension (it is less than 40% of the average production worker’s salary – well below the poverty threshold of 60%) (Price, 2008). The proportion of people with Not good health in the lower educated group in the sample studied here increased, which suggests that attempts to increase the means-tested pension are largely inadequate in improving the health status of the most disadvantaged pensioners. Despite these attempts, the difference between the minimum and standard pensions increased in England during the period of the study, which may partly explain the growing health inequalities. In 2007, the level of minimum pension replacement
rates in Sweden fell below those of England, which may stimulate similar concerns about the adequacy of the Pension Guarantee in Sweden, although such concerns have not yet reached the public consciousness to any large extent (Belfrage & Ryner, 2009). The difference between the standard and minimum pensions did not increase in Sweden, in contrast to what happened in England, which may partly explain why health inequalities did not increase despite falling net replacement rates.

It is possible that health is influenced more by past social circumstances than by the present. If that is the case, developments in health inequalities may not be in line with developments in pension policy. However, there is evidence that pensions do matter for health in old age: Fors et al. (2012) found evidence that a generous public pension system is associated with lower mortality among the retired. Bartley and Plewis (2007) found that both past circumstances and current social circumstances influence health in retirement. Their study of social mobility showed that the more time spent in one social class, the more an individual’s health came to resemble that of those in this social class. The health status of those who moved between social classes, in contrast, was generally somewhere between those of the two classes.

It may well be that, while pensions are important for the general standard of living in old age, they matter less for health inequalities, as many people develop long-standing health problems before they reach retirement age (Sinclair et al., 2014).

5.3.3 Limitations

Limitations that apply to the entire study are discussed in Chapter 7. I present here a discussion of the limitations that apply specifically to the investigation of recommodification of pensions and health inequalities in the retired population.
It is possible that using education as a measure of socio-economic status does not capture the effects of pensions change, as income is more closely linked to occupational status than education (and especially closely linked to income during working age). The analysis of occupational differences in health in the retired population confirmed the main finding: that health inequalities increased in England during the period studied in a manner that was not matched in Sweden. However, with regards to health inequalities by manual work, the pattern in Sweden was more curvilinear than stable (with the lowest point in 1992, and the highest in 2003). Most of the increase in England took place after 2005, which means that I cannot compare the English trajectory with the Swedish, as I have no data on Sweden from this period. It is possible that Swedish health inequalities also increased after 2005.

Income is the measure of SES that is most closely tied to pensions, and measuring health inequalities by income would thus be the best way to see how the pension level is linked to health. However, total income is not wholly related to pension income, as people may well have other sources of income, such as investments, family members, and continuing to work in some capacity while drawing a pension. Despite these drawbacks, income is still the best way to measure how pension recommodification affects people on an individual level, so a good avenue for future investigation in this area would focus on income-related health inequalities in old age.

The problems of measuring health by self-rated health, as outlined in Chapter 7, are particularly acute when it comes to the retired population, as health deteriorates in old age. While HSE does not, as the British Household Panel does, specifically ask its participants to compare their health status to others of the same age, it is inevitable that these comparisons colour people’s perceptions of their health status. I have tried to counteract this by controlling for age in all my models, but it may be insufficient to eliminate bias fully.
Similarly, the problems of using net replacement rates as a proxy for recommodification, also outlined in Chapter 7, are again relevant here, as the pension reforms in both Sweden and England did not have an immediate significant impact on net replacement rates. They did, however, significantly change the system of pensions, and recommodify the pension system fairly extensively, particularly in Sweden.

5.4 Conclusions

There is no direct relationship between net replacement rates and health inequalities in the retired population. In fact, Sweden had stable health inequalities throughout the period under study, despite substantial recommodification of its pension system, and health inequalities increased in England, despite there being no corresponding recommodification. There is, however, a correlation between the difference between minimum and standard pensions and health inequalities during retirement in England, although not in Sweden. I therefore conclude that the relationship between the recommodification of pensions and health inequalities in the retired population is weak. This is not what I expected. I expected health inequalities to increase or decrease in line with recommodification. However, the health of the retired population was better in Sweden than in England, and health inequalities were smaller, even if the trends were not what we would expect, so it may be too early to write off a relation between decommodification and health in this population just yet.

It may also be that health inequalities are more influenced by social circumstances earlier in the life course. Health status is influenced by many factors throughout life, so it is possible that pensions have a much smaller influence than other socio-economic, psychological, and biological factors. Pension replacement rates may contribute to the standard of living in retirement, but it is possible that the level of pension generosity is less related to health inequalities. However, there is a link between the difference between minimum and standard pensions and health inequalities. Furthermore, given the accumulation of influences to health
over the life course, a longitudinal approach might be needed to isolate the effects of pension value and pension inequality on health from the effects of previous experiences over the life course.

6.1 Introduction

In this chapter I present an analysis of inequalities in access to healthcare in Sweden. Unlike Chapters 4 and 5, this is not a comparative study, but rather a case study of Sweden, since appropriate data for England are not available. I have compared health usage by education, categorised into highest (tertiary qualifications and above), intermediate (secondary school qualifications), and lowest (no qualifications or only primary school qualifications). Further, I have examined the correlation between inequalities in healthcare usage and the average price of a primary care visit. Healthcare visits probably depend on health status, as people with poorer health are more likely to have visited the doctor. Health status is socially graded, as is previously established. This means that part of the social differences in healthcare usage is due to social differences in health status. In order to account for this, all models were run for the entire population, and on those with Good health and Not good health. The methods used are explained in Chapter 3.

Healthcare is an important part of the welfare state, and it is very popular among citizens. In Sweden, the stated goal is that healthcare should be provided to all according to need, regardless of social position. Nevertheless, the “inverse care law” operates, and it is very likely that user charges contribute to inequalities in access to healthcare. Studying how recommodification of healthcare contributes to inequalities in access to healthcare allows us to better understand the role of user charges in these inequalities.

The hypothesis this chapter is based on is that healthcare will be recommodified over the study period, especially after 1991. Inequalities in access to healthcare will increase following this recommodation.
While inequalities in access to healthcare did not increase in line with the price of a visit, the lower educated with *Not good health* did not access healthcare as much as their higher or intermediately educated counterparts. Thus, educational inequalities in access to healthcare exist in the population with the worst health.

6.2 Results

6.2.1 Absolute rates, absolute rate difference, and relative rate ratios

Table 6.1 shows the proportion of the population that report having visited a doctor in the previous 3 months for the lowest and highest educated. The lowest educated were in all years more likely to have visited a doctor, but the difference was greater in the 1980s than in the 1990s. The absolute rate difference in healthcare use between the higher educated decreases with time, and is thus lower in the mid-2000s than in the 1980s. However, the relative rate difference remains fairly stable during the 1990s. It is higher in the mid-2000s than in the 1980s. This is in line with increasing usage in both groups, with a higher increase in the highest educated.
<table>
<thead>
<tr>
<th>Year</th>
<th>Highest Educated</th>
<th>Lowest Educated</th>
<th>Absolute Rate Difference</th>
<th>Relative Rate Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>27.8%</td>
<td>41.9%</td>
<td>14.1</td>
<td>0.663</td>
</tr>
<tr>
<td>1981</td>
<td>30.1%</td>
<td>42.4%</td>
<td>12.3</td>
<td>0.710</td>
</tr>
<tr>
<td>1988</td>
<td>29.9%</td>
<td>40.4%</td>
<td>10.5</td>
<td>0.740</td>
</tr>
<tr>
<td>1989</td>
<td>27.5%</td>
<td>37.2%</td>
<td>9.7</td>
<td>0.739</td>
</tr>
<tr>
<td>1991</td>
<td>30.2%</td>
<td>37.4%</td>
<td>7.2</td>
<td>0.807</td>
</tr>
<tr>
<td>1992</td>
<td>34.2%</td>
<td>40.2%</td>
<td>6.0</td>
<td>0.851</td>
</tr>
<tr>
<td>1993</td>
<td>35.8%</td>
<td>38.4%</td>
<td>2.6</td>
<td>0.932</td>
</tr>
<tr>
<td>1994</td>
<td>33.2%</td>
<td>39.7%</td>
<td>6.5</td>
<td>0.836</td>
</tr>
<tr>
<td>1995</td>
<td>32.5%</td>
<td>41.8%</td>
<td>9.3</td>
<td>0.778</td>
</tr>
<tr>
<td>1996</td>
<td>30.4%</td>
<td>40.1%</td>
<td>9.7</td>
<td>0.758</td>
</tr>
<tr>
<td>1997</td>
<td>30.6%</td>
<td>38.7%</td>
<td>8.1</td>
<td>0.790</td>
</tr>
<tr>
<td>1998</td>
<td>36.3%</td>
<td>41.7%</td>
<td>5.4</td>
<td>0.870</td>
</tr>
<tr>
<td>1999</td>
<td>34.0%</td>
<td>41.0%</td>
<td>7.0</td>
<td>0.829</td>
</tr>
<tr>
<td>2000</td>
<td>36.1%</td>
<td>40.0%</td>
<td>3.9</td>
<td>0.903</td>
</tr>
<tr>
<td>2001</td>
<td>36.8%</td>
<td>41.6%</td>
<td>4.8</td>
<td>0.885</td>
</tr>
<tr>
<td>2002</td>
<td>33.5%</td>
<td>43.7%</td>
<td>10.2</td>
<td>0.767</td>
</tr>
<tr>
<td>2003</td>
<td>35.0%</td>
<td>42.3%</td>
<td>7.3</td>
<td>0.827</td>
</tr>
<tr>
<td>2004</td>
<td>34.9%</td>
<td>42.2%</td>
<td>7.3</td>
<td>0.827</td>
</tr>
<tr>
<td>2005</td>
<td>35.6%</td>
<td>42.1%</td>
<td>6.5</td>
<td>0.846</td>
</tr>
</tbody>
</table>

Table 6.1: Proportion who have visited a doctor in the previous 3 months in Sweden.

6.2.2 Stage 1: Inequalities in access to healthcare by education

Using the highest educated as the reference category, Table 6.2 presents the odds ratio and 95% confidence intervals for having made a visit to the doctor in the past three months in Sweden from 1991-2005, including a few years from the 1980s. I separated the results by health status. The lowest educated in the entire population were slightly more likely than the
highest educated to have visited the doctor, as Table 6.1 also confirms. However, the pattern was reversed for those with self-rated health *Fair or Poor,* and the lowest educated were now less likely than their more educated counterparts to have visited the doctor. There was no difference between the two groups for those with *Good health,* and the odds ratios tended to fluctuate around 1, being rarely above 1.10 or below 0.90. Thus, part of the higher propensity for the low educated to seek healthcare was due to their poorer health status, and when this was accounted for, they were less likely to seek care.
<table>
<thead>
<tr>
<th>Year</th>
<th>All</th>
<th>Not good health</th>
<th>Good health</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>1.30 [1.11, 1.54]</td>
<td>1.12 [0.73, 1.69]</td>
<td>1.02 [0.85, 1.24]</td>
</tr>
<tr>
<td>1981</td>
<td>1.20 [1.03, 1.40]</td>
<td>0.43 [0.27, 0.66]</td>
<td>1.14 [0.95, 1.37]</td>
</tr>
<tr>
<td>1988</td>
<td>1.27 [1.09, 1.48]</td>
<td>0.59 [0.40, 0.89]</td>
<td>1.12 [0.93, 1.35]</td>
</tr>
<tr>
<td>1989</td>
<td>1.24 [1.06, 1.44]</td>
<td>0.63 [0.43, 0.91]</td>
<td>1.14 [0.95, 1.36]</td>
</tr>
<tr>
<td>1991</td>
<td>1.22 [1.04, 1.42]</td>
<td>0.98 [0.69, 1.38]</td>
<td>1.03 [0.86, 1.23]</td>
</tr>
<tr>
<td>1992</td>
<td>1.14 [0.99, 1.33]</td>
<td>0.91 [0.66, 1.24]</td>
<td>0.94 [0.78, 1.12]</td>
</tr>
<tr>
<td>1993</td>
<td>0.94 [0.81, 1.09]</td>
<td>0.65 [0.48, 0.87]</td>
<td>0.84 [0.70, 1.01]</td>
</tr>
<tr>
<td>1994</td>
<td>1.15 [1.00, 1.33]</td>
<td>0.75 [0.54, 1.05]</td>
<td>0.97 [0.81, 1.15]</td>
</tr>
<tr>
<td>1995</td>
<td>1.26 [1.09, 1.45]</td>
<td>0.78 [0.56, 1.09]</td>
<td>1.08 [0.90, 1.29]</td>
</tr>
<tr>
<td>1996</td>
<td>1.25 [1.07, 1.40]</td>
<td>0.94 [0.67, 1.34]</td>
<td>1.08 [0.90, 1.30]</td>
</tr>
<tr>
<td>1997</td>
<td>1.20 [1.03, 1.40]</td>
<td>1.01 [0.71, 1.42]</td>
<td>0.93 [0.77, 1.12]</td>
</tr>
<tr>
<td>1998</td>
<td>1.10 [0.95, 1.28]</td>
<td>0.73 [0.51, 1.03]</td>
<td>1.00 [0.83, 1.19]</td>
</tr>
<tr>
<td>1999</td>
<td>1.24 [1.06, 1.43]</td>
<td>0.93 [0.67, 1.27]</td>
<td>1.08 [0.90, 1.29]</td>
</tr>
<tr>
<td>2000</td>
<td>1.08 [0.93, 1.26]</td>
<td>0.84 [0.60, 1.17]</td>
<td>0.94 [0.79, 1.13]</td>
</tr>
<tr>
<td>2001</td>
<td>1.07 [0.92, 1.24]</td>
<td>0.54 [0.39, 0.75]</td>
<td>1.03 [0.86, 1.23]</td>
</tr>
<tr>
<td>2002</td>
<td>1.40 [1.22, 1.62]</td>
<td>0.98 [0.72, 1.34]</td>
<td>1.25 [1.05, 1.50]</td>
</tr>
<tr>
<td>2003</td>
<td>1.24 [1.08, 1.43]</td>
<td>0.74 [0.55, 1.01]</td>
<td>1.15 [0.97, 1.37]</td>
</tr>
<tr>
<td>2004</td>
<td>1.17 [1.01, 1.41]</td>
<td>0.91 [0.66, 1.24]</td>
<td>0.94 [0.78, 1.14]</td>
</tr>
<tr>
<td>2005</td>
<td>1.19 [1.01, 1.42]</td>
<td>1.04 [0.72, 1.51]</td>
<td>0.98 [0.80, 1.21]</td>
</tr>
</tbody>
</table>

Table 6.2: The odds ratios and 95% confidence intervals of healthcare usage by education, controlling for age, highest educated as reference, lowest as comparison, separated by health status.
With the exception of 1980, the difference between the high and low educated in the propensity to seek care was greater in the 1980s than in the 1990s and 2000s in those with *Not good health*.

The odds ratios for the entire population were consistently just over 1 for all the years, and the odds ratios for those with *Not good health* were consistently just under 1 after 1991. For those with *Good health*, the odds ratios were just about 1 all years. Figure 6.1 illustrates these trends.

Figure 6.1: Odds ratios of doctor visits, with LOWESS trend lines, high educated as reference, low educated as comparison. The shaded areas represent 95% confidence intervals. Non-overlapping confidence intervals means that the difference between the two groups is significant, while overlapping confidence intervals means that it is not significant.
Figure 6.1 shows that, in the total population, the lowest educated were consistently more likely to have visited a doctor, and this did not change substantially over the years. Changes in the group with Good health were also small, as the odds ratios in that group hovered around 1: the propensity of those with Good health did not change systematically. The pattern in the group with Not good health, in contrast, changed over time – in the opposite direction I expected: while those with low education were significantly less likely to seek healthcare than their highly educated counterparts with Not good health in the 1980s, the differences diminished during the 1990s and early 2000s, so that by the end of the analysis period in 2005, there were no significant differences in the propensity to seek healthcare, even in the population with Not good health.
Figure 6.2: Odds ratios of doctor visits, with LOWESS trend lines, high educated as reference, intermediate educated as comparison. The shaded areas represent 95% confidence intervals. Non-overlapping confidence intervals means that the difference between the two groups is significant, while overlapping confidence intervals means that it is not significant.

Figure 6.2 shows the odds ratios of having visited the doctor in the past 3 months, comparing the intermediate educated with the high educated. The difference between the intermediate and high educated is smaller than the difference between the low and high educated (the odds ratios are closer to 1). The intermediate educated with Not good health are just as likely to have accessed healthcare as those with high education, where there was a fairly clear difference between the low educated and high educated. In the population as a whole, those with intermediate education are not more likely to have made a visit than the higher educated, whereas those with low education are.
The patterns fluctuate much more when those with intermediate education are compared with those with low education, as shown in figure 6.3. The patterns for the latter were fairly stable, with no clear trend, as was the case also for those with low education.

Figure 6.3: Odds ratios of doctor visits, with LOWESS trend lines, intermediate educated as reference, low educated as comparison. The shaded areas represent 95% confidence intervals. Non-overlapping confidence intervals means that the difference between the two groups is significant, while overlapping confidence intervals means that it is not significant.
While there is not much difference between the higher and intermediate educated, the difference between the intermediate and lowest educated with Not good health is almost as large as the difference between the highest and lowest educated. Thus, inequalities in access to healthcare in Sweden are a matter of a gap between the lowest educated and the rest of the population, rather than a gradient.

6.2.3 Stage 2: Association between inequality in access to healthcare and price of healthcare

![Mean Price of a Primary Care Visit in 1991 Prices, Sweden](image)

**Figure 6.4:** Mean price for a primary care visit in 1991 prices.

Figure 6.4 shows the trend in user fees in the Swedish healthcare system, converted to 1991 prices to adjust for inflation. The main increase occurred between 1989 and 1991, as many counties took the opportunity to raise prices when they had the ability to set their own prices. After 1991, most of the increase in the price of Swedish healthcare is from 2008 onwards, for which I lacked health status data. However, a 6% increase in the cost of healthcare in Sweden occurred between 1991 and 2005, which was not matched by an
increase in inequality in healthcare usage. No marked increase in inequalities in access to healthcare, took place in the early 1990s, nor later, even though the price of a visit increased.
<table>
<thead>
<tr>
<th></th>
<th>Unadjusted Results</th>
<th></th>
<th>Adjusted Results for Time-varying Effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>Price</td>
<td>$R^2$</td>
<td>Constant</td>
</tr>
<tr>
<td>All</td>
<td>0.753**</td>
<td>-0.009**</td>
<td>0.735</td>
<td>4.900</td>
</tr>
<tr>
<td></td>
<td>[0.503, 1.002]</td>
<td>[-0.012, -0.006]</td>
<td>[-20.691, 30.492]</td>
<td>[-0.014, -0.003]</td>
</tr>
<tr>
<td></td>
<td>-0.738</td>
<td>0.006</td>
<td>0.095</td>
<td>3.867</td>
</tr>
<tr>
<td></td>
<td>[-0.378, -0.097]</td>
<td>[-0.001, 0.013]</td>
<td>[-69.989, 69.723]</td>
<td>[-0.008, 0.021]</td>
</tr>
<tr>
<td>Not good health</td>
<td>0.188</td>
<td>-0.002</td>
<td>0.411</td>
<td>-16.032</td>
</tr>
<tr>
<td></td>
<td>[-0.067, 0.443]</td>
<td>[-0.005, 0.001]</td>
<td>[-40.794, 8.731]</td>
<td>[-0.010, 0.001]</td>
</tr>
<tr>
<td>Good Health</td>
<td>-0.067</td>
<td>0.443</td>
<td>0.908</td>
<td>0.008</td>
</tr>
<tr>
<td></td>
<td>[-0.005, 0.001]</td>
<td>[0.004, 0.021]</td>
<td>[-0.004, 0.021]</td>
<td></td>
</tr>
</tbody>
</table>

** Adjusted** $p<0.05$

Table 6.3: Linear regression results for the relationship between inequalities in doctor visits by education, controlling for age, and healthcare prices in 1991 SEK.
Table 6.3 shows the correlation between the average price of a healthcare visit in 1991 prices, and the log (odds ratio) of having visited a doctor in the past 3 months for the entire population, those with *Not good health*, and those with *Good health*, using the highest educated as reference group and the lowest educated as comparison group. Table 6.3 shows that the correlation between the price of healthcare and inequalities in access to healthcare was not strong in any health-status group. This is compatible with the results obtained from the logistic regression model, as inequalities in access remained stable despite the price increase. The correlation coefficient for price remained similar in all groups when time was adjusted for, which shows that the correlation was in fact due to price and not to other time-varying factors.

Although the associations in all health-status groups were small, the associations with price were marginally smaller in those with *Not good health*. The $r^2$ value was also smaller than in any of the other groups, meaning that the correlation between the price of healthcare and inequalities in access to healthcare was smaller in the group of those with *Not good health*.

**6.3 Summary and Discussion**

**6.3.1 Summary**

The results presented here show that while the less educated are slightly more likely to seek healthcare in Sweden, the more educated in the group with *Not good health* are slightly more likely to seek healthcare. This indicates that the higher propensity for the less educated to seek healthcare is probably due to higher needs. For groups with similar needs, the higher educated are more likely to seek healthcare. It may well be that the price of healthcare contributes to this inequality, or at least does nothing to amend it. For those with *Good health*, there was little difference between the groups in the likelihood to have sought healthcare in the past 3 months. There are also no trends in the inequality in access to
healthcare. This goes against expectations from previous studies: as healthcare prices have increased, and there has been a greater expansion of private choice of provider.

6.3.2 Recommodification of healthcare and inequalities in access to healthcare

The healthcare system in Sweden has been recommodified, not only in terms of a price increase, meaning that access is probably more dependent on market income, but also in terms of private actors in the system. Price is expected to be one factor that can deter people from seeking care, and it is also expected that this deterrent effect is greatest among those with lower socio-economic status (Mossialos & Thomson, 2003). This study, however, shows that the association between price and inequalities in healthcare access in Sweden is lowest in those with Not good health, indicating that they are less price-sensitive than members of other groups. These are the people who are more likely to have a greater need for healthcare, which may be why there is less correlation with price. Another factor that may lead to less price sensitivity in the group with Not good health is the existence in the Swedish system of a maximum amount that any person is required to pay in one year for healthcare, above which any healthcare consumed is free. This probably matters more for those with Not good health, as they are the group most likely to consume healthcare above said maximum. So the protections within the Swedish system may have buffered against too many adverse effects on access for the most in need, even though there is no specific provision covering healthcare costs for the poorest.

People with Good health are expected to be most price-sensitive, as the healthcare that they most often seek is non-emergency, preventative, or unnecessary care (particularly the last is what the user fees are intended to deter). The role of the maximum amount is expected to matter less for this group, as it is less likely that they seek enough care in one year to rise above the level. However, the change in inequalities in access is quite small even in this group. Similarly, the overall proportion of people who seek care does not decrease with
increases in price, indicating that healthcare, both needed and not needed, is not very price-sensitive. One possible explanation is that the price increase was too small to have any impact on people’s behaviour, as the rate adjusted for inflation was fairly stable throughout the 1990s and early 2000s. Some evidence from France suggests that small price changes have very little impact on people’s behaviour, as other costs (of transportation or time) also affect people’s choices about whether or not to access healthcare (Mossialos & Thomson, 2003).

The main price increase occurred between the late 1980s and the early 1990s, with a second large increase after 2008, which unfortunately lies outside the scope of this study. I do not expect a lag in the associations with inequality, since the price needs to be paid up-front at each visit in Sweden. This would be enough to deter people from going as soon as prices were raised.

The choice reforms introduced in the Swedish healthcare in the 1990s and 2000s, which opened up for private healthcare providers to establish a practice and for people to choose their healthcare provider, can also be seen in terms of recommodification, although less so from a patient’s perspective, since his or her market position does not determine access to care. However, a healthcare market is created, and thus the choice reforms can be considered to be recommodifying measures. It is also the case that the state no longer guarantees equal access to equal care in a choice system, and receiving the highest quality of care depends on the patient’s choice of provider. Education is particularly important when choosing healthcare provider – more highly educated patients are better able to understand the system and make demands (Blomqvist, 2004; Diderichsen, 1995; Glasgow, 2009; Harrison & Calltorp, 2000).

There are concerns that the choice reforms implemented in the 1990s favoured more educated patients (Blomqvist, 2004; Diderichsen, 1995). However, there is no evidence of this in this study, as inequalities in healthcare did not increase when the choice reforms were implemented. It is, however, difficult to put a specific year to the choice reforms, as they
were rolled out at different paces and to different extents in different counties. Most of the counties adopted choice reforms during the time period studied, yet educational inequalities did not increase during the period.

The lower educated were less likely to seek healthcare than the high educated in those with *Not good health*, although this was true even before the implementation of the choice reforms. However, it was in those with *Not good health* that the difference between the odds ratios calculation that used the lowest educated as a comparison group and the calculation that used the intermediate educated as a comparison group was the greatest, indicating that the disadvantage that lower educated people face in accessing care is the greatest in those with greater health needs. The difference between the intermediate and highest educated was small in all groups, whereas for those with *Not good health*, the difference between the lowest and intermediate educated was on a par with the difference between the highest and lowest educated. This indicates a gap between the disadvantaged and the rest of the population in access to healthcare, rather than a gradient, which has implications for policy development. The presence of a gap, rather than a gradient, indicates that an approach that is targeted to those with most disadvantages is needed in order to decrease inequalities in access to healthcare, perhaps in the form of exemptions to user fees for those with low incomes, rather than a universal approach of lowering user fees.

My findings do not support pervious findings (Burström, 2002), as I found that price increase is only weakly correlated with inequalities in access to healthcare. Access to healthcare is a complex issue that depends on many factors, and it may be that the price has not yet risen to levels at which it outweighs other considerations, such as need and accessibility, in any educational group. This is supported by my finding that the group with
*Not good health* is the least price-sensitive, although I would have expected the group with *Good health* to be more price-sensitive for this to be the case.

This study has used different indicators of socio-economic status from those used in other studies. I measured socio-economic status by education, whereas previous studies have measured it mainly by income and occupation. The correlation between education and income is not perfect, and different measures of socio-economic status capture different ways in which inequality is expressed. Price is more likely to be associated with income differences in healthcare access, whereas education plays a greater role in the evaluation of need and knowing when and how to seek the most appropriate care. It may be that there are smaller differences in the educational factors that influence healthcare access in the Swedish healthcare system, such as knowledge of how to gain access to the system. This would explain the discrepancies between this study and studies such as Burström (2002), who found that health inequalities increased more in the 1990s than in 1980s. Elofsson et al. (1998) found that education affects only the probability of having unmet care needs in those with good finances. Although this study looks at healthcare access from a different perspective, it may be that this also affects my results, since I had no way of separating those on a low income from those on a high income.

It is difficult to determine the association between price and inequalities in access to healthcare. The work presented here, however, indicates that the association is minor at most, since trends in inequality do not follow trends in prices. Many other factors are involved in access to healthcare, as outlined in Chapter 2.
6.3.3 Limitations

Limitations that apply to the entire study are discussed in Chapter 7. I present here a discussion of the limitations that apply specifically to the investigation of recommodification of healthcare and inequalities in access to healthcare.

It proved to be quite problematic to gain access to reliable data. My measures of socio-economic status and need were restricted by the available definitions in ULF, and information on the level of care and geographical location was missing from the data. Few data points were available before 1991, and data were not available for the years after 2005.

Education may be less adept at reflecting price sensitivity than income, so I may have missed changes in access associated with income. The measures are interrelated, but the correlation between them is only moderate, and they capture different aspects of advantage and disadvantage (Avendaño et al., 2009; Geyer et al., 2006). It may be that income relates more to whether people can afford to access healthcare, and education relates more to whether they have the knowledge to access appropriate healthcare. However, it can be argued that education is a better long-term measure of SES.

There might be differences in the type of care that is sought (relief for temporary health issues, urgent care, preventative care, or unnecessary care) between the health status groups that I were not able to pick up on using my measure of healthcare use. Furthermore, the failure to distinguish between primary and secondary care is a weakness in my study, since the drivers that cause people to seek care at different levels might be different. Furthermore, the prices for various types of speciality care differ from the price of primary care. I was unable to distinguish between levels of care for two reasons: the first is simply data limitations – the question that is asked in ULF refers to all levels of care. The second is that different counties have different arrangements for care, so that care provided by specialists in
one county is provided by primary care practitioners in other counties. Selecting either only primary care or only specialist care would therefore unbalance the results in favour of residents in some counties.

Unfortunately, I was not able to classify the responders into counties. Splitting the sample I had into 20-26 smaller samples would have given sample sizes that were too small for any meaningful analysis. Furthermore, the structure of the county system has been changed since the 1980s, reducing the number of counties from 26 in 1980 to 20 in the late 1990s, and some of the borders have changed. This would have posed problems for comparisons over time.

6.4 Conclusions

Increases in user charges have not increased inequalities in healthcare usage between groups with different educational levels. However, healthcare usage does differ with education: in the entire population, the lowest educated use healthcare more than those with high education. Among those with self-rated Not good health, however, healthcare usage is more common among the more educated, in the form of a gap between the lowest educated and the rest of the population. It is probable that the increase in user charges above the rate of inflation has contributed to this inequality, or at least done nothing to amend it. However, inequality did not change with the increased price of healthcare usage. This was probably due to some of the protections within the Swedish system, as the user charges are moderate relative to average wages, and price caps are used to protect those with the greatest health needs from accumulating large charges. This is an important caveat for other countries that are thinking about introducing user charges. At least at the level of prices in Swedish healthcare from the 1980s-2000s, healthcare usage is not price-sensitive. Prices set at other levels may, however, have different effects, and other studies have suggested that user charges do reduce healthcare usage, especially among lower income groups (Burström, 2002; Elofsson et al., 1998; Oliver & Mossialos, 2004; Robinson, 2002).
Chapter 7: Discussion

7.1 Introduction

This thesis investigates the relationship between recommodification and health inequalities in Sweden and England over the past few decades. The title is *Recommodification of the Social Determinants of Health*, but it can also be seen as an investigation of recommodification as a social determinant of health. Decommodification influences the distribution of the social determinants, but it can also function as a determinant of health in its own right (Bambra, 2006). My research offers novel insights into the association between recommodification and health, showing that it has had a stronger association with health inequalities in Sweden than in England, and a stronger association with health inequalities between the employed and unemployed than in the retired population.

The results presented here were obtained in three studies of recommodification and health inequalities. I chose unemployment benefits, healthcare and pensions as three examples of the major welfare state responsibilities. The three policy domains chosen mean that I cover examples of both cash benefits and services, the latter having often been excluded from studies of welfare states, as they are more difficult to operationalise (Bambra, 2005; Bambra, 2007). These three areas account for a significant proportion of government spending. They are among the most visible features of the welfare state, and healthcare and pensions, in particular, are very popular among the electorate, with strong support for spending on these areas. Unemployment benefits, in contrast, receive less public support (Giger, 2011).

This study has taken a novel approach in studying recommodification of the social determinants of health. It treats decommodification not only as a determinant in itself, but also considers the way other determinants of health are decommodified. The aim of the study was to operationalise decommodification and to isolate the relationship between
decommmodification and health from other aspects of welfare states, something that has not been attempted before.

Recommmodification is an on-going process in many countries, and we do not yet know its full effects. The health consequences of the austerity packages that numerous governments are implementing, ostensibly due to the economic crisis, are only just beginning to become fully apparent (Stuckler & Basu, 2013). It is very likely that austerity plays out differently in different contexts. Furthermore, recommodification is not a linear or uniform process: it is often piecemeal and combined with other policy initiatives that have competing or contradictory goals. Thus, an in-depth study of recommodification and its relation to health and health inequalities over time is important in order to understand the relationship between social context and health inequalities. Sweden and England were chosen as examples of two contrasting experiences with recommodification: Sweden as a highly decommmodified country that underwent extensive recommodification during the 1990s and 2000s, and England as a country with low decommmodification that did not undergo extensive recommodification during the study period. The results show how decommmodification and recommodification act in different social contexts.

This study is also partly a response to the “Nordic puzzle” of health inequalities (Bambra, 2011a; Breberg, 2012). Theories of welfare regimes and theories of the social determinants of health both lead to the expectation that health inequalities are smaller in the Nordic countries than elsewhere, but this is not borne out by the evidence (Brennenstuhl et al., 2012; Dahl et al., 2006; Lundberg et al., 2008a; Lundberg & Lahelma, 2001; Mackenbach, 2012). Until we understand why health inequalities are so much larger in the Nordic countries than expected, we cannot fully understand the interplay between decommmodification and health inequalities. By studying decommmodification over time in both decommmodified and less
decommodified contexts, we can obtain a better sense of how decommodification is linked to health inequalities. Thus, Sweden and England were chosen, as they are a highly decommodified country (Sweden) and a less decommodified country (England).

In this thesis, I argue that recommodification has a negative or negligible association with health inequalities. In no case did I find that recommodification was accompanied by a decrease in health inequalities.

I present an overview of my findings below. I then place my results in a context and try to explain them, for each policy domain, in the same order in which I presented my results (unemployment, pensions, and healthcare). Some general conclusions follow, in which I compare and contrast trends and patterns in each policy domain. A discussion of the limitations of my research follows, and the chapter ends with conclusions.

7.1.1 Overview of findings
I have shown that Sweden recommodified in all the policy areas studied (healthcare, pensions, and unemployment benefit), while England did not. Indeed, while the unemployment net replacement rates remained fairly steady in England between 1991 and 2011, the replacement rates of English pensions increased, contrary to expectations. Health inequalities increased between the Swedish employed and unemployed, yet they did not increase in the retired population, and inequalities in access to healthcare also remained steady during this period. Given that all policy domains in Sweden experienced recommodification, we would expect inequalities to increase in all domains. Conversely, given the recommodification profile in England, we would not expect inequalities to increase here, whereas they did. The patterns of inequality were similar for both absolute and relative inequalities.
England and Sweden have two very different welfare regimes, where Sweden belongs to the highly protective Social Democratic regime, and England to the residual and basic Liberal regime (Esping-Andersen, 1990). The policies in the UK and Sweden have different designs and different effects on people: there is less poverty and income inequality in Sweden, and the Swedish policy environment acts as a more efficient buffer against the effects of poverty and low income than is the case in the UK (Jones et al., 2006). Nevertheless, despite these policy differences, health inequalities are not systematically smaller in Sweden (Åberg-Yngwe et al., 2001). This thesis is a response to the call to open up the “black box” of welfare regimes (Brennenstuhl et al., 2012; Hurrelmann et al., 2010; Lundberg, 2008). I looked specifically at the interplay between recommodification and health inequalities through an in-depth study of particular policy domains in England and Sweden, two countries with contrasting welfare states, and different welfare trajectories.

7.2 Health Inequalities and the Recommodification of Unemployment, Pensions and Healthcare

7.2.1 Unemployment

Cuts to healthcare and pensions are more likely to be unpopular than cuts to unemployment benefits (Giger, 2011). This is consistent with my results, which show not only that unemployment benefits were cut more than pensions and healthcare, but also that the cuts to the unemployment insurance were more strongly related to health inequalities, especially in Sweden. The strongest relationship I found was between recommodification of unemployment insurance and health inequalities in Sweden, with an \( r^2 \) of 0.438, a moderate correlation. This correlation was much lower in England, with an \( r^2 \) of 0.228. The finding that health inequalities increased more in a context of high recommodification (Sweden) than one of low recommodification (England) indicates that recommodification is linked to increases in health inequalities, at least among the unemployed.
I found substantial recommodification of unemployment in Sweden. Net replacement rates were decreased from nearly 90% of salary, to just over 60%. In addition to the decline in net replacement rates, work tests have increased in Swedish labour market policies, and there are concerns that the activation measures are bordering on workfare (Kananen, 2012; Kildal, 2001). This may have affected the health of the unemployed, as stigma is reduced and self-esteem is increased by activation measures, but less so by workfare (Limm et al., 2012). The increased use of sanctions may thus also have contributed to the increase in health inequalities between the employed and unemployed in Sweden.

I found far less recommodification of unemployment in England than in Sweden, with net replacement rates hovering around 20% throughout the study period. The New Labour governments of 1997-2010 instituted a series of “New Deals” to help people who were out of work with their job-search. The New Deals provided training, job-search support and placement opportunities, aimed to help people find work, but they imposed heavy sanctions on those who failed to comply (Jones et al., 2006). The New Deals were withdrawn by the Conservative/Liberal Democrat coalition government in 2011 and replaced by the Work Programme, which offers interviews, training and work placements for benefit recipients, again under the threat of sanctions (Department for Work and Pensions, 2011). The use of sanctions meant that there were fewer alternatives to market provision, which makes the New Deals and the Work Programme recommodifying measures. However, they were also supportive measures, introducing an element of training and help that had not previously been present in the system to the same extent as in Sweden. Thus, while it is easy to classify the changes to unemployment policy in Sweden as recommodifying, both in net replacement rates and in terms of workfare, the developments in England are far more mixed. This may have influenced my results, as I found a decline in health inequalities between the unemployed and the employed in the mid-2000s. This may be lagged effects of the New
Deals. It may also be effects of harsher and more insecure working environments on the health of the employed.

The UK has a more de-regulated and flexible labour market than Sweden, which probably leads to more health selection (Jones et al., 2006). People with chronic illness are more likely to be in employment in Sweden than in the UK (van der Wel et al., 2012; Whitehead et al., 2009a), although this is related more to the benefit generosity and active labour market policies than to income equality and employment protection (van der Wel et al., 2012). A randomised controlled trial from Finland showed that those who receive activation measures are less likely to experience depression and anxiety than those who receive only information, and that these effects last for at least two years (Stuckler & Basu, 2013). People who receive activation measures are also more likely to find employment (Stuckler & Basu, 2013). However, there is evidence that the risk of poverty for people who are outside the labour market and who have a limiting long-standing illness has increased in Sweden, whereas no such increase has occurred in Denmark or the UK (Burström, 2015b). Sweden’s employment protection and social security both serve to protect the ill against poverty to a greater extent in Sweden than in England (Whitehead et al., 2000). In the UK, the benefit level is set far below the minimum income for healthy living, whereas the minimum wage and the minimum income for healthy living are approximately the same amount (Bartley, 2012). While active labour market policies and job protection measures improve health and employment prospects in general, the Conservative-led coalition government in the UK cut public jobs and made layoffs in the private sector easier, as a response to the economic situation (Stuckler & Basu, 2013).

Unemployment increases the risk of both poverty and adverse health outcomes, and the mechanisms that have been suggested for this are material deprivation, stigma, and unhealthy
coping mechanisms (O'Campo et al., 2015). The unemployed are often among those with most need to save, as they have little regular income, yet they are also among those least likely to have an income that permits saving (Bartley, 2012). Low replacement rates in the unemployment insurance do little to reduce poverty, not only because the amount is insufficient, but also because people might be reluctant to apply for benefits, since they consider that the effort required is not worth the amount of money obtained (O'Campo et al., 2015). Conversely, generous eligibility can reduce poverty, as a large proportion of the unemployed receive benefits (O'Campo et al., 2015). This is important because poverty is a key determinant of health (Lundberg et al., 2014). The net replacement rate in the Swedish unemployment insurance was well above the threshold for people at risk of poverty (60% of the average salary) in the 1990s, but it had fallen to hover around this threshold by 2011. This is an average measure, and thus many more unemployed people were in poverty in 2011 than in 1991, and this might be one cause of the rise in health inequalities between the employed and the unemployed in Sweden, since the link between poverty and ill health is very well documented (Davey Smith & Krieger, 2008; Graham, 2007).

Entitlement-based benefits (i.e. benefits given on the basis of contributions rather than means-tested) are better for health than means-tested benefits (Rodriguez, 2001). This may be because they tend to be higher in value, often being earnings-related, or because there is less stigma in claiming benefits that have been “earned” through contributions (Rodriguez, 2001). The number of people in Sweden who qualify for entitlement-based unemployment insurance has decreased since 1999, and especially since 2007 (IAF, 2015), when the entitlement rules for the unemployment insurance funds were changed. It became necessary for people to contribute more to their own unemployment insurance, and membership of a union was made compulsory for entitlement to union-managed funds (previously non-members had been allowed to contribute to union-managed insurance funds) (Davidsson & Marx, 2013). The
increased use of means-testing rather than contributions may have increased the stigma of unemployment, and brought back the notion of the “deserving” and “undeserving” (Judt, 2010). This may have contributed to the rise in health inequalities between the employed and the unemployed that my results have revealed, as the policy change increased the proportion of unemployed who qualified only for social assistance, rather than social insurance. While the JSA in the UK does have a contributions-based aspect, it is given at a flat-rate amount that is the same as the means-tested amount, so, while the contributions-based JSA might alleviate some of the stigma of unemployment benefits, it does not work very well as income maintenance.

Health inequalities between the employed and the unemployed increased in both countries, indicating that the importance of work for health well-being increased. Some of this is probably due to the reduction in unemployment benefits, at least in Sweden, but many other factors affect health inequalities, such as the increased stigma of being unemployed, and the stress and lack of self-esteem that come from being unemployed.

7.2.2 Pensions

While my analysis of unemployment insurance recommodification and health inequalities supports the hypothesis that recommodification is accompanied by greater health inequalities, my analysis of pensions is far less conclusive.

In Sweden, health inequalities between pensioners with the highest and lowest levels of education remained steady, despite decreased replacement rates. Furthermore, this was accompanied by decreased levels of self-reported Not good health by people of all educational levels. In England, conversely, the absolute rates of Not good health remained steady in the highest educated group, and increased in the lowest educated group, leading to an overall increase in health inequalities, despite increased replacement rates. However,
pension reform is slower to implement, as pensions are accumulated during a long period, and the retired population operates under pension rules that depend on the system in place when they retired.

The increase in health inequalities among the retired population in England may be related to the increase in the difference between the minimum and standard pensions in England. Although most pensioners are now better off relative to the rest of the population than they were 20 years ago, the gap between advantaged and disadvantaged pensioners has increased. This is compatible with the increased health inequalities that my results reveal. However, it is not compatible with the increased prevalence of Not good health among the pensioners with the lowest education. There are substantial income inequalities among English pensioners (Taylor-Gooby, 2005). Pension inequality in the UK is located mainly in the hierarchical occupational structure, reflected in the higher contributions that are accumulated by high earners (Walker & Foster, 2006). However, there is also some inequality in the pension system itself, in that high earners are more likely to belong to private schemes with higher replacement rates (Neugschwender, 2011). I found that the difference between the minimum and standard pensions in England increased, and thus the improvement in net replacement rates was greater among high earners. This may very well be related to the increase in inequalities among English pensioners. However, the difference between the minimum and standard pensions decreased in Sweden, which may have protected the health of the poorest pensioners from falling too far behind that of their contemporaries.

It is not surprising that health inequalities in old age are less sensitive to policy changes. A life course perspective of health inequalities states that health is a product of accumulated advantage and disadvantage: the retired population has had longer to experience influences
on health, and its health is thus less susceptible to policy changes (Beckfield & Krieger, 2009). It may be that the increasing health inequalities in the retired population in England are due to increasing income and social inequality during the last 30 years, and that the increase in pension net replacement rates is insufficient to counteract the effect of this. Health inequalities are not smaller in older Scandinavian cohorts, who are more likely to have spent more of their lives in a recommodified welfare state than the younger cohorts (Bambra et al., 2010). It is possible that the older Scandinavian cohorts carry more effects of rural poverty and physical strain from their working and living conditions than their younger counterparts (Lundberg & Lahelma, 2001). This may explain why I found decreasing rates of Not good health in the Swedish pensioners, despite the recommodification of pensions.

There were smaller health inequalities among the retired than among the general population, and this difference was especially noticeable in Sweden. In addition, England had greater health inequalities between the unemployed and the employed than among the retired population. The magnitude was similar between the employed and unemployed and the older population in Sweden.

This is compatible with previous results that show that, although health inequalities persist into old age, the magnitude of health inequalities may decrease (Grundy & Sloggett, 2003; McMunn et al., 2009). This is, however, less consistent with the theory of accumulated disadvantage, which predicts greater inequalities in old age (Kjellsson, 2013). It is possible that social mobility plays a role here, as social mobility means that people are subjected to more varied influences on health throughout their life course (Bartley & Plewis, 2007). It is also possible that health inequalities are smaller in old age, as income inequalities are smaller due to the imposition of minimum and maximum amounts in the pension system (Fors et al., 2012). However, if that were the case, we would expect Sweden’s health inequalities to be
even smaller than they are relative to England’s inequalities, as income inequality is smaller in Sweden than in England (Wilkinson & Pickett, 2009). The Swedish low income inequality, however, is more a product of the tax system and labour market organisation than of social security (Abrahamson, 2010) (although this may be less true for the older population (Fors et al., 2012)). The most probable explanation of my results is a combination of accumulated disadvantage and advantage, which explains why health inequalities are greater in England than in Sweden: over the life course, the differences between the most advantaged and least advantaged pensioners is greater in England than it is in Sweden. The pension system is unlikely to be an effective buffer against rising inequality over the life course in England, leading to the increase in health inequalities that my results revealed. The increase in the value of pensions may be too little and too late to prevent an increase in health inequalities. In Sweden, however, there was no increase in either the rate of Not good health or the inequality between the most and least educated pensioners, despite a decrease in the value of pensions. The changes to pensions in both systems may have been insufficient to overcome the effects of circumstances throughout the life course. However, the difference between the minimum and the standard pension may affect the extent to which these accumulated circumstances are entrenched or ameliorated.

7.2.3 Healthcare

The results presented here show that cash benefits were more recommodified than healthcare in Sweden during the 1990s and 2000s. There is often a difference between a country’s cash and service provision (Bambra, 2005; Ferragina & Seeleib-Kaiser, 2011). This is especially true for the UK, which has market-dominated cash benefits and a state-dominated healthcare system, free at the point of use (Bambra, 2005; Padamsee, 2007). However, both Sweden and England have experienced reforms that have opened healthcare
provision to private providers, intended to increase patient choice (Brereton & Vasoodaven, 2010; Dahlgren, 2008; Martinussen & Magnussen, 2009; Mays & Tan, 2012).

While social welfare is correlated with mortality and morbidity rates more strongly than healthcare (Burström, 2012), the latter is an important social determinant of health (Raphael, 2006). Access to primary care is particularly important (Starfield et al., 2005). Access to healthcare is often taken for granted in European countries (Burström, 2015a). I found that in the complete population those with lower education were more likely to have visited a doctor than those with higher education in Sweden, while the opposite was the case for those who had self-reported Not good health. This suggests that access to healthcare is unequal, and that the increased probability of having made a visit among those with lower education was due to the greater prevalence of need in that group. However, the inequalities in access among those with Not good health were greater in 1980 than in the 1990s and 2000s, despite an increase in user charges. User charges were fairly stable relative to inflation during the 1990s and 2000s, which may explain why inequalities were stable during that period. Prices increased, however, between 1980 and 1991, and I expected to see this reflected in an increased inequality of access, as the people with lower SES are more likely to be price-sensitive (Mossialos & Thomson, 2003). The increase in user charges in healthcare is part of a broader change in many societies, as the state rolls back its responsibilities and individuals need to take more responsibility for their own health and well-being (Ilcan, 2009). Other changes that are part of this general state roll-back are the increased use of private providers in healthcare, and a growth in private health insurance (Ilcan, 2009). Both of these have occurred also in Sweden (Burström, 2009; Fenger, 2009). The increase in user charges cannot be seen in isolation from these concurrent changes to the health system, and it is hard to attribute changes in patterns in access to healthcare solely to the effect of user charges. The latter are,
however, the most immediately obvious sign of recommodification of the healthcare system from a patient’s perspective.

There is a ceiling to the amount of money any one person is required to pay in a calendar year for care in Sweden, which may protect those with *Not good health* to a greater extent than others, since they are more likely to consume care above the said ceiling. However, the effect of this ceiling decreased during the crisis, as it was not increased in line with inflation (Thomson et al., 2014). Despite this, the level of unmet need for care did not increase in Sweden, although it did elsewhere in Europe (Reeves et al., 2015). The inverse care law is strongest where people need to pay for care (Stuckler & Basu, 2013), and access to healthcare increased in England, but decreased in countries, such as the US, France and Germany, that use co-payments (Stuckler & Basu, 2013). Evidence from the RAND studies in the United States shows that people’s consumption of care decreases as the price increases, and that this has a greater effect among those with low incomes, leading in this way to inequalities in access to care (Kananen, 2012; Kildal, 2001). However, this dose-response relationship was not seen in my study.

Detrended analysis confirms that the $r^2$ decreased during the period in the group with *Not good health*, while it increased in the group with *Good health*. It is possible that the change in those with *Not good health* was driven by other factors than price, while the change in those with *Good health* was, in fact, due to price increases. This is in line with my expectation that those with *Good health* are more price-sensitive, since the care they seek is less likely to be urgent and necessary (Mossialos & Thomson, 2003; Thomson et al., 2010).

The NHS is based on the principle that it should be free at the point of use (Webster, 2002), but there are concerns that this may change in the future (Thomson et al., 2010). There are already user charges in the NHS in England, for prescription medicines, optician services
and dentistry (Thomson et al., 2010). The NHS is facing increasingly tight budgets and a growing need for healthcare with an ageing population (House of Commons Health Committee, 2006). There are occasionally calls for the introduction of co-payments or fees for certain other services, especially those identified by the National Institute for Health and Care Excellence (NICE) as having low cost effectiveness (Aggarwal & Sullivan, 2014; House of Commons Health Committee, 2006). However, the NHS is very popular among the British public (Ham, 2004), and the introduction of user charges remains politically toxic. A survey carried out in 2014 reported that 48% favoured increasing taxes to pay for the NHS, whereas 21% favoured introducing user charges (Boon, 2014). Even though the system is free at the point of use, however, there are inequalities in access to healthcare in the NHS (Hughes, 2003; Morgan, 2003). It is highly unlikely that user charges would reduce these inequalities, although the results presented here do not allow firm conclusions to be drawn about the effect of user charges in the Swedish healthcare system.

There are inequalities in access to healthcare in Sweden, but they cannot be directly linked to the presence of user charges, since inequalities in access did not increase when user charges did. However, it is probable that user charges did contribute somewhat to, or at least did nothing to reduce, inequalities in access. It may be that the comparatively low level of the charges or the presence of a maximum limit prevented the user charges from having a large effect.

7.3 Overall Trends and Patterns of Commodification and Health Inequalities

My research has revealed substantial differences in the magnitude of recommodification in Sweden and England. In fact, there was no evidence of recommodification in England for the two measures for which I had data (pensions and unemployment benefits), and the decommodification of pensions increased. In Sweden, in contrast, recommodification occurred in all three policy domains. This agrees with other research, which has shown that
measures to curtail spending on welfare during the 1990s and 2000s in the UK were counteracted by increased measures catering to the elderly and families (Arcanjo, 2011). However, while spending on health and pensions increased, other welfare spending was pegged and food prices increased, so the poorest families were worse off in real terms (Watt & Miller, 2014). The main impacts of Thatcher’s policies were a reduction in full employment and corporatism (Abrahamson, 2010). Pierson (2002) and Aysan and Beaujot (2009) both find that Liberal welfare states have recommodified, whereas Conservative and Social Democratic states have focused on cost-containment and recalibration instead. However, this is not supported by my results in Sweden, although I did not study any countries from the Conservative regime. Even so, the UK was already quite highly commodified before the start of my study period (Esping-Andersen, 1990; Lain et al., 2012), especially in the realm of unemployment benefits, so there was not much room to recommodify.

### 7.3.1 Trends in absolute and relative health inequalities

There were substantial differences between the magnitude and trajectory of health inequalities between Sweden and England. For all policy areas, in all populations studied here, Sweden had lower absolute rates of Not good health. This agrees with previous results that show that population health tends to be better in countries with low income inequality, high social cohesion, universal social policies, gender equality, high decommodification, and low unemployment (Brennenstuhl et al., 2012; Eikemo et al., 2008b; Wilkinson & Pickett, 2009).

The absolute rates of Not good health in the two countries were most similar in the employed group, and the difference was greatest among the low educated pensioners. Furthermore, the health of those with low SES is better in Sweden than in England, which also agrees with previous results, which show that mortality rates among manual workers in
Scandinavia are lower than elsewhere in Europe (Bambra, 2011b; Lundberg, 2008; Lundberg et al., 2008a; Mackenbach et al., 2002).

While the absolute difference between the unemployed and the employed was smaller in Sweden than in England, this was not the case for pensions, where the magnitude of absolute inequalities was fairly similar. This also agrees with previous research (Hoffman, 2011; Mackenbach, 2012; Mackenbach et al., 2008; Silventoinen & Lahelma, 2002). It has been suggested that the low rates of mortality and morbidity in the Nordic countries lead to relative inequalities of a magnitude that is similar to that of other European countries, even though the Nordic countries have smaller absolute inequalities. Thus, health inequalities appear artificially high in the Nordic countries, and their success works against them. My results do support this suggestion, as the lower rates of Not good health in Sweden do not necessarily correspond to lower absolute inequalities.

The results concerning relative inequalities (measured as odds ratios) are ambiguous. In fact, the pattern in this case was the reverse: while the odds ratios were always greater in England than in Sweden for the retired population, the magnitude of the difference between the employed and the unemployed was of similar magnitude, especially towards the end of the study period. The relative commodification levels would lead us to expect the opposite, more in line with the results for absolute inequalities, as the net replacement rates for pensions are more similar in England and Sweden than the net replacement rates in the unemployment insurance. The question of why health inequalities in Scandinavia are as large as they are, given the social equality of these countries, has often been posed in comparative social epidemiology. It is possible that the universal social policies benefit the entire population, including the more advantaged. Thus, the health of all is better, but health inequalities remain, making it appear that the state has less impact on health inequalities than
is actually the case (Brennenstuhl et al., 2012; Lundberg, 2008). My results support this idea, as the health of both the advantaged and the disadvantaged was better in Sweden than in England, in all groups studied.

The detrended analysis showed that the relationship between health inequalities and net replacement rates became stronger when I controlled for time, which makes it unlikely that the relationship was caused by other time-varying factors: this was especially true for unemployment insurance. However, the strength of the relationship between unemployment and health inequalities in England decreased and the relationship became non-significant, which suggests that there are other changes in society that caused the small relationship I observed. However, when I detrended the relationship between pension net replacement rates and health inequalities, there was a substantial increase in the correlation. There is a greater incidence of in-work poverty in the UK than in Sweden (Jones et al., 2006). There is also a higher incidence of flexible, fixed-term, and insecure work, and the incidence of this kind of employment is rapidly increasing (Schrecker & Bambra, 2015) The psychosocial working environment is also poorer in the UK than in Social Democratic countries, and the laws both to protect job security and to regulate working conditions are weaker (Bambra, 2011c; Schrecker & Bambra, 2015). This means that there may be higher inequality within the labour market in England than in Sweden, and that the differences between the employed and unemployed thus appear smaller.

In Sweden, health inequalities among the general population were far greater than health inequalities between the employed and the unemployed, whereas in England they were of similar magnitude for all measures of SES. Previous research has found larger inequalities in Sweden between groups classified by education and by occupation than between groups classified by income (Mackenbach et al., 1997). The welfare state may ameliorate some of
the dimensions of the link between social position and health, but not others (Mackenbach et al., 1997). Education is more closely related to childhood social position and environment than other measures of SES, and it is linked to differences in the awareness and integration of knowledge into one’s lived experience (such aspects as health behaviours, a sense of control over one’s life, knowledge and understanding of medical advice, and the judgement of when to seek medical care). Income, in contrast, is more closely related to material resources and the ability to manage stressful situations (Geyer et al., 2006). The fact that health inequalities are larger by education than by other, more materially related, measures of socio-economic status suggests that the Swedish welfare state is less able to reduce psychosocial and behavioural inequalities than material ones. The smallest health inequalities are frequently found in Southern Europe, where behavioural determinants (especially smoking and diet) are more equally distributed than in Sweden (Mackenbach, 2012; Mackenbach et al., 2002). In England, health inequalities are more similar between groups classified by different measures of SES, which indicates that the impact of material, psychosocial and behavioural factors are of roughly equal magnitudes. It is probable that this is because the English welfare state is less successful in reducing material inequalities than the Swedish welfare state. I have only studied net replacement rates, and it is for this reason difficult to estimate the relative impacts of material, psychosocial and behavioural factors on my results.

7.3.2 Health inequalities and social inequalities in an international perspective

Not all countries have recommodified to the same extent and recommodification has had different impacts on health and health inequalities in different countries.

Thatcher deregulated the labour and financial markets, privatised utilities and state enterprises, restricted social housing, curtailed trade union rights, marketised the public sector (although not to the extent that many thought she would, and not to the extent her successors – both Labour and Conservative – have done), significantly cut the social wage by welfare
state retrenchment, did nothing to counter mass unemployment and implemented large tax
cuts for the business sector and the most affluent (Scott-Samuel et al., 2014). These reforms
included abolishing the earnings-related unemployment benefit (Scott-Samuel et al., 2014).
Had I studied the period starting in the 1970s, the results regarding recommodification would
probably have been very different. However, the legacy of Thatcherism has been embedded
and strengthened by successive governments, both Conservative and Labour (Scott-Samuel et
al., 2014).

Similar developments have been studied in other countries. One example is New Zealand,
which underwent large structural changes, including the introduction of a less redistributive
tax system, targeted social benefits, and a regressive tax on consumption. Further, major
utilities and public housing were privatised, user charges for welfare services were
introduced, and the labour market was deregulated, although this process began during the
1980s (Blakely et al., 2008; Fawcett et al., 2005; Shaw et al., 2005). The Nordic countries
also underwent structural changes during the 1990s: replacement rates were cut, waiting days
were introduced, and schools and primary care clinics were opened to private ownership and
consumer choice. These changes had been, however, more sudden and severe in New
Zealand (Fawcett et al., 2005), and they had a greater impact on health inequalities in New
Zealand than in the Nordic countries (Beckfield & Krieger, 2009; Fawcett et al., 2005). Even
though countries may have implemented similar measures (such as New Public Management,
discussed in Chapter 2, in which activation, cutting benefits, and privatisation are common
measures, although to different degrees and at different speeds), the outcomes and their
impact differ, depending on the context (Sainsbury, 2001).

The links between neoliberal policies, income inequality, and health inequalities are not
straightforward. Although evidence from New Zealand (Blakely et al., 2008; Fawcett et al.,
2005; Shaw et al., 2005), the US (Krieger et al., 2012; Waterman et al., 2012), and the UK (Scott-Samuel et al., 2014) shows that health inequalities increased when income inequalities increased, observations from Norway showed no evidence of increasing health inequalities in a time of increasing neoliberalism and rising income inequalities. In fact, health inequalities decreased (Krokstad et al., 2002). Conversely, a study from Spain found that health inequalities (both mortality and disability differences) increased during a period of decreasing income inequality and increasing redistribution (Regidor et al., 2006). The increase in health inequalities was due to a more rapid improvement at the top of the socio-economic ladder than at the bottom, particularly for cardiovascular mortality, even though there was an improvement in all groups (Regidor et al., 2006). This led the authors to suggest that even though income had become more egalitarian, differences in more proximal determinants of health, such as diet and smoking, had increased (Regidor et al., 2006). We do not know if there is a lag between changes to social equality and health equality, or, if so, how large it is (Bleich et al., 2012). However, we do know that income inequality carries with it a range of other negative social consequences, including higher mortality and morbidity rates, and larger health inequalities (Wilkinson & Pickett, 2009).

Generally across Europe, Starke et al. (2008) found that pensions tended to be increased, unemployment insurance tended to hold steady, sickness insurance tended to be cut, and states tended towards convergence in their spending levels. The laggards in Southern and Continental Europe increased their spending on cash benefits, whereas high spenders tended to have low or no growth in spending., The effect was, consequently, convergence, although not a “race to the bottom” (Starke et al., 2008). Similarly, the United Kingdom and the United States made smaller cuts to their spending on social services and social protection than other countries in the OECD (Peters, 2012). The results from these studies are generally consistent with my results: recommodification of unemployment benefits was stronger than that of
pensions or healthcare, which indicates that the policy domains that are more popular among the electorate are more shielded from recommodification. Sweden, however, recommodified both pensions and unemployment benefits more than England, despite the higher popularity of the welfare state in Sweden than the UK (Svallfors, 2012). Thus, popularity is not the sole determinant of whether or not recommodification takes place.

7.3.3 Recommodification and public support

I found differences in the trajectory of recommodification, both between policy areas within one country, and between the two countries. I expected that Sweden would have recommodified to a greater extent than England, which I also found, yet what I did not expect was to find very little evidence of recommodification at all in England. However, I only covered the period up to 2011, and the effects of the austerity package implemented by the Conservative-Liberal Democrat Coalition government in the UK may very well have led to recommodation that has not yet appeared in the database from which I obtained the data. Such effects may become visible in the future. Furthermore, the UK has a long history of embracing neoliberalism since the time of Margaret Thatcher, by both the Conservatives and New Labour (Crouch, 1997; Grimshaw & Rubery, 2012; Scott-Samuel et al., 2014), and the trends in net replacement rates for both unemployment and pensions show more recommodation during the 1980s than during the 1990s or 2000s.

Despite its long tradition of left-wing governments, Sweden recommodified more extensively than England during the period studied, even when the Social Democrats were in government. This is especially noticeable in the unemployment benefit. Healthcare was recommodified to a lesser extent, at least when user fees are used to measure recommodation. In England, pensions increased in value, whereas unemployment benefits stayed the same. I argue that this is due to the different political popularities of the domains in question: healthcare and pensions are very popular among the public, while unemployment
benefits are more contentious: it is easier to introduce a notion of the “undeserving” among the unemployed, especially among the unemployed who depend on social assistance benefits.

Public support for welfare has always been strong in Sweden, not just for one’s own personal benefit, but also as a matter of social justice and rights, whereas public opinion in this matter is more ambiguous in the UK (Jones et al., 2006). There is a general belief that capitalism needs inequality, so there is a limit to how much a country can redistribute (Espelt et al., 2008).

Sweden has a long history of cooperation in the Parliament, which makes radical reform less likely (Dahlström, 2009; Lockhart, 2012). This held true during the 1990s crisis (Dahlström, 2009). Popular opinion towards the cuts during the 1990s was mostly negative as the effects of rationing made themselves felt (Bergmark, 2000). Public support for the welfare state had been declining during the 1980s, as the rise of individualism meant that people started to feel there was little legitimate need for it, but the crisis reversed this trend, as social vulnerability increased and the media drew attention to the effects of retrenchment (Bergmark, 2000).

The Varieties of Capitalism theory predicts that globalisation will lead to retrenchment in LMEs, but not in CMEs, as CMEs are more able to maintain social protection, and have more interest in doing so (Busemeyer, 2009). Firms in CMEs rely on their workers having high levels of specific skills, which requires social protection, as workers need some income or employment guarantee to incentivise them to invest in skills. Firms in LMEs, in contrast, need their workers to have either general skills, which are a form of guarantee in themselves, or low skills (Estevez-Abe et al., 2001). While retrenching social security in CMEs might lead to lower taxes, it would come at the expense of a workforce less willing to invest in firm-specific or industry-specific skills (Busemeyer, 2009). That is not to say that CMEs
cannot change their institutional arrangements to meet the challenges of globalisation, but that they are more likely to seek other adjustments than outright retrenchment (Jensen, 2011). Similarly, Coburn’s neoliberalism theory predicts that Social Democratic and Conservative countries will be less likely to cut social security than Liberal ones, although this is less related to the needs of businesses to remain competitive (as in Varieties of Capitalism), and more with the political ideology of the government and citizens (Coburn, 2000; Coburn, 2004). Olaskoaga-Larrauri et al. (2010) suggest that welfare institutions in Social Democratic welfare states are more resilient to cuts, as they are more well-developed and embedded in society. However, my results are the opposite of the predictions of these two theories: Sweden has recommodified more than England, both in pensions and unemployment benefits. While this is only one limited aspect of welfare state retrenchment and recommodification, it does challenge the hypothesis that Social Democratic states or CMEs are more likely to resist neoliberalising pressures than Liberal states or CMEs.

7.3.4 Politics versus policies

There is a debate within comparative social epidemiology over whether the welfare state has a holistic or atomistic influence on health inequalities (Dahl et al., 2006). The debate started with a call to open the “black box” of welfare regimes and investigate the effects of actual policies, as mentioned in Chapter 2 (Brennenstuhl et al., 2012; Hurrelmann et al., 2010; Lundberg, 2008). However, since policies are shaped by politics, some researchers are of the opinion that analysing policies in an atomistic way is analogous to studying the symptoms of a disease, rather than its causes (Espelt et al., 2010; Muntaner et al., 2010b). Furthermore, they argue that the totality of a welfare state is greater than the sum of its policies (Navarro & Shi, 2001). However, countries are not homogenous in their policies or policy development, nor in their implementation of those policies (Lundberg, 2008; Scruggs & Allan, 2006). Welfare developments are often contradictory (Belfrage & Ryner, 2009), as I
found in the UK, and even though it is difficult to disentangle the effects of different policies and the general political context, it is a worthwhile endeavour. Changes to net replacement rates might be too small to change the overall political and social context of a country, and might not make a grand impact on the political tradition. However, changes to net replacement rates surely affect the living standards, and thus the health, of the beneficiaries. A change to net replacement rates, therefore, may cause changes to health inequalities. Not all policies contribute equally to population health (Lundberg et al., 2008b), and we might miss some of the mechanisms linking political economy and health if we simply compare regimes and political traditions.

Comparing regimes has not helped to solve the long-standing puzzle of why Scandinavia’s health inequalities are not as small as the social equality in these countries leads us to expect (Brennenstuhl et al., 2012). While I found that population health was better in Sweden, I did not find smaller health inequalities, either absolute or relative. This agrees with previous results (Bambra, 2011c; Brennenstuhl et al., 2012; Lundberg et al., 2008a). The magnitude of health inequalities in Sweden were sometimes similar to those in England, but this may be the result of different mechanisms: recommodification, for example, is weakly associated with the development of health inequalities in England, but is more strongly associated in Sweden. This may be because England’s level of decommodification has always been low – it may not have ever been key to the magnitude of health inequalities, and other social factors (such as the quality of work, the living environment, levels of stress, and behavioural determinants) may have been more important. In Sweden, in contrast, decommodification may have contributed to health inequalities to a greater extent than in England, although it has of course been one factor of many. Policy can influence health at various points: the exposure to social determinants of health, the vulnerability to such exposure, and the consequences of ill health can all be modified by policy (Whitehead et al.,
Net replacement rates are more likely to influence exposure to hazardous social determinants of health (both material and psychosocial determinants that arise from having an insufficient income), or, in the case of unemployment benefits and sick pay, the consequences of ill health. However, it has been noted that active labour market policies matter more for alleviating the consequences of ill health than the passive receipt of benefits, regardless of amount (Whitehead et al., 2009a; Whitehead et al., 2009b). Some studies have found that income matters more for health in England than in Sweden (Åberg-Yngwe et al., 2001), although my results throw doubt on this conclusion, as I found a closer link between recommodification and health inequalities in Sweden. Furthermore, the shape of the health gradient depends on the social, economic and cultural make-up of a society (McLeod et al., 2012). One study found that the relationship between income and health is fairly linear in the Nordic countries, whereas it is more curved elsewhere (Mackenbach et al., 2005). The authors propose that the curvilinearity of the relationship is due to the influence of material factors, whereas behavioural and psychosocial factors are more important in countries with linear relationships (Mackenbach et al., 2005). My finding that health inequalities in Sweden were greater by education than by employment status supports this proposal. While the relative differences of psychosocial, material, and behavioural factors may differ between countries and time points (Aldabe et al., 2010), those with higher SES always have better health than those with lower SES: socioeconomic status is thus a fundamental cause of health inequalities, regardless of the specific mechanisms in operation (Link & Phelan, 1995).

Studies from the 1980s did show that health inequalities were smaller in Sweden than elsewhere (Bambra, 2013). This was before my study period, and Sweden had started the recommodification process by the early 1990s, when my study period started. Employment matters more for health in a more recommodified society, as England, as those without
employment are less able to maintain adequate living standards. Health inequalities by employment status increased in Sweden during the period I studied.

The trends were different in England. In 1997, New Labour announced that one of their key aims was to reduce health inequalities in the UK during their time in office. The strategy had some limited successes, but health inequalities did not noticeably decrease during New Labour’s 13 years in office. Some measures of health inequalities increased (Mackenbach, 2010). One of the main explanations put forward for this is that income and wealth inequality did not decrease during this period, and that the English policy had tried to tackle the “downstream” determinants of health inequalities without changing the “upstream” factors (Mackenbach, 2010). In macroeconomic policy, New Labour continued to pursue the neoliberalism started in the 1980s by the Conservative government, and the social policies New Labour instituted were placed in this context (Grimshaw & Rubery, 2012). While I found that the health inequalities had not decreased in the groups I studied, I found no evidence of recommodification. Indeed, decommodification increased in the group for which health inequalities increased the most (the retired). While macroeconomic effects and increasing neoliberalism might be involved in the increase of inequalities between the employed and unemployed, it is unlikely that they are to blame for the rise in inequalities among the retired. Others have shown that the pension system in the UK has not been recommodified, although it was never highly decommodified in the first place, which means that it is still more commodified than other systems in Europe (Arcanjo, 2011; Lain et al., 2012). The accumulation of influences on health throughout the life course make it especially hard to pinpoint the mechanisms behind health inequalities among the elderly. It may be that Sweden’s general social equality throughout the life course was able to buffer against the reduction of pension net replacement rates that took place, whereas in England, health
inequalities increased due to increasing general social inequality, despite the increasing value of both the standard and minimum pensions.

7.4 Limitations

7.4.1 Data sources

Both the HSE and the ULF are repeated cross-sectional studies, rather than longitudinal studies, which means that I could not perform time series analysis or other statistical analyses that require longitudinal data. It also meant that I was unable to make any causal inferences about the relationship between recommodification and health inequalities. The ULF was modified somewhat in 2005 to make it comparable with other European living conditions surveys in the SILC project. Further, the data collection method was changed in 2006 from face-to-face interviews to telephone interviews, which may have affected how respondents answered certain questions. This is the case, in particular, for questions for which social desirability bias may play a role in how respondents present themselves. However, the questions used in this investigation were not changed in 2005, and are not of the type for which social desirability plays a role. I believe that the design of SILC as the successor to ULF ensures that trends over time can be compared using the two surveys. Both the ULF/SILC and the HSE are repeated cross-sectional surveys carried out every year. The HSE started in 1991. The 1980s were a period of intense recommodification under the Thatcher government in the UK (Leys, 2003), and I have missed part of the relationship between recommodification and health inequalities in England by excluding the 1980s from the study. There was a major decrease in the net replacement rates in unemployment benefits between 1979 and 1981, after which the decline was more steady and eventually levelled off. The pension net replacement rates increased quite slowly, throughout the 1970s and 1980s, although the standard pension increased at a much more rapid rate than the minimum pension after 1979, thus increasing inequalities in pension income. The trajectory of net replacement
rates before the study period is different from that during the study period, and the drastic changes in replacement rates means that my study probably suffered from the exclusion of this decade. However, the effects of the policy changes probably took some time to become embodied, and the results presented here may well have been affected by lagged effects of Thatcherism.

Both the HSE and the ULF exclude the institutionalised from their samples. This is a limitation, especially when studying health inequalities in the retired population, since many of the oldest and frailest elderly are institutionalised in care homes.

Using secondary data sources means that the research is limited by the variables that exist in the data, and researchers cannot construct their own dataset to suit their own needs. However, this is compensated for by the large sample size and the wealth of data available to the researcher – the scope of both the HSE and the ULF is far beyond what could be achieved in a Ph.D. project.

The sources I used contain a wealth of information relevant to this project, but the scope of the project has occasionally been limited by what is available in the data.

### 7.4.2 Variables

Net replacement rates capture only one aspect of decommodification: other variables are the duration and coverage of benefits, and how much people need to contribute to their own benefits (Esping-Andersen, 1990). However, net replacement rates do measure the extent of income maintenance that is available to people outside the labour market. I have used net replacement rates as a measure of living standards when on benefits relative to when in work, for the average production worker. It is a more robust measure than benefits at purchasing power parity, since living standards differ between countries, and what is considered an essential product in certain contexts is considered a luxury in others (Whiteford, 1995). Net
replacement rates measure benefit stratification, i.e. the extent to which benefits are tied to previous earnings (Whiteford, 1995). As such, they are more a measure of consumption smoothing than poverty alleviation, even though pensions and unemployment benefits have both aims (Grech, 2013). A single replacement rate cannot be clearly defined – the replacement rate depends on personal and family characteristics, previous work history and earnings, and the complicated rules governing social insurance, social assistance, taxation, and the interactions between them (Grech, 2013; Martin, 1996). The net replacement rate, therefore, is a theoretical one, based on a typical case – in this case, an average full-time production worker, living alone. This measure was chosen due to the availability of good data, but most employees do not fit the profile of an average full-time production worker (Immervoll & O'Donoghue, 2002), and wages in the manufacturing sector differ from wages in other sectors, which undermines the international comparability of net replacement rates (Whiteford, 1995). Net replacement rates may change due to a change in wages rather than a change in benefit levels. Furthermore, net replacement rates measure what people should receive, rather than what they do receive. There is never 100% take-up of benefits, especially in social assistance (Martin, 1996; Whiteford, 1995). Net replacement rates are also only one part of the benefit system (Whiteford, 1995), and there may be several changes that are not picked up by this measure. Increasing the reliance on means-tested benefits (Grech, 2013), changes to the eligibility and contribution rules, work tests, and sanctions in unemployment insurance are all examples of such changes (Martin, 1996). These changes would also serve as indicators of recommodification.

However, I could not use the decommodification index defined by Esping-Andersen (1990) as it is a comparative index: a country’s decommodification index score can change relative to other countries, without its decommodification level changing. Further, other aspects of recommodification, such as the increased use of sanctions or a reduction in welfare
to increase work incentives, cannot be captured quantitatively. Wider recommodification processes that affect, for example, health services and other parts of the welfare state that would have affected the living standards of the unemployed were also not captured in my research.

Using self-rated health as an indicator is subject to certain limitations. The relationship between self-rated health and mortality is stronger in higher educated groups than in lower (Burström & Fredlund, 2001), and health problems have a greater impact on self-rated health among the higher educated (Delpierre et al., 2009). There may be cultural differences between Sweden and England, or between the employed and unemployed, in the way in which people value their health (Bambra, 2011a). The relationship between self-rated health and mortality is stronger in higher educated groups than in lower (Burström & Fredlund, 2001), and health problems have a greater impact on self-rated health among the higher educated (Delpierre et al., 2009). Any systematic differences in how people value their health may have introduced bias into my results.

7.4.3 Analysis

One weakness of my method is that I dichotomise self-rated general health into Good and Not good, in order to be able to run logistic regression models. This means that some gradations and nuances are lost. (It can, however, be argued that the difference between Good and Very good, or Poor and Very poor is even more subjective than the difference between Good and Not good.)

I have not used any form of lag between the measurement of recommodification and the health outcome. Although this is less likely to affect visits to healthcare, since the fee is payable upfront at the time of visit, it is likely that the effects of changes to pensions and unemployment replacement rates will take some time to be translated into health outcomes.
While there is a lag before changes in the social determinants of health affect mortality (Blakely et al., 2000), the extent to which effects on self-rated health lag behind changes in the social determinants is not clear. This is because the concept of “health” includes mental health (Au & Johnston, 2014), which can be affected by changed circumstances without a long lag.

7.5 Implications

7.5.1 Implications for future research

The results presented here add to our knowledge of how recommodification influences health inequalities, but the relationships between decommodification, recommodification, and health inequalities remain far from clear.

The Nordic puzzle of social epidemiology is still as puzzling as ever. My results support those, such as Lundberg and Lahelma (2001), who argue that the Social Democratic welfare state does not in itself lead to small health inequalities, but it can act as a buffer against increasing health inequalities. However, that still leaves unanswered the fundamental question of why a low level of social inequality does not lead to a low level of health inequalities. If, as Lundberg et al. (2008c) suggests, it is specific policies that have the greatest impact on health and health inequalities, rather than general social welfare, then the answer is to investigate specific policy domains and specific subgroups of the population, to determine which policies decrease health inequalities most efficiently. My research is one part of this endeavour, and has investigated the links between health and unemployment policies, pension policies and healthcare policies, but there are many policy domains that I have not been able to cover. It would be interesting to study the recommodification of education, social care, childcare, and family leave policies, and to explore the extent to which changes in these policy areas have are associated with health inequalities. This study has
gained relevance in the light of austerity policies currently being implemented in many countries.

Furthermore, I have included only two countries in my study. It is, of course, interesting to compare Sweden and England, as they are examples of two contrasting welfare states. Many other states, however, differ from both England and Sweden in important ways, particularly those of other welfare regimes, such as the Southern European or Conservative welfare regimes. Adding examples of such regimes to the comparison would give more insight, not only into the magnitude of recommodification across different regime types, but also into how recommodification is associated with health inequalities. Such a study would determine whether decommodification does in fact have buffering properties, as speculated here and elsewhere. Further, regimes are not monoliths, and studying differences within regimes may isolate factors that are of particular importance to trends in health inequalities.

7.5.2 Implications for policy

Reducing health inequalities has long been a policy goal of governments in both the UK and Sweden, and in many other countries, both rich and poor (Asthana & Halliday, 2006; Davey Smith & Krieger, 2008). However, most strategies to reduce health inequalities have met with less than spectacular success (Asthana & Halliday, 2006; Mackenbach, 2010). This has sometimes been attributed to a lack of knowledge about which policies can effectively reduce health inequalities, but it may also stem from a reluctance to implement such policies, such as income and wealth redistribution (Asthana & Halliday, 2006; Davey Smith & Krieger, 2008; Graham, 2009b; Mackenbach, 2010). While most policies to tackle health inequalities operate on the micro-level, and target the proximate causes of health inequalities, there is a widespread belief in academia that the most effective interventions operate on the macro-level, and target distal causes. The evidence for this, however, is tenuous: it is much more difficult to assign credit or blame to distal policies, as many other social factors act as
intermediaries (Smith & Kandlik Eltanani, 2014). However, according to the political economy perspective of health inequalities, macroeconomic conditions and politics are the fundamental causes of health inequalities: they are the reason that the social determinants of health are distributed in the way they are (Birn, 2011). An increase in the evidence base that describes how the political economy influences health and health inequalities will increase our understanding, and thus contribute to providing sound advice on policy, even in the absence of macro-level policies to reduce health inequalities.

### 7.6 Conclusions

To conclude, the work presented here shows that recommodification and health inequalities are related, but not always in the direction expected and not to the extent expected. The clearest relationship between health inequalities and recommodification was regarding unemployment insurance in Sweden. In England, the relationship between unemployment benefit net replacement rate and health inequalities was less strong than in Sweden, as expected, as there had been much less change to the net replacement rate. With regards to healthcare and pensions in Sweden, an increase in recommodation was not accompanied by greater health inequalities; while in England, increased health inequalities occurred concurrently with an increase in pension net replacement rates and stable net replacement rates in the unemployment benefit. However, even though net replacement rates increased in the pension system, so did the difference between the minimum and standard pensions, which may have been related to health inequalities in the older population. The wider context definitely plays a role in determining when and how recommodification is associated with health inequalities, and the relationship between decommodification and health inequalities is influenced by many other factors, such as general social and income equality, values and norms, and lifestyle.
Chapter 8: Conclusions

8.1 Summary of Thesis

The work presented here is a comparative study of England and Sweden between 1991 and 2011. I have used a two-stage binomial-normal distribution model, in which I used a generalised linear model to estimate the magnitude of health inequalities in each country each year, and then correlated the magnitude of health inequalities with measures of recommodification.

The aim of this project was to investigate the extent of recommodification of the social determinants of health in Sweden and England over a twenty-year period between 1991 and 2011. I investigated the magnitude of recommodification in Sweden and England, and the association of recommodification with health inequalities. While others have carried out comparative studies of developments in health inequalities (Fawcett et al., 2005; Kunst et al., 2005), recommodification has not previously been used as a theoretical concept to frame trends in health inequalities. The work presented here is also one of the few studies to look at both the recommodification of cash benefits and of social services, the latter of which has been somewhat neglected in studies of decommodification (Bambra, 2005).

I focused my analysis on health inequalities in three policy domains: unemployment, old age pensions, and healthcare, and I set out to answer three questions:

- Have health inequalities between the employed and unemployed in Sweden and England increased between 1991 and 2011, and, if so, is this increase associated with recommodification?
• Have health inequalities in the retired population in Sweden and England increased between 1991 and 2005, and, if so, is this increase associated with recommodification?

• Have inequalities in access to healthcare in Sweden increased between 1980 and 2005, and, if so, is this increase associated with recommodification?

Health inequalities are not as small in the Nordic countries as we would expect, given the high level of decommodification and the low levels of social inequalities in those countries (Bambra, 2011a). It is necessary to examine social policies in more detail, in order to understand how and why social policies matter for health (Lundberg, 2008). Furthermore, welfare states are not static, and changes to social policies may affect health inequalities (Krieger et al., 2012). There is some evidence that Social Democratic welfare states had smaller health inequalities than other European countries during the 1980s, when levels of recommodification were low (Bambra, 2013). Studying whether health inequalities change in response to changes in social policy can help us to better understand the relationships between social policies and health inequalities, and may lead to an understanding of the Nordic puzzle.

8.2 Key Findings

The main finding of this thesis is that recommodification was accompanied by stable or increasing health inequalities. While I did find one population and domain in which health inequalities increased as decommodification increased (in the retired population in England), increased recommodification was never accompanied by decreasing health inequalities.

Recommodification has had a greater impact on health inequalities in Sweden than in England. Silventoinen and Lahelma (2002) and Lundberg and Lahelma (2001) suggest that a generous welfare state acts as a buffer against changing economic contexts: health
inequalities did not increase in the Nordic countries during a time of economic crisis, despite increasing income inequalities. My results support this in the case of health inequalities in the retired population, but the buffering effect has been eroded in the case of health inequalities between the employed and unemployed in Sweden: health inequalities increased in this case, particularly during the latter half of the 2000s. The limited decommodification of the welfare state that took place in the UK may mean that the welfare state in the UK never did have the buffering properties that the Swedish welfare state had, so health inequalities were, and are, more strongly influenced by other factors. This would explain why health inequalities increased in England, despite stable unemployment net replacement rates, and increasing net replacement rates for pensions.

I found also that Sweden experienced recommodification in all three policy areas I studied. The unemployment net replacement rate in England remained steady, and the pension net replacement rate increased, contrary to expectations. Health inequalities increased between the Swedish employed and unemployed, yet they did not increase in the retired population, and inequalities in access to healthcare also remained steady during the period. Given the recommodification profile in Sweden, we would expect inequalities to increase in Sweden in all areas studied. Conversely, we would not expect them to increase in England, given the recommodification profile there, and my results show that they did. The patterns of inequality were similar for both absolute and relative measures.
**Appendix 1: Age and sex adjusted analyses**

*Health Inequalities Between the Employed and Unemployed*

Logistic regression

<table>
<thead>
<tr>
<th>Year</th>
<th>England</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>1.81 [1.15, 2.76]</td>
<td>1.62 [1.04, 2.43]</td>
</tr>
<tr>
<td>1992</td>
<td>2.72 [1.89, 3.86]</td>
<td>1.83 [1.36, 2.43]</td>
</tr>
<tr>
<td>1993</td>
<td>2.44 [2.07, 2.86]</td>
<td>2.20 [1.72, 2.80]</td>
</tr>
<tr>
<td>1994</td>
<td>5.22 [1.87, 21.75]</td>
<td>1.98 [1.51, 2.58]</td>
</tr>
<tr>
<td>1995</td>
<td>2.55 [2.10, 3.08]</td>
<td>1.85 [1.40, 2.43]</td>
</tr>
<tr>
<td>1996</td>
<td>3.17 [2.61, 3.84]</td>
<td>2.44 [1.89, 3.13]</td>
</tr>
<tr>
<td>1997</td>
<td>3.60 [2.75, 4.70]</td>
<td>2.81 [2.15, 3.66]</td>
</tr>
<tr>
<td>1998</td>
<td>3.62 [2.90, 4.51]</td>
<td>1.82 [1.36, 2.41]</td>
</tr>
<tr>
<td>1999</td>
<td>2.80 [2.03, 3.84]</td>
<td>1.73 [1.26, 2.34]</td>
</tr>
<tr>
<td>2001</td>
<td>3.49 [2.73, 4.45]</td>
<td>2.86 [2.12, 3.84]</td>
</tr>
<tr>
<td>2002</td>
<td>2.86 [2.12, 3.83]</td>
<td>2.31 [1.68, 3.15]</td>
</tr>
<tr>
<td>2003</td>
<td>3.18 [2.45, 4.10]</td>
<td>2.22 [1.61, 3.02]</td>
</tr>
<tr>
<td>2004</td>
<td>3.89 [2.59, 5.81]</td>
<td>2.06 [1.53, 2.76]</td>
</tr>
<tr>
<td>2005</td>
<td>3.84 [2.74, 5.33]</td>
<td>2.16 [1.71, 2.71]</td>
</tr>
<tr>
<td>2010</td>
<td>3.38 [2.54, 4.46]</td>
<td>3.01 [2.23, 4.03]</td>
</tr>
<tr>
<td>2011</td>
<td>2.34 [1.74, 3.12]</td>
<td>3.15 [2.34, 4.20]</td>
</tr>
</tbody>
</table>

Table A1: Odds ratios for *Not good health* between the employed and unemployed, controlling for age and sex.
## Linear regression

<table>
<thead>
<tr>
<th></th>
<th>Unadjusted results</th>
<th>Adjusted results for time-varying effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>Net replacement rate</td>
</tr>
<tr>
<td>England</td>
<td>2.250</td>
<td>-6.053</td>
</tr>
<tr>
<td></td>
<td>[1.228, 3.272]</td>
<td>[-11.488, -0.617]</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.445</td>
<td>-2.172</td>
</tr>
<tr>
<td></td>
<td>[1.616, 3.273]</td>
<td>[-3.299, -1.045]</td>
</tr>
</tbody>
</table>

Table A2: Linear regression results for the relationship between health inequalities between the employed and unemployed adjusted for age and gender and minimum net replacement rates in the unemployment insurance.
### Health Inequalities in the Retired Population

Logistic regression

<table>
<thead>
<tr>
<th>Year</th>
<th>England</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>2.61 [1.35, 5.38]</td>
<td>1.75 [1.14, 2.72]</td>
</tr>
<tr>
<td>1992</td>
<td>1.70 [1.01, 2.97]</td>
<td>1.49 [0.98, 2.28]</td>
</tr>
<tr>
<td>1993</td>
<td>2.17 [1.68, 2.83]</td>
<td>1.50 [1.02, 2.22]</td>
</tr>
<tr>
<td>1994</td>
<td>2.93 [2.24, 3.88]</td>
<td>2.71 [1.71, 4.39]</td>
</tr>
<tr>
<td>1995</td>
<td>1.85 [1.47, 2.34]</td>
<td>1.79 [1.17, 2.75]</td>
</tr>
<tr>
<td>1996</td>
<td>2.37 [1.87, 3.03]</td>
<td>2.42 [1.55, 3.85]</td>
</tr>
<tr>
<td>1997</td>
<td>2.42 [1.75, 3.39]</td>
<td>1.77 [1.18, 2.68]</td>
</tr>
<tr>
<td>1998</td>
<td>3.09 [2.42, 3.97]</td>
<td>1.61 [1.05, 2.50]</td>
</tr>
<tr>
<td>1999</td>
<td>2.75 [1.96, 3.91]</td>
<td>1.55 [1.04, 2.35]</td>
</tr>
<tr>
<td>2000</td>
<td>2.80 [2.06, 3.85]</td>
<td>2.03 [1.36, 3.06]</td>
</tr>
<tr>
<td>2001</td>
<td>2.68 [2.16, 3.34]</td>
<td>1.27 [0.86, 1.86]</td>
</tr>
<tr>
<td>2002</td>
<td>2.43 [1.77, 3.35]</td>
<td>2.87 [2.01, 4.17]</td>
</tr>
<tr>
<td>2003</td>
<td>2.34 [1.87, 2.95]</td>
<td>2.09 [1.50, 2.93]</td>
</tr>
<tr>
<td>2004</td>
<td>2.67 [1.96, 3.65]</td>
<td>2.08 [1.42, 3.08]</td>
</tr>
<tr>
<td>2005</td>
<td>2.73 [2.27, 3.29]</td>
<td>1.70 [1.27, 2.30]</td>
</tr>
<tr>
<td>2007</td>
<td>2.96 [2.19, 4.03]</td>
<td>1.53 [1.09, 2.18]</td>
</tr>
<tr>
<td>2008</td>
<td>2.46 [2.03, 2.99]</td>
<td>1.72 [1.27, 2.33]</td>
</tr>
<tr>
<td>2009</td>
<td>3.06 [2.16, 4.39]</td>
<td>2.47 [1.82, 3.38]</td>
</tr>
<tr>
<td>2010</td>
<td>2.62 [2.04, 3.38]</td>
<td>2.10 [1.57, 2.84]</td>
</tr>
<tr>
<td>2011</td>
<td>2.22 [1.77, 2.79]</td>
<td>1.97 [1.45, 2.69]</td>
</tr>
</tbody>
</table>

Table A3: Odds ratios of *Not good health* in the retired population, controlling for age and sex.
## Linear regression

<table>
<thead>
<tr>
<th></th>
<th>Unadjusted results</th>
<th></th>
<th>Adjusted results for time-varying effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>Net replacement rate</td>
<td>R²</td>
<td>Constant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Net replacement rate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Year</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R²</td>
</tr>
<tr>
<td>England</td>
<td>0.965</td>
<td>-0.134</td>
<td>0.518</td>
<td>-41.632</td>
</tr>
<tr>
<td></td>
<td>[0.262, 1.668]**</td>
<td>[-2.389, 2.123]</td>
<td></td>
<td>-4.117</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.026</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.327</td>
</tr>
<tr>
<td></td>
<td>1.001</td>
<td>-1.012</td>
<td>0.025</td>
<td>-7.403</td>
</tr>
<tr>
<td></td>
<td>[-0.075, 2.094]</td>
<td>[-3.897, 1.873]</td>
<td></td>
<td>-0.401</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.083</td>
</tr>
<tr>
<td>Sweden</td>
<td>[-0.075, 2.094]</td>
<td>[-3.897, 1.873]</td>
<td></td>
<td>[-104.244,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-8.036, 7.234]</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>89.437</td>
</tr>
</tbody>
</table>

** Adjusted $p<0.05$

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table A4: Linear regression results for the relationship between health inequalities adjusted for age and gender in the retired population and minimum net replacement rates in the pension system.**
Inequalities in Access to Healthcare by Education

Logistic regression

<table>
<thead>
<tr>
<th>Year</th>
<th>All</th>
<th>Not good health</th>
<th>Good health</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>1.28 [1.09, 1.51]</td>
<td>1.12 [0.73, 1.69]</td>
<td>1.02 [0.84, 1.23]</td>
</tr>
<tr>
<td>1981</td>
<td>1.19 [1.02, 1.38]</td>
<td>0.43 [0.27, 0.65]</td>
<td>1.12 [0.94, 1.35]</td>
</tr>
<tr>
<td>1988</td>
<td>1.26 [1.08, 1.47]</td>
<td>0.58 [0.39, 0.86]</td>
<td>1.12 [0.93, 1.34]</td>
</tr>
<tr>
<td>1989</td>
<td>1.22 [1.05, 1.42]</td>
<td>0.62 [0.42, 0.90]</td>
<td>1.13 [0.95, 1.36]</td>
</tr>
<tr>
<td>1991</td>
<td>1.22 [1.04, 1.43]</td>
<td>0.84 [0.66, 1.08]</td>
<td>0.97 [0.83, 1.14]</td>
</tr>
<tr>
<td>1992</td>
<td>1.14 [0.98, 1.33]</td>
<td>0.89 [0.71, 1.11]</td>
<td>0.96 [0.81, 1.12]</td>
</tr>
<tr>
<td>1993</td>
<td>0.94 [0.81, 1.09]</td>
<td>0.90 [0.72, 1.12]</td>
<td>0.85 [0.72, 1.00]</td>
</tr>
<tr>
<td>1994</td>
<td>1.15 [0.99, 1.33]</td>
<td>0.91 [0.72, 1.16]</td>
<td>0.94 [0.80, 1.10]</td>
</tr>
<tr>
<td>1995</td>
<td>1.26 [1.08, 1.46]</td>
<td>0.97 [0.77, 1.22]</td>
<td>1.11 [0.95, 1.31]</td>
</tr>
<tr>
<td>1996</td>
<td>1.25 [1.07, 1.47]</td>
<td>0.80 [0.63, 1.03]</td>
<td>0.96 [0.82, 1.13]</td>
</tr>
<tr>
<td>1997</td>
<td>1.20 [1.03, 1.40]</td>
<td>0.69 [0.53, 0.89]</td>
<td>0.84 [0.71, 1.00]</td>
</tr>
<tr>
<td>1998</td>
<td>1.11 [0.95, 1.29]</td>
<td>0.88 [0.68, 1.13]</td>
<td>0.97 [0.83, 1.14]</td>
</tr>
<tr>
<td>1999</td>
<td>1.23 [1.06, 1.43]</td>
<td>0.71 [0.56, 0.91]</td>
<td>0.92 [0.78, 1.09]</td>
</tr>
<tr>
<td>2000</td>
<td>1.09 [0.94, 1.27]</td>
<td>0.68 [0.53, 0.87]</td>
<td>1.00 [0.84, 1.18]</td>
</tr>
<tr>
<td>2001</td>
<td>1.07 [0.92, 1.24]</td>
<td>0.88 [0.69, 1.11]</td>
<td>0.91 [0.77, 1.08]</td>
</tr>
<tr>
<td>2002</td>
<td>1.41 [1.22, 1.63]</td>
<td>0.93 [0.73, 1.18]</td>
<td>0.99 [0.84, 1.17]</td>
</tr>
<tr>
<td>2003</td>
<td>1.25 [1.08, 1.44]</td>
<td>0.84 [0.66, 1.07]</td>
<td>0.98 [0.84, 1.16]</td>
</tr>
<tr>
<td>2004</td>
<td>1.18 [1.02, 1.37]</td>
<td>0.82 [0.64, 1.06]</td>
<td>0.99 [0.82, 1.19]</td>
</tr>
<tr>
<td>2005</td>
<td>1.21 [1.02, 1.43]</td>
<td>0.95 [0.69, 1.30]</td>
<td>1.04 [0.85, 1.27]</td>
</tr>
</tbody>
</table>

Table A5: Odds ratios for having visited the doctor in the past 3 months in Sweden, controlling for age and sex, highest educated as reference category.
### Linear regression

<table>
<thead>
<tr>
<th></th>
<th>Unadjusted results</th>
<th></th>
<th>Adjusted results for time-varying effects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>Net replacement rate</td>
<td>R^2</td>
<td>Constant</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td>0.455</td>
<td>-0.005</td>
<td>0.515</td>
<td>4.046</td>
</tr>
<tr>
<td></td>
<td>[0.264, 0.647]**</td>
<td>[-0.007, -0.002]**</td>
<td>[0.265, 0.647]**</td>
<td>[-15.541, 23.632]</td>
</tr>
<tr>
<td><strong>Not good health</strong></td>
<td>0.240</td>
<td>-0.003</td>
<td>0.268</td>
<td>-10.257</td>
</tr>
<tr>
<td></td>
<td>[0.043, 0.437]**</td>
<td>[-0.005, -0.001]</td>
<td>[-0.044, 0.43]</td>
<td>[-29.728, 9.214]</td>
</tr>
<tr>
<td><strong>Good health</strong></td>
<td>-0.820</td>
<td>0.007</td>
<td>0.207</td>
<td>23.100</td>
</tr>
<tr>
<td></td>
<td>[-1.350, -0.289]</td>
<td>[0.001, 0.013]</td>
<td>[2.999, 76.189]</td>
<td>[0.000, 0.023]</td>
</tr>
</tbody>
</table>

** Adjusted p<0.05

Table A6: Linear regression results for the relationship between inequalities in doctor visits adjusted for age and sex and user charges for healthcare
## Appendix 2: Linear regression using absolute risk difference as outcome variable

### Health Inequalities between the Employed and Unemployed

<table>
<thead>
<tr>
<th></th>
<th>Unadjusted results</th>
<th>Adjusted results for time-varying effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>Net replacement rate</td>
</tr>
<tr>
<td>England</td>
<td>0.431</td>
<td>-1.356</td>
</tr>
<tr>
<td></td>
<td>[0.208, 0.655]**</td>
<td>[-2.537, -0.176]</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.267</td>
<td>-0.223</td>
</tr>
<tr>
<td></td>
<td>[0.195, 0.338]**</td>
<td>[-0.328, -0.119]**</td>
</tr>
</tbody>
</table>

**Adjusted $p<0.05$**

Table A7: Linear regression results for the relationship between absolute health inequalities between the employed and unemployed and net replacement rates in the unemployment insurance.
### Health Inequalities by Education in the Retired Population

<table>
<thead>
<tr>
<th></th>
<th>Unadjusted results</th>
<th>Adjusted results for time-varying effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>Net replacement rate</td>
</tr>
<tr>
<td>England</td>
<td>20.493</td>
<td>6.534</td>
</tr>
<tr>
<td>Sweden</td>
<td>12.696**</td>
<td>19.610</td>
</tr>
<tr>
<td></td>
<td>[5.598, 19.760]</td>
<td>[0.778, 38.442]</td>
</tr>
</tbody>
</table>

**Adjusted p<0.05**

Table A8: Linear regression results for the relationship between absolute health inequalities in the retired population and minimum net replacement rates in the pension system.
**Inequalities in Access to Healthcare by Education**

<table>
<thead>
<tr>
<th></th>
<th>Unadjusted results</th>
<th></th>
<th>Adjusted results for time-varying effects</th>
<th></th>
<th></th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>Net replacement rate</td>
<td>R²</td>
<td>Constant</td>
<td>Net replacement rate</td>
<td>Year</td>
</tr>
<tr>
<td>All</td>
<td>18.451</td>
<td>-0.120</td>
<td>0.460</td>
<td>-8.001</td>
<td>-0.013</td>
<td>0.013</td>
</tr>
<tr>
<td></td>
<td>[12.804, 24.099]</td>
<td>[-0.183, -0.057]</td>
<td></td>
<td>[-588.745, 572.742]</td>
<td>[-0.251, 0.002]</td>
<td>[-0.282, 0.031]</td>
</tr>
<tr>
<td>Not good health</td>
<td>-15.950</td>
<td>0.231</td>
<td>0.279</td>
<td>-118.100</td>
<td>0.013</td>
<td>0.594</td>
</tr>
<tr>
<td></td>
<td>[-31.511, 0.389]</td>
<td>[0.058, 0.403]</td>
<td></td>
<td>[-2658.014, 295.637]</td>
<td>[-0.309, 0.335]</td>
<td>[-0.159, 1.346]</td>
</tr>
<tr>
<td>Good health</td>
<td>-15.679</td>
<td>0.215</td>
<td>0.614</td>
<td>309.459</td>
<td>0.276</td>
<td>-0.166</td>
</tr>
<tr>
<td></td>
<td>[-23.197, 8.160]**</td>
<td>[0.132, 0.298]**</td>
<td></td>
<td>[-444.524, 1063.442]</td>
<td>[0.112, 0.440]</td>
<td>[-0.550, 0.218]</td>
</tr>
</tbody>
</table>

**Adjusted p<0.05**

Table A9: Association between absolute risk differences in access to healthcare and user charges of healthcare, Sweden.
### Appendix 3: Health inequalities by education in the non-retired population

<table>
<thead>
<tr>
<th>Year</th>
<th>Sweden</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>2.64</td>
<td>4.21</td>
</tr>
<tr>
<td>1992</td>
<td>3.04</td>
<td>3.45</td>
</tr>
<tr>
<td>1993</td>
<td>2.09</td>
<td>3.86</td>
</tr>
<tr>
<td>1994</td>
<td>2.80</td>
<td>2.53</td>
</tr>
<tr>
<td>1995</td>
<td>2.98</td>
<td>3.08</td>
</tr>
<tr>
<td>1996</td>
<td>2.58</td>
<td>3.25</td>
</tr>
<tr>
<td>1997</td>
<td>3.23</td>
<td>3.26</td>
</tr>
<tr>
<td>1998</td>
<td>2.74</td>
<td>3.17</td>
</tr>
<tr>
<td>1999</td>
<td>3.38</td>
<td>3.72</td>
</tr>
<tr>
<td>2000</td>
<td>2.95</td>
<td>2.88</td>
</tr>
<tr>
<td>2001</td>
<td>2.19</td>
<td>2.84</td>
</tr>
<tr>
<td>2002</td>
<td>2.44</td>
<td>2.51</td>
</tr>
<tr>
<td>2003</td>
<td>2.77</td>
<td>3.37</td>
</tr>
<tr>
<td>2004</td>
<td>2.85</td>
<td>3.44</td>
</tr>
<tr>
<td>2005</td>
<td>2.18</td>
<td>4.01</td>
</tr>
<tr>
<td>2006</td>
<td>2.60</td>
<td>3.08</td>
</tr>
<tr>
<td>2007</td>
<td>2.92</td>
<td>3.49</td>
</tr>
<tr>
<td>2008</td>
<td>3.26</td>
<td>4.21</td>
</tr>
<tr>
<td>2009</td>
<td>3.02</td>
<td>3.88</td>
</tr>
<tr>
<td>2010</td>
<td>3.35</td>
<td>3.79</td>
</tr>
<tr>
<td>2011</td>
<td>3.27</td>
<td>3.38</td>
</tr>
</tbody>
</table>

Table A10: Odds ratios of *Not good health* for the lowest educated compared to the highest, non-retired population.
<table>
<thead>
<tr>
<th>Year</th>
<th>Sweden</th>
<th>England</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>2.45</td>
<td>2.29</td>
</tr>
<tr>
<td>1992</td>
<td>2.44</td>
<td>1.85</td>
</tr>
<tr>
<td>1993</td>
<td>2.06</td>
<td>2.17</td>
</tr>
<tr>
<td>1994</td>
<td>2.23</td>
<td>2.60</td>
</tr>
<tr>
<td>1995</td>
<td>2.01</td>
<td>2.23</td>
</tr>
<tr>
<td>1996</td>
<td>2.27</td>
<td>2.00</td>
</tr>
<tr>
<td>1997</td>
<td>2.33</td>
<td>2.03</td>
</tr>
<tr>
<td>1998</td>
<td>2.41</td>
<td>1.92</td>
</tr>
<tr>
<td>1999</td>
<td>2.02</td>
<td>2.04</td>
</tr>
<tr>
<td>2000</td>
<td>2.40</td>
<td>1.90</td>
</tr>
<tr>
<td>2001</td>
<td>1.94</td>
<td>2.16</td>
</tr>
<tr>
<td>2002</td>
<td>1.96</td>
<td>1.76</td>
</tr>
<tr>
<td>2003</td>
<td>1.89</td>
<td>2.04</td>
</tr>
<tr>
<td>2004</td>
<td>2.25</td>
<td>1.99</td>
</tr>
<tr>
<td>2005</td>
<td>1.85</td>
<td>2.05</td>
</tr>
<tr>
<td>2006</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>1.89</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>2.19</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>2.29</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>1.97</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>2.15</td>
<td></td>
</tr>
</tbody>
</table>

Table A11: Odds ratios of *Not good health* for manual workers compared to non-manual workers, non-retired population.
Bibliography


212


