



GROWING INEQUALITIES AND THEIR IMPACTS IN THE UNITED KINGDOM

**Abigail McKnight
Tiffany Tsang**

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Table of Contents

Executive Summary	1
1. Introduction	6
2. The nature of inequality and its development over time	7
2.1 Has inequality grown?	7
2.1.1 Household Income Inequality.....	7
2.1.2 Wealth and Debt Inequality	19
2.1.3 Labour Market Inequality	22
2.1.4 Educational Inequality.....	34
2.2 Whom has it affected?	37
2.3 Interdependence between the above inequalities over time.....	37
2.4 Why has inequality grown?	38
2.5 Conclusions	39
3. The Social Impacts of Inequality	42
3.1 Introduction	42
3.2 Material Deprivation	43
3.3 Cumulative Disadvantage and Multidimensional Measure of Poverty and Social Exclusion	48
3.4 Indicators of Social Cohesion	49
3.5 Family Formation and Breakdown, Lone Parenthood, Fertility	50
3.6 Health Inequalities.....	54
3.7 Housing Tenure	63
3.8 Crime and Punishment.....	66
3.9 Subjective measures of well-being, satisfaction, “happiness”	75
3.10 Intergenerational Mobility	78
3.11 Conclusions: Appraisal of the interdependence and the ‘national story’ of inequality drivers and their social impacts.....	79

- 4. Political and Cultural Impacts 82**
- 4.1 Introduction 82
- 4.2 Political and civic participation 82
- 4.3 Trust in others and in institutions 87
- 4.4 Political Values and Legitimacy 91
- 4.5 Values about social policy and welfare state 100
- 4.6 Conclusions: Appraisal of the interdependence and the ‘national story’ of inequality drivers and their cultural and political impacts 104
- 5. Effectiveness of Policies in Combating Inequality 108**
- 5.1 Introduction 108
- 5.2 Labour Income 109
- 5.3 Taxation 112
- 5.4 Social Expenditures 115
- 5.5 Education expenditure 126
- 5.6 Conclusions: Appraisal of the ‘national story’ of policies affecting inequality, intended or unintended 129
- References 132**

List of Figures

Figure 2.1 Household income inequality 1980 to 2009/10 (Gini coefficient)	10
Figure 2.2 Changes in income inequality (decile ratios) before and after housing costs (GB)	12
Figure 2.3 Changes in income inequality (Gini and MLD inequality indices) before and after housing costs (GB)	13
Figure 2.4 Changes in income shares 1979-2002/03	14
Figure 2.5 Percentage of the population below 60% median household income – contemporary income (rel) and held constant in real terms, 1998/99 income (abs)	16
Figure 2.6 Percentage of the population below 60% median household income	18
Figure 2.7 Age profiles in mean net worth, net financial assets and housing equity by year.....	20
Figure 2.8 The distribution of net worth (mean, median, P10 and P90 percentiles).....	20
Figure 2.9 Trends in UK unemployment 1971-2012 (working age)	24
Figure 2.10 Changes in hourly wage inequality (90/10 ratio) among employees.....	25
Figure 2.11 Changes in weekly earnings inequality (90/10 ratio) among employees 1997-2011	28
Figure 2.12 Changes in annual earnings inequality 1978/79 – 2004/05.....	29
Figure 2.13 Trends in individual non-employment and workless household rates 1979-2002.....	30
Figure 2.14 Percentage of adults and children living in a jobless household	31
Figure 2.15 Mean consumption expenditure per equivalent adult by income quintile (in PPS) and Q5/Q1 ratio.....	32
Figure 2.16 Trends in educational attainment among the working age population (25-64 years)	34
Figure 2.17 Trends in relative earnings by level of educational attainment for 25-64 year olds (upper secondary and post-secondary non-tertiary education=100)	37
Figure 3.1 Material deprivation within different population groups.....	44
Figure 3.2 Depth of Material Deprivation, UK.....	45
Figure 3.3 Percentage of children who don't have because... ..	47
Figure 3.4 Persistence - Percentage of group below 60% median household income (AHC) in at least 3 out of 4 years	49

Figure 3.5 Age-specific fertility rates at selected ages, by year of birth of woman, 1920 to 1990 (England and Wales) 51

Figure 3.6 Total Fertility Rate (TFR), teenage fertility rate (15-19) and live births rate unmarried women (15-44) England and Wales, 1980-2011..... 52

Figure 3.7 Age-specific fertility rates in UK (1982-2010)..... 53

Figure 3.8 Marriage, civil partnerships and divorce rates..... 54

Figure 3.9 Age standardised death rates, UK, 1980-2010..... 56

Figure 3.10 Age-standardised mortality rates by NS-SEC – males 2001-2010..... 57

Figure 3.11 Life expectancy at birth and infant and neonatal mortality rates - UK 58

Figure 3.12 Life expectancy in the UK, males and females (1981-2025) 59

Figure 3.13 Life expectancy at birth – females (1982-86 to 2002-06) 60

Figure 3.14 Trends in smoking, drinking and obesity – % adult population 1993-2010 (England)..... 61

Figure 3.15 Childhood obesity and overweight – per cent of children aged 2-15 years (England) 1995-2011 62

Figure 3.16 Trends in housing tenure, England 1981-2008 64

Figure 3.18 Housing cost overburden rate in the UK and EU-27 average by income status 66

Figure 3.19 Overall trend in crime rates and homicide rate: Police Recorded Crime and British Crime Survey (England and Wales) 67

Figure 3.20 Trends in theft, robbery and burglary (England and Wales)..... 69

Figure 3.21 Percentage who were victims once or more of domestic abuse (men and women aged 16-59)..... 70

Figure 3.22 Annual rate of prison population 71

Figure 3.24 Youth in custody in secure estates (England and Wales)..... 74

Figure 3.25 Perceptions of national crime and local crime and Worry about specific crimes (England and Wales) 75

Figure 3.26 Average (mean) life satisfaction and worthwhile ratings: by occupational group, 2011–12 (UK) 76

Figure 3.27 Life satisfaction 1973-2012 78

Figure 4.1 Voter turnout for the UK (1979-2010): % of registered voters who actually voted	83
Figure 4.2 Share of eligible population who voted in each general election (1974-2005), by social class (where available)	84
Figure 4.3 Trends in union membership and union density.....	86
Figure 4.4 Share of population belonging to civic organisations – Great Britain.....	87
Figure 4.5 Share who tend to trust in UK parliament, government and legal system.....	89
Figure 4.6 Share agreeing that most people can be trusted.....	90
Figure 4.7 Share on the far right of the BSAS left-right scale.....	93
Figure 4.8 Share on the far left of the BSAS left-right scale.....	94
Figure 4.9 Share agreeing that Britain continues EEC membership.....	97
Figure 4.10 Share of people saying that membership of the European Community (Common Market) is.....	98
Figure 4.11 Share agreeing that getting ahead in society depends on family wealth	99
Figure 4.12 Share agreeing inequalities are “too large” in the country.....	100
Figure 4.13 Share agreeing that the government should redistribute income from the better-off to those who are less well-off	102
Figure 4.14 Share agreeing that people live in need do so because they are lazy (or lack willpower)	103
Figure 4.15 Share who think that there is generally more racial prejudice in Britain now than there was 5 years ago	104
Figure 5.1 Gross minimum wages relative to median wages of full-time workers.....	110
Figure 5.2 Trends in average trade union wage premiums and share of employees whose pay is affected by collective agreement.....	112
Figure 5.3 Tax revenue as percentage a of GDP.....	114
Figure 5.4 Tax revenue by origin as a percentage of GDP.....	115
Figure 5.5 Public social expenditure by type as a percentage of GDP	116
Figure 5.6 Public social expenditure (cash and in kind) by function, % GDP	118
Figure 5.7 Health expenditure (% GDP).....	119

Figure 5.8 Disability, Incapacity and Industrial Injuries benefits expenditure: Total and working age (% GDP)..... 121

Figure 5.9 Unemployment benefit (Jobseekers Allowance) expenditure (% GDP)..... 122

Figure 5.10 Housing Benefit expenditure: total and claimants over 60 years (% GDP)..... 124

Figure 5.11 State Pension expenditure: Total, Basic and Second Pension (% GDP) 125

Figure 5.12 Voluntary and mandatory private social expenditure, % GDP 126

Figure 5.13 Public expenditure on education, % GDP..... 127

Figure 5.14 Public expenditure on education as a % of GDP 128

List of Tables

Table 2.1: Inequality in net worth	21
Table 2.2 GCSE attainment by Free School Meal (FSM) status 2006/07-2010/11 (England)	36
Table 3.1 Percentage of children whose parents say that they don't have because they can't afford by income quintile (2009/10).....	46
Table 3.1 Average number of people having contact with on a typical week day by Social Class	50
Table 3.2 Trends in self-reported sickness and disability by gender – Great Britain.....	63
Table 4.1 Position on a left-right scale - percentage.....	96

Acronyms

AHC	After Housing Costs
ASHE	Annual Survey of Hours and Earnings
BHC	Before Housing Costs
BHPS	British Household Panel Survey
BSAS	British Social Attitudes Survey
FES	Family Expenditure Survey
FRS	Family Resources Survey
FSM	Free School Meals
GDP	Gross Domestic Product
HBAI	Households Below Average Income
IFS	Institute for Fiscal Studies
LCF	Living Costs and Food Survey
LEL	Lower Earnings Limit
LFS	Labour Force Survey
LLMDB	Lifetime Labour Market Database
LPC	Low Wage Commission
NCRS	National Crime Recording Standard
NES	New Earnings Survey
NI	National Insurance
NMW	National Minimum Wage
NS-SEC	National Statistics Socio Economic Classification
OECD	Organisation of Economic Co-operation and Development
ONS	Office for National Statistics
PPS	Purchasing Power Standard
PRC	Police Recorded Crime
ROI	Redistribution of Income analysis
RPI	Retail Price Index
SOC 90	Standard Occupational Classification 1990
SOC 2000	Standard Occupational Classification 2000
UKIP	UK Independence Party
WAS	Wealth and Asset Survey

Executive Summary

Over the 1980s inequality in the UK increased dramatically. Since the 1990s there have been periods of falling inequality and periods of rising inequality but nothing that matches the change in inequality that occurred in the 1980s. Not only did the increase in inequality in the 1980s lead to a high level of inequality from a UK perspective but the UK became one of the most unequal advanced nation and this has remained the case.

Increases in household income inequality were driven by increases in labour market inequalities – earnings and labour force participation – affecting both individual and household inequalities. This is not surprising as the vast majority of household original (market) income is derived from employment income. What has driven these increases in labour market inequality? While there is no consensus, it is generally agreed that globalisation, skill-biased (task-biased) technological change and institutional change all contributed to this increase. Changes to the supply of skills (particularly educational attainment) relative to changes in demand for these skills either exacerbated or ameliorated these pressures. Demographic change also played a part with increases in single-headed households and the extent to which individuals formed households with similarly qualified adults (homogamy).

Social policy, particularly tax and benefit policy, also played a key role in modifying these external pressures. Payment of cash benefits has a strong equalising effect on original income inequality as cash benefits are generally targeted at low income households. When considered together direct and indirect taxation has had a broadly neutral effect on household income inequality since 1980. Analysis of the redistributive effects of tax and benefit policy regimes has shown that over the 1980s the Conservative government policies led to a weakening of the redistributive effects and that the Labour government's policies 1997-2010 led to a strengthening of the redistributive effects. Government policy also has a wider part to play in terms of tackling the root causes of inequality.

In thinking about the UK context for assessing the wider impacts of growing inequality two key features need to be borne in mind: (1) The very large increase in inequality that took place over the 1980, (2) Inequality has remained at a high level over the 1990s and 2000s not just high from a UK perspective but high in an international perspective. In this report we explore the potential impact of these key characteristics of UK inequality on the wide range of social, political and cultural outcomes by comparing trends over a 30 year period. Unfortunately we don't have long time series covering

the full 30 year period we are interested in for all of the social outcomes/variables. As the greatest changes occurred in the 1980s it would be particularly interesting to have series that covers this period.

The evidence we have on material deprivation (2005-2009) shows falling rates of material deprivation, particularly among under 18s, and poverty persistence (1991-2008) but increases in poverty persistence among households with children after 2003. As child poverty rates have fallen this could mean that the most disadvantaged families remained in poverty over this time (selection). Material deprivation rates follow a strong income gradient but so too does the share reporting that they don't have a particular item because this is something that they do not want or need and there is some evidence that families adapted to lower income over the economic recession by re-evaluating 'need'.

When we examine trends in life and death we find that while women have continued to delay childbearing to later ages, with the mode shifting from age 25 in 1982 to age 31 in 2010, after fairly constant rates between 1980 and 2005, fertility rates have trended upwards. This took many demographers by surprise and was certainly not a feature of historical population projections. There is some speculation that part of this upward trend is due to improved maternity arrangements and more generous cash benefits for children. At the other end of life we find falling death rates, steeper for men than women but with a strong social class gradient that appears to steepen for men. In addition infant mortality and neonatal mortality rates also fell over the period, continuing long run downward trends. The falls for infant mortality are greater than for neonatal mortality which paradoxically is likely to be due to advances in antenatal and neonatal medicine.

Not surprisingly these lower mortality rates have led to increases in life expectancy (at birth, age 25 and age 65). These increases are greater for men, who on average have lower life expectancy than women, and life expectancy is projected to continue increasing. Social gradients in life expectancy at birth have persisted despite increases in overall life expectancy.

When individuals are asked about their self-perceived general health, over the limited period for which we have data (2005-09), we find increasing shares of men and women who perceive their general health to be very good.

The relationship between crime and inequality is not straightforward, as crime is affected by a whole range of factors and policies, but increasing economic divisions between individuals and limited opportunities to succeed financially for some groups could be related to increases in particular crimes such as theft and burglary. Poverty brings with it considerable personal strain and strain on personal relationships, increases in in poverty, particularly long-run entrenched poverty, could give

rise to increases in domestic abuse. We find increases in recorded crime rates over the 1980s, particularly the late 1980s through to the early 1990s when inequality increased. There have been falls since 2002 but overall crime rates remain above those recorded in 1981. We have shorter time series for the analysis of particular crimes (over the 2000s) but here we find falling theft, robbery and burglary crime rates and falls in domestic abuse.

Prison populations are clearly affected by a whole range of factors, not just the crime rate, such as sentencing policy, historical crime rates, crime solving, etc. From 1980 prison populations were relatively stable up to 1993 after which there were big increases up to 1997 and further increases since 2001.

With increasing relative child poverty rates over the 1980s, up to over one-third of all children, and a fall since the end of the 1990s to the mid-2000s, we thought it would be informative to examine trends in youth prison populations. We find no discernible trend over the 2000s but a fall in young people being held in custody in secure estates (particularly after 2007/08).

Perceptions of crime and worry about burglary, car crime, violent crime and local crime all fell between 1992 and 2010/11 but perceptions of national crime, no doubt influenced by media reporting of crime, are higher and we find no downward trend over this period.

The extent to which individuals/households are divided by economic means can also affect the way they are divided culturally and the extent to which they feel engaged, and in fact engage, with political and civil society. One dimension of this is voter turnout. Over the period 1980 and 2001 there was a downward trend in UK parliamentary election voter turnout. Voter turnout was 78 per cent in the 1992 general election compared with 59 per cent in the 2001 election. The 1999 EU parliament election was also a low point (24 per cent) but no time trend is detectable in voter turnout rates for EU parliament elections in the UK. There is a social class gradient in voter turnout with professional and managerial classes more likely to vote in elections than unskilled and partly skilled classes. Social class differentials increased between the 1992/1997 elections and the 2005 election.

Divisions can also affect individuals trust in institutions and even in other people. Trust in UK parliament and government is low and seems to be largely affected by political events (MPs' expenses scandal etc). Trust in the UK legal system is higher and while there is some fluctuation over time there is no particular trend over the period 2003-2010. When we look at trust in other people we find the overall rate fairly stable over the period 1998-2008 and the social class gradient has become more compressed (widest in 2004), mainly due to a fall in the extent to which professionals believe other people can be trusted.

In terms of wider participation and membership we look at support for EEC membership and find that this has increased over the 1980s (with a social gradient which narrowed between 1983 and 1991). We find that support for the European Community fluctuates over time, is lower in the UK than the EU average and appears to be influenced by political events. The current economic crisis has led to a deterioration in support for the EU and a rise in political parties that oppose EU membership (in particular UKIP).

We also have some information on how individuals feel that family background (family wealth) is dependent on getting ahead. We find a fall in the overall share of people agreeing with this view. Individuals from lower social classes and, interestingly, with high level and low level educational qualifications are more likely to agree with this view than others. However, we find that social class and educational differences fall over the period 1987-2009. When asked about the reasons why some individuals are poorer, we find the share saying that the reason is that they are “lazy” fell over the period 1985-1994 and then increases up to 2003, since then following a fluctuating path. Individuals with degree level qualifications and above are least likely and those with no qualifications are most likely to believe the poor are simply lazy.

Another measure of the extent to which individuals/societies are inclusive and willing to include people from outside, is racial prejudice. The evidence we have on the extent to which individuals perceive an increase in racial prejudice over the previous five years followed a downward trend between 1987 and 1998 but then increased from 1998 to 2008: a period which was marked by large increases in immigrants entering the UK. Professional classes and individuals with degrees are the least likely to report an increase while the unskilled classes and those with no qualifications are the most likely to express this view.

When asked about the size of inequalities present in society, the vast majority of the UK population think that inequalities are too large. This share increased over the 1980s as inequality increased and then fell through to 2005, after which it has increased again. When individuals are asked whether the government should redistribute from the most well-off to the least well-off, 51 per cent in 1994 agreed. The share fell to 36 per cent in 1999 and then increased between 1999 and 2003 and thereafter fluctuated. Individuals at both ends of the educational spectrum are most likely to agree with government redistribution from the most well off to the least well off.

In terms of policy, a review of the evidence on the impact of the NMW (introduced in 1999) suggests that it has had a small impact on reducing wage inequality. While the NMW has virtually eradicated extreme low pay, its conservative level and other characteristics of the UK labour market leaves the UK with the second highest low pay rate across the OECD.

The high reliance on indirect taxes and social insurance contributions coupled with low rates of tax on wealth means that tax policy overall is broadly neutral in terms of the distribution of income across households. It is how they tax revenue is spent that has the greatest effect on income inequality. Public social expenditure as a share of GDP is influenced by the economic cycle (GDP growth and unemployment in particular). There was a growth in in-kind benefits between 1999 and 2004, reflecting the Labour government's social investment policies in health and education which both benefited from real terms increases. While there have been improvements in educational attainment and health outcomes, inequalities have proved to be harder to tackle.

The retrenchment of the welfare state and major changes to entitlement to welfare benefits by the current Coalition government in response to the 2007 financial crisis mean that the UK is undergoing a period of considerable change and uncertainty, with the future evolution of inequality looking bleak.

1. Introduction

In this report we begin in Chapter 2 by tracking the development of inequality in the UK over a 30 year period. We examine trends in income, earnings, wealth and education inequalities and the role of tax and benefit policies in reducing gross market income inequality. We explore how relative and absolute poverty rates have changed over this period. We report on the various explanations that have been put forward to explain these trends.

In Chapter 3 we examine the relationship between trends in inequality and a range of potential social impacts – material deprivation, social isolation, family and fertility, health, housing, crime and well-being. We are not able to identify causal relationships but we by comparing trends we show how the temporal relationships evolve. Where information is available we examine changes in social gradients.

In Chapter 4 we look at political and cultural spheres – political and civic participation, political values and attitudes to inequality, social policy and the welfare state. We examine trends over time and changes in social and educational gradients where this information is available.

In Chapter 5 we examine the effectiveness of policies in combating inequality and the potentially harmful effects of inequality on society.

2. The nature of inequality and its development over time

2.1 Has inequality grown?

In this section we examine trends in inequality in the UK since 1980. The main focus is on trends in household income inequality and we examine in detail the extent to which levels and trends are shaped by tax and benefit policy and income source. However the main analysis on the effectiveness of policy on combating inequality is located in Chapter 5. We also consider how household demographics influence measures of inequality and how changes in household composition and size have played a part in the evolution of household income inequality trends in the UK over the last 30 years. The two main sources of market income for households are income from employment and income from investments. Wealth and debts describe inequalities in terms of stocks, in contrast to income which represents a flow, but wealth also generates a flow and contributes to income. We look separately at the distribution of wealth and debt of UK households and their evolution over time. With employment income representing well over 80 per cent of household market income (original income) we focus specifically on the relationship between individual earnings inequality, household earnings inequality and household income inequality. We review the evidence of the main drivers behind changes in earnings inequality and the extent to which changes in the demand and supply of skills, in the form of educational attainment, have shaped these inequalities.

In the analysis we consider changes in the overall distribution and also examine changes to different parts of the distribution. We look at changes amongst the lowest income households and assess patterns and trends of relative poverty risk and at the other end of the scale we focus on top income shares. To complete the picture we look at middle shares and review the UK debate on the 'squeezed middle'.

2.1.1 Household Income Inequality

In this section we look at how household income inequality has changed since 1980 and how tax and benefit policy shape the distribution and redistribution of household income. In these data a household is defined as a single person or group of people living at the same address as their only or main residence, who either share one meal a day together or share the living accommodation (ie living room). In all the analysis it is assumed that income is shared to benefit all household members in accordance with the adopted equivalence scales. In the UK there are two main official sources

used to monitor household income distribution. The Department for Work and Pensions (DWP) publish a series based on the Family Resources Survey – the Households Below Average Income (HBAI) series; despite its name it includes information on the complete distribution of income rather than solely focussing on low income families. The Office for National Statistics publishes annual data and analysis on ‘The effects of taxes and benefits on household income’ (ETB) (also known as the Redistribution of Income (ROI) analysis) which is based on the Living Costs and Food Survey (LCF) and its predecessors (mainly the Family Expenditure Survey). Prior to 1994/95 both the HBAI and the ETB series were based on the Family Expenditure Survey. The FRS has a larger sample size (24,000 households) than the LCF (6,000 households) and therefore estimates of the distribution of income are thought to be more reliable from this data source; differences between the two series are relatively small (Jones et al, 2008). Two differences in the definition of income are worth noting. Firstly, for the HBAI series the unit of analysis is the individual, income is computed according to the household in which they live, while the ROI unit of analysis is the household. Secondly, they use different equivalence scales, HBAI uses the modified OECD scale while ROI uses the McClements’ scale. Both sources have strengths and weaknesses and we shall draw on both of these series.

Since 1980 inequality in British household income measured by the Gini coefficient¹ can be characterised by two very distinct periods: a dramatic rise in inequality over the 1980s followed by smaller, non-monotonic, increases over the 1990s and 2000s. For example, recent estimates, using the HBAI series, show that inequality in equivalised disposable household income increased from around 0.25 in 1979 to 0.34 in the early 1990s. Inequality fell slightly in the mid-1990s and then increased again to 0.35 in 2000. The mid 2000s was also a period where inequality fell slightly but by 2009/10 inequality had increased to 0.36 (Jin et al, 2011). In 2010/11 inequality fell to 0.34; the largest one year fall since this series began which seems to be driven by progressively greater falls in real income moving up household income quintiles (Cribb et al., 2012). The precise estimate of inequality depends on the measure of inequality, the unit of analysis, how income is defined¹ and the data source, however the overall pattern of rapidly rising inequality during the 1980s followed by two decades of relative stability, with some evidence of a slight upward trend, is pretty much universal.

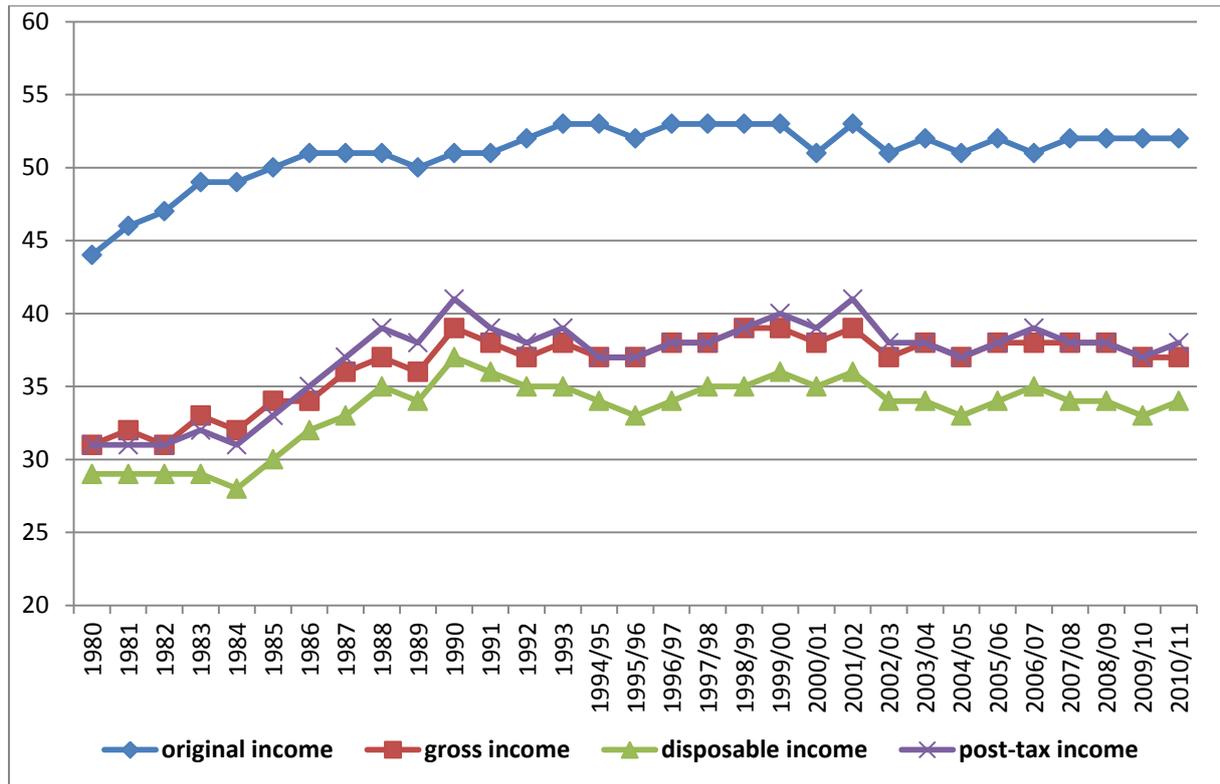
Figure 2.1 maps changes in household income inequality measured by the Gini coefficient and the redistribution effects of taxes and benefits since 1980 using information from the ROI. Firstly, it can be seen that inequality trends in these data follow the same pattern as that described above which draws on the HBAI series. Government policy in the form of tax and welfare policy plays a significant

¹ The Gini coefficient is a summary index of inequality ranging from 0, complete equality where each member of a population has an equal share, to 1, where one member of a population has everything.

role in terms of the distribution and redistribution of household income. Inequality in original income, sometimes referred to as market income, from employment and investments is greatly reduced by the payment of cash benefits (gross income), by over 10 points in the Gini coefficient, due to the fact that cash benefits are disproportionately received by low income families. Direct taxes also reduce inequality but by a considerably lesser extent (3-4 points) as the lowest income households tend not to pay tax (disposable income) and while income tax is progressive amongst tax payers some forms of tax are regressive among higher income individuals (National Insurance contributions). Indirect taxes (such as VAT) have a disequalising effect as lower income households tend to spend a higher proportion of their income on goods and services liable to these taxes (post-tax income). It can be seen from Figure 2.1 that overall tax policy (direct and indirect taxes in aggregate) since 1986 has either had no effect on gross income inequality or has had a disequalising effect. The redistributive effects of taxation result from the ways in which tax revenues are spent rather than how the revenue is raised.

One point that is worth highlighting is that in the most recent observations for 2010/11 show that inequality in original and gross income is unchanged according to this data series, compared with 2009/10, but inequality in disposable and post-tax income increases. This suggests that the effect of the recession so far has led to an increase in disposable income inequality as a result of the incidence of direct taxes becoming more regressive at the household level. This is at odds with the HBAI series which, as noted above, shows a fall in inequality between 2009/10 and 2010/11. The HBAI series is derived from a larger survey and is considered to be more reliable in terms of measuring year-on-year changes.

Figure 2.1 Household income inequality 1980 to 2009/10 (Gini coefficient)



Sources: Office for National Statistics – The effects of taxes and benefits (ETB) data series

An analysis of the impact of government tax and benefit policies estimates that the 1997-2010 Labour government's policies directly led to a lower level of income inequality than would have been the case if they had simply uprated the policies they inherited from the Conservative government in 1997. Uprating in line with the inflation (Retail Price Index – RPI) would have resulted in inequality 3.4 points higher and uprating in line with GDP would have resulted in 1.6 points higher (Adam and Browne, 2010). In contrast, the same study, estimates that the 1979-1997 Conservative government's tax and benefit policies directly led to increases in income inequality.

When inequality is measured by the 90/10 ratio it is found to follow a similar trend to the Gini coefficient while the 75/25 ratio increased much less (Jones et al, 2008). The reason for this is that the main story of inequality over the last 30 years in the UK has been about the extent to which employment growth (participation and earnings) benefiting higher income households and the extent to which benefits and pension income have supported the relative incomes of lower income households.

The measure of income examined so far is based on a before housing costs² (BHC) measure which is the general practice when estimates of the complete distribution of income are computed. After housing costs³ (AHC) measure of income is often favoured when the focus is on low income households. Where there is limited choice over housing cost and quality, as can be the case for social rental tenants, and for pensioners who own their homes outright, the AHC measure of income tends to be regarded as a better reflection of these individuals' living standards (Jin et al, 2011, p71).

In the following analysis we compare changes in disposable household income inequality before and after housing costs using the HBAI series. Incomes are net of direct taxes and are expressed as the equivalent for a childless couple using the Modified OECD equivalence scale.

Figure 2.2 shows changes in income inequality measured by decile ratios. We concentrate on two ratios: 50/10 – to look at changes in the dispersion of the lower half of the distribution and the 90/10 to look at changes from top to bottom. The 90/50 ratio, which is a measure of dispersion of the top half of the distribution, is not shown as housing costs make very little difference to this ratio, with the BHC ratio falling marginally below the AHC ratio.

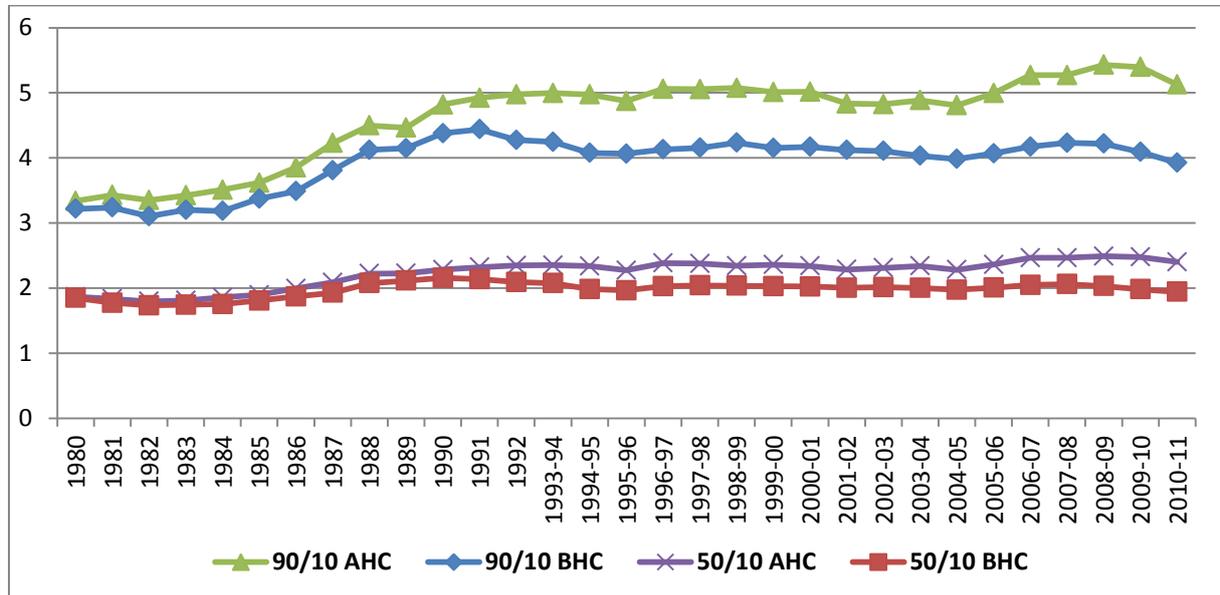
We observe the same time trend in these measures of income inequality as that shown in Figure 2.1 with inequality rising steeply over the 1980s, particularly in the second half, and then a much more stable pattern of small fluctuations in inequality through to 2008/09. The effect of the recession has led to a fall in inequality in both ratios. The 90/10 BHC series follows a very similar trend to the disposable income Gini coefficient series in Figure 2.1 (although the ETB series does not record a fall in inequality). The comparison between the BHC and AHC estimates available in this series reveal a divergence from around 1990. While the BHC measures show a reduction in inequality in the early 1990s this is not observed in the AHC measure. In addition the AHC measures show a much greater increase in inequality from 2004/05 up to 2008/09. Overall these figures show that in 1980 an individual at the 90th percentile of the BHC disposable household income distribution enjoyed an income 3.2 times as high as an individual at the 10th percentile, by 2007/08 this ratio had increased to 4.2, falling back to 3.9 in 2010/11. However, after housing costs had been taken into account an individual at the 90th percentile enjoyed an income 3.3 times as high as an individual at the 10th percentile in 1980 (ie little different from the BHC ratio) but by 2008/09 this had increased to 5.4 before falling back to 5.1 in 2010/11.

² Negative incomes are reset to zero. Negative income can occur as a result of self-employment losses.

³ Housing costs include: rent (gross of housing benefit), water rates, community water charges and council water charges, mortgage interest payments, structural insurance premiums (for owner occupiers), ground rent and service charges.

Overall the difference in these two series suggests that the cost of housing increased to a greater extent among low income households.

Figure 2.2 Changes in income inequality (decile ratios) before and after housing costs (GB)

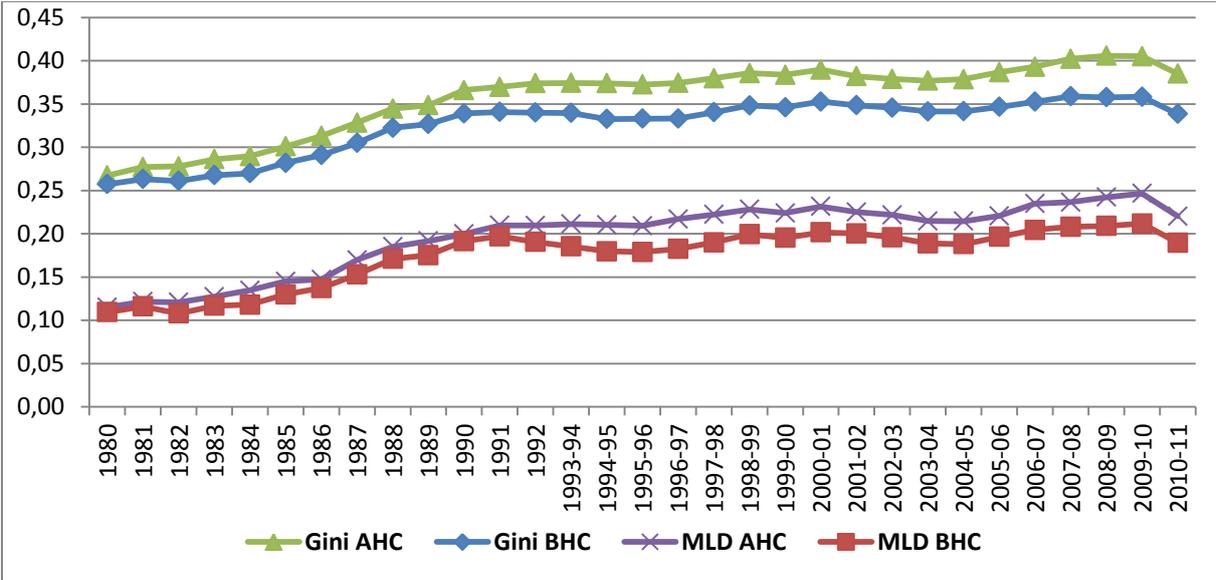


Source: IFS, <http://www.ifs.org.uk/bns/bn19figs.xls>

Notes: All statistics are based on IFS calculations. The methodology employed is the same as is used in the Government's official publication: Households Below Average Income (HBAI). Incomes are net of direct taxes and measured at the household level. They are expressed as the equivalent for a childless couple using the Modified OECD equivalence scale. 1980-1993-4 FES, thereafter FRS.

If instead of looking at ratios which compare only 2 points in the income distribution, we consider inequality measures that summarise information for all households' incomes into single indices we find some interesting differences but overall a similar pattern (Figure 2.3). We include two measures of inequality which are sensitive to income changes in different parts of the income distribution. The Gini coefficient is relatively sensitive to changes in the middle of the distribution (around the mean) and the Mean Log Deviation (MLD) is more sensitive to changes at the lower end of the distribution. Both measures show higher income inequality after housing costs have been deducted and both show a divergence after 1990 with a continuing upward trend to 2009/10 in the AHC measure and very little overall change in the BHC measure. According to these data series the Gini coefficient increased by 9.5 points in the before housing costs measure and 12.8 points in the after housing costs measure between 1980 and 2009/10 and then fell by 2 points between 2009/10 and 2010/11.

Figure 2.3 Changes in income inequality (Gini and MLD inequality indices) before and after housing costs (GB)



Source: IFS, <http://www.ifs.org.uk/bns/bn19figs.xls>

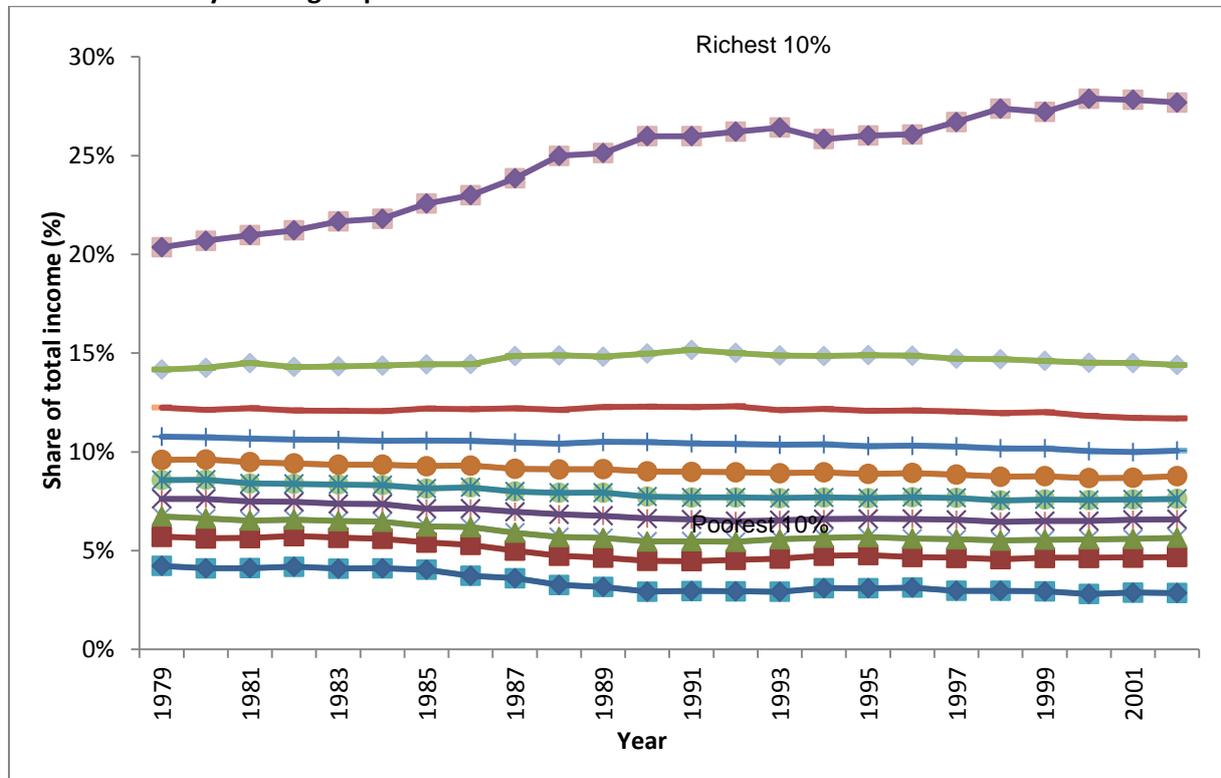
Notes: All statistics are based on IFS calculations. The methodology employed is the same as is used in the Government's official publication: Households Below Average Income (HBAI). Incomes are net of direct taxes and measured at the household level. They are expressed as the equivalent for a childless couple using the Modified OECD equivalence scale. 1980-1993-4 FES, thereafter FRS.

An alternative way to look at inequality is to express the share of total income held by different groups of individuals. Much of this work has focussed on examining the share of income held by the richest individuals or households. Atkinson has studied trends in UK top incomes going back as far as 1908 (Atkinson, 2005). He finds that the share of total personal income of the top percentile groups (1%, 0.5%, 0.1% and 0.05%) fell throughout most of the 20th century levelling off in the mid-1970s before increasing strongly again up to 2000. He estimates that before the First World War the top 0.1% (1%) received more than 10% (20%) of the total gross income, falling dramatically so that by 1978 their share was 1.25% (5.7%). 1979 marked a turning point and over the last two decades of the 20th Century the top 0.1% (1%) increased their share to 4.8% (13%). Atkinson's estimates are based on personal income estimates drawn from administrative tax data. Goodman and Oldfield (2004) take a different approach and estimate income shares based on equivalised household income drawn from household surveys. Figure 2.4 reproduces some of their analysis which looks at changes in income shares over the period 1979-2002/03. The chart in the first panel shows how the share of total income received by the richest 10 per cent of individuals dramatically increased over this period – from around 20 per cent to 28 per cent of total income. In contrast, the share of total income received by the poorest 10 per cent of individuals declined – from around 4 per cent to 2.8 per cent. More detailed analysis in the lower panel of this figure shows that the greatest changes have occurred at the extremes of the distribution with the biggest gains in the top decile enjoyed by the

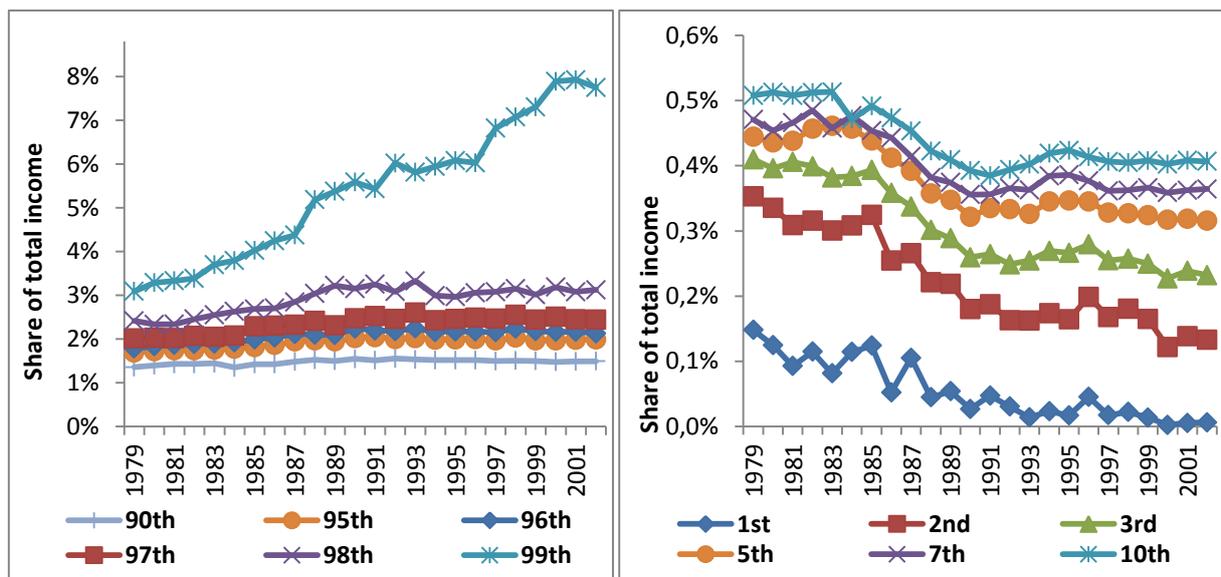
richest 1 per cent. Analysis of income source shows that these very rich individuals are much more likely to gain their income from self-employment and investments than individuals on lower income.

Figure 2.4 Changes in income shares 1979-2002/03

Income shares by decile group



Income shares by percentile group amongst top and bottom 10 per cent



Note: Points are drawn from calendar years up to and including 1992, and financial years thereafter.

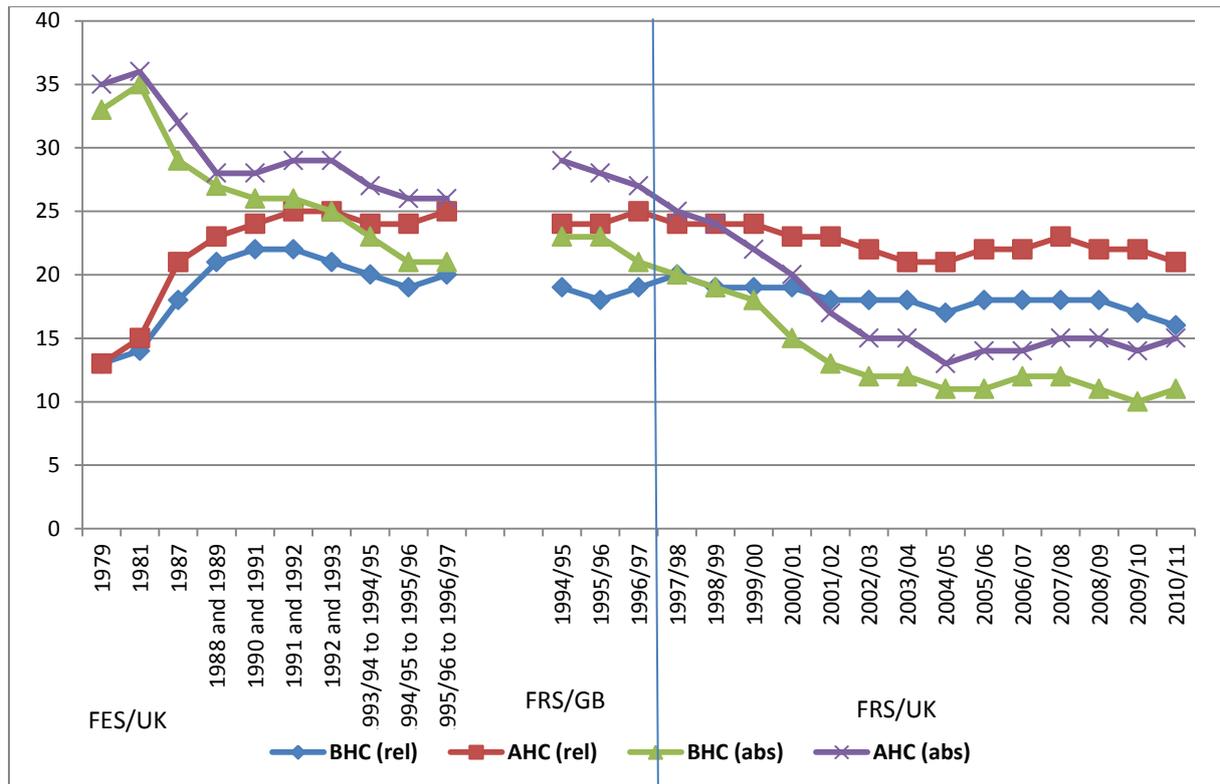
Data: Family Expenditure Survey, 1970 to 1993/94; Family Resources Survey, 1994-95 onwards

Source: Figures 3.9 and 3.10 reproduced with kind permission from Goodman and Oldfield (2004)

In recent work Atkinson and Leigh (2010) have shown that the changes in top income shares are related to changes in tax rates. When they analysed historical data for five Anglo-Saxon countries with relatively similar backgrounds and tax systems (UK, US, Australia, New Zealand and Canada) they found that reductions in the marginal tax rates on wage income or investment income were associated with increases in the share of the top percentile group.

It is interesting to look at what these changes mean in terms of income poverty. Income poverty can be defined in a relative sense or in absolute terms. In the UK relative poverty is typically defined as contemporary equivalised household income below 60% of the median. Income poverty defined in an absolute sense is expressed as a fixed level of income defined at a point in time (which may or may not be linked to the cost of a number of identified items/services) which in some cases is uprated in line with inflation. Some countries, such as the US, have an official poverty line. This is not the case in the UK where absolute poverty is usually defined in terms of a relative measure of income poverty fixed at a point in time. Figure 2.5 shows changes in relative poverty (rel) and absolute poverty (abs), where absolute poverty is defined as income less than 60% median household income fixed to the 1998/99 value. Real income growth leads to a fall in absolute poverty over time. Both these measures are computed before and after housing costs have been deducted. Breaks and discontinuities in the data series prohibit a consistent time series over the whole period but a number of findings are clear. Between 1979 and 1989 absolute poverty declined from around one-third to one-quarter of all households, at the same time relative poverty rates increased. Poverty measured before and after housing costs, for both measures of absolute and relative income poverty, diverged between 1979 and 1996 according to data in the Family Expenditure Survey. In the second period 1994/95-2009/10 we once again see falling absolute poverty rates which is not surprising given the real increase in household incomes over this time period but following the recession absolute poverty rates before and after housing cost increased between 2009/10 and 2010/11. Relative measures of poverty continued to fall, affected by falling median incomes which in resulted in a fall in the level of income at the 60% median mark and consequently fewer households below this level. After housing cost measures of poverty are higher than before housing cost measures, reflecting the fact that although households with lower income often receive financial support to cover housing costs, these costs represent a much smaller share of household income among higher income households.

Figure 2.5 Percentage of the population below 60% median household income – contemporary income (rel) and held constant in real terms, 1998/99 income (abs)



Notes: FRS figures are for financial years; FES figures are for single and combined calendar years.

Source: HBAI series, Department for Work and Pensions/ONS.

In the next two figures we look at changes in relative income poverty since 1994/95 for individuals living in a selection of different types of households before housing costs have been deducted (Figure 2.6a) and after housing costs (Figure 2.6b). Of the household types considered single parent households have the highest poverty rates (before and after housing costs). Since 1997 poverty rates among these households have fallen which has no doubt been affected by policies aimed at reducing child poverty through tax credits and other changes to welfare benefits alongside other initiatives to increase lone parent employment (such as the New Deal for Lone Parents).

The work of Gregg, Harkness and Machin (1999) highlighted the very big increases in child poverty that occurred in Britain over the period 1968 to 1995/96. They estimate that in 1979 13% of children were living in relative income poverty (AHC)⁴ increasing to 33% in 1995/96. They estimate that around half of the children living in poverty were living in households where no adult was in work. In 1999 the Labour government pledged to eradicate child poverty in a generation (20 years); and later set intermediate goals such as halving the rate in 10 years. The definition of poverty in relation to the pledge was defined as 60% of median equivalised household income. The Child Poverty Act 2010

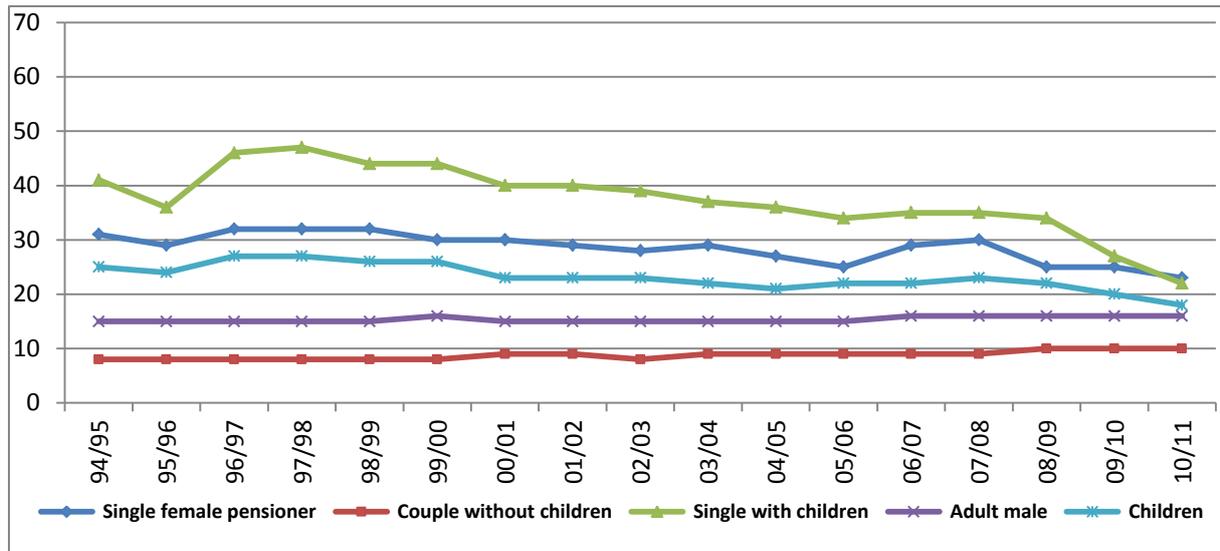
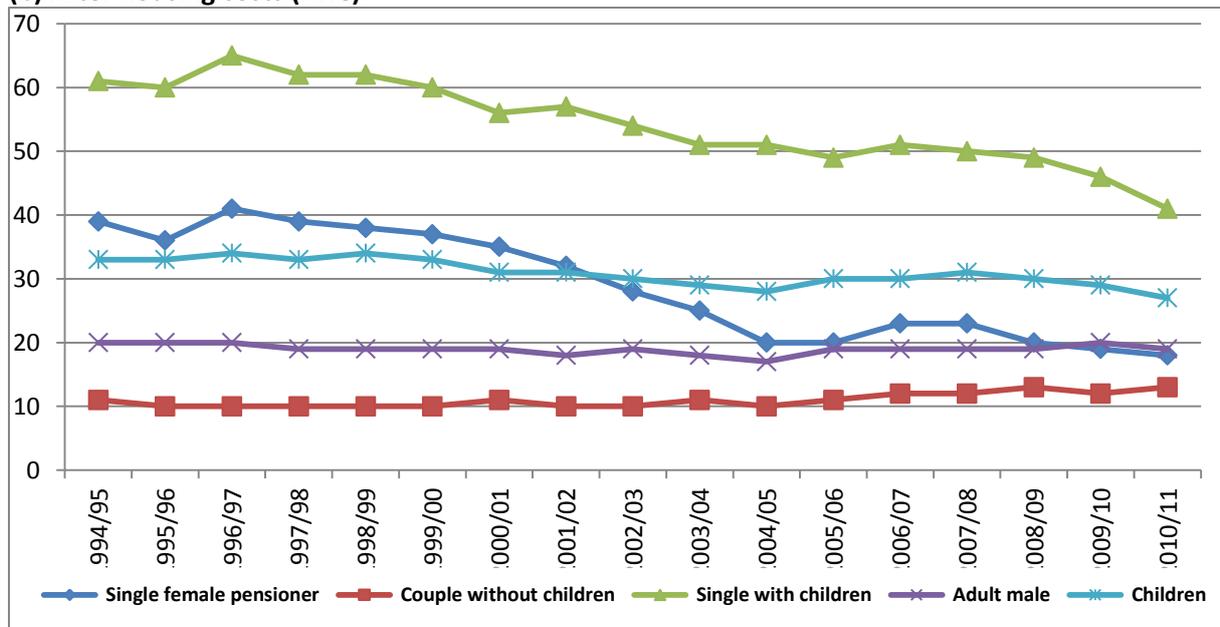
⁴ They define poverty as living below half average (mean) equivalised household income. The estimates for BHC are lower but the increases are similar; 8% in 1979 rising to 24% in 1995/96.

enshrined in legislation the 2020 child poverty target, established a Child Poverty Commission (later changed to a Child Poverty and Social Mobility Commission by the Coalition government) and set a requirement for the government to publish a regular child poverty strategy and annual progress reports⁵. Along with monitoring progress there has followed a series of consultations on how poverty should be defined in this context. In 2002 the DWP conducted the first consultation, publishing its conclusions in 2003 stating that a tiered approach was the best way to monitor progress on child poverty over the long term. This involved a set of inter-related indicators (tiers) capturing different aspects of poverty but recognised that income is at the core of people's conception of poverty. The first two tiers would measure income poverty according to absolute and relative thresholds respectively, while the third would comprise both low income and material deprivation⁶. The 2010 Act included a relative income target, a combined low income and material deprivation target, an absolute low income target and a persistent poverty target. On 15 November 2012 a further consultation on measuring child poverty was launched. A number of potential dimensions are proposed: income and material deprivation, worklessness, unmanageable debt, poor housing, parental skill level, access to quality education, parental health and family stability. While governments continue to debate and set their own targets for monitoring progress in tackling this difficult issue it seems inevitable that outside commentators will continue to assess the extent of child poverty based on a relative income measure, consistent with most people's conception with poverty.

Figure 2.6a shows falling child poverty rates (60% median equivalised household income) since 1997, falling from 27% in 1996/97 to 18% in 2010/11 for BHC estimates. The estimated rates for AHC measures are higher and have fallen by less from 34% to 27% (Figure 2.6b).

⁵ <http://www.parliament.uk/documents/commons/lib/research/rp2009/rp09-062.pdf>

⁶ *Department for Work and Pensions, Measuring child poverty: Final conclusions 2003.*

Figure 2.6 Percentage of the population below 60% median household income**(a) Before housing costs (BHC)****(b) After housing costs (AHC)**

Source: HBAI series, Department for Work and Pensions/ONS. Figures are for the United Kingdom from 2002/03 onwards. Earlier years are for Great Britain only.

The next highest risk group out of these household types is single female pensioner households. It is interesting to note that while falls in poverty rates for these householders have been modest, when income is measured before housing costs, poverty rates halved from 40% in 1997 to 20% in 2005 when income is measured after housing costs (Figure 2.6 (b)). This large drop in after housing costs poverty rates among single female pensioner households meant that before housing costs poverty rates were higher than after housing costs poverty rates in 2010/11. This suggests that housing costs have fallen for these pensioner households, which is consistent with increasing shares of pensioners

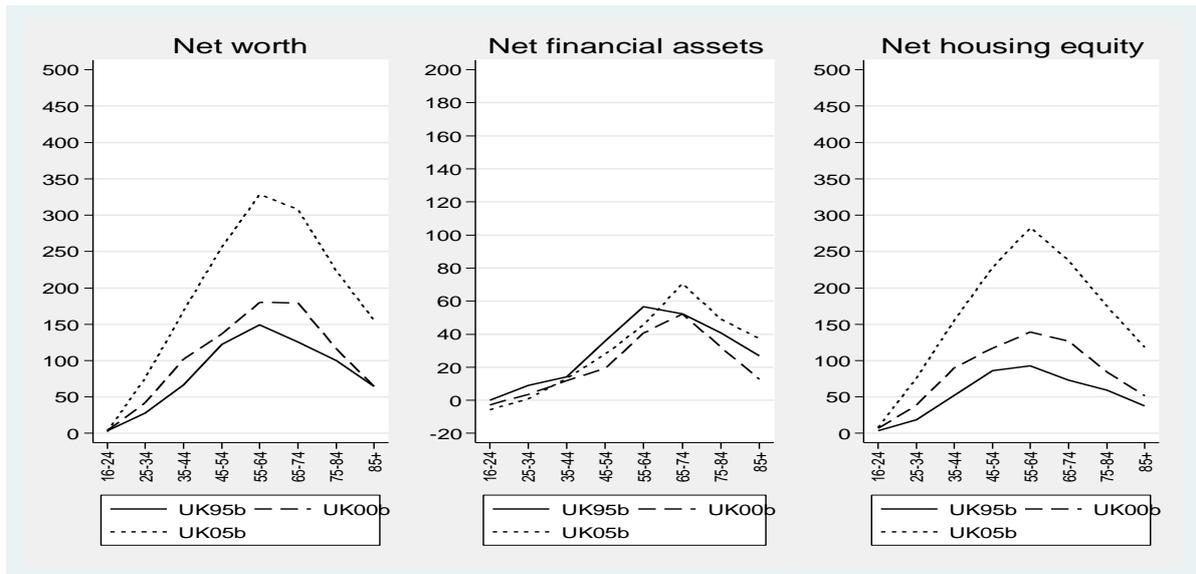
owning their homes outright. Other household types without children have seen very little change in poverty rates over this 15 year period and some modest increases for individuals living in couple households.

2.1.2 Wealth and Debt Inequality

While household income and individual earnings provide information on current standard of living, household wealth provides additional information on past financial well-being (to the extent that savings represent the excess of income over expenditure) and an indication of future financial health. We are interested in looking at wealth because it represents the accumulative effect of historical inequalities (earnings, income, inheritance) and its role in driving future inequalities (through the ability to invest in education and skills, housing, business enterprise, retirement income, bequests). We know that wealth holdings are greatly influenced by the lifecycle so we start by examining the changing age profiles of net worth and its components: net financial assets and net housing assets. For the UK we have three observations 1995, 2000 and 2005 which are after the main increase in income inequality over the 1980s. The age-wealth profiles (Figure 2.7) show how wealth holdings typically change with age: lower at younger ages and reaching a peak prior to retirement in the 55-64 age group. However, it is worth noting that we are not able to separate time and cohort effects with the information available. We observe from Figure 2.7 increases in net worth overtime and particularly between 2000 and 2005. Examination of the components of net worth shows that this was driven by increases in housing equity. Evidence on net financial assets shows falls, particularly large increases between 1995 and 2000, among the 45-54 and 55-64 age groups. The second figure in this panel shows that for all age groups 2000 real values of net financial assets are at or below 1995 values. This could in part be a switch to housing assets and an increase in average gross financial debt⁷. In 2005 real net financial wealth is only higher than 1995 values for household heads over the age of 65. The third figure in this panel shows that the increase in net worth was driven by increases in net housing equity.

⁷ In 1995 overdraft values were not recorded in the BHPS nor were educational loans. The omission of educational loans is likely to have a negligible impact as they were still uncommon even in 2000 (Cowell, Karagiannaki and McKnight, 2012).

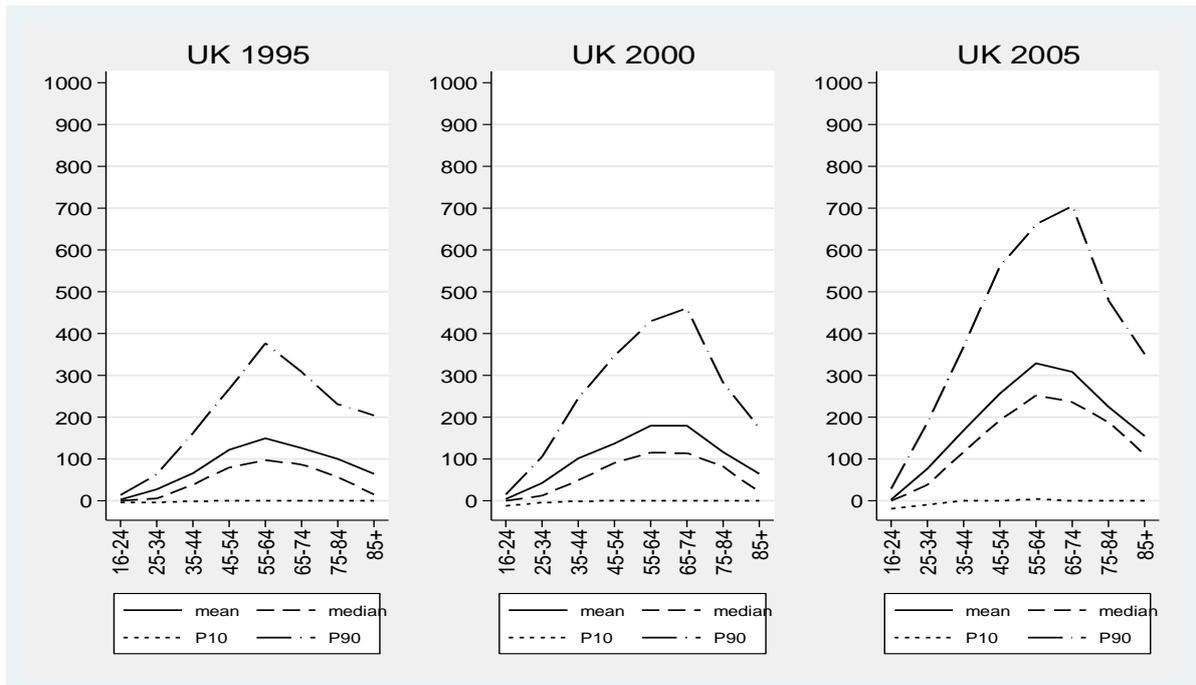
Figure 2.7 Age profiles in mean net worth, net financial assets and housing equity by year



Note: All monetary values are expressed in thousands 2005 Euros (Euro 16 ppp)
 Source: BHPS 1995, 2000 and 2005 (Cowell, Karagiannaki and McKnight, 2012)

Figure 2.8 plots, within each age group, different points in the net worth distribution in 1995, 2000 and 2005: the mean, median, the 10th and 90th percentile. We find very little change at the 10th percentile, although there is evidence that negative net worth has deepened, but increases in the mean and median and large increases at the 90th percentile over this period.

Figure 2.8 The distribution of net worth (mean, median, P10 and P90 percentiles)



Note: All monetary values are expressed in thousands 2005 Euros (Euro 16 ppp)
 Source: BHPS 1995, 2000 and 2005 (Cowell, Karagiannaki and McKnight, 2012)

Table 2.1 contains various estimates of net worth inequality. These estimates of inequality show how wealth is much more unevenly distributed than income or earnings. This difference is due to two main factors: the much greater concentration of wealth among the wealthiest people, at one end of the distribution, and the significant fraction of people who are in overall debt, at the other end of the distribution. For the UK we find falling wealth inequality between 1995 and 2005. The reason for this fall is that the increases in net worth over this period were concentrated in housing net worth which is more evenly distributed than financial assets. Over this period home ownership rates increased and between 2000 and 2005 there was a rapid increase in house prices. Further analysis suggests that the increase in net housing equity and the associated fall in wealth inequality can be explained by house price rises (Bastagli and Hills, 2013) and demographic change (Cowell, Karagiannaki and McKnight, 2012). It would appear from these results that the dramatic increases in income inequality in the 1980s did not lead to increases in wealth inequality between 1995 and 2005 even when changes in house prices are taken into account.

Table 2.1: Inequality in net worth

Year	Gini	GE(2)	P90/P50	P75/P25	P75/P50	P25/P50
1995	0.687	1.523	5.343	76.761	2.649	0.034
2000	0.655	1.099	4.822	52.732	2.343	0.044
2005	0.587	0.810	3.391	21.950	1.942	0.088

Source: BHPS 1995, 2000 and 2005 (Cowell, Karagiannaki and McKnight, 2012)

Net worth (NW1) is equal to the sum of net financial assets (=TFA1-NHD) and housing equity which is equal to the sum of own principal residence, investment real estate (TNF1) minus mortgage debt.

Educational loans to finance higher education have grown in importance in the UK since they were introduced in 1990. The introduction in tuition top-up fees and the replacement of most student maintenance grants with student loans in 1998/99 in England marked the point at which take-up and loan values increased⁸. Information on student loans was not collected in the BHPS in 1995 but even by 2000 educational loans were only held by around 1 per cent of households, increasing to 6 per cent in 2005 (Cowell, Karagiannaki and McKnight, 2012). A breakdown by age groups shows the much greater prevalence among younger households with 15 per cent of households with heads aged 25-34 and 32 per cent of those with heads aged 16-24 holding educational loans in 2005. Unfortunately we don't have information on the size of these loans but we do not that the reforms

⁸ Official statistics on take-up and loan values can be found at www.slc.co.uk

introduced in 2012 which saw the introduction of tuition fees of around £12,000 a year for many students will lead to further increases in the future.

The measure of net worth used so far in this section, drawn from the British Household Panel Survey, does not include information on cash held in current accounts or the value of durables, valuables, collectibles or pensions. In 2006-08 a new dedicated biennial longitudinal household survey on wealth was conducted in the UK for the first time. The Wealth and Asset Survey (WAS) interviewed around 30,000 households in the first wave and 20,000 in a second wave that took place 2008-10. It is too soon for these data to provide much more than a snapshot of the distribution of wealth and its components, however due to the survey's comprehensive design it does provide an informative picture of household wealth. Hills and Bastagli (2013) show that when wealth is measured including estimates of financial, housing, physical and pension wealth just under 2 per cent of households in 2008-10 had zero or negative net wealth. At the other end of the scale, even though surveys don't capture the very wealthiest, estimates from WAS show that the top 1 per cent of households held 13 per cent of total wealth, and their average total wealth was more than £5 million (in 2008-10 values). Estimates of inequality measured by the Gini coefficient for total wealth (including private pensions) are 0.62 in 2006-08 and 0.61 in 2008-10 which are very similar to the BHPS estimates of inequality in the much narrower definition of wealth - net worth.

2.1.3 Labour Market Inequality

The overall level and rate of change in income inequality is predominately driven by changes in original income from employment and investments, most importantly employment income which typically accounts for over 80% of original (market) income. In the previous section we looked at changes in the inequality of wealth from which investment income can be drawn, in this section we focus on inequalities that derive from the labour market. The amount of employment income received by a household is determined by the number of workers, their hours of work and their wage rates. All of these factors directly affect the distribution of household income and all can be influenced by government policy.

A recent OECD study has shown that the two main factors that explain changes in household earnings inequality in the UK (mid-1980s to mid-2000s) are inequality in male earnings, which has increased inequality, and increases in female labour force participation, which has limited inequality growth (OECD, 2011).

In this section we start by examining trends in unemployment as unemployment determines the ability of individuals to receive earnings from employment in the first place, we then look at the

trends in earnings inequality by examining different measures of earnings (over different time frames) and for different groups of workers. We build up the picture from the bottom by starting with changes in hourly wage inequality then weekly earnings inequality, which takes into account differences in weekly hours of work, and finally annual earnings inequality, which takes into account differences in work intensity over a year. Finally we look at changes in the concentration of work across households.

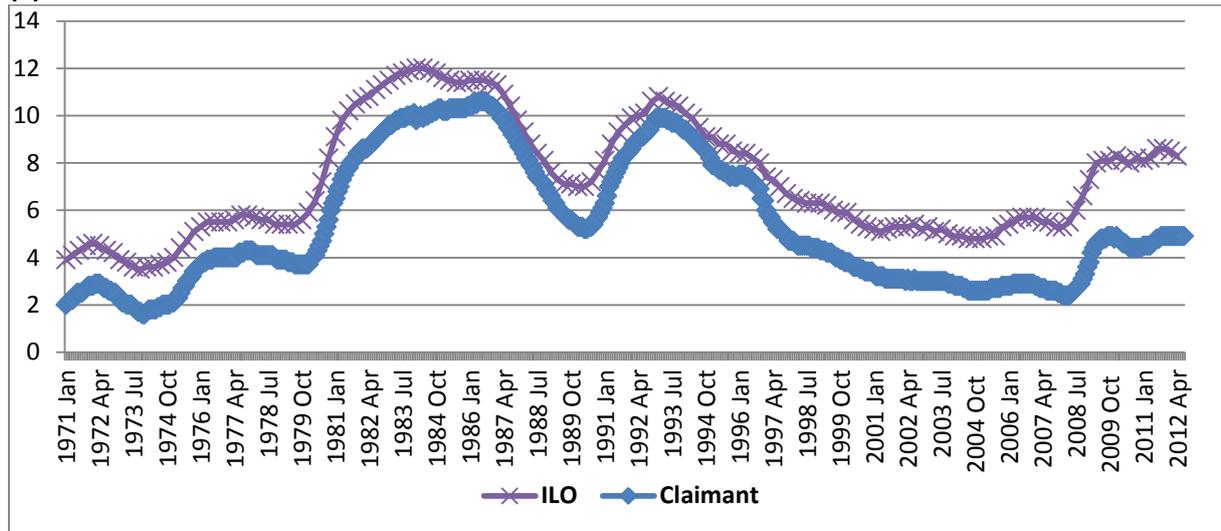
Figure 2.9 maps the trends in unemployment rates since the early 1970s. Two measures of unemployment are shown; defined in terms of receipt of unemployment benefit (claimant rate) and the ILO definition of unemployment⁹. Figure 2.9b shows gender specific ILO rates. These series show the deep recessions and associated high unemployment rates of the 1980s and the early 1990s and the increase in unemployment following the 2008 financial crisis. A number of interesting findings emerge. The ILO rate is higher than the claimant rate and this is to be expected as not all unemployed people qualify for unemployment benefit. For example, where an individual has an insufficient National Insurance contribution record to qualify and lives in a household where income is high enough to mean that they do not qualify for means-tested unemployment benefit (such as where a partner is employed), individuals who left their job voluntarily or before joint claims were introduced and only the main claimant in a household was included in the count. The gap between the two series varies over time and some of this is associated with tightening up the qualifying rules for unemployment benefit such as a reduction in entitlement to contribution based benefits from 12 months to six months of any spell of unemployment when Jobseeker's Allowance (JSA) was introduced in 1996, and it is evident that the gap between the claimant rate and the ILO rate has widened since this date. In the current recession the rates diverge by around 2 percentage points and therefore the claimant rate now severely underestimates the true rate of unemployment which is better captured by the ILO rate. The concern must be that unemployment unprotected by unemployment benefit has a greater negative impact on household income and the evidence presented in this figure suggests that the current recession is hitting household incomes hard through unemployment even though unemployment rates, so far, are lower than in the previous two recessions. The trends by gender shown in Figure 2.9b show that the early 1990s recession hit men harder than women and the same is true, to a lesser extent, in the current recession. Potential explanations for this are that due to the gendered nature of employment by industry and occupation,

⁹ The ILO defines individuals as unemployed if they are without work, want to work, have actively sought a job in the last four weeks and are available to start work in the next two weeks. Individuals who are out of work, have found a job and are waiting to start it in the next 2 weeks are also defined as unemployed. The claimant definition consists of all people claiming unemployment benefit (Jobseeker's Allowance since 1996). These individuals must declare that they are out of work, capable of, available for and actively seeking work during the week in which their claim is made.

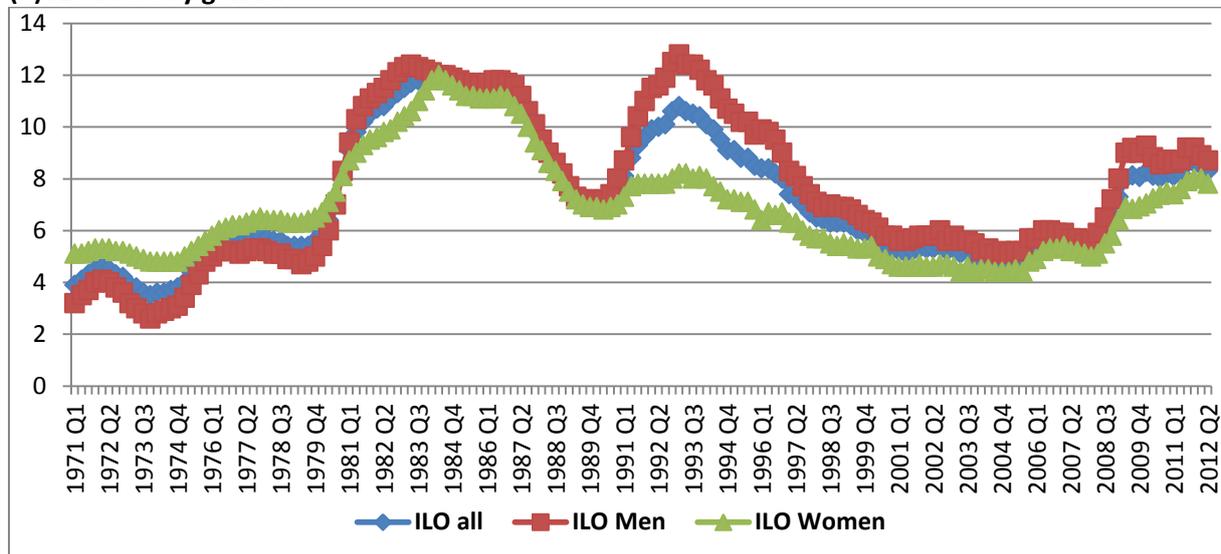
the sectoral impact of recessions is often uneven and industrial restructuring that often occurs during recessions (and booms) is not gender neutral. Women are still more inclined to take on additional caring roles when out of work and are therefore less likely to classify themselves as unemployed and women are more likely to take on part time work, which increased over the 1990s. It is interesting to note that the ILO unemployment rates were higher for women than men over the 1970s.

Figure 2.9 Trends in UK unemployment 1971-2012 (working age)

(a) ILO and Claimant rates



(b) ILO rates by gender

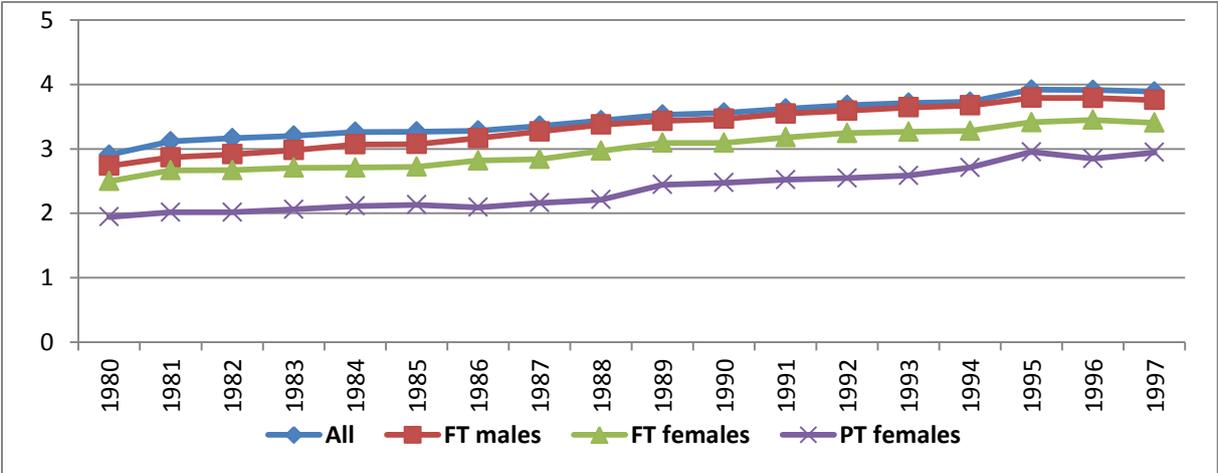


Source: Claimant rates derived from the ONS BCJE series based on administrative unemployment benefit claim data; ILO rates from ONS series based on Labour Force Survey household data.

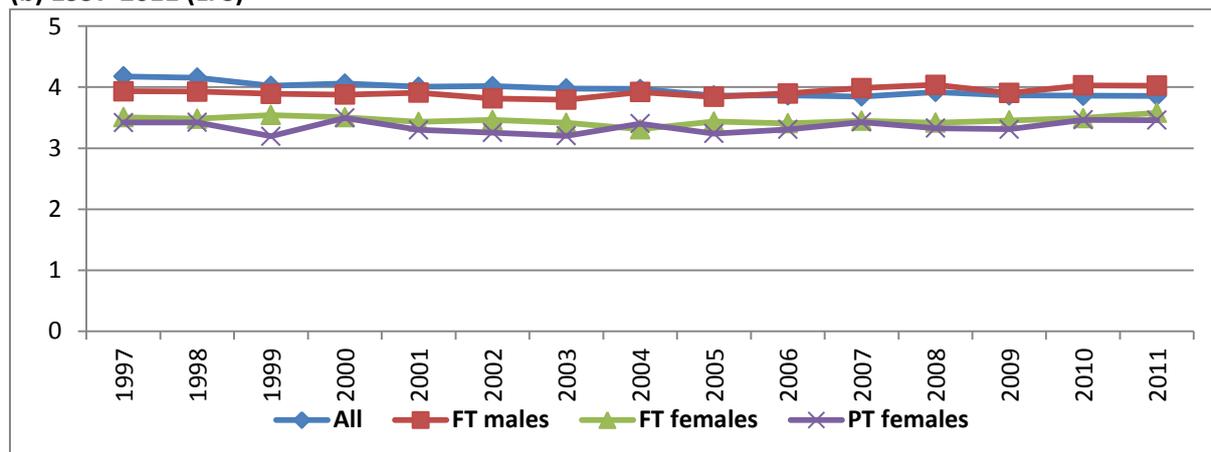
Previous studies have highlighted the non-random nature of unemployment with low-skilled, less qualified, younger and older individuals experiencing more unemployment in terms of frequency of spells and duration of spells.

Turning now to labour market inequalities for those who are in work, Figure 2.10 shows hourly wage inequality among employees between (a) 1980 and 1997 and (b) 1997-2011 measured by the 90/10 ratio. The data for the 1980-1997 period are drawn from the New Earnings Survey (NES) that was superseded by the Annual Survey of Hours and Earnings (ASHE) in 2004¹⁰. The NES data is drawn from an administrative source which collected annual information on employees from employer’s payroll records. It was a large survey comprising a 1% random sample of all employees with a National Insurance (NI) record and collected annual information in relation to their employment when earnings were above the NI Lower Earnings Limit (LEL). Over this period we observe an upward trend in wage inequality and unlike the trend in household income inequality this is not isolated to the 1980s and inequality continues to increase through the 1990s. Hourly wage inequality is highest among full-time male employees and increases by more for this group over the second half of the 1980s than among either full or part-time female employees. Upward trends are also observed among female employees working full and part time. Wage inequality is lowest among female part-time employees.

Figure 2.10 Changes in hourly wage inequality (90/10 ratio) among employees (a) 1980-1997 (NESPD)



¹⁰ ONS have created a back series for ASHE dating back to 1997 using information from the NES.

(b) 1997-2011 (LFS)

Source: (a) New Earnings Survey Panel Dataset. (b) Labour Force Survey, <http://www.ons.gov.uk/ons/rel/lms/labour-market-statistics/october-2011/index-of-data-tables.html#tab-Earnings-table>. The data shown are for the second quarter (April-June).

Note: There is a discontinuity in this NESPD series in 1995/96 due to an administrative change.

Figure 2.10b extends the time period and shows how hourly wage inequality among employees has evolved since 1997. These data are from a different source, the Labour Force Survey, which has better coverage of low paid workers¹¹ than the New Earnings Survey but wage information is only available from 1992 and sample sizes were small until the end of 1995. The LFS is a quarterly household survey but here we present the observations for the second quarter (April – June) which is closest to the date of the annual return of the NES in April. As you would expect the 90/10 ratio is higher in the LFS data than in the NES data but the estimates are not that dissimilar, with the exception of female employees employed part-time for whom inequality is much higher in the LFS data than in the NES data. This is undoubtedly due to the poor coverage of low paid female part-time employees in the NES. A number of interesting findings emerge from the LFS series over the period 1997-2011. There is a slight downward trend in overall wage inequality over this period. Inequality among male full-time employees fluctuates around 4 (full-time male employees at the 90th percentile enjoy a wage rate four times the size of full-time male employees at the 10th percentile). From the mid-2000s inequality among male full-time employees exceeds inequality among all employees. The downward trend in inequality among all employees is most likely to be the result of increasing shares of female employees among whom wage inequality is lower. While it is well documented that women employed part-time, on average, earn less than women employed full-time, inequality (90/10 ratio) is very similar among part-time employees as it is among female full-time employees.

¹¹ Because the New Earnings Survey only collected information on employees earning above the LEL some low paid workers were excluded, also coverage of low paid workers employed in small enterprises was believed to be incomplete. Although the LFS has better coverage of low paid workers than the NES it is known that hourly and weekly earnings are underestimated. This is thought to be primarily due to proxy responses.

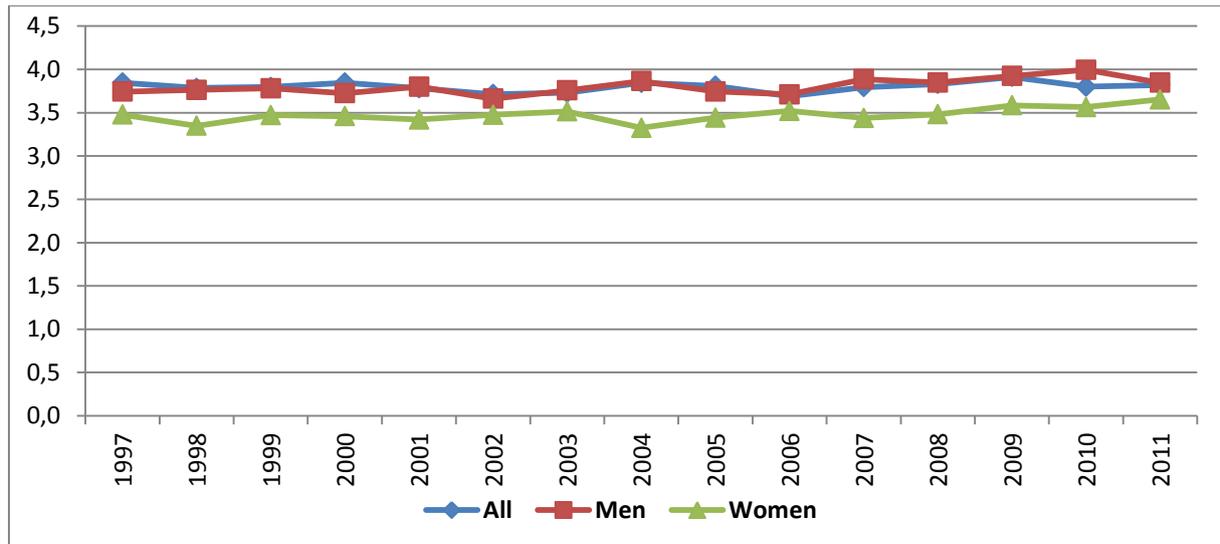
As noted earlier, weekly earnings inequality can differ from hourly wage inequality as a result of differences in weekly hours of work across the wage distribution. The ONS monitors patterns of pay in the UK using data from the Annual Survey of Hours and Earnings (ASHE) and has produced a series dating back to 1997 (Pike, 2012). Focusing on full-time employees¹² they find very little change in the 90/10 ratio of gross weekly earnings between 1997 and 2011 (3.5 in 1997, 3.6 in 2011). Extending the sample to include all employees (Figure 2.11) using data from the LFS shows that, although inequality is higher due to inequality in weekly hours of work, inequality is fairly stable with small fluctuations.

More detailed analysis of a combined NES/ASHE series dating back to 1970 shows that inequality in weekly earnings of full-time male employees measured by the 90/10 ratio increased from 1977 until around 2005. For full-time female employees inequality in weekly earnings started increased a little later in 1979 and levels off earlier in 1995 (Stewart, 2011). Stewart also examines changes in the upper half (90/50) and the lower half (50/10) of the distribution. He shows that there were much greater increases in the upper half of the male weekly earnings distribution than the lower half and inequality continued rising for somewhat longer. For women the increases in the two halves of the distribution was much more even. He also shows that the greatest increases in inequality are observed among inequality indices that give most weight to earnings differences/changes among higher earnings.

Machin (2011) using a harmonized NES/ASHE series, constructed for the work of the National Equality Panel (2010), of weekly wages over the period 1970-2009 concludes from his analysis that wage inequality trends can be characterised by four distinct decades: (1) the 1970s was a decade where inequality narrowed slightly; (2) the 1980s was a decade of rapidly increasing inequality; (3) more muted increases in inequality occurred over the 1990s; and, (4) in the 2000s inequality increases were concentrated in the upper part of the distribution.

¹² Employees on adult rates and whose pay was unaffected by absence in the pay period.

Figure 2.11 Changes in weekly earnings inequality (90/10 ratio) among employees 1997-2011

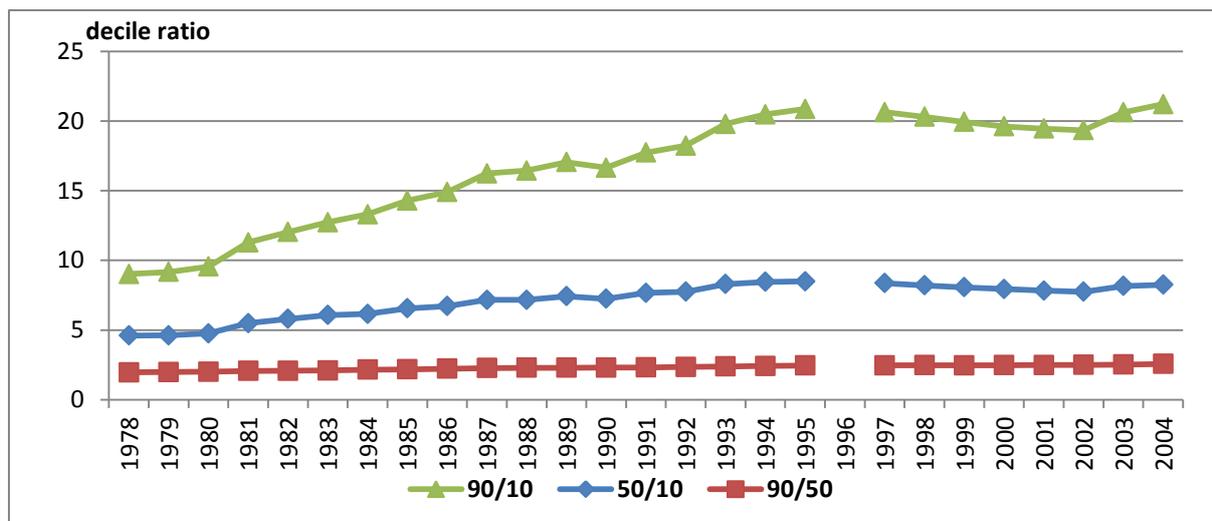


Source: Labour Force Survey, <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-222445>. The data shown are for the second quarter (April-June)

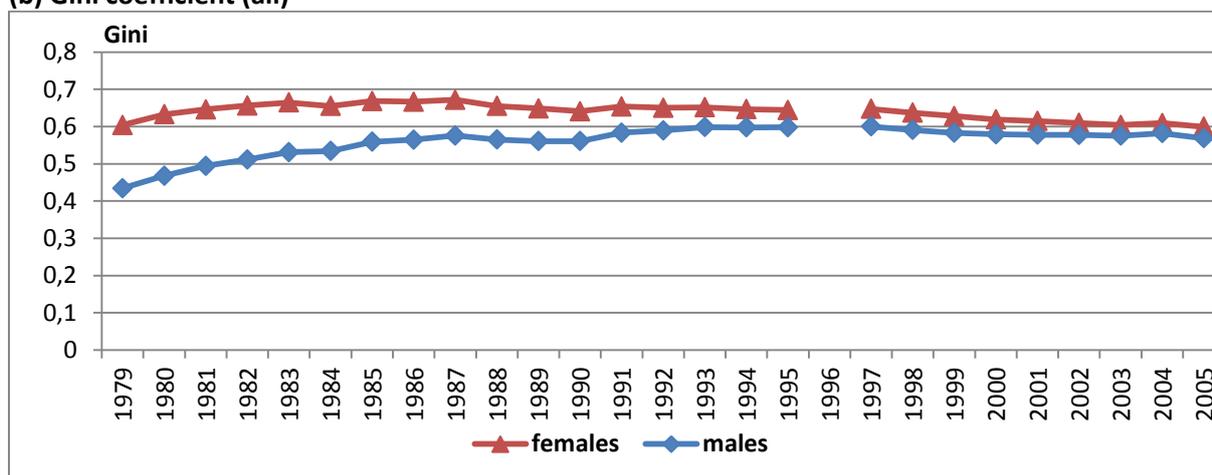
Extending the timeframe further we examine changes in annual earnings. These data are drawn from an administrative data source called the Lifetime Labour Market Database (LLMDB). It is compiled from tax records and is drawn from the same sampling frame as the NES/ASHE and is likely to be the most accurate record of annual employee earnings in the UK. Figure 2.12a shows the decile ratios for working age (22-59/64) employees and it is clear from this chart that the large increase in annual earnings inequality between 1979 and 1995/96 was driven by a widening in the bottom half of the annual earnings distribution (50/10). Inequality in annual earnings from employment is affected by wages, weekly hours of work and number of weeks worked in a year. For example, an increase in part time working can increase annual earnings inequality and a shift from part-time to full-time working can reduce annual earnings inequality. Similarly increases in unemployment resulting in changes in annual hours of work can lead to increases in inequality. To consider the impact of long term unemployment (where unemployment extends to 12 months or longer) Figure 2.12b shows changes in the Gini coefficient for all men and women of working age separately. Here we can see that the increase in annual earnings inequality across the working age population over the 1980s was driven by an increase in earnings inequality among men. This can partly be explained by increasing in earnings inequality for those who are in work and the experience of unemployment during the 1980s recession. For women, increases in employment have led to falling rates of annual earnings inequality among working age women as increasing numbers of women have positive earnings.

Figure 2.12 Changes in annual earnings inequality 1978/79 – 2004/05

(a) Decile ratios (employees)



(b) Gini coefficient (all)



Source: LLMDB (Dickens and McKnight, 2008 and McKnight, 2009)

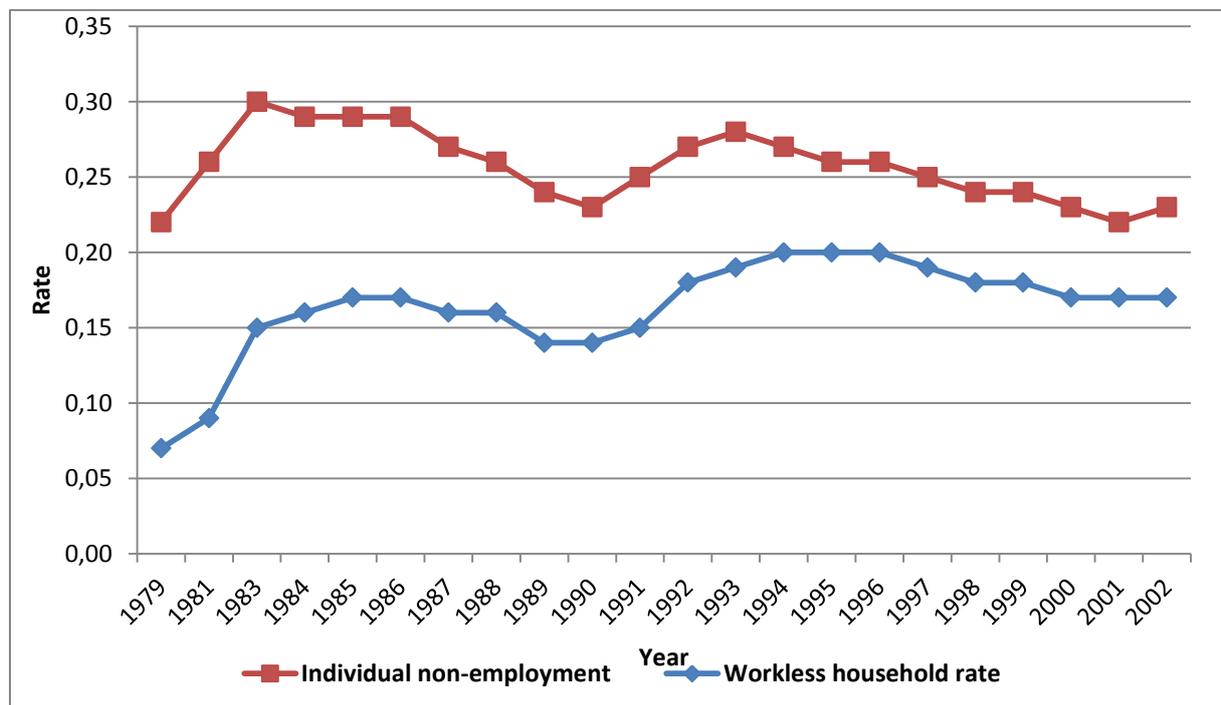
Note: there is a break in the series in 1996 as an administrative change to the system created a discontinuity. The sample is restricted to adults over the age of 22 years and under 60 (women)/65 (men).

Bell and van Reenen (2010) argue the case for examining annual earnings data as they show that there has been a large and sustained increase in the earnings of those at the top of the distribution (particularly over the decade 1998-2008) driven by increasingly large annual bonus payments made to the better off. These payments have been made primarily in the financial sector (60% of the rise in the income share of the top decile is estimated to have accrued to finance workers) and would be almost entirely missed in the more frequently analysed weekly earnings data. Decile ratios can also fail to pick up these big changes as they simply compare two points in the distribution. They show that the share of the wage bill going to the top decile of workers has increased substantially over the last 30 years and that all the gains of the top 5% of workers since 1998 have resulted from substantial increases in bonus pay, much of which was in the form of bankers bonuses.

The distribution of work across individuals is uneven with unemployment more likely to be experienced by individuals who have low levels of qualifications, are young or nearing retirement, work in low paid occupations, have disabilities, some ethnic minority groups and who live in particular regions of the UK. Work is also unevenly distributed across households with household composition (number of working age adults (reduces risk), presence of children (increases risk)), individual characteristics of household members and the extent to which individuals with disadvantaged or advantageous characteristics are concentrated within households all playing a part.

In understanding household income inequality trends an important change occurred in the UK concerning the polarisation of work across households. Gregg and Wadsworth, who have conducted a considerable amount of research on workless households in the UK, found that over the 1980s there was a convergence in the individual non-employment rate and the workless household rate (see, for example, Gregg and Wadsworth, 2003). Figure 2.13 reproduces their analysis of the changes in individual non-employment and workless household rates 1979-2002. The convergence in these two rates means that non-employment has become more concentrated within households.

Figure 2.13 Trends in individual non-employment and workless household rates 1979-2002

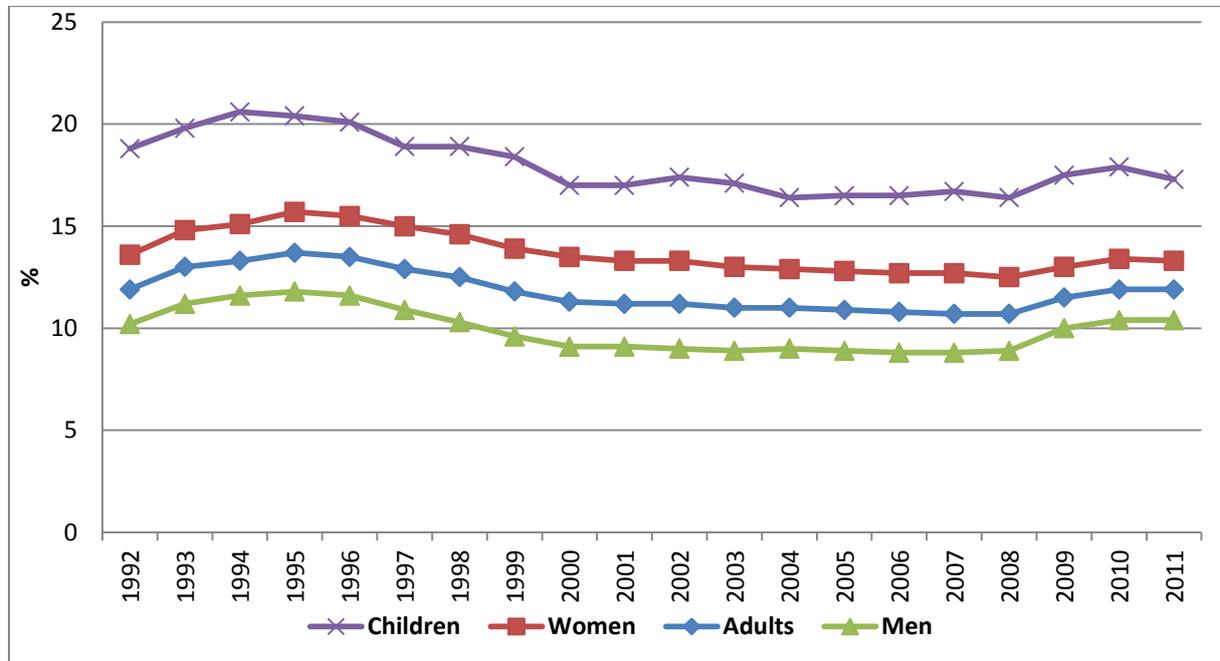


Source: Gregg and Wadsworth (2003), based on LFS data

It is also the case that children are most likely to be living in a workless household and part of the child poverty reduction strategy has been to increase employment among households with children. Figure 2.14 shows the percentage of working age adults and children living in a jobless household based on Eurostat (LFS) estimates for the UK. There is some evidence from the data in this chart that

the risk of children living in a workless household, relative to all adults, narrowed in 2000 but the impact of the financial crisis in 2008 has led to marked increases in workless household rates in the UK which have hit children and men particularly hard.

Figure 2.14 Percentage of adults and children living in a jobless household



Source: Eurostat (LFS)

Notes: Adults aged 18-59, children aged 0-17

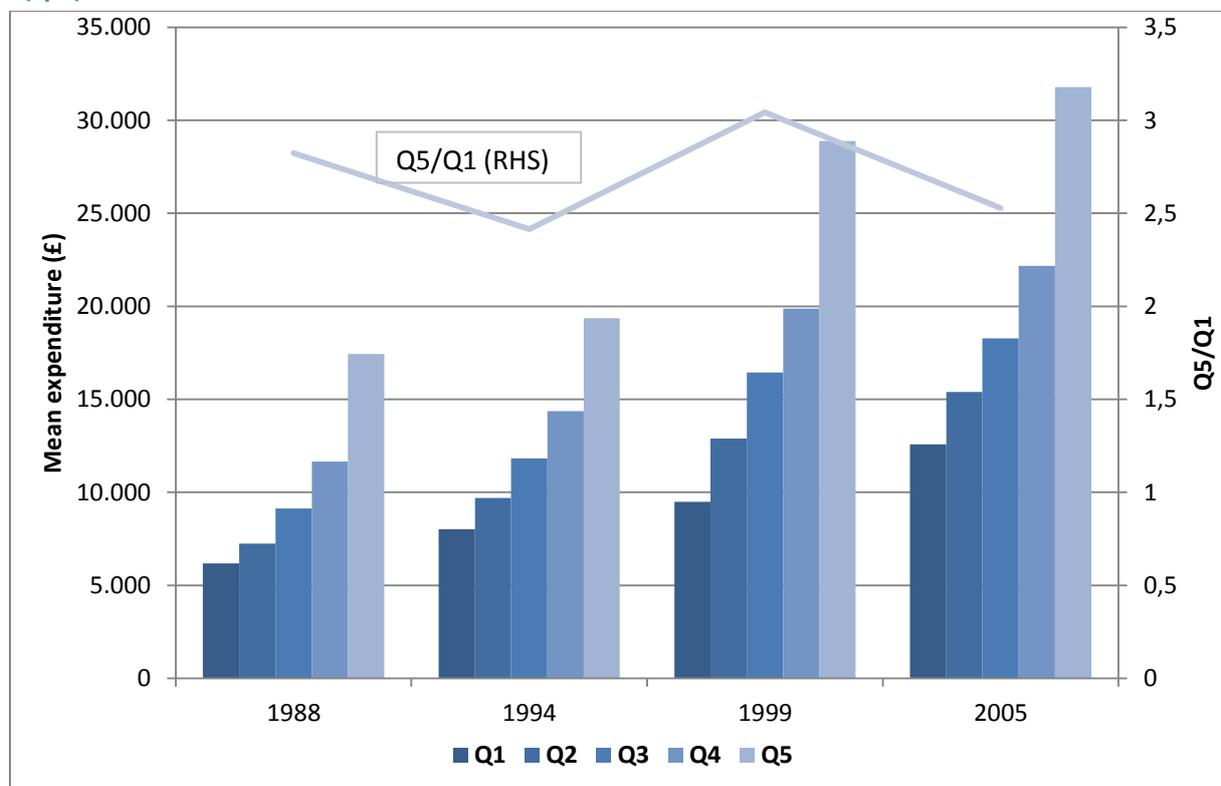
Consumption inequality

An alternative approach to measuring inequality in material circumstance is to use a measure of consumption rather than income. In fact data on consumption is not available which forces analysts to adopt expenditure data as a proxy. It has been argued that consumption (expenditure) provides a better measure of material circumstance as income typically fluctuates in the short term while individuals can smooth consumption through borrowing or running down savings and therefore it is a better indicator of ‘permanent’ differences between individuals (Blundell and Preston, 1998; Goodman and Oldfield, 2004).

Figure 2.15 shows mean consumption expenditure per equivalent adult by income quintiles for four points in time (1988, 1994, 1999 and 2005) and the Q5/Q1 ratios. The first data point available through Eurostat is 1988 which is towards the end of the big rise in income inequality (see Figure 2.1 above). Between 1988 and 1994 expenditure inequality (the ratio of mean consumption expenditure for the highest quintile to the lowest quintile) fell and this was the result of greater increases in expenditure for the lowest quintile compared with the highest quintile. This is consistent with the fall

in disposable income inequality between these two dates shown in Figure 2.1. However, the information in Figure 2.2 suggests that the increase in expenditure by the lowest quintile could have been on housing costs as BHC 90/10 ratio inequality is unchanged between 1988 and 1994 but AHC income inequality increases. The increase in expenditure inequality between 1994 and 1999 is not matched in the income data as disposable income inequality is the same in 1994 and 1999 (measured by the Gini coefficient), although there are very slight increases in the 90/10 income inequality ratio both before and after housing costs. Looking at the quintile breakdown of average expenditure this increase in expenditure inequality resulted from much larger increases in expenditure in Q5 compared with a very modest increase in Q1. Both expenditure inequality and income inequality fall between 1999 and 2005.

Figure 2.15 Mean consumption expenditure per equivalent adult by income quintile (in PPS) and Q5/Q1 ratio



Source: Eurostat (From UK Family Expenditure Survey)

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hbs_exp_t133&lang=en

Overall these figures suggest some similarities in consumption inequality and income inequality but more detailed analysis extending the analysis back to the mid-1970s suggests a different picture (Goodman and Oldfield, 2004). When income and expenditure Gini coefficients are plotted over the period 1979-1999 (both indexed to 1 in 1979) three distinct periods emerge. During the 1980s while both income and expenditure inequality increase, income inequality growth substantially outstrips

expenditure inequality growth. In the first half of the 1990s there was a large decline in expenditure inequality but income inequality only declined by a little¹³. In the second half of the 1990s income and expenditure inequality moved in unison. What do these results suggest? If it is true that expenditure is a better measure of 'permanent' income than contemporaneous income then these results suggest that while permanent income inequality increased over the 1980s the increase was not as dramatic as the increase in cross-sectional income inequality. In addition, over the first half of the 1990s it is estimated that permanent income inequality fell while cross-sectional income inequality remained largely unchanged (or fell slightly). What can explain this divergence? Blundell and Preston (1998) suggest that the observation that expenditure inequality increased by less than income inequality over the 1980s can be explained by an increase in the short term volatility of income during this period. However, this suggests that short term volatility in the early 1990s must have fallen. McKnight (2000) and Dickens and McKnight (2008) look at changes in earnings mobility (in particular focusing on mobility that leads to falls in long run differences in earnings inequality). McKnight examines hourly wages and her analysis shows that mobility was lower in the period 1984-1990 compared with 1977-1983 and remained at this lower level in the period 1991-1997, particularly for male employees. When she extends the analysis to allow for periods out of the labour market when earnings are zero she continues to find a fall in mobility between the first two time periods, particularly for prime age males. Dickens and McKnight examine similar changes in mobility but use annual earnings. They find falling mobility over the 1980s and particularly in the period 1987 to 1994 and evidence of increasing mobility 1997/98-2004/05. The evidence on earnings mobility suggests that falling mobility, certainly through to the mid-1990s, meant that increases in cross-sectional inequality became more representative of long run differences between individuals than in the past. As earnings represents the largest component of household income, the evidence on earnings mobility is at odds with the theory that income inequality increased by more than expenditure inequality over the 1980s because of increases in the short term volatility of income leading to a divergence in cross sectional income and 'permanent' income.

Overall expenditure inequality is an important factor in understanding differences in material circumstance. However, the explanation for differences in the trends in income and expenditure inequality in the UK remains a puzzle.

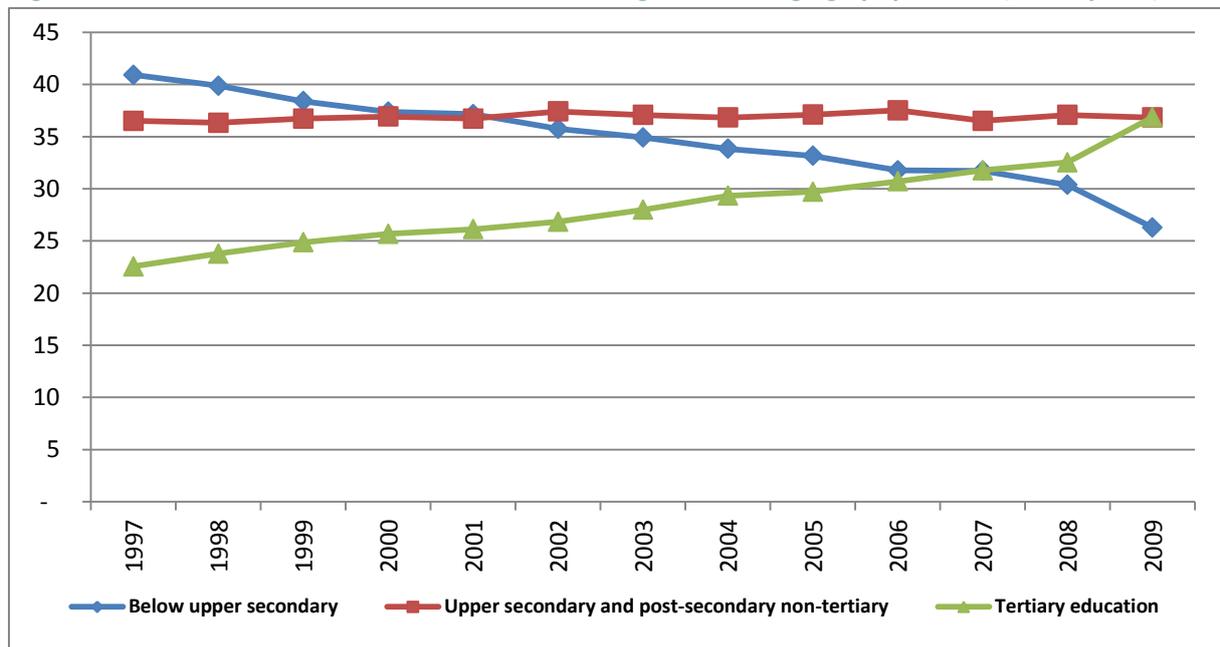
¹³ An interesting difference emerges between the IFS estimate of income inequality in 1988 and 1994 and the ROI estimates presented in Figure 2.1. The IFS estimates show an increase in income inequality between 1988 and 1994 while the ROI estimates record the same level of inequality in 1988 and 1994. One difference is that the IFS estimates are computed from the HBAI series (FES up to 1994 then switch to FRS) where the unit of analysis is the individual while the unit of analysis of the ROI series is the household (FES up to 1994 then switch to LCF predecessor). We also find these differences between Gini coefficient estimates from these two series (compare Figures 2.1 and 2.3). Between 1988 and 1994 both series were computed from the FES.

2.1.4 Educational Inequality

Inequality in education can be looked at in a number of ways. Most commonly educational inequality is measured by examining the distribution of educational attainment among adults. This can be done for the whole population or within different age cohorts. The UK, like most OECD countries, has been characterised by increasing rates of educational attainment.

Using internationally comparable data, Figure 2.16 shows trends in educational attainment in the UK among the working age population (25-64 years) derived from OECD data. Attainment is measured in terms of ISCED-97 levels and there has long been concern about the classification of UK qualifications to ISCED levels which led to a revision in 2009. This revision has led to a significant discontinuity even though the back series has been revised in line with the new mapping. While it would be unwise to compare the end year (2009) with previous years in terms of precise shares it is possible to see from this chart that there has been a significant increase in tertiary education since 1997 and a commensurate fall in below secondary education as the highest level of education achieved.

Figure 2.16 Trends in educational attainment among the working age population (25-64 years)



Source: OECD Education at a Glance 2011, Table A1.4

There are wide disparities in educational attainment according to parental background. McKnight (2005) shows GCSE performance (A*-C) in England and Wales by parental social class over the period 1989-2000. These attainment inequalities increased under the Conservative government between 1989 and 1994 due to greater relative gains made by children from more privileged backgrounds and

then they narrowed between 1998 and 2000 due to plateauing at the top and some catch up by children from less privileged backgrounds. In 2000 69% of children from managerial/professional social class backgrounds attained five or more A*-C grade GCSEs compared with 30% of children from unskilled manual social class backgrounds. Pupils eligible for FSMs are also more likely not to achieve any GCSE passes compared with other pupils (McKnight, 2005). A consistent series by social class background is not available for the whole 30 year period that we are interested in. An alternative measure which compares the attainment of pupils eligible for Free School Meals (FSMs)¹⁴ with other pupils. The first panel of Table 2.2 shows the shares of pupils gaining 5 or more GCSEs grades A*-C (this is considered to be the expected level of attainment for this age group) by FSM status for pupils in England, educated in maintained schools for the years 2006/07-2010/11. The figures show considerable gains in GCSE attainment for all pupils and a narrowing in the gap between these two groups from a 27 percentage point gap in 2006/07 to a gap of 18 percentage points in 2010/11. The lower panel shows the share of pupils gaining 5 or more GCSEs grades A*-C which include English and mathematics – this is generally the preferred measure of performance. A different picture emerges from this series. While attainment has improved for both groups of pupils, there is really very little change in the gap in performance between pupils eligible for FSMs and all other pupils. In 2010/11 only 35% of pupils eligible for FSMs attained a grade A*-C in GCSE English and mathematics at the end of secondary education (normally age 16) compared with 62% of all other pupils. It is also interesting to note that the gap between the two series was very similar in 2006/07 and it is clear the divergence occurred over a fairly short period of time as pupils eligible for FSMs gained more GCSE A*-C grades in subjects other than English and mathematics. These examinations not only mark the performance of pupils as they complete their secondary education but they are also used to assess the performance of English secondary schools and the published results are available to assist parents and pupils in their choice of secondary school. There is therefore a strong incentive for schools to maximise pupil attainment within the criteria. There has been growing concern about the value of some of the subjects studied at GCSE level and qualifications which are regarded (for administrative purposes) as GCSE equivalents. This has led to the current government moving to assessing and publishing the performance of schools (in England) on the basis of achievement across a core of academic subjects – English, mathematics, history or geography, the sciences and a language. This has been term The English Baccalaureate or EBacc.

¹⁴ Where household income is low and families qualify for certain means-tested benefits children qualify for Free School Meals and this indicator is frequently used to identify children from low income backgrounds.

Table 2.2 GCSE attainment by Free School Meal (FSM) status 2006/07-2010/11 (England)**Per cent**

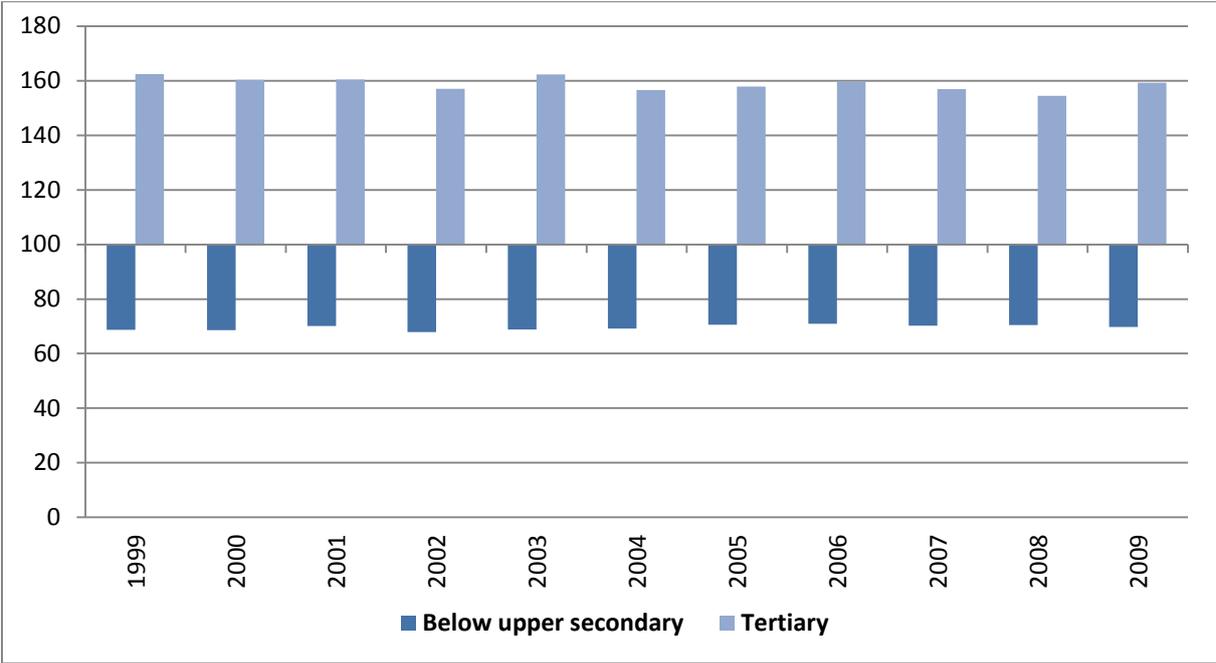
	2006/07	2007/08	2008/09	2009/10	2010/11
5+ GCSEs A*-C					
FSM	36.2	41.0	48.9	58.6	64.6
non FSM	63.4	67.7	72.8	78.8	83.0
<i>Gap (ppt)</i>	27.2	26.7	23.9	20.2	18.4
5+ GCSEs A*-C incl. English and maths					
FSM	21.4	23.8	26.6	31.2	34.6
non FSM	49.3	51.7	54.3	58.8	62.0
<i>Gap (ppt)</i>	27.9	27.9	27.7	27.6	27.4

Source: DfE Statistical First Return, sfr03 2012 (DfE, 2012).

This gap in educational achievement between more and less advantaged children is common across OECD countries but the UK performs particularly badly on these equity measures (OECD, 2010). There is also a problem of a relatively high proportion of pupils performing at a low level in an international context. This has been described as the long tail of low achievement. Some detailed analysis of GCSE attainment data by Clifton and Cook (2012) by pupil postcode and performance of England's secondary schools shows that there is a gap in attainment prior to pupils entering secondary schools, with a strong gradient in primary attainment tests taken at age 11 by the level of deprivation within a postcode (small geographic unit). They also show that not only do pupils living in the most deprived areas attend poorer performing schools (in terms of the assessments made in school inspections carried out by OFSTED) but within all school types (categorised according to OFSTED rating) poorer pupils attainment is below children from more advantaged backgrounds. It is clear from this that to improve educational attainment among poorer students will take more than just improving the quality of the schools that they attend.

In terms of returns to education, Figure 2.17 shows the gross weekly earnings of 25-64 year olds with tertiary and below upper secondary education relative to those with upper secondary and post-secondary non-tertiary education (=100). As these OECD data (drawn from the UK LFS) use the ISCED-97 classification which was subject to a revision in the mapping between qualifications and ISCED levels in 2009 for the UK there is a discontinuity at this point. However it is possible to observe that there is a large positive earnings premium associated with a tertiary education (even greater for females than males; OECD 2011) which has withstood the expansion of the working age population attaining this level (see above).

Figure 2.17 Trends in relative earnings by level of educational attainment for 25-64 year olds (upper secondary and post-secondary non-tertiary education=100)



Source: OECD Education at a Glance 2011, Table A8.2a

2.2 Whom has it affected?

The rise in inequality affected different groups of individuals/families in different periods. It seems that the increase over the 1980s resulted from an overall increase in the dispersion of income and earnings and a fall in mobility rates. Latterly the increase seems to have been driven by an increase in top income shares (particularly at the very top). The evidence on child poverty rates demonstrates that up to the late 1990s families with children were hit relatively hard but much has been done to improve the income of families (through active labour market programmes and income supplements); at least prior to the current economic crisis.

In the UK there does appear to have been a demand shift away from the low skilled over this 30 year period. Even though educational attainment has increased there remain strong social gradients in attainment and therefore the low skilled have been affected most by trends over this time period.

2.3 Interdependence between the above inequalities over time

There are strong, complex interdependencies between inequalities in education, earnings, income and wealth which have been demonstrated in this chapter but more work could be done to understand these inter-relationships.

2.4 Why has inequality grown?

As in many countries there are a number of hypotheses that have been put forward to explain inequality trends. There does appear to have been a demand shift away from low skilled workers as a result of a combination of skilled-biased technological change and globalisation. In addition institutional change, particularly the demise of institutions such as trade unions that previously protected the rights and pay of low skilled workers has also played an important role in shaping these trends. On the supply side there have been large demographic shifts with increases in educational attainment and female labour force participation that have influenced these trends.

Gosling and Lemieux (2004) examine the extent to which labour market reforms explain changes in wage inequality in the UK and the US. They analyse comparative trends in wage inequality, unionization and minimum wages over the period 1979-1999. Important differences in the evolution of real wages between men and women are found with falling median and P10 male wages in the US, coupled with largely unchanged P90 real wages over this period resulting in a divergence between median and P10 wages and P90 male wages. In contrast P10 wages for women fell between 1979 and 1984, increasing again slightly after 1994, female median real wages remained fairly stable but female P90 wages for women in the US increased substantially, overall leading to an increase in the dispersion of female wages. In the UK male and female median real wages grew over this 20 year period, more so for women than for men. P10 male wages were relatively unchanged while P10 female wages increased but for both men and women P90 real wage increased by most, although for men the increase stopped in around 1992. The divergent trends between male and female median wages over this period in the US and the UK led to a substantial decline in the gender pay gap. Most of the growth in the 90-10 differential and the standard deviation occurred in the 1980s, with the increase greater in the US during the 1980s (mainly driven by increases in female wage inequality) but greater in the UK in the 1990s. Wage inequality is found to be higher for women than men in the UK while the opposite is true in the US but over this time period there was a convergence in both countries. In addition the level and distribution of wages converged between these two countries since real wages were initially lower but grew faster in the UK than in the US. In explaining these trends Gosling and Lemieux examine reforms made to labour market institutions. They highlight how the strength of UK unions in the late 1970s went some way in protecting UK male employees but the lack of a minimum wage left low paid UK women vulnerable. In the US the real value of the minimum wage fell sharply between 1979 and 1989 before recovering somewhat in the 1990s (again affecting low paid women hardest). Wage inequality in the US begins to narrow in the 1990s as the real value

of the minimum wage started to increase, but keeps expanding in the UK where no minimum was in place. They show that minimum wage pressure has a positive and significant effect on the US-UK gap in the variance of female wages. The introduction of the UK national minimum wage in 1999 reduced wage inequality among women, pulling the UK female wage inequality below that observed for males and contributed to the convergence between the UK and the US. Over the 1980s and 1990s there was a substantial decline in the rate of union membership in the UK – around 20 percentage points between 1979 and 1998. Union membership rates are much lower in the US, the decline was more modest and concentrated in the 1979-1984 period and therefore rates between the two countries have converged to some extent. Unionization rates are higher among men and tend to reduce male wage inequality but have little effect on women; most likely because unionized jobs for women tend to be in the public sector among the relatively high skilled (teaching, nursing, etc.). They show that the effect of de-unionization has been to increase male wage inequality but has had little effect on female wage inequality. In fact they estimate that de-unionization can account for 34 per cent of the increase in male wage inequality in the UK between 1983 and 1998, and 41 per cent of the increase in the US over the same period. They find little effect for women, for whom the decline in the unionization rate is much smaller. They conclude that the convergence in the unionization rate between the US and the UK contributed (about one-third) to the convergence in male wage inequality. Their conclusion is that wage inequality increased faster for US women during the 1980s because of the decline in the minimum wage. Over the 1980s and 1990s inequality increased for men faster in the UK because of the decline in unionization.

2.5 Conclusions

In this chapter we have mapped changes in earnings, income, wealth and educational inequalities in the UK since 1980s. A big increase in inequality over the 1980s made the UK one of the most unequal countries in the Western world and this inequality has become entrenched and shaped further by increases in concentration at the top of the income distribution.

Over the 1980s inequality in the UK increased dramatically. Since the 1990s there have been periods of falling inequality and periods of rising inequality but nothing that matches the change in inequality that occurred in the 1980s. Not only did the increase in inequality in the 1980s lead to a high level of inequality from a UK perspective but the UK became one of the most unequal advanced nation and this has remained the case.

Increases in household income inequality were driven by increases in labour market inequalities – earnings and labour force participation – affecting both individual and household inequalities. This is not surprising as the vast majority of household original (market) income is derived from employment income. What has driven these increases in labour market inequality? While there is no consensus, it is generally agreed that globalisation, skill-biased (task-biased) technological change and institutional change all contributed to this increase. Changes to the supply of skills (particularly educational attainment) relative to changes in demand for these skills either exacerbated or ameliorated these pressures. Demographic change also played a part with increases in single-headed households and the extent to which individuals formed households with similarly qualified adults (homogamy).

Social policy, particularly tax and benefit policy, also played a key role in modifying these external pressures. Payment of cash benefits has a strong equalising effect on original income inequality as cash benefits are generally targeted at low income households. When considered together direct and indirect taxation has had a broadly neutral effect on household income inequality since 1980. Analysis of the redistributive effects of tax and benefit policy regimes has shown that over the 1980s the Conservative government policies led to a weakening of the redistributive effects and that the Labour government's policies 1997-2010 led to a strengthening of the redistributive effects. Government policy also has a wider part to play in terms of tackling the root causes of inequality.

In thinking about the UK context for assessing the wider impacts of growing inequality two key features need to be borne in mind: (1) The very large increase in inequality that took place over the 1980, (2) Inequality has remained at a high level over the 1990s and 2000s not just high from a UK perspective but high in an international perspective.

3. The Social Impacts of Inequality

3.1 Introduction

In this chapter we examine the relationship between trends in inequality and a range of potential social impacts. We are unable to establish the presence (or absence) of causal relationships but instead relate trends over a 30 year period to assess whether there is any observational evidence of a correlation. We begin by looking at trends in poverty measured in terms of material deprivation, focusing on particular groups of interests (children, pensioners). We extend this analysis further to look at measures of cumulative disadvantage and multidimensional measures of poverty and social exclusion. We examine the relationship between inequality and social isolation, in particular contact with other people, to see if there is any evidence that economic divisions are related to social divisions.

We compare trends in family formation/breakdown and fertility with changes in inequality to try and form a better understanding of the temporal relationship between the two. There exists a well-documented relationship between poverty and poor health and inequalities in health and income. We look at how changes in mortality, life expectancy and health (objective and subjective measures) relate to changes in inequality in the UK.

Inequalities in earnings and income (flows) can feed through to inequalities in assets/wealth (stocks) and so we look at how housing tenure patterns have changed over time. Wealth is an important dimension of inequality because it not only reflects past inequalities but it is also a good predictor of future inequalities. In this sense wealth inequality is a driver of future inequalities as well as the impact of past inequalities.

The relationship between inequality and poverty and crime has been explored in the literature. Here we examine broad trends in crime rates and prisoner population and a more detailed breakdown by particular crimes likely to be sensitive to changes in poverty/inequality, and assess how these have changed over time.

Finally we examine patterns and trends in subjective measures of well-being, satisfaction and “happiness”, before assessing the extent to which inequalities have become entrenched across generations.

3.2 Material Deprivation

In Chapter 2 we looked at trends in household income poverty. Material deprivation provides an alternative measure of poverty, to some extent measuring absolute poverty but generally including items that are regarded as necessary for full participation in society. It is less susceptible to some of the problems relating to measurement error and volatility that income suffers from but is not without measurement problems. Material deprivation is most commonly constructed from a multi-item index derived from a series of survey responses provided by households indicating items that the household has had to manage without through lack of resources. The choice of items is most commonly selected in terms of 'essentials' or 'basic needs' combined with those identified to reflect societal norms. In some cases this information is combined with income poverty and the depth of poverty can be measured by the number of items of which a household is deprived. Changes in income, earnings and wealth inequality can have an impact on material deprivation in a number of ways where associated with changes in income poverty and falling income among the least well off. This can have a direct effect on the ability of households to afford items included in the index. Secondly increasing inequality can lead to higher prices and this can affect the extent to which low income households are affected by material deprivation. In this chapter we also examine how measures of material deprivation have changed over time.

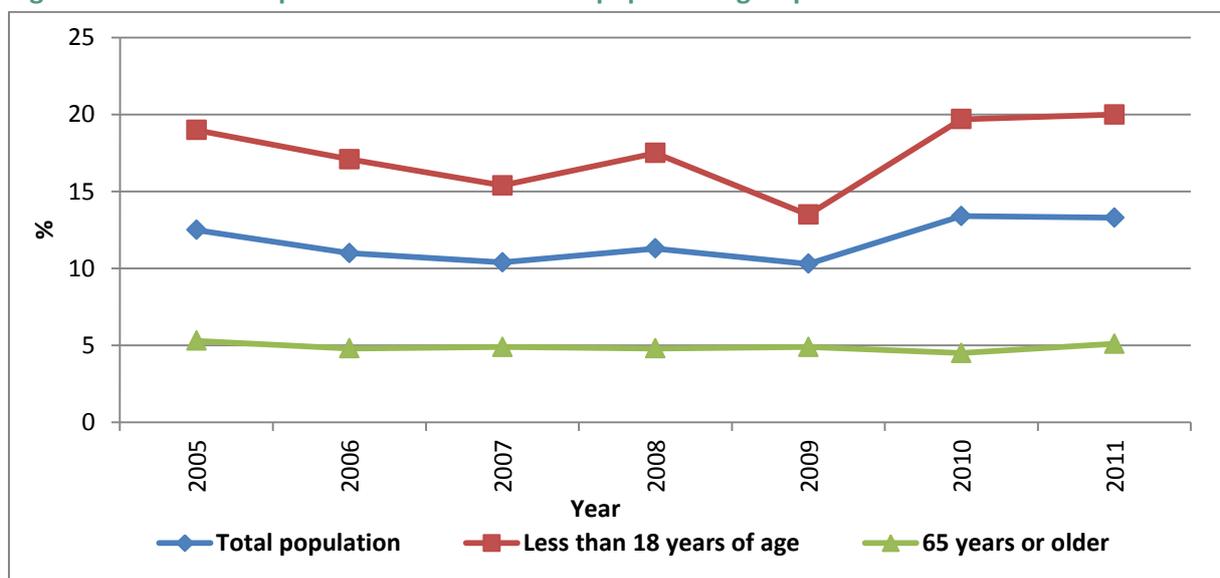
The official measurement of material deprivation is relatively new in the UK although there is a long historical interest in the measurement and understanding of material deprivation among social scientists, social commentators and policy makers (Townsend, 1979; Gordon et al., 2000). A review and consultation conducted by the DWP in 2002/03 into the measurement of child poverty made some recommendations on how material deprivation could be defined and measured and since 2009/10 the DWP has collected and published data on material deprivation for children and separately for households over pension age. The items selected in the scale as indicators of material deprivation are, understandably, different for these two groups.

Firstly we shall look at internationally comparative figures. Eurostat publish a material deprivation measure based on data from EU-SILC but unfortunately the time series is very short and only covers five years 2005-2011 (Figure 3.1). Material deprivation according to this definition (deprived of at least three out of nine items¹⁵) is higher among children (less than 18 years of age) than the population average. In 2005 nearly one in five children were defined as materially deprived

¹⁵ These nine items are: the household could not afford: i) to face unexpected expenses, ii) one week annual holiday away from home, iii) to pay for arrears (mortgage or rent, utility bills or hire purchase instalments), iv) a meal with meat, chicken or fish every second day, v) to keep home adequately warm, or could not afford (even if wanted to), vi) a washing machine, vii) a colour TV, viii) a telephone, ix) a personal car.

compared with one in twenty individuals aged 65 years or older. These data show an overall downward trend in material deprivation in the total population which is driven by falls among children up to 2009 which is consistent with the attempts made by the then UK Labour Government policies designed to reduce the incidence of child poverty. This fall is consistent with falls in income poverty rates for children shown in Chapter 2. The big drop in 2009 still needs to be verified (see chart notes). As the economic crisis took hold material deprivation increased among children particularly after 2009/10, although as noted earlier the 2009 data point may not be reliable but even excluding this it is clear that material deprivation has increased relative to 2007 and 2008.

Figure 3.1 Material deprivation within different population groups



Source: Eurostat, EU-SILC

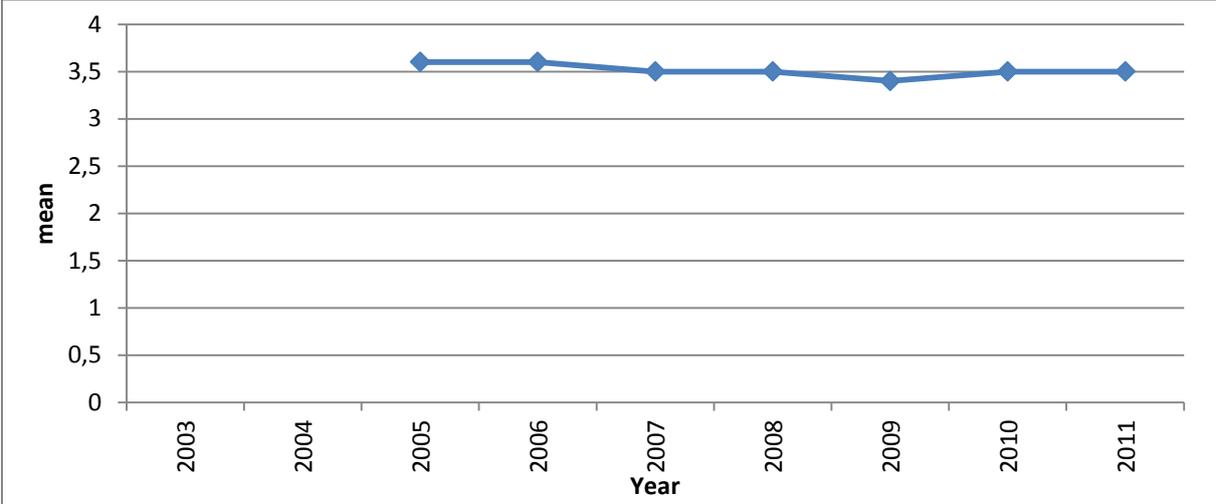
Notes: (1) The indicator is defined as the percentage of population with an enforced lack of at least three out of nine material deprivation items in the "economic strain and durables" dimension.

(2) 2009 data (total, less than 18 years of age, 65+) is noted as "unreliable or uncertain data" by Eurostat, which is listed as such because of small sample size:

http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/ilc_esms.htm#conf

It is also possible to look at the depth of material deprivation, calculated as the mean score among individuals defined as materially defined (at least three of the nine items). These data show a fall in the depth of material deprivation over this time period among the total population from a mean of 3.6 in 2005 to 3.5 in 2011 (3.4 in 2009).

Figure 3.2 Depth of Material Deprivation, UK



Source: Eurostat, EU-SILC

Notes: (1) The indicator is defined as the unweighted mean of the number of items lacked by the materially-deprived population (at least three out of the nine items retained for the definition of the 'Material deprivation rate' indicator). (2) 2009 data is noted as "unreliable or uncertain data" by Eurostat, which is listed as such because of small sample size: http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/ilc_esms.htm#conf

A more detailed examination of material deprivation among UK children is possible using data from the 2009/10 Family Resources Survey. We focus here on children as they are the main subject of the debate on poverty policy in the UK. Table 3.1 shows the overall percentage of children deprived of a range of items/activities as a result of not being able to afford them (reported by their parents). We also show the shares within each income quintile to examine the link between income inequality, income poverty and material deprivation. Unsurprisingly there is a clear relationship between low income and material deprivation among children. It is also noted by supporters of this measure of poverty that not all children who are in low income households go without these items and children in higher income households can also be deprived in this sense (no attempt is made here to produce a composite measure).

Having at least one week's holiday away from home with family is the least likely item/activity to be enjoyed by all children. Just over one-third of all children are reported by their parents to be deprived of this activity because they can't afford it, but this is only the case for six per cent of children in the top income quintile compared with over 60 per cent, on average, for children in the lowest income quintile. This ratio, of ten times higher deprivation among the lowest income quintile compared with the highest income quintile is common across many of the items/activities in the index. However, it is also interesting to note that there is a very clear income gradient for a number of the items in the share of children whose parents reported that this was something that they did not want or need. For example, while 22% of children in Q1 say that their child/ren don't want or need a hobby or leisure activity only 11% of children in Q5 were reported by their parents not to

want or need this activity. It is fair to assume that children's desire to have a hobby or leisure activity is pretty universal. This causes some concern about the possibility that income deprived parents are rationally evaluating 'need' in the light of the resources they have available and therefore this measure of deprivation is underestimating true material deprivation.

Table 3.1 Percentage of children whose parents say that they don't have because they can't afford by income quintile (2009/10)

	Q1	Q2	Q3	Q4	Q5	All
Outdoor space/facilities to play safely	19	13	8	5	3	11
Enough bedrooms for every child 10 years or over of a different gender	30	19	10	4	3	17
Celebrations on special occasions	8	4	1	1	0	3
Leisure equipment such as sports equipment or a bicycle	16	8	3	1	0	7
At least one week's holiday away from home with family	62	48	28	14	5	36
Hobby or leisure activity	14	9	3	1	1	7
Swimming at least once a month	22	14	6	2	1	11
Have friends round for tea or a snack once a fortnight	18	10	4	2	1	8
Go on school trip at least once a term	13	8	3	1	1	6
Go to a playgroup once a week	12	7	5	1	1	6

Source: FRS/HBAI

Note: With the exception of 'Outdoor space/facilities to play safely' parents indicate whether this was something their child/ren would like to have/do but could not afford to do so.

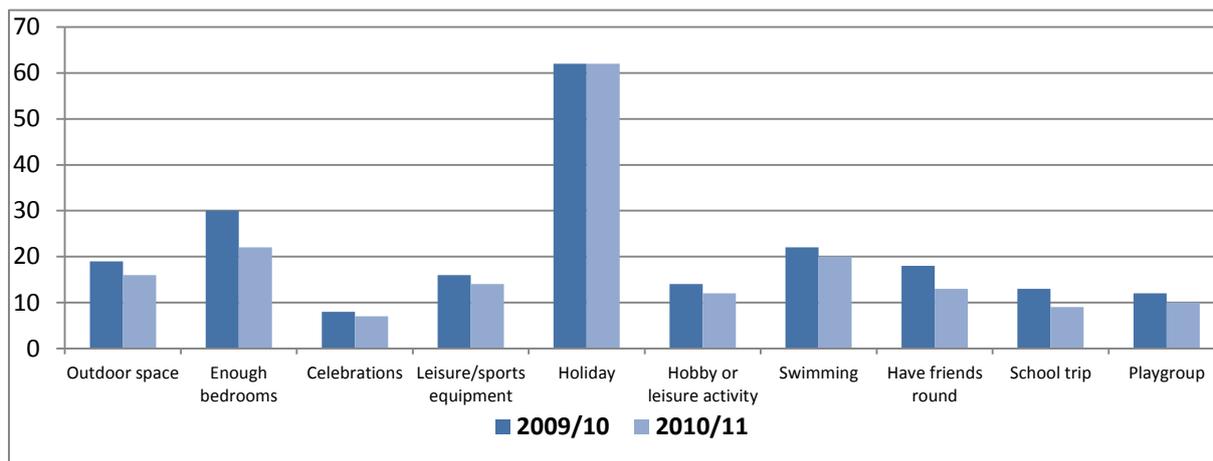
While a time series from this official source is not available we now have two observations - 2009/10 and 2010/11- and given the economic crisis this is a very interesting time to observe what has happened to this measure of material deprivation. Figure 3.3a shows for the 10 items included in both years the percentage of children who don't have them because they can't afford them (according to their parents' responses). For nine out of ten of these items the share of children deprived of these items/activities has fallen between these two years, a period as we know was marked by falling incomes. With only this information to hand, the naïve analyst could conclude that material deprivation had fallen between these two years.

However, as noted above, the distribution of responses for those indicating that this was an item that their child/ren did not want or need is not even. For most of the items there is an income gradient – that is to say that the lower household income is, the more likely parents are to say that an item/activity is something that their child/ren did not want or need. Further, what is a concern is that the apparent fall in material deprivation suggested by Figure 3.3a is influenced by an increase in the share of parents indicating that their children did not want or need these items. Figure 3.3b shows the share of children who don't want or need particular items (excluding playgroup as this clearly doesn't apply to school age children), according to their parents. Comparing the solid bars

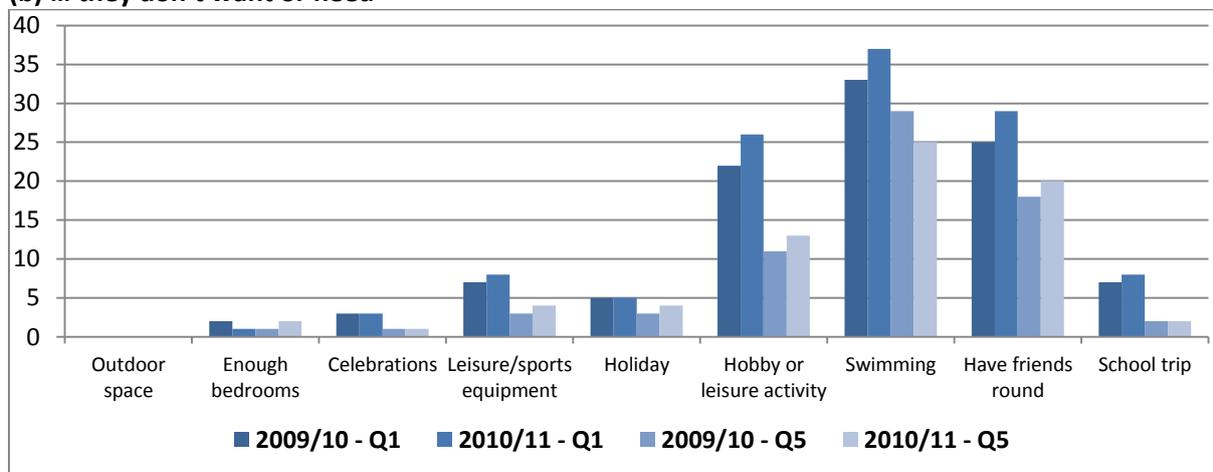
shows very clearly the difference in the share of children who don't want or need these items in 2009/10 between Q1 and Q5 and the striped bars show what happened to these shares in 2010/11. It is clear that all parents made a re-evaluation of what their children 'wanted or needed' as household incomes fell but this was greater among low income households.

Figure 3.3 Percentage of children who don't have because...

(a) ... they can't afford



(b) ... they don't want or need



Source: FRS/HBAI

Note: With the exception of Outdoor space/facilities to play safely' children indicated that this was something they would like to have/do but could not afford to do so.

Material deprivation measures of poverty are very sensitive to the items/activities chosen to delineate deprivation. Some of the items commonly used have a value that tends to move with real income, others have a more nominal value and some depend on neighbourhood facilities. This makes material deprivation measures of poverty a type of hybrid between relative and absolute measures of poverty.

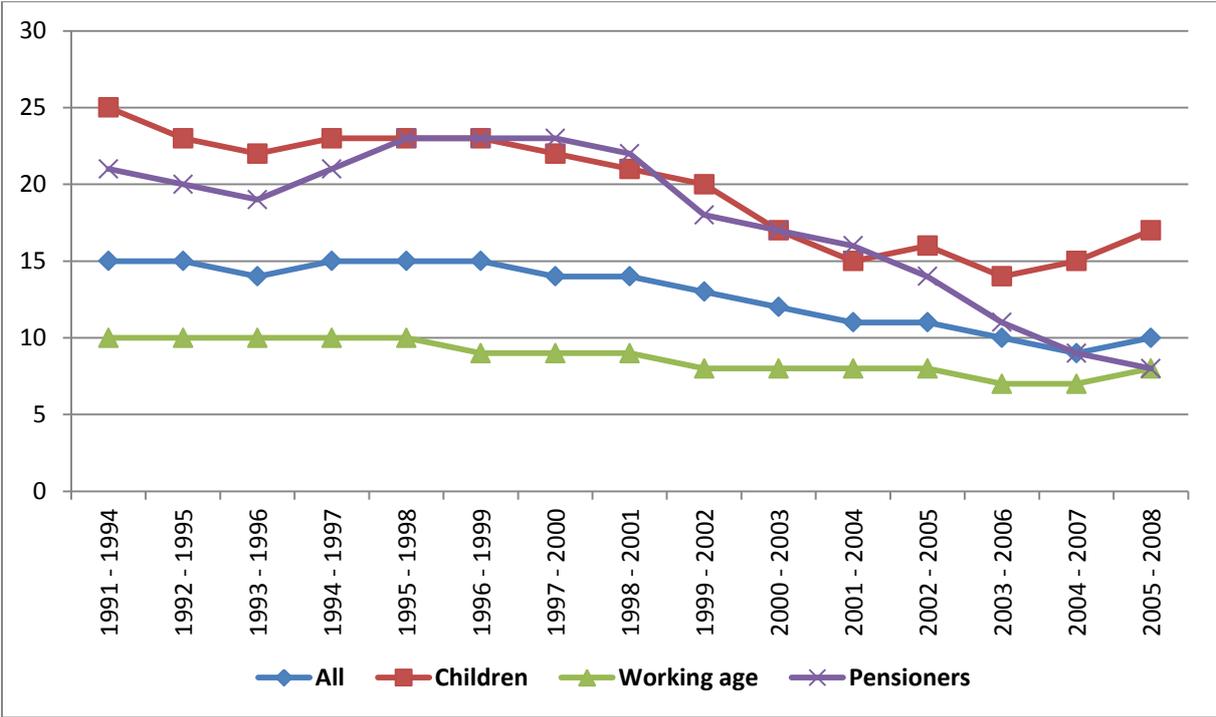
What we have shown, with the limited time series available, is that material deprivation fell slightly over the 2000s at a time when income inequality was either stable or slightly increasing (depending on the measure and definition), income poverty was fairly stable and slight falls in income poverty among children; indicating that these series appear to move in the same direction. In addition we show that there is a strong income gradient in relation to material deprivation. Not only are children in low income families less likely to enjoy items/activities included in the index but their parents are less likely to say that they want or need them. This suggests that the parents in low income households have quite rationally, to some extent, adapted their expectations in line with what their family can afford. What is of concern is that as incomes fall, such as in the current economic crisis, parents rationally re-evaluate what their children 'want or need' and this is greater among low income households giving the impression that material deprivation has fallen. This seems to be a failing on the part of this measure, as while it is debateable which way a relative measure of income poverty will change in a recession, most people would expect that if children are going without more, as in the time of a recession when incomes are lower, they would expect a measure of material deprivation to pick this up. See Hick (2012) for an informative discussion on 'consistent' measurement of poverty.

3.3 Cumulative Disadvantage and Multidimensional Measure of Poverty and Social Exclusion

One measure of cumulative disadvantage is the length of time an individual remains in poverty. Figure 3.4 maps the trends over time since 1991 in persistent poverty defined as the percentage of individuals living in income poverty (below 60% median household income – AHC) in at least 3 out of 4 years. In this chart we show the percentage of individuals living in household poverty who experienced persistent poverty in each four year period defined. These figures show that children and pensioners living in household poverty are most likely to have experienced persistent poverty. One in four children living in household poverty between 1991 and 1994 were living in persistent poverty compared to one in ten working age adults, demonstrating the more transient nature of income poverty among working age adults. Persistent poverty among children and pensioners has fallen over this period, falling further for pensioners. Persistent poverty among children has increased from 2003-06 to 2005-08¹⁶.

¹⁶ The series for persistent low income ends in 2008. The BHPS has been subsumed into the Understanding Society survey. ONS hope to produce a new series on persistent low income in late 2012.

Figure 3.4 Persistence - Percentage of group below 60% median household income (AHC) in at least 3 out of 4 years



Source: HBAI series based on BHPS data, ONS.

Increases in inequality/poverty may be ‘shared out’ among households or may be associated with long duration poverty/ long run differences in earnings/income. This is influenced by income mobility and the ease at which households can exit poverty. In the UK we have learnt from previous studies that over the period that earnings inequality increased, earnings mobility fell (McKnight, 2000; Dickens and McKnight, 2008) leading to increases in long-run (lifetime) earnings inequality. What we observe is falling persistent poverty over a period where cross-sectional poverty also fell (Figure 2.7). However, since the early 2000s we see a divergent experience for the two groups most likely to experience poverty – pensioners and children. For pensioners, the persistent poverty rates continued to fall up to 2008 but for children there appears to have been an increase. Further research is required to understand if this is due to the possibility that falling cross-sectional child poverty rates has led to a situation where the most disadvantaged are defined as poor and these poor/disadvantaged families find it particularly difficult to exit poverty.

3.4 Indicators of Social Cohesion

Social isolation provides a useful indicator of social cohesion. While we have had some difficulty in collating a time series for the UK we have found some interesting findings from the 2006 BSAS. Table 3.1 shows the average number of people respondents have contact with on a typical week day by

social class. The group having contact with 0-4 persons is the group considered to be most at risk of social isolation. These figures show quite striking gradients with individuals from lower social classes most likely to have contact with only 0-4 persons on a typical week day than individuals from higher social classes. To some extent the figures will reflect employment and workplace size.

Table 3.1 Average number of people having contact with on a typical week day by Social Class

Number of people in contact with on a typical week day	I. Professional	II. Intermediate/Managerial and Technical	III. (non-manual) Skilled	III. (manual) Skilled	IV. Partly Skilled	V. Unskilled	Overall
0-4 persons	7.94	9.58	11.15	12.4	17.92	19.8	12.76
5-9 persons	12.24	16.85	22.08	19.64	22.85	22.43	19.76
10-19 persons	33.88	23.34	21.99	24.02	30.19	34.13	25.63
20-49 persons	30.58	26.81	22.63	25.49	15.11	8.06	22.72
50 or more	11.77	17.83	18.34	11.92	6.47	5.76	13.76

Source: British Social Attitudes Survey, 2006

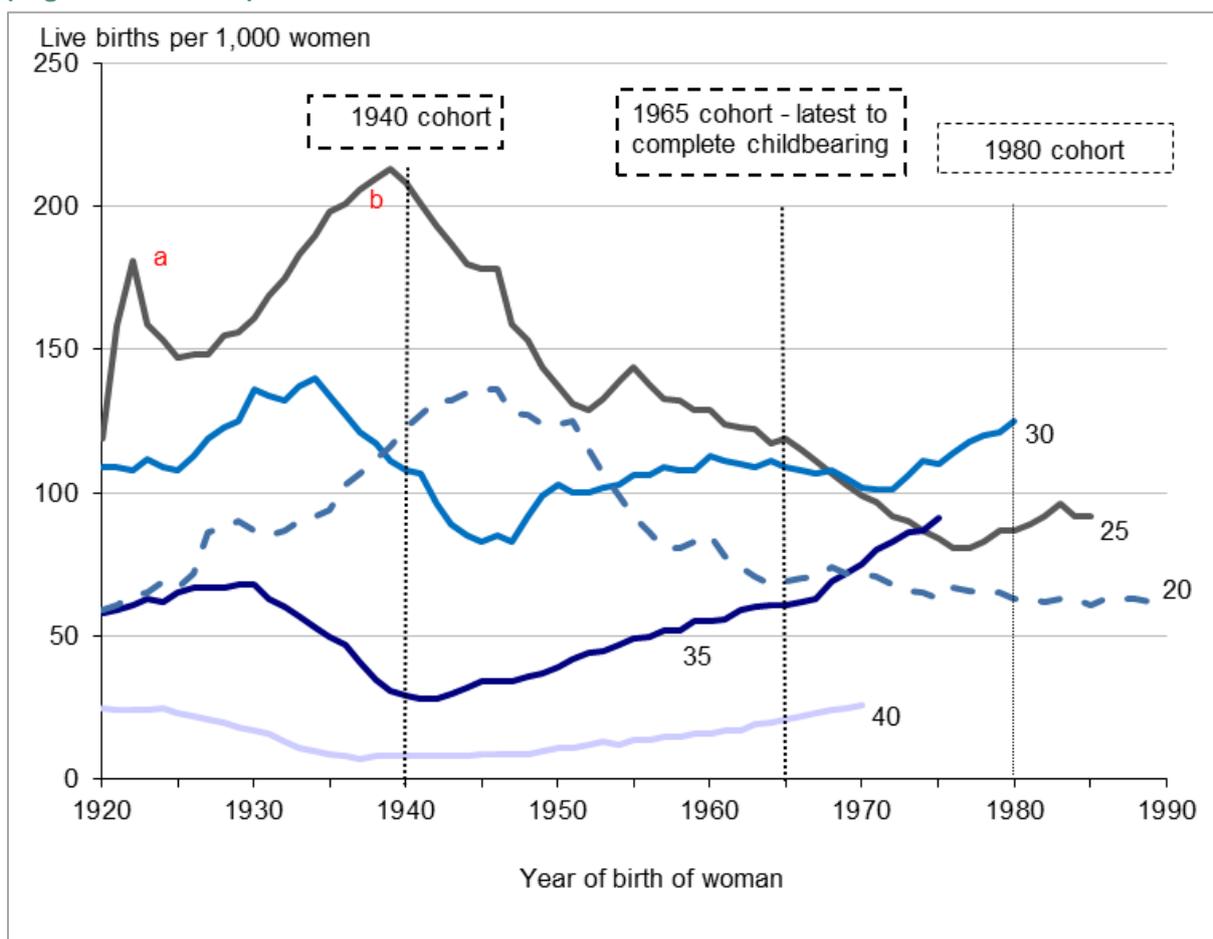
3.5 Family Formation and Breakdown, Lone Parenthood, Fertility

Changes in inequality, particularly those associated with increases in poverty are likely to put great strain on personal relationships and family breakdown. In addition we know from existing research that teenage pregnancy is more prevalent among young women from disadvantaged backgrounds and therefore increases in inequality and poverty could lead to an increase in birth rates among teenagers. However, there are big societal changes taking place affecting family configuration and birth rates. And, as we have seen, while inequality and poverty can impact on families, relationships and fertility these demographic changes can also feedback into levels and trends in inequality as, for example, single headed households are more vulnerable to poverty and overall there share can directly affect levels of inequality. Firstly we look at changes in fertility and while it is not at all clear what the overall effect of increases in inequality on fertility rates and it is certainly possible that the effects could vary for different age and social groups.

Figure 3.5 shows age-specific fertility rates for women born between 1920 and 1990. Each trend line shows the fertility rate for selected ages. For example, the dashed line shows the age 20 fertility rate for women born in the years 1920 to 1990. This shows that age 20 fertility rates increased for women born after 1920 and reached a peak for women born in 1945 (ie they had their children in 1965), age 20 fertility rates fell for women born after 1945 and then levelled off for women born after around

1975. There is an even more dramatic fall in age 25 fertility rates, which reached a peak in the late 1930s from 213, falling to 81 in 1976/77. The vertical lines identify three different age cohorts demonstrate how age-specific fertility rates can be compared for different age-cohorts of women. This chart illustrates the shift towards more recent cohorts of women having children at a later age and it is possible to identify the post World War II baby boom (labelled (a) in the figure) and the 1960s baby boom (labelled (b) in the figure).

Figure 3.5 Age-specific fertility rates at selected ages, by year of birth of woman, 1920 to 1990 (England and Wales)



Source: Office for National Statistics, Cohort fertility, Table 4 (2011)

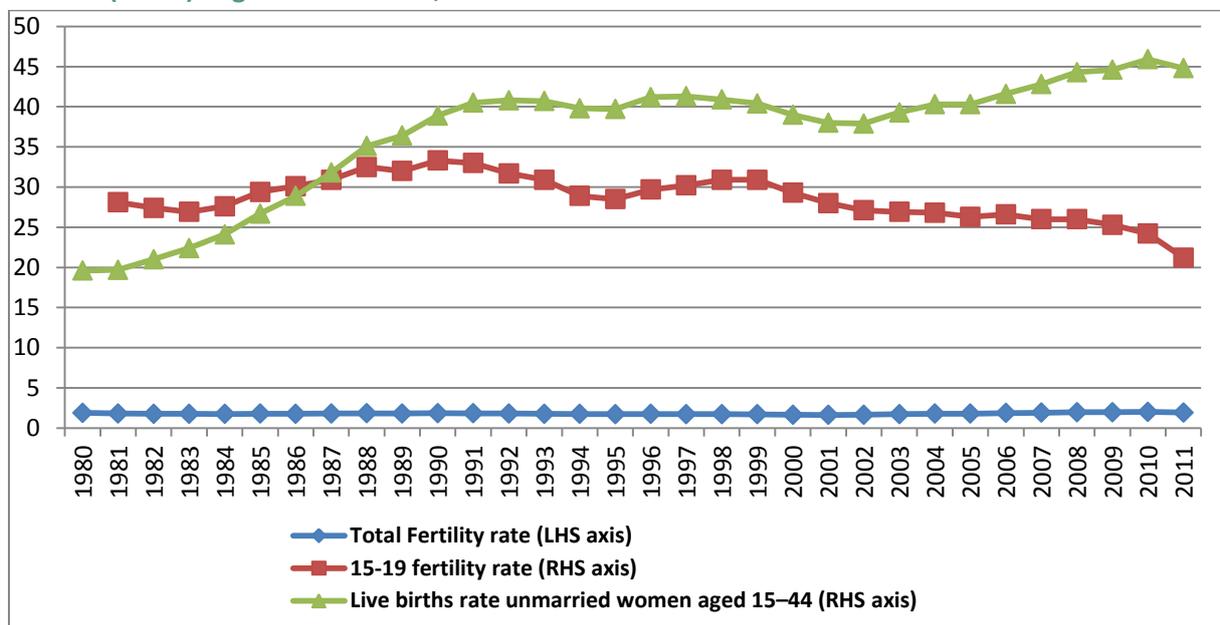
An alternative way of looking at fertility rates is the Total Fertility Rate series. This is an estimate of the average number of live children that a group of women would have throughout their childbearing lives if they experienced the age-specific fertility rates of the calendar year in question. Calculating fertility using this method allows us to look at fertility over long time periods; Figure 3.6 shows the trend between 1980 and 2011. The historical decline in fertility continued after 1980 (albeit at a lower rate with the main decline occurring between 1965 and 1978 – ONS, 2010) and follows a shallow downward trend before picking up in 2001. In 2010 the average number of children

per woman was two, and the average had not been this high for nearly thirty years. The increase in fertility has taken many by surprise and three possible explanations have been put forward:

- Women born in the 1960s and 1970s delayed childbearing to older ages;
- Changes in support for families (maternity/paternity leave, tax credits);
- Increases in foreign born women with higher fertility rates (ONS, 2010).

While the increase in inequality appears to have had no effect on the total fertility rate, falls in poverty rates among children and a levelling off in some measures of inequality may have had some bearing on the increase since 2001.

Figure 3.6 Total Fertility Rate (TFR), teenage fertility rate (15-19) and live births rate unmarried women (15-44) England and Wales, 1980-2011



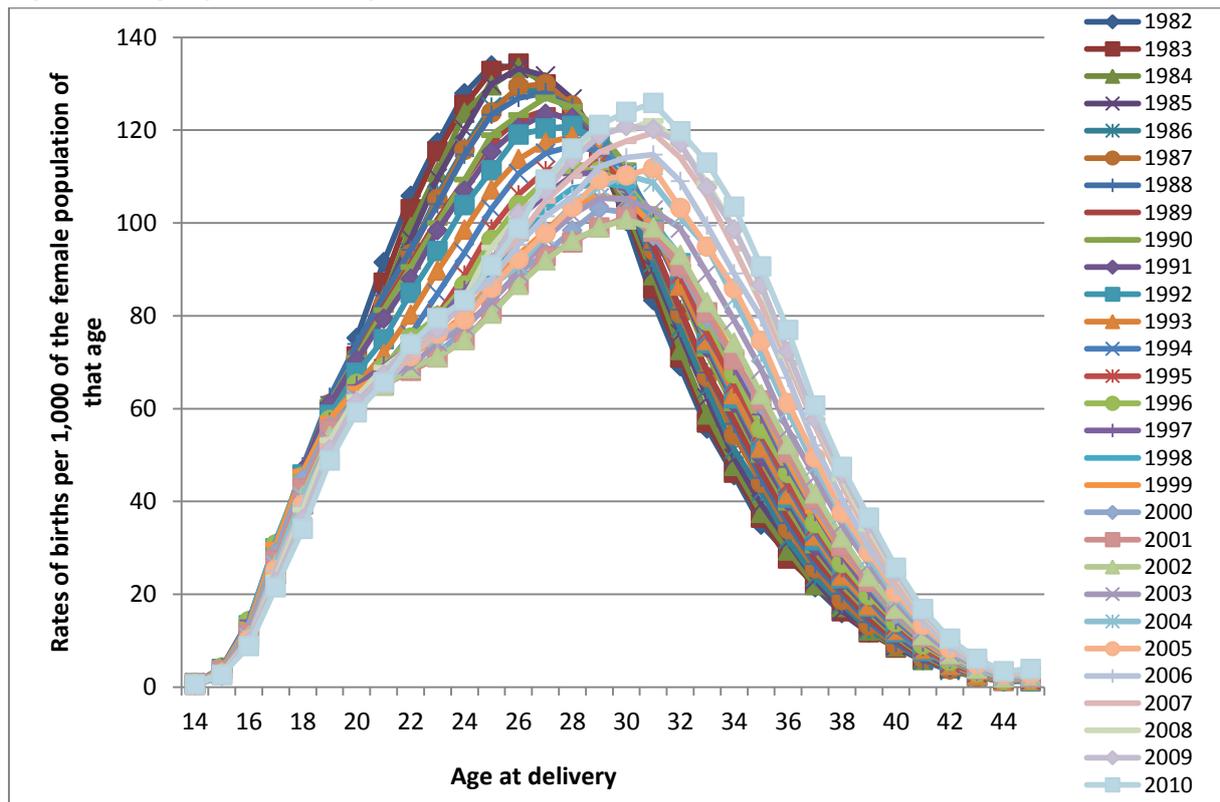
Notes: (1) The Total Fertility Rate is the average number of live children that a group of women would bear if they experienced the age-specific fertility rates of the calendar year in question throughout their childbearing lifespan. (2) The number of live births to mothers aged 15-19 per 1,000 women in that age group.

Source: Office for National Statistics, Birth summary tables, England and Wales 2011 (final)

Figure 3.6 also shows the fertility rates for teenage mothers (age 15-19). Teenage fertility rates increased between 1983 and 1990, a period where inequality rates increased substantially. Rates then declined until the mid-1990s, increasing slightly up to 1998 and substantially declined under the Labour government who targeted teen pregnancies through a number of different initiatives, launched in 1999 with the Teenage Pregnancy Strategy. This was also a period where poverty rates declined and increases in inequality were driven by increases among top-earners pulling away from the rest.

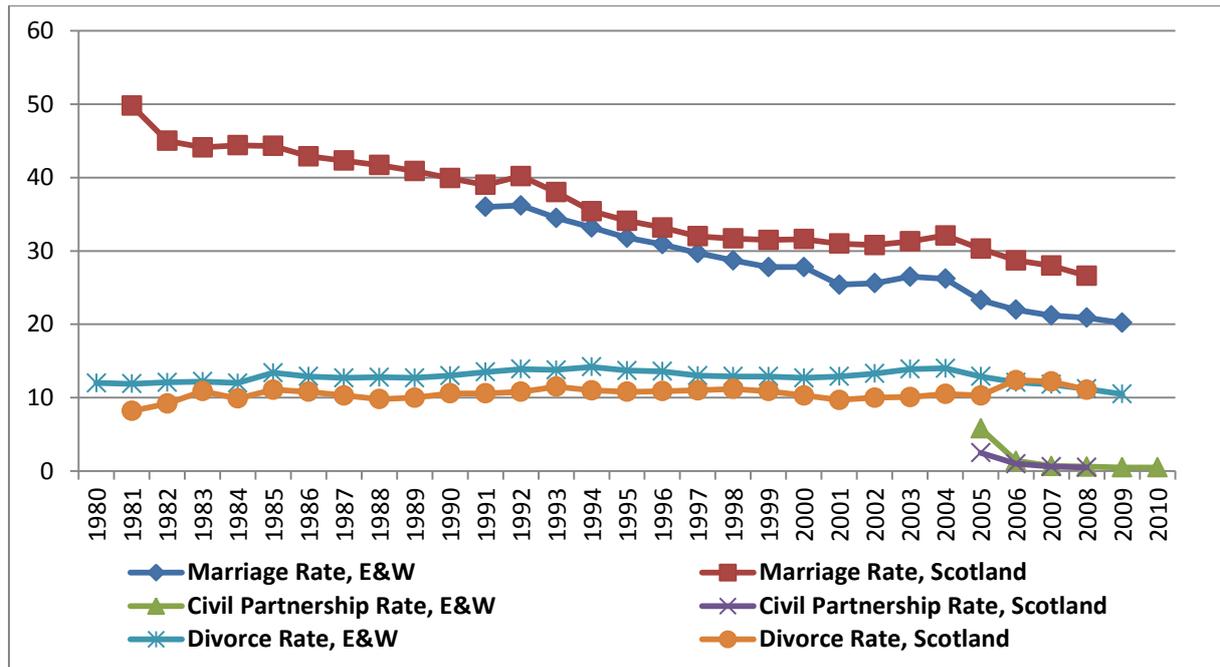
Figure 3.7 provides a powerful graphical representation of the dramatic changes to fertility rates between 1982 and 2010 in the trend towards women delaying childbearing to older ages can be seen by the shift in the mode from age 25 in 1982 to age 31 in 2010. The increase in fertility since 2002 can be seen for all women between the ages of 21 and 40 showing that the increase in fertility was not purely driven by the delay in child bearing of women born in the 1960s and 1970s. The mode shifts from age 25 in 1982 to age 31 in 2010.

Figure 3.7 Age-specific fertility rates in UK (1982-2010)



Source: Fertility and Family Analysis Unit, Office for National Statistics (special data request)

Another striking social change that has continued since 1980 (starting prior to 1980) is the fall in marriage rates. In Scotland the marriage rate virtually halves, falling from 50 per cent in 1980 to 27 per cent in 2008. The fall has been even faster in England and Wales. Over this time period divorce rates have remained fairly stable at around 10 per cent in Scotland (13 per cent in England and Wales). With lower marriage rates it is not surprising that there has been an increase in the rate of children born to unmarried mothers (dotted line in Figure 3.6 above), more than doubling over this thirty year period.

Figure 3.8 Marriage, civil partnerships and divorce rates

Source: ONS - Vital Statistics: Population and Health Reference TABLES (Nov 2001 update): annual time series date 22-Nov-2011

Note: Rates have been computed from the relevant populations. For example, marriage rate is persons marrying per 1,000 unmarried total/male/female population aged 16 and over.

3.6 Health Inequalities

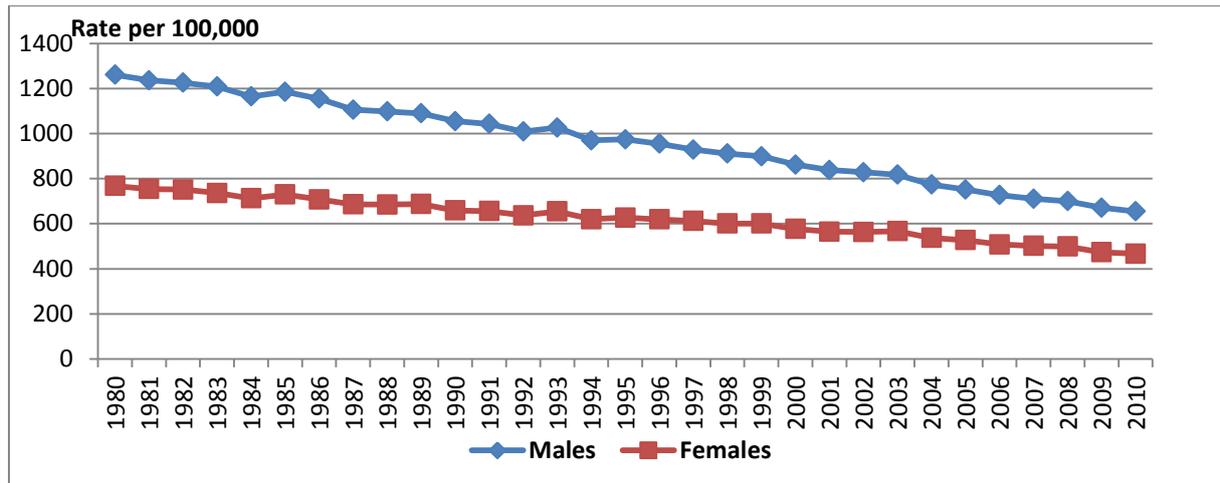
The UK has a comprehensive public funded health service – The National Health Service - and a small private health sector. In recent years there has been some move towards the private sector supplying health services and in 2012 the private sector was contracted to run an NHS hospital. In the UK stubbornly high rates of health inequality by socio-economic groups have led to a number of high profile inquiries and policy reviews over the last 30 years: The Black Report (1980), The Acheson inquiry (1998), The Marmot review (2010). The Acheson report highlighted widening health gaps between different social groups and made a number of policy recommendations designed to tackle these inequalities many of which he saw as remediable. When Marmot reported, on behalf of the Department of Health, on the progress made 10 years on in terms of the developments in tackling these inequalities he found that while significant progress had been made in improving the health of the population and the least advantaged, health inequalities between groups and areas persisted. He concluded that sustained reduction in health inequality would require a sustainable, systematic approach across all areas of government (Marmot, 2009). A recent House of Commons report into health inequalities (2009) concluded that although health of all groups in England was improving, health inequalities between social classes widened over the previous ten years (4% for men and 11% for women) because the health of the rich improved more quickly than the health of the poor.

The relationship between health outcomes and income as well as income inequality has been researched extensively. While the existence of a social gradient in health outcomes and mortality rates in the UK is not in dispute, there is not a consensus on whether this is directly due to income differences or other factors such as access to and quality of health services, education or even psychological factors. The direct relationship between inequality and health outcomes – i.e. that higher inequality leads to poorer health – is disputed by some with conflicting findings.

In this section we start by looking at mortality statistics and relate these to inequality by examining the available evidence by social class and by directly comparing trends. Unfortunately it is not always possible to show series going back as far as 1980. Some series are interrupted by the introduction of a new social classification in 2001 (NS-SEC) and as health is a devolved responsibility, UK series are not always available.

A change in income inequality will not necessarily lead to a contemporaneous change in health inequalities – even where a causal relationship exists. In fact there could be quite long time lags as, for example, many adult health problems have antecedents in childhood circumstances (poverty, living conditions, hardship, diet, etc). It is therefore informative to look at time trends as well as cross-sectional health inequalities by social class where available. Figure 3.9 shows the age-standardised UK death rates for the period 1980-2010. This is the all age series and annual rates have been standardised to the European Standard Population which allows comparison between men and women and over time where age structures can differ. Over this 30 year period the figures show a fall in death rates and while death rates among men are higher than among women there is a substantial convergence with death rates falling further for men than for women (48 per cent compared with 39 per cent). This fall is generally due to medical advances, with death due to circulatory diseases seeing the greatest fall (ONS, 2012a).

Figure 3.9 Age standardised death rates, UK, 1980-2010



Source: Office for National Statistics <http://www.ons.gov.uk/ons/rel/mortality-ageing/mortality-in-the-united-kingdom/mortality-in-the-united-kingdom--2010/mortality-in-the-uk-2010.html>

The ONS Longitudinal Study, a representative 1% sample of the population of England and Wales, links data from population censuses from 1971 onwards with birth and death registrations, has been used by ONS to analyse trends in social class differences in mortality and cause of death. A recent study analysing the trends between 1986 and 2000 which uses the Registrar General's Social Class schema to examine social class gradients for individuals aged 35-64 in 1993-99 shows for men falling mortality rates in all social classes but a persistent social class gradient (White et al., 2003). In fact the gap between the top two social classes (I and II) and the bottom two (IV and V) actually widened over this period. For women social class gradients were not as well defined, mortality rates are much lower than men's and these data show a narrowing between Social Classes. However, women have a much higher share of deaths where social class cannot be determined and a greater share of women are typically assigned the social class of their spouse or their father or mother because fewer women in this cohort were employed in 1971 when social class was derived. This makes the findings harder to interpret for women and not directly comparable with men. The analysis of causes of death by social class for men showed increases in the social class gradients in ischaemic heart disease and cerebrovascular disease. However, while there were big increases in social class differences in respiratory disease mortality over the 1990s for men there was a contraction for women. Social Class gradients were not found for all causes of death, in fact in some cases an inverse gradient is found; such as breast cancer and external causes of injury and poisoning in women and prostate cancer and melanoma in men.

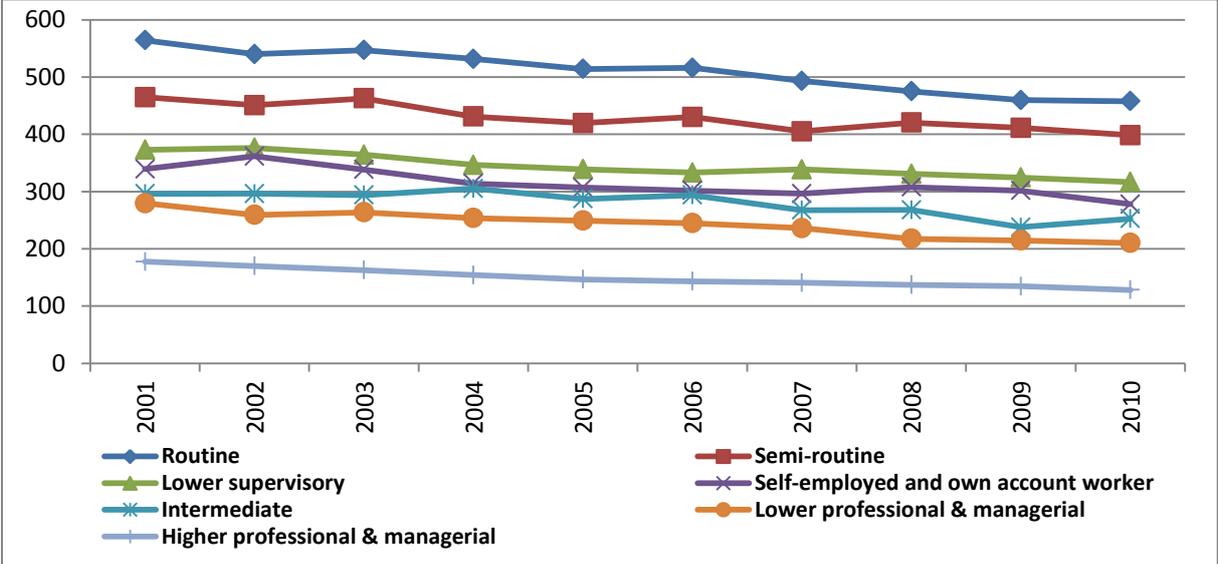
Figure 3.10 shows mortality rates for working age men (25-64 years) by NS-SEC classes 2001-2010. This figure clearly shows the well documented socioeconomic gradient in mortality rates and the fall in overall mortality rates, shown in Figure 3.9, can be observed within NS-SEC classes over this

period. In terms of inequality, more detailed examination of these data shows that absolute differences between mortality of the least and most advantaged Classes shows a small decline. However, relative differences between the least and most advantaged classes actually increased over this period (Langford and Johnson, 2010).

A similar exercise computing annual mortality rates by NS-SEC for working age women over the same time period found less difference between classes, and although overall mortality rates fell this was not true for all NS-SEC classes. There was no clear trend in absolute measures of inequality between NS-SEC classes while relative inequalities tended to increase. Technical difficulties associated with annual volatility and low levels of mortality among working age women have left ONS to question the reliability of the annual estimates of female mortality by NS-SEC (Johnson and Al-Hamad, 2011).

ONS have conducted some analysis of life expectancy that continues to classify individuals' social class according to RG Social Class up to 2006 to aid continuity over the period that the official classification changed. The broad findings from this analysis concur with those using NS-SEC (ONS, 2011a).

Figure 3.10 Age-standardised mortality rates by NS-SEC – males 2001-2010



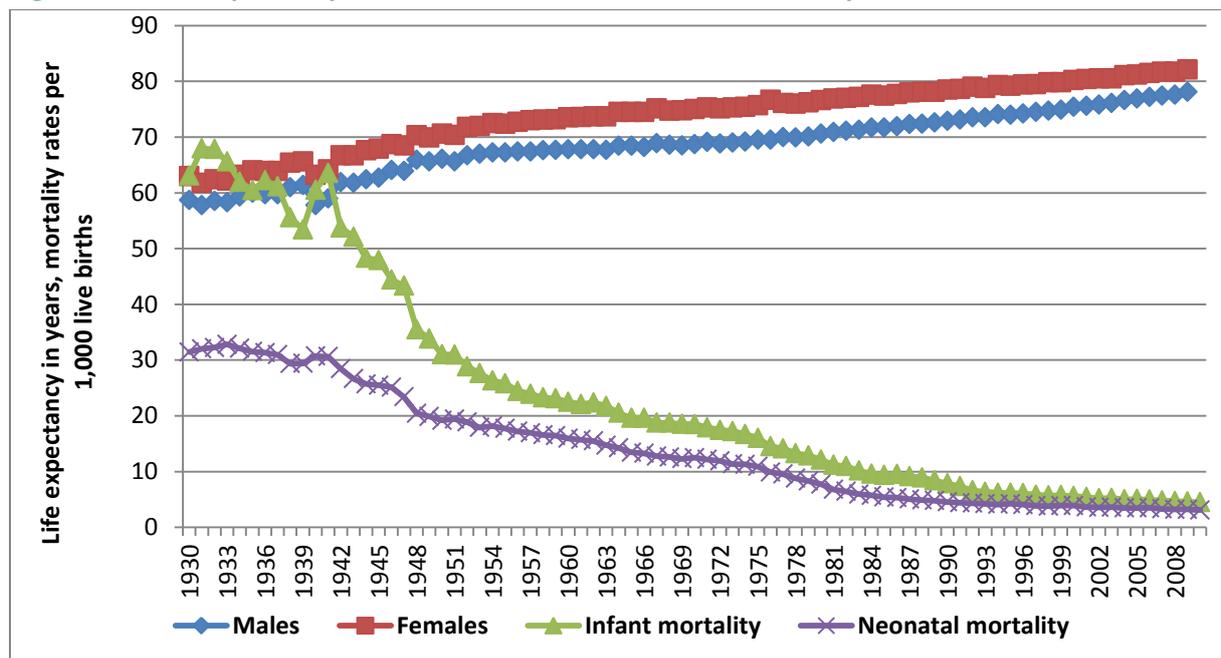
Source: ONS, Statistical Bulletin (2012): Intercensal Mortality Rates by NS-SEC 2001-2010.

Notes: England and Wales.

Figure 3.11 shows the historical series dating back to 1930 for neonatal and infant mortality rates alongside life expectancy at birth (ONS, 2011b). We show the longer time series here as the most dramatic change in neonatal and infant mortality occurred during the 1940s and 1950s. This series shows falls in neonatal and infant mortality rates, with greater falls in infant mortality rates than neonatal deaths and by the early 1990s they converged and have remained stable at around 2-3 per

1,000 live births¹⁷. Life expectancy at birth for males and females from 1980 has continued an historical upward trend for both men and women. It seems clear from this chart that the overall improving trends in life expectancy and infant and neonatal mortality are unrelated to changes in inequality. The causal force behind these general trends is likely to be driven by increases in real incomes, living standards, diet, education and medical advances. ONS estimates show that over the last 50 years (1960-2010) the average lifespan has increased by around 10 years for a man and 8 years for a woman in England and Wales.

Figure 3.11 Life expectancy at birth and infant and neonatal mortality rates - UK



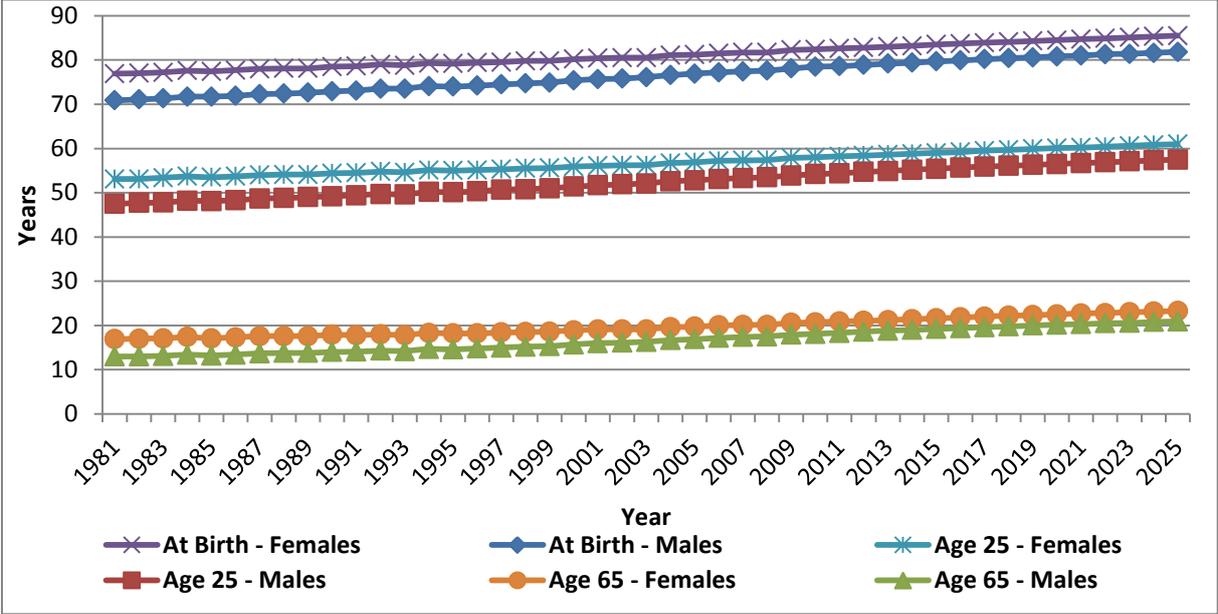
Notes: (1) Deaths under age 1 per 1,000 live births; (2) Deaths under 28 days per 1,000 live births; (3) Data for 1930-1950 are England and Wales; 1951 onwards are for UK; (4) Life expectancy data for 2009 are period life expectancies from the 2008-based principal projections.

Source: Office for National Statistics; National Records of Scotland; Northern Ireland Statistics and Research Agency, Social Trends 41.

Figure 3.12 shows life expectancy at birth, age 25 and age 65 from historical 1981-2010 data and projections through to 2025. Life expectancy has increased at all these ages and is projected to continue to increase. The projections also show that life expectancy differences between men and women will continue to narrow.

¹⁷ Neonatal mortality rates are affected by advances in neonatal medicine that has meant that premature babies, some with very complex health needs, are now more likely to be born alive than in the past.

Figure 3.12 Life expectancy in the UK, males and females (1981-2025)

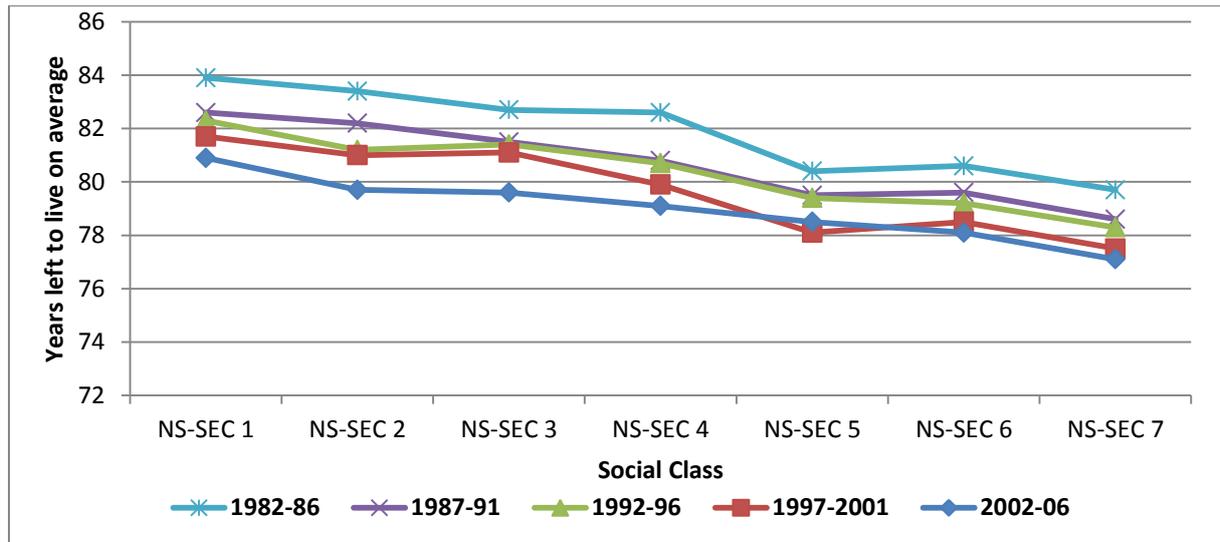


Source: ONS, 2012. Notes: Based on historical mortality rates from 1981 to 2010 and assumed calendar year mortality rates from the 2010 - based principal projections.

Life expectancy trends by NS-SEC (1982-2006) have recently been released by ONS (ONS, 2011a). Figure 3.13 shows the life expectancy estimates at birth by NS-SEC for females. This figure shows that while life expectancy has increased over this period socioeconomic inequalities have persisted. This finding was also true for males for whom the gradient is steeper and inequalities have increased (figure not shown). Analysis of life expectancy by individuals’ own socio-economic class at age 65, rather than parental class at birth, show similar socio-economic gradients. Despite improvements in life expectancy in all classes inequalities between classes have persisted for women and are both higher and have increased for men.

Previous research has shown that there exist strong regional disparities in life expectancy and mortality (ONS, 2011c). The broad finding is that life expectancy is higher in the Southern regions than in the Northern regions of England followed by Wales and Northern Ireland and lowest in Scotland. A recent report by the House of Commons Health Committee (House of Commons, 2009) highlighted geographical differences in both poor health and life expectancy across England, with people living in the most deprived areas having shorter lives and shorter healthier lives than people living in more affluent areas.

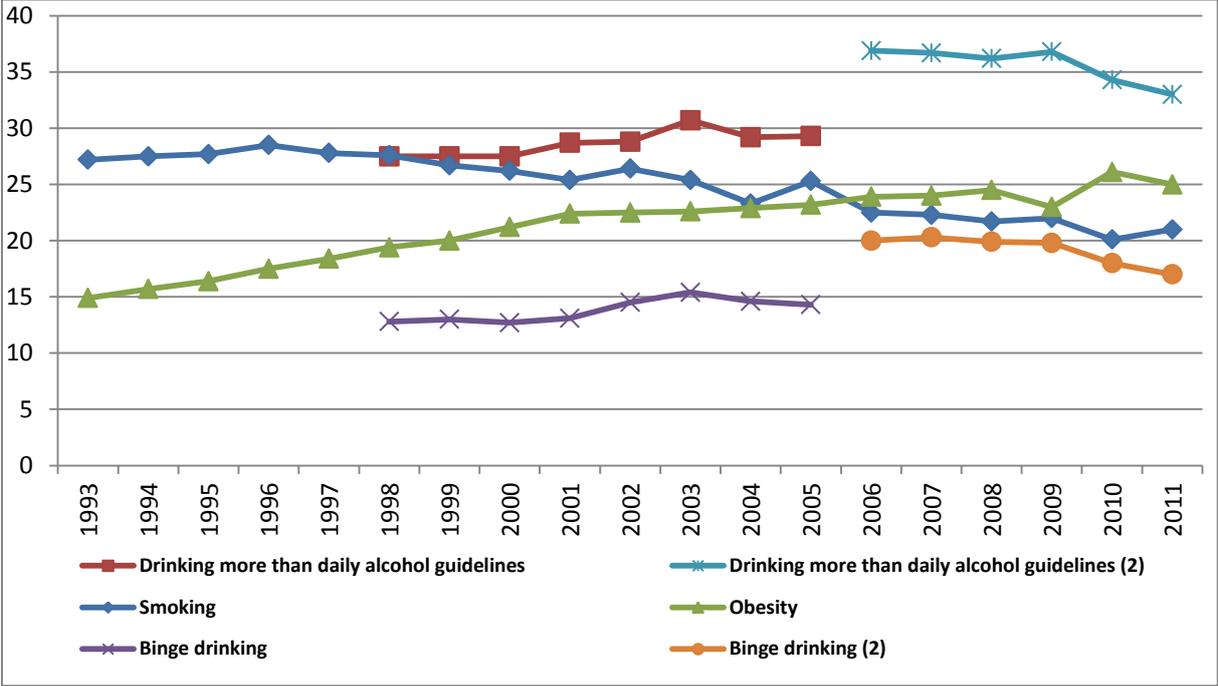
Figure 3.13 Life expectancy at birth – females (1982-86 to 2002-06)



Source: ONS Longitudinal Study; Statistical Bulletin: Trends in life expectancy by the National Statistics Socio-economic Classification 1982–2006 (ONS, 2011a).

We now turn to trends in behaviours that have a direct effect on health outcomes; lifestyle factors that influence health inequalities are sometimes referred to as “proximate” causes of health inequalities in contrast to the wider determinants such as poverty, housing or education. Figure 3.14 shows the trends among the English adult population in smoking, drinking and obesity (over eating). The figure shows the downward trend in smoking but an upward trend in obesity. Drinking alcohol above the daily alcohol guidelines is common with one-third of the adult population consuming this much alcohol and over 1 in 6 adults binge drinking. The series before and after 2006 are not comparable due to definitional changes (see Figure notes). The latest figures for 2011 show falls in drinking above daily alcohol guidelines, binge drinking (since 2009) and obesity but an increase in smoking. It is too early to tell how these relate to the economic crisis. Lifestyle factors such as smoking, nutrition and obesity are found to follow the same socio-economic gradient as mortality (House of Commons, 2009). Although smoking prevalence fell across the population the decline is much greater among the most affluent groups than in the poorest groups between 1973 and 2004 (*ibid.*). These lifestyle-related causes of health inequalities reflect underlying causes (income, socio-economic groups, employment, education) as adopting beneficial health behaviours is not a major priority for the poorest in society facing more serious problems, and some of which may provide a form of comfort. In addition to the fact that these behaviours have a direct effect on mortality and are more prevalent among disadvantaged groups, it is also the case that, for example, people in high socio-economic classes who smoke live longer than those from lower socio-economic classes who smoke (*ibid.*).

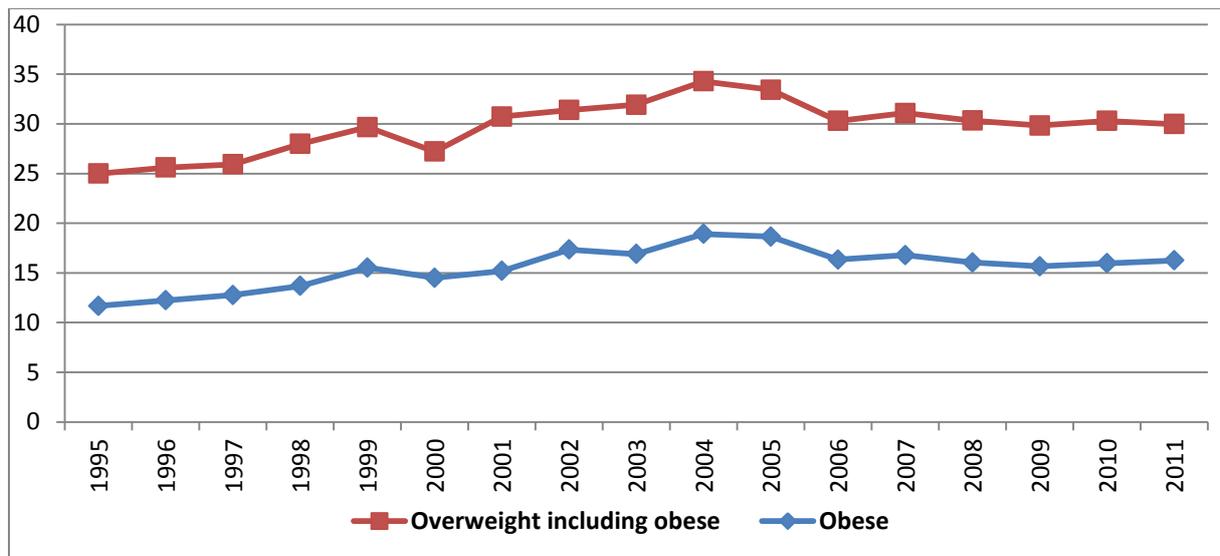
Figure 3.14 Trends in smoking, drinking and obesity – % adult population 1993-2010 (England)



Notes: (1) Data up to 2002 are unweighted, from 2003 onwards data have been weighted for non-response; (2) Drinking more than daily alcohol guidelines series includes those who drunk 3 (4) units for women (men) on at least one day in the week prior to interview; (3) Obese = BMI 30 or more; (4) Binge drinking includes those who drunk 6 units for women and 8 units for men on at least one day in the week prior to interview; (5) Results from 2006 include longitudinal data. (6) In 2006, the method of calculating units was reviewed, and the conversion to unit equivalents for wine, strong beers and lagers and alcopops have been revised. See the 2006 HSE report, Volume 1 Chapter 9 for details of revised conversion factors; www.ic.nhs.uk/pubs/hse06cvdandriskfactors.

Source: Health Survey England (HSE) tables, 2011.

Figure 3.15 highlights the concerning levels of children who are overweight or obese. These rates calculated for children aged 2-15 living in England, over the period 1995-2010, peaked in 2004 before declining to some extent up to 2006 since then they appear to have stabilised. In 2011 30 per cent of children were classified as overweight (including obese) and over 16 per cent obese; the concern must be about what health life expectancies these children will have.

Figure 3.15 Childhood obesity and overweight – per cent of children aged 2-15 years (England) 1995-2011

Note: (1) Obese = BMI 30 or more; (2) Overweight = BMI 25 to less than 30,

Source: Health Survey England (HSE) tables, 2011

Trends in the proportion of the population self-reporting good health have been increasing over recent years (ONS Social Trends 41, 2011). However, it is shown in Table 3.2 that the proportion of the population reporting a long-standing illness or disability has increased since the 1970s. Prevalence rates are very similar for men and women; 30 and 31 per cent respectively in 2010. The main increase in rates of long-standing illness or disability occurred over the 1970s (8 percentage points for men, 9 percentage points for women) with smaller increases over the 1980s (3 percentage points for men, 2 percentage points for women). During the 2000s rates fluctuated by a few percentage points. Limiting long-standing illness or disability rates are lower as not all long-standing illness or disability are limiting. Both rates peaked in 2002, although there was an earlier similar peak in 1996 (data not shown). Respondents were also asked to report if they had restricted activity in the 14 days before interview due to illness or injury (acute illness). Again these rates peaked in 2002 (and in 1996, data not shown), doubling from those recorded in 1972. In 2010 10-12% of respondents reported such restricted activity. ONS note that as these statistics are based on individuals own assessment of their health changes over time may reflect changes in people's expectations of their health as well as changes in incidence or duration of sickness. In addition, different sub-groups may have varying expectations, activities and capacities of adaption (ONS, 2012).

Table 3.2 Trends in self-reported sickness and disability by gender – Great Britain**Percentage reporting**

	1972	1975	1981	1991	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
(a) long-standing illness or disability															
Males	20	23	28	31	33	32	34	31	31	32	33	31	29	30	30
Females	21	25	30	32	32	31	35	32	32	33	34	32	30	31	31
All	21	24	29	31	32	32	35	31	31	33	33	31	29	30	30
(b) limiting long-standing illness or disability															
Males		14	16	17	18	18	20	17	17	18	17	18	16	17	17
Females		16	19	18	19	19	22	19	19	20	20	19	18	19	19
All		15	17	18	19	19	21	18	18	19	19	18	17	18	18
(c) restricted activity in the 14 days before interview due to illness or injury (acute sickness)															
Males	7	9	11	11	13	13	14	12	12	11	11	11	10	10	10
Females	8	10	13	13	15	15	16	15	14	15	14	13	12	12	12
All	8	9	12	12	14	14	15	14	13	13	13	12	11	11	11

Notes: 2005 data includes last quarter of 2004/05 data due to survey change from financial year to calendar year.
Data are also available for 1985, 1995, 1996 and 1998.

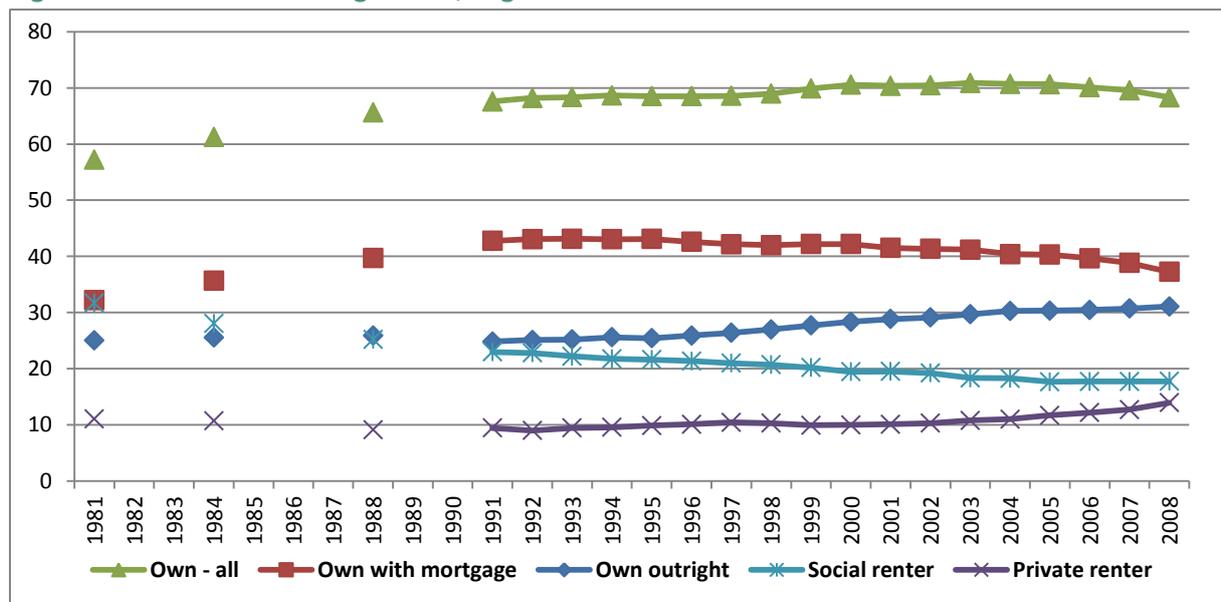
Source: General Lifestyle Survey, Office for National Statistics.

3.7 Housing Tenure

Over the last 30 years there have been some striking changes to housing tenure in the UK. In England, owner occupation increased rapidly over the 1980s from 58 per cent in 1981 to 68 per cent in 1991 (Figure 3.16). This rise was associated with a fall in social rental fuelled by the introduction of the 'Right-to-Buy' scheme for social renters introduced by the Conservative government in 1980. Under this scheme tenants in social housing (local authority owned) were given the right to buy their homes at a discounted value, which depended on their length of residence. Over the 1990s home ownership increased very gradually, by a further two percentage points, and remained at this level over the 2000s before falling from 2006 onwards. Figure 3.16 also shows the breakdown among owner occupiers between those who own their property through a mortgage or housing loan and those who own their property outright. This shows the increasing share of homeowners who own their properties outright, increasing from 25 per cent in 1995 to 31 per cent in 2008. This rate

continued to increase after 2006 and therefore the share of owners who own their property outright increased between 2006 and 2010. The fall in overall owner occupation reflects the fall in owners with mortgages and no doubt a contributing factor to this fall was the large increase in house prices between 1997 and 2007 (annual house price inflation rate was in double figures for most of these years). House prices, mix-adjusted rate, increased by 17 per cent in 2002 alone and just prior to the financial crisis, annual house prices increased by 11 per cent in 2007. As in many other countries there exists a considerable amount of regional variation¹⁸. These large increases in house prices made house purchase unaffordable for many first-time buyers as household income wasn't increasing at this rate, and overstretched many of those who had bought their homes through a mortgage. In 2007, on average, first-time buyers paid 17.2 per cent of the price paid as a deposit and their total mortgage payment as a percentage of their income was 23.5 per cent, by 2011 these figures were 25.2 per cent (deposit) and 18.1 per cent (percentage of income)¹⁹.

Figure 3.16 Trends in housing tenure, England 1981-2008



Source: S101: Trends in tenure: 1918 to 2008, England.

<http://www.communities.gov.uk/housing/housingresearch/housingsurveys/surveyofenglishhousing/sehlivetables/trendstenure/> (accessed 11 September 2012)

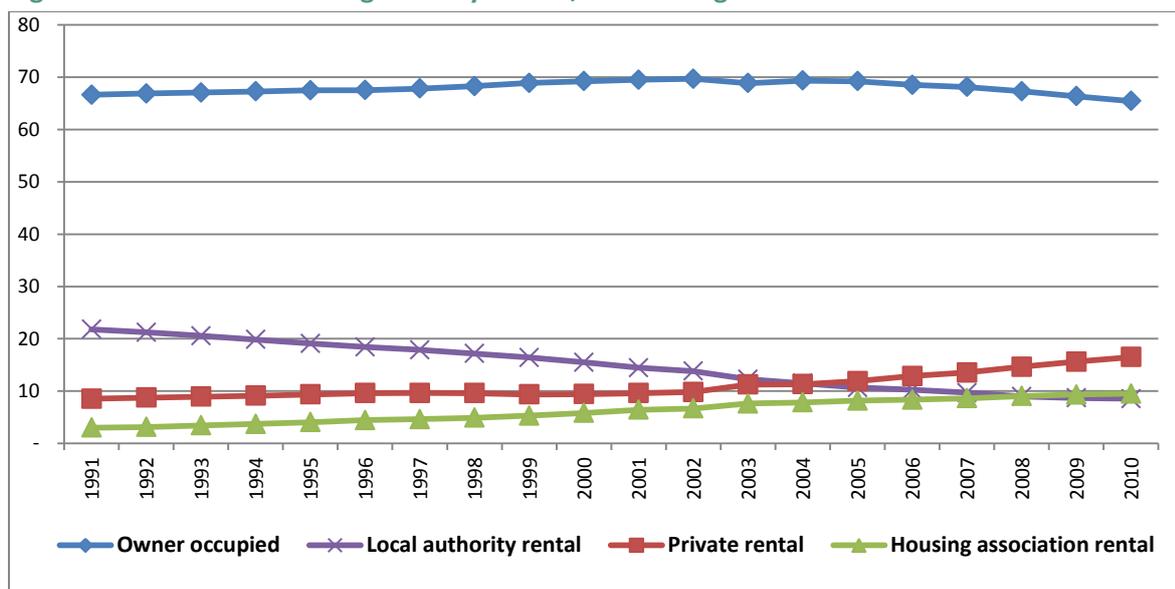
An important change occurred over the 1990s in the housing rental market. As local authority housing stock was sold off and stock was not replenished through equivalent building of new housing leading to a decline in the share of households living in local authority rental. Figure 3.17 shows a fall from 21 per cent in 1991 (the earliest year for which we can find official statistics) to 15 per cent in

¹⁸ http://www.ons.gov.uk/ons/dcp171778_275550.pdf (last accessed 26 September 2012).

¹⁹ ONS House Price Index Table 38 (Regulated Mortgage Survey), August 2012.

2001, falling further to 9 per cent in 2010. A considerable amount of local authority housing stock was transferred to non-profit housing associations (Pawson and Fancy, 2003), which partly explains the increase in this tenure type over this period. In addition to social housing, low income households can rent from private landlords and depending on their household income and circumstances their rent can be subsidised through the payment of housing benefit. Increases in the share of the private rental stock are likely to have resulted from high house prices limiting access to owner occupation and an increase in the popularity of ‘buy-to-let’ schemes among property investors.

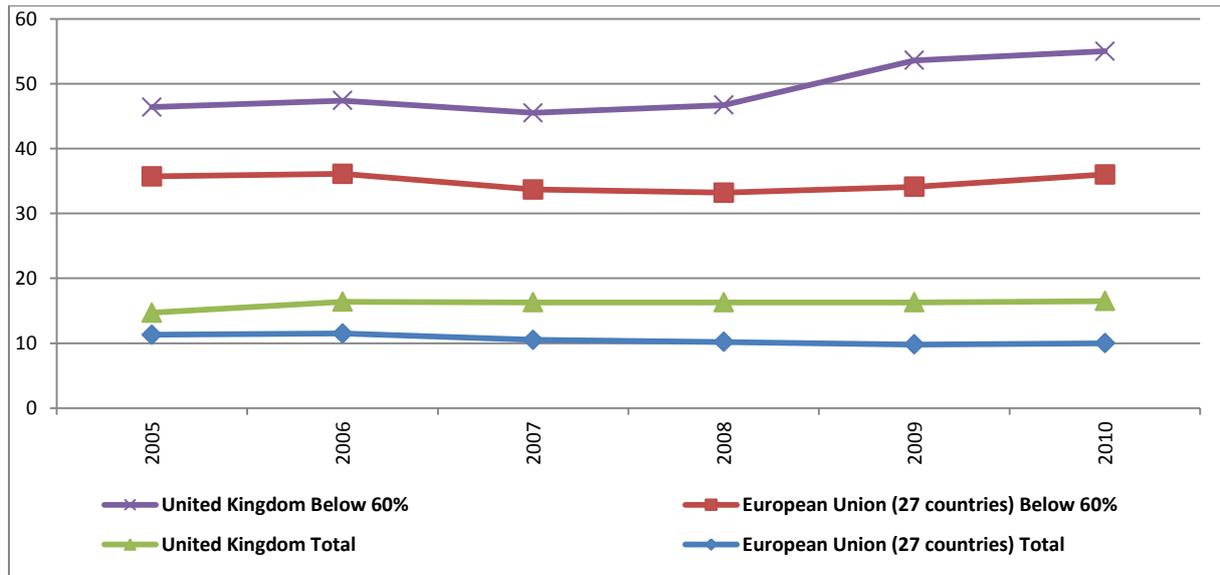
Figure 3.17 Trends in dwelling stock by tenure, United Kingdom



Source: Table 101: by tenure, United Kingdom (historical series) <http://www.communities.gov.uk/housing/housingresearch/housingstatistics/housingstatisticsby/stockincludingvacants/livatables/> (accessed 11 September 2012)

Figure 3.18 shows the housing cost overburden rate²⁰ for the UK, the EU-27 average for the total population and for households with below 60 per cent of median equivalised income (at risk of poverty). The UK has a high housing cost overburden rate, above the EU-27 average, and particularly high housing cost overburden rate for households at risk of poverty. The onset of the economic crisis led to a jump in the share of at risk of poverty households experiencing housing cost overburden from 47 per cent in 2008 to 54 per cent in 2009.

²⁰ This indicator is defined as the percentage of the population living in a household where the total housing costs (net of housing allowances) represent more than 40% of the total disposable household income (net of housing allowances) presented by poverty status.

Figure 3.18 Housing cost overburden rate in the UK and EU-27 average by income status

Source: Eurostat

3.8 Crime and Punishment

The relationship between crime and inequality is complex and the influences are likely to vary depending on the type of crime considered. In this section we look at overall crime rates and homicide rates. We then focus on a number of crimes that we anticipate will be most sensitive to changes in inequality. These are theft, robbery and burglary, and domestic abuse. We then look at perceptions of crime and worry about particular crimes. Finally we consider trends in prison populations, with a focus on young people.

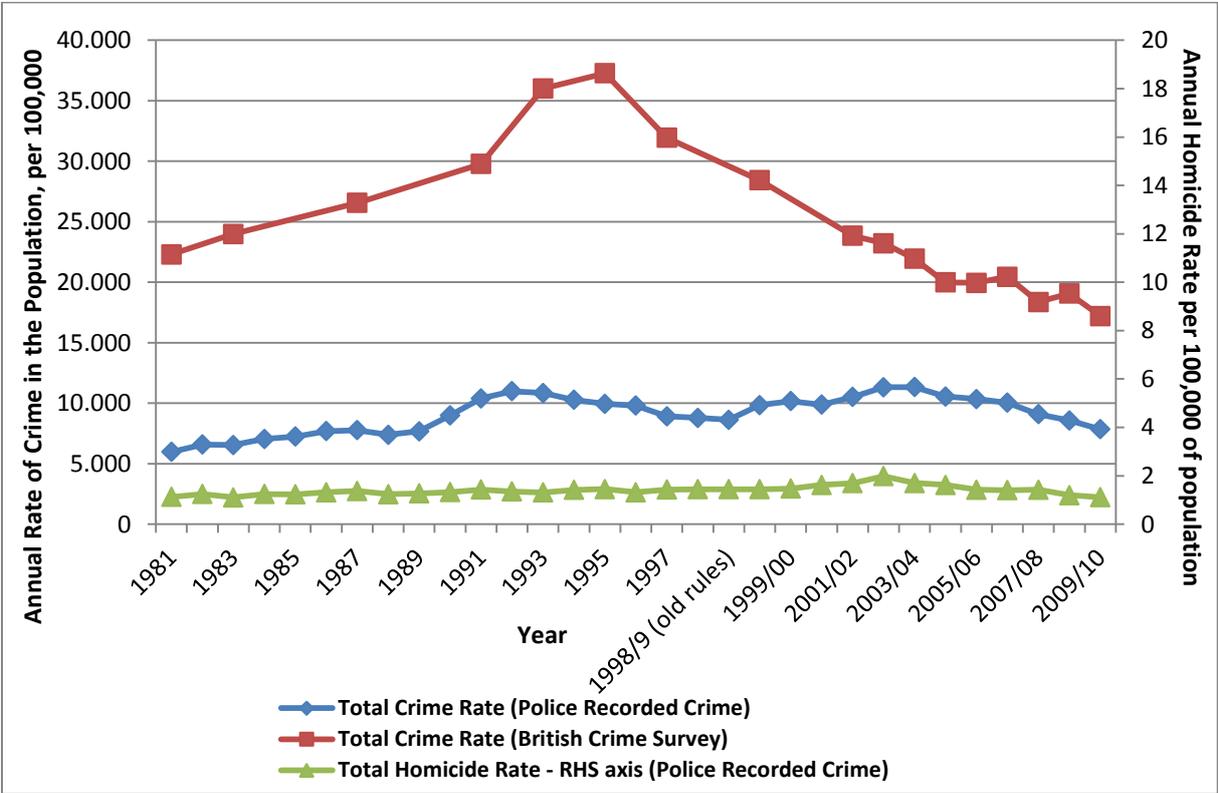
Annual data from Police Recorded Crime and the British Crime Survey together provide the most comprehensive picture of crime in England and Wales²¹ (Figure 3.19). Information from the BCS is considered to be a more accurate reflection of long-term crime trends in England and Wales—for the crime types and population it covers—than Police Recorded Crime in some instances, as not all crimes are reported to the police. In addition, there are differences in police recording practices overtime and across local authorities and definitions of offences can change. However, the BCS does not cover some important offences, including homicide, fraud and victim-less crimes such as drug possession and crimes against business and other organisations (Home office 2011a: 4; Home Office 2011b: 16).

Police Recorded Crime data have undergone two important changes over the time period we are interested in. The first was in April 1998, in which the “Home Office Counting Rules for Recorded

²¹ Crime statistics are only available separately for England and Wales; Scotland and Northern Ireland as the legal, judicial and policing is devolved. We focus here on England and Wales.

Crime” expanded its policies to include additional offences. The crime counts became more “victim-based” as well, with the number of victims being counted instead of the number of offences. The second round of major changes came in April 2002 with the introduction of the National Crime Recording Standard (NCRS) across England and Wales. It is intended to “ensure greater consistency between forces in recording crime and to take a more victim-oriented approach to crime recording with the police being required to record any allegation of crime unless there was credible evidence to the contrary” (Home Office 2011a: 12). This could explain the much higher total crime rate figure in 2002/03 in the Police Recorded Crime estimate which is not observed in the British Crime Survey data.

Figure 3.19 Overall trend in crime rates and homicide rate: Police Recorded Crime and British Crime Survey (England and Wales)



Source: Police Recorded Crime, Home Office; British Crime Survey

Notes on Figure 3.14

- (a) Rates are computed using mid-year population estimates from ONS. When period of data recorded switches from calendar year to fiscal year, the population estimate of the most current year is used (i.e., for 2003/2004, the mid-year population for 2004 is taken)
- (b) The change to the Home Office Counting rules for recorded crime from 1 April 1998 onwards caused the number of crimes counted to increase. Thus, the number of offences for years before and after this date is not directly comparable (Home Office 2010)
- (c) Additional changes introduced by the NCRS on 1 April 2002 also increased the number of offences recorded, which means that offences recorded after this date are not comparable with previous years (Home Office 2010)
- (d) BCS estimates are given for the calendar before 2001/02 and are related to crimes experienced in the fiscal year from 2001/02 onwards (Home Office 2011c)

In relation to inequality and poverty trends, the crime and homicide rates did increase over the 1980s. A number of hypotheses have been put forward to explain the dramatic fall in crime since the early 1990s:

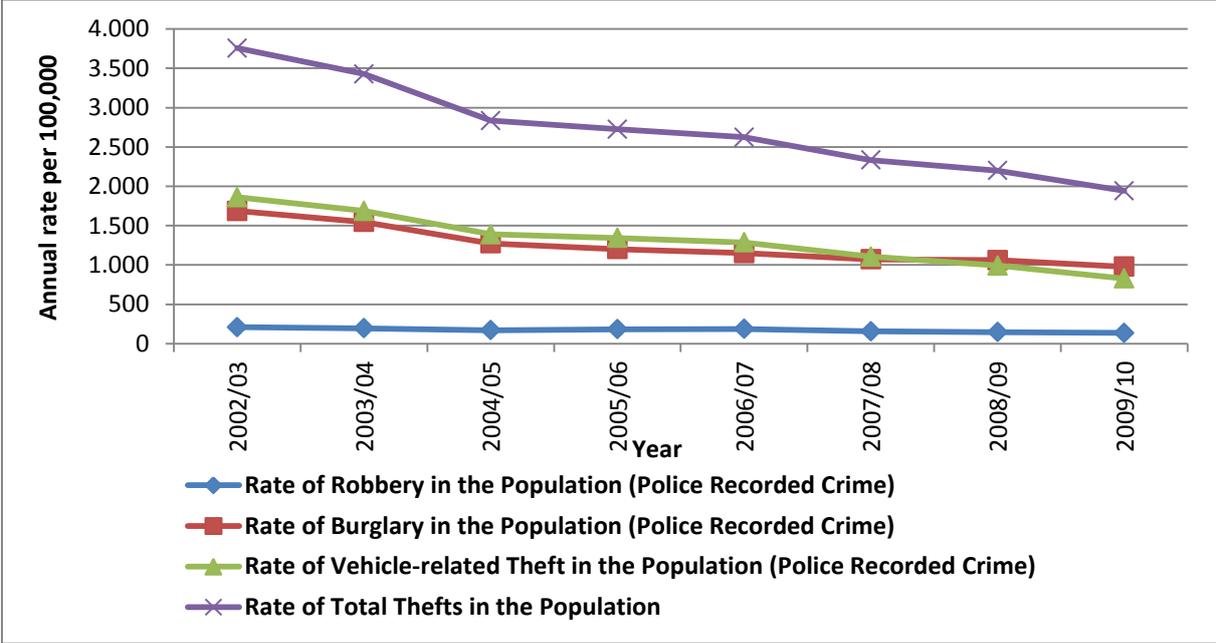
- Improved property security
- Economic influences
- Social change
- Use of CCTV
- Other local crime reduction initiatives and
- Changes in policing and the wider criminal justice system (Home Office, 2011b).

Even if the increase in crime rates over the 1980s was influenced by rising inequality, these figures suggest that since 1995 crime rates have fallen much faster and further than changes in income inequality.

For detailed changes in specific crimes we have a shorter time series covering 2002-2010 and we have focused on robbery, burglary and vehicle related theft and these are plotted alongside the overall rate of total thefts in the population (Figure 3.20). Unfortunately the series does not cover the 1980s, the period when the UK experienced the greatest increases in inequality. We find that the overall fall in crime rates is replicated for these recorded crimes with these rates falling by nearly one-half over this time period.

Personal relationships can also be affected by financial circumstances. We include here the trend in domestic abuse 2004/05-2010/11 (Figure 3.21). Over this period we observe a fall in domestic abuse rates. The Home Office publishes annual statistics on Intimate Violence, which is a term that encompasses and refers to “a number of different forms of physical and non-physical abuse consisting of partner abuse, family abuse, sexual assault and stalking. The term reflects the intimate nature either of the victim-offender relationship or of the abuse itself” (Home Office 2011d: 71). Domestic Abuse is a measurement of the various aspects of Intimate Violence, combining “partner abuse (non-sexual), family abuse (non-sexual) and sexual assault or stalking carried out by a current or former partner or other family member” (Home Office 2011d: 71). However, the latest figures provided by the Home Office, presented in Figure 3.21, exclude stalking to make measurements comparable over the years (see note 4 below figure). Unfortunately this is a very short time series but what we observe is a fall in the percentage of men and women recorded in the BCS suffering domestic abuse. The falls occurred between 2006/07 and 2008/09.

Figure 3.20 Trends in theft, robbery and burglary (England and Wales)



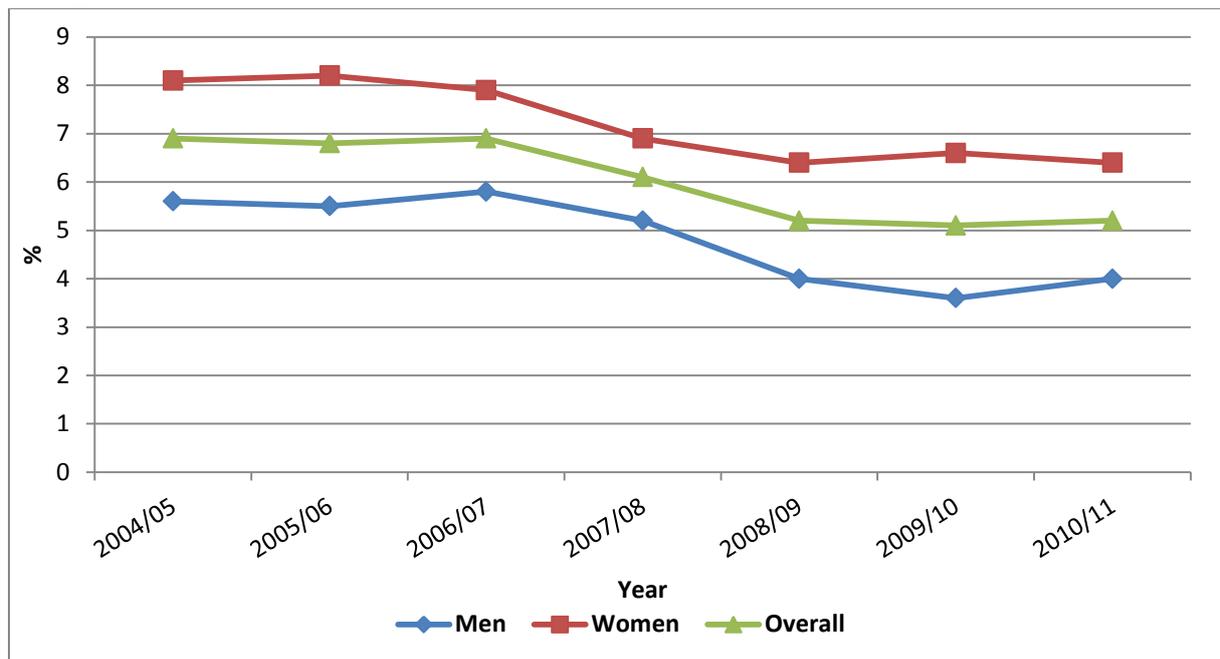
Source: Police Recorded Crime

Notes: (also see notes (a), (b), (c) for Figure 3.17)

(d) Vehicle-related theft is defined here as: Aggravated vehicle taking; Theft from a vehicle; Theft or unauthorised taking of a motor vehicle

(e) Total Theft calculations are authors’ calculations and are based on the PRC categories of Total Robbery, Total Burglary and the authors’ calculation of Total Vehicle-related theft.

It is important to note that the main BCS figures for domestic violence are known to be affected by under-reporting, which is why the BCS contains a self-completion module that covers violent and non-violent abuse by a partner or family member. As the self-completion module “provides more reliable estimates for these types of incidents”, the figures from the self-completion module are the ones that are included in this section for domestic abuse (Home Office 2011b: 62).

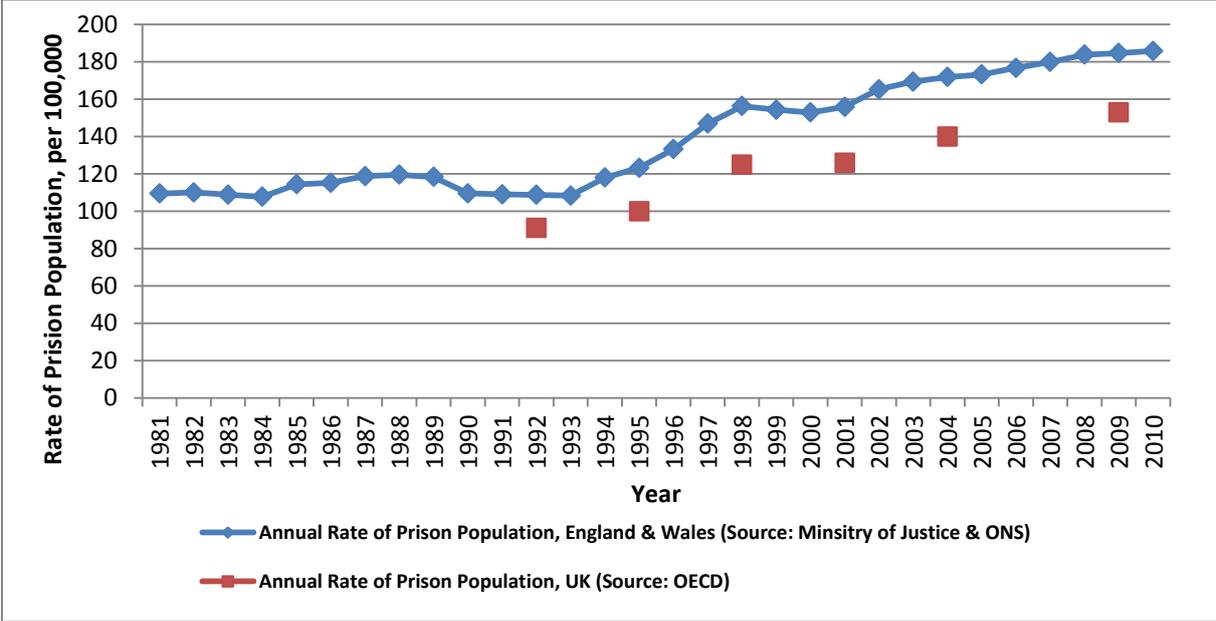
Figure 3.21 Percentage who were victims once or more of domestic abuse (men and women aged 16-59)

Source: British Crime Survey, Crime in England and Wales 2010/11, Table 3.02 & 3.03 (results from self-completion module)

Notes: Other notes (Home Office 2011c: Tables 3.02 and 3.03): Footnote 2: The 2007/08 BCS self-completion module on intimate violence did not include questions on stalking. Footnote 3: The sample size is lower in 2010/11 than in previous years due to use of a split-sample experiment. Footnote 4: Figures for any domestic abuse, any partner abuse and any family abuse have excluded stalking in order to create a comparable measure across years (questions on stalking were not included in the 2007/08 BCS). Footnote 6: Figures for any domestic abuse, any partner abuse, any family abuse, partner abuse (non-sexual) and any sexual assault will differ from those published in Crime in England and Wales 2009/10 and other publications prior to January 2011 due to revisions

We now turn to figures on the prison population. The size (rate) of the prison population is a reflection not just of present crime levels and conviction rates but also historical crime trends and is sensitive to policy regarding detention. Figure 3.22 shows the annual rate of the prison population in England and Wales based on Ministry of Justice and ONS statistics. For comparative purposes we have also included the UK rate reported by the OECD. These figures show that while crime rates increased in the 1980s the prison population rate increased only slightly (1984-1987) before falling back (1989-1990). Over the 1990s when crime rates were fairly stable the prison population rate increased dramatically (1993-1998), and from 2001 where the statistics in Figure 3.19 show falling crime rates the prison population has continued to increase. If inequality and poverty are related to crime rates and prison population rates it is possible that the increase in inequality and poverty over the 1980s led to increasing crime rates up to the mid-1990s and since then has fed through into higher prison populations as inequality remained high. The OECD series shows lower rates and although they are drawn from different populations, England and Wales versus UK, we think this is unlikely to explain the difference. Both series follow the same time trend.

Figure 3.22 Annual rate of prison population



Source: Ministry of Justice (Offender Management Caseload Statistics) and mid-year population estimates from ONS (from 15+ only). OECD.

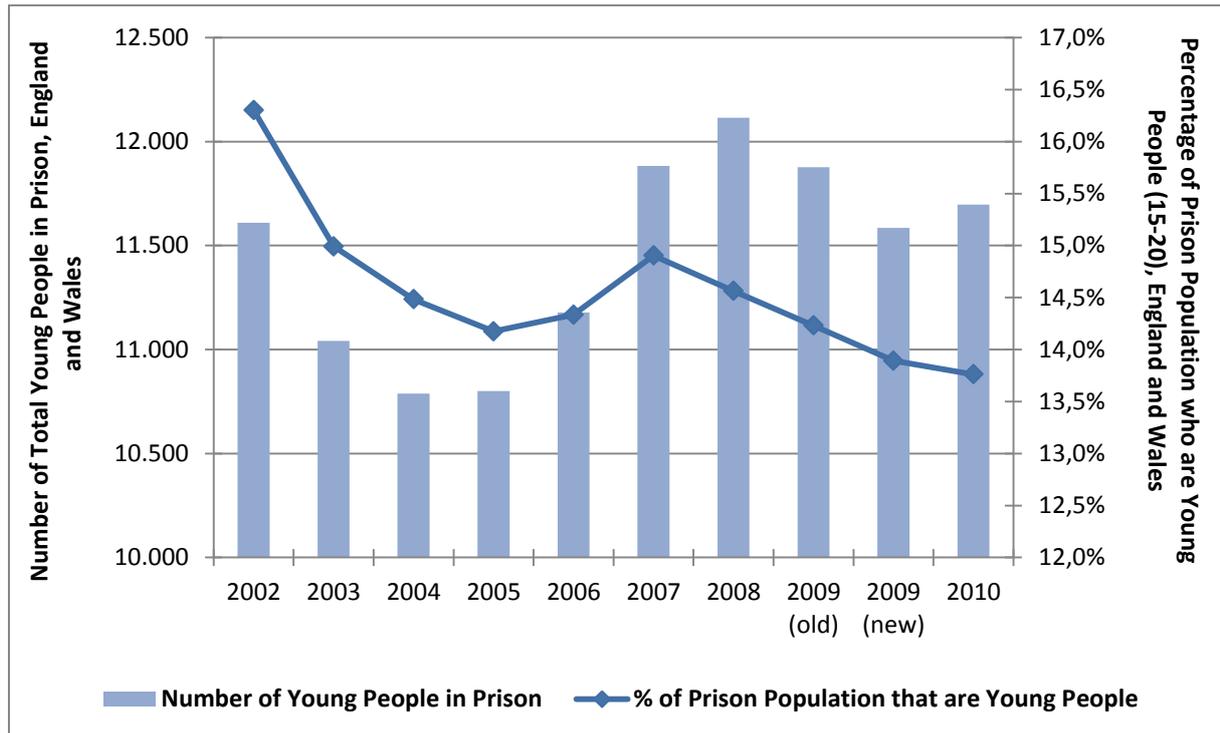
Notes: Rates based on mid-year population estimates from ONS. Ministry of Justice confirmed with the authors in February 2012 that it does not currently provide their own annual prison population rates.

Other notes (Ministry of Justice 2010: Table A1.2)

(1) The prison population annual average is the average of the 12 month end prison populations.

We now focus on young offenders as crime tends to be more prevalent among young people and it is fair to assume that the increased observed in child poverty will have its greatest impact on young people. The Ministry of Justice, in its Offender Management Caseload Statistics, defines 15 to 17 year olds as a separate category to “young adults” in prison, which are those aged 18-20. This “young adult” term also includes “21 year olds who were aged 20 or under at conviction who have not been reclassified as part of the adult population” (Ministry of Justice 2010: Table A1.1). Both of these categories are combined in this report to produce a “young people in prison” category, defined as those aged between 15 and 20, with the understanding that there may be some 21 year olds counted. It was not possible to obtain population figures for 15-20 year olds in England and Wales, so instead of a population rate of young people in prison, Figure 3.23 displays the percentage of the prison population aged 15-20, alongside the number of young people in prison. We find that the share of young people in the prison population (rate) and the number of young people in prison (stock) follow a similar trend. Both the stock and the rate fell 2002-2005 and then increased, although the stock continues to increase between 2007 and 2008 while the rate falls between these two years reflecting the fact that the adult prison population increased over this time to a greater extent than for young people. The rate and the stock fall 2008-2009 (old and new).

Figure 3.23 Trends in young prison population, aged 15-20 (England and Wales)



Source: Ministry of Justice, Offender Management Caseload Statistics 2010 tables

Notes (Ministry of Justice 2010: Table A1.1)

(1) Due to the introduction of a new prison IT system the 2010 prison population data is now taken from a different source and recalls are shown separately (they were previously included in the relevant sentence length band). The 2009 figures from both the old and new systems have been presented to aid comparison.

(2) Young adults are those aged 18 - 20 and those 21 year olds who were aged 20 or under at conviction who have not been reclassified as part of the adult population.

Not all young people who have committed crimes are held in prison or counted as part of the prison population. Figure 3.24 shows the size of the youth population held in secure estates. There are three types of Secure Estates for children and young people (Ministry of Justice 2012: worksheet 3.0):

- Secure Children's Homes (SCH)
- Secure Training Centres (STC)
- Young Offender Institutions (YOI)

The definitions of these different types of secure accommodations are as follows and are taken from the Youth Justice Board (Ministry of Justice 2012: worksheet 3.0):

Secure Children's Home

Secure Children's Homes (SCH) in England are run by Local Authorities in conjunction with the Department for Education. There is one Secure Children's Home in Wales run by Neath Port Talbot

local authority in conjunction with the Welsh Assembly Government in Wales. Secure Children's Homes range from 5 to 38 beds and have high staff to young person ratios allowing focus on the emotional, physical and mental health needs of the young people they accommodate. They generally accommodate remanded or sentenced young people aged 12-14 and girls and 'at risk' boys up to the age of 16.

Secure Training Centre

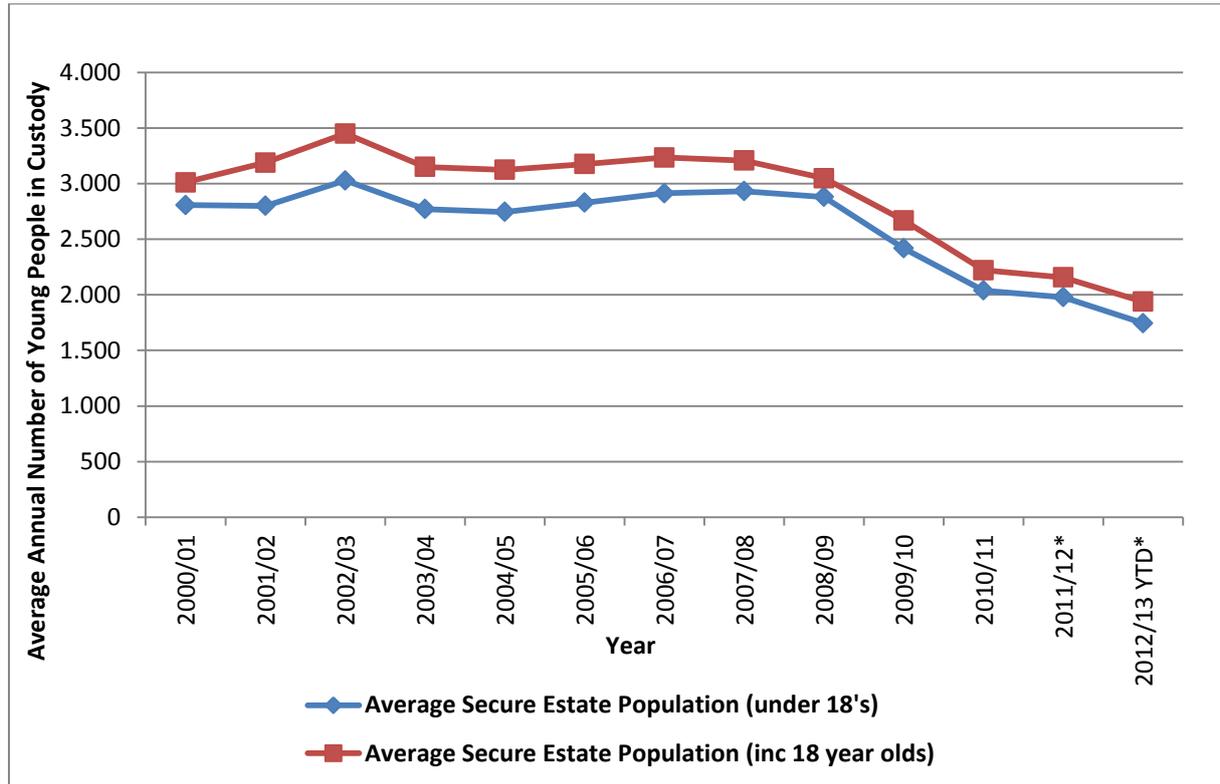
There are four purpose-built Secure Training Centres (STC) in England offering secure provision to sentenced or remanded young people aged 12-17. They provide a secure environment where vulnerable young people can be educated and rehabilitated. They are run by private operators under contracts which set out detailed operational requirements. Broadly speaking, staffing levels are three members of custody staff to young people living in a group of eight, and two members of custody staff to young people living in a group of six.

Young Offender Institution

Young Offender Institutions (YOI) can accommodate young people who offend aged from 15-21. However, the Youth Justice Board is only responsible for commissioning secure accommodation for young people up to the age of 17. YOIs tend to be larger than SCHs and STCs with lower ratios of staff to young people. Consequently, they are not considered suitable for housing those young people that have been assessed as having higher levels of risk. The YJB has however, commissioned smaller specialist YOI units to meet the demands of some of these 'at risk' young people.

Unfortunately these series are short and only available from 2000. We find increases in the number of young people held in secure estates 2000/01-2002/03, relative stability 2003/04-2007/08 and then a fall 2007/08-2011/12 (2012/13 data is provisional - average for April to July 2012).

Figure 3.24 Youth in custody in secure estates (England and Wales)

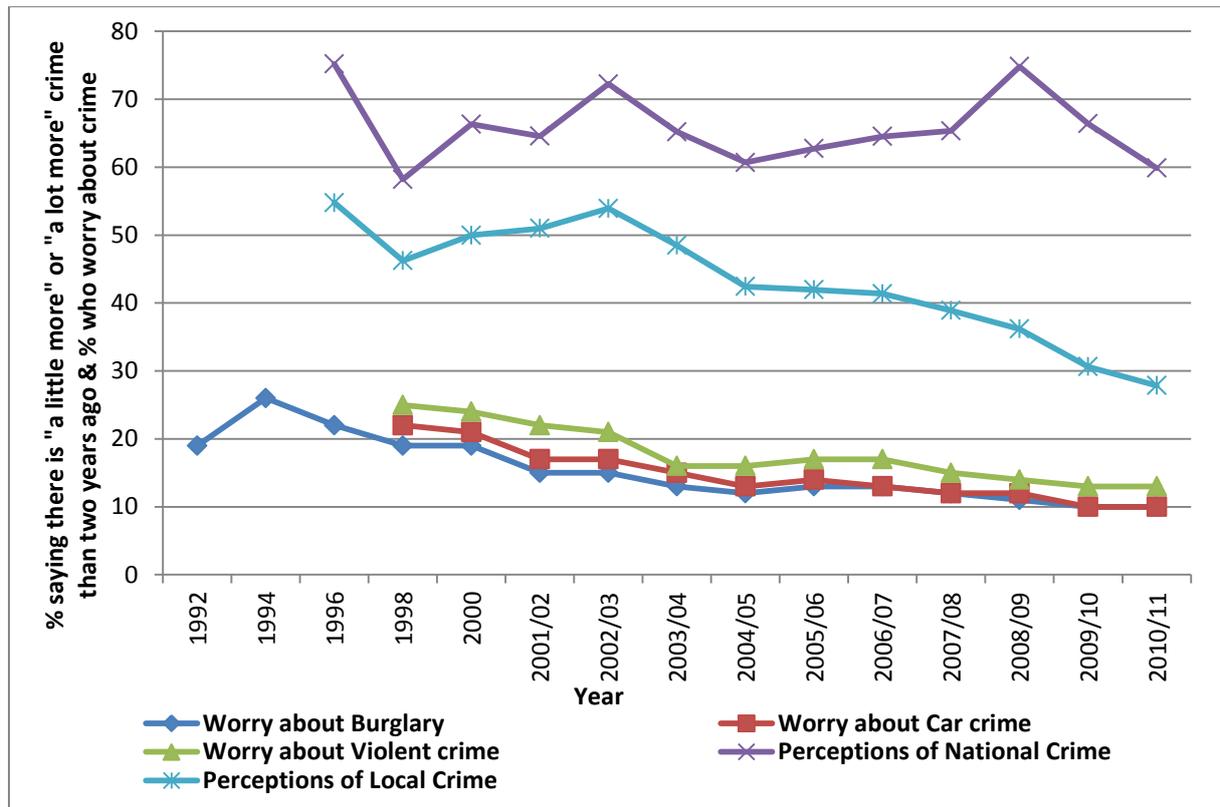


Source: Ministry of Justice (Youth Justice Board), Monthly Youth Custody Report – December 2011

Notes: 2012/2013 data provision (Year to Date – YTD – average April to July 2012)

Finally in this section we examine trends in perceptions of crime and the extent to which individuals worry about specific crimes (Figure 3.25). We find that over the period since 2000 when recorded crime rates declined, worry about burglary, car crime and violent crime has also declined. Perceptions of local and national crime fell between 1996 and 1998 (a period with falling crime rates BCS; stable PRC rates) and then increased up to 2002/03 (falling crime rates BCS; increasing PRC rates) It is interesting to note that while perceptions of local crime have declined since 2002/03, perceptions of national crime has been more volatile and does not display a consistent downward trend. It could be that perceptions of national crime rates are more sensitive to media reporting of crime, particularly high profile crimes such as child abduction and homicide. For example, the very high profile cases of the abduction and murder of two 10 girls in 1992 could explain the peak in the perception of national crime rates in 2002/03 and the conviction of a man for the murder of five prostitutes in 2008 might explain the peak in 2008/09.

Figure 3.25 Perceptions of national crime and local crime and Worry about specific crimes (England and Wales)



Source: British Crime Survey, Crime in England and Wales 2010/11, Table 5.01

3.9 Subjective measures of well-being, satisfaction, “happiness”

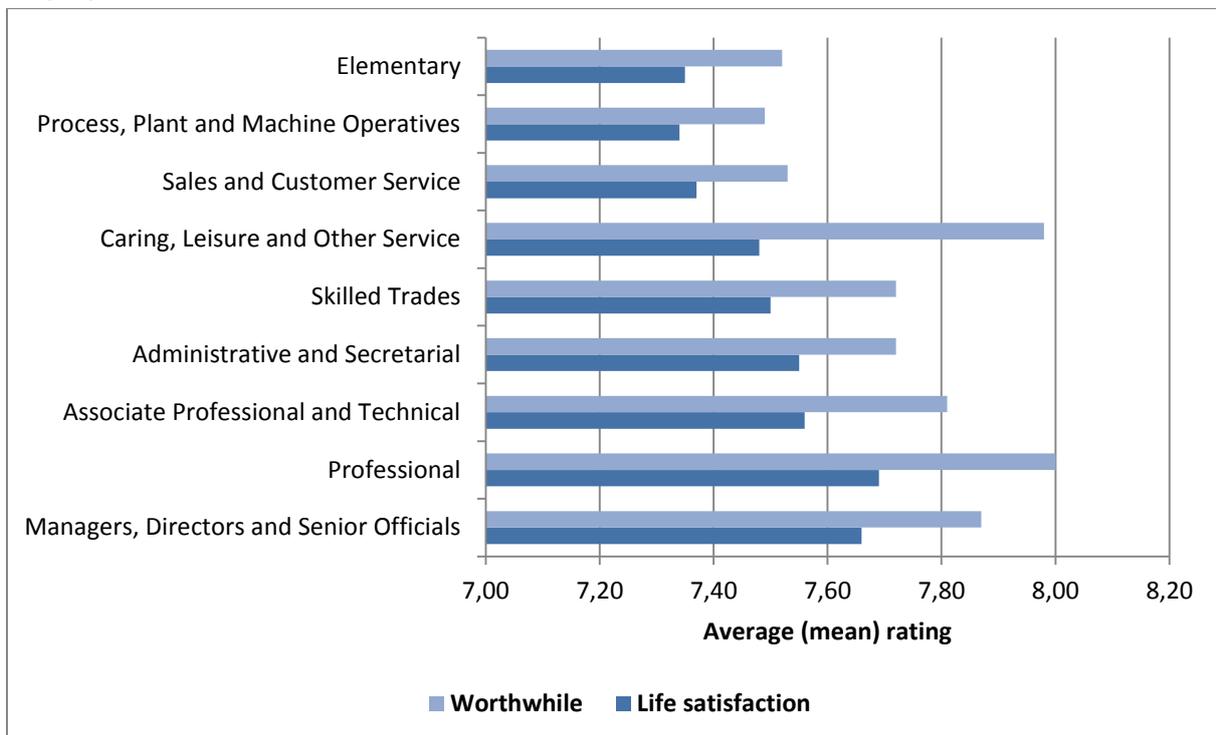
A growing interest in the use of alternative indicators of well-being, alongside economic measures, led to the introduction of official measures of subjective well-being in the April 2011-March 2012 Annual Population Survey. The questions were developed as a result of a collaborative effort between academics and statisticians. Four experimental questions were included:

- Overall, how satisfied are you with your life nowadays?
- Overall, to what extent do you feel the things you do in your life are worthwhile?
- Overall, how happy did you feel yesterday?
- Overall, how anxious did you feel yesterday?

All were answered on a scale of 0 to 10 where 0=not at all and 10=completely. The results from this exercise are still regarded as experimental. The first results from this exercise replicates the findings from previous studies that there exists a U-shaped relationship between age and life-satisfaction (where younger and older people report higher life satisfaction than those in between) and women reporting higher average levels of life satisfaction than men, however they also report higher average levels of anxiety. While it is too soon to relate life satisfaction to inequality in these data we are able

to look at individuals’ employment status and occupation. Adults in employment are more likely to report high and medium levels of life satisfaction (80 per cent) than unemployed adults (55 per cent), economically inactive adults fall between these two (73 per cent). Unemployed adults are the most likely to report very low levels of life satisfaction (16 per cent). For those adults who are in work there is evidence that occupation plays a role in shaping individuals’ subjective well-being. Figure 3.26 shows the average rating for overall life satisfaction and how worthwhile you feel the things you do in your life are by occupation of employment. While there aren’t big differences between occupation groups we do find evidence of an occupational gradient with individuals in the higher ranking occupations reporting higher life satisfaction than those in the lower ranking occupations. It is also clear that there is a relationship between how worthwhile people feel they are with the things they do in their lives and their occupation of employment with people employed in Professional and Caring, leisure and other service occupations scoring the highest average value in this domain. Obviously these are just correlations and no controls are included for other personal characteristics or selection.

Figure 3.26 Average (mean) life satisfaction and worthwhile ratings: by occupational group, 2011–12 (UK)



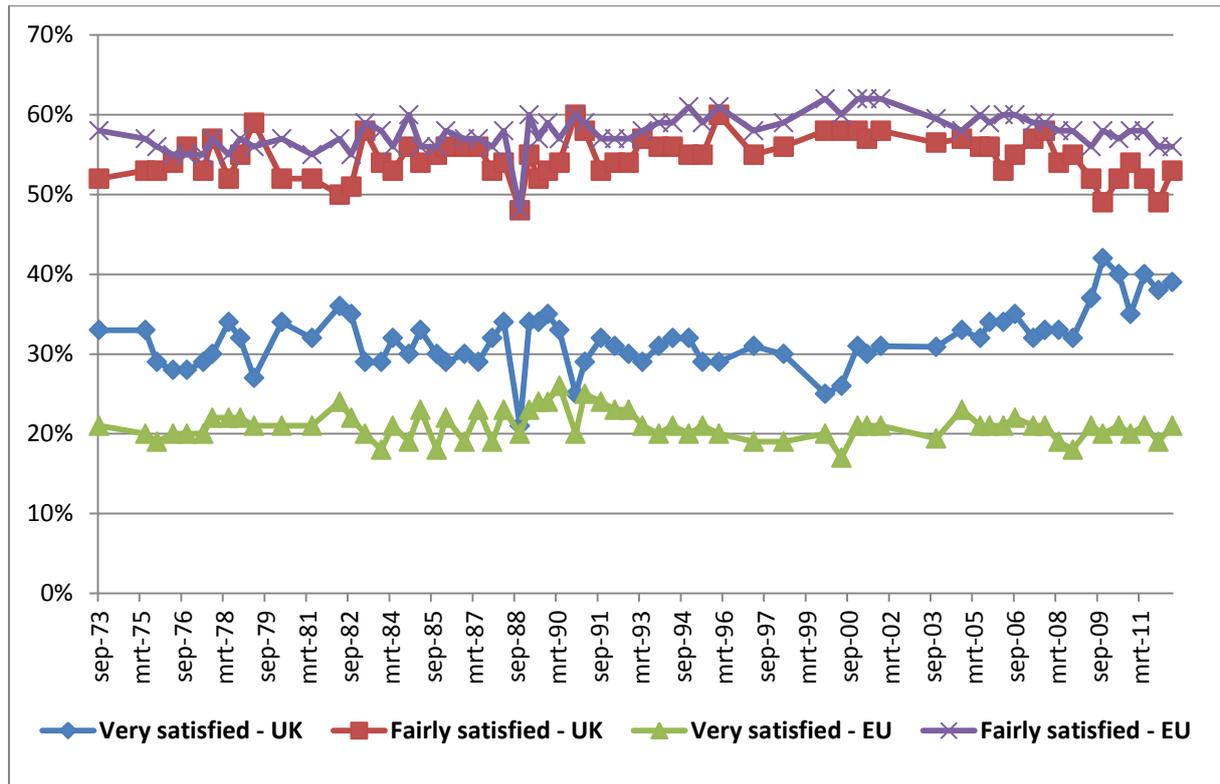
Source: Annual Population Survey (APS) - Office for National Statistics

Notes: (1) Adults aged 16 and over were asked 'Overall, how satisfied with your life are you nowadays?' and 'Overall, to what extent do you feel the things you do in your life are worthwhile?' where 0 is 'not at all' and 10 is 'completely'; (2) Data from April 2011 to March 2012; (3) All data weighted; (4) Non-respondents not included.

Time series evidence for life satisfaction is available for the UK in the Eurobarometer series from September 1973 to May 2012. Figure 3.27 plots the series for the UK and EU average for the shares reporting that they are 'Very satisfied' or 'Fairly satisfied' with life²². Across the EU around 1 in 5 individuals report that they are very satisfied with their lives and despite some fluctuations this has remained a fairly stable fraction over this entire period. In the UK a much higher share of the population report that they are very satisfied with their lives at 3 in 10 (30 per cent) and although this share remained fairly stable throughout most of this period, from around 2003 this share has been increasing so that by 2009 the share had increased to 4 in 10 (40 per cent). The shares reporting that they are fairly satisfied with the life they lead are very similar across the EU and in the UK and both series tend to decline from 2006 but more so for the UK. There is no obvious relationship here between trends in inequality and trends in life satisfaction apart from to say at the aggregate level there does not appear to be a relationship between inequality and life satisfaction. It is not clear why the share reporting that they are Very satisfied with the life they lead increased from 2008 as the financial crisis hit. A tentative explanation for this is that the financial crisis while hitting the headlines has taken some time to filter through to the real economies and have an impact on people's everyday lives and relative to the headlines of doom and gloom there is at least a group of people who consider themselves to be fortunate in a relative sense. The reason why there is a divergence between the EU average and the UK could be down to the fact that the UK is not part of the Euro zone.

²² The question asked was "On the whole are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the life you lead?"

Figure 3.27 Life satisfaction 1973-2012



Source: Eurobarometer, European Commission http://ec.europa.eu/public_opinion

3.10 Intergenerational Mobility

Two birth cohorts, one born in 1958 and the second born in 1970, have been followed-up periodically since birth, provide the main source of data that has been used to analyse intergenerational mobility in the UK and how it has changed over time²³. Economists and sociologists who have estimated intergenerational mobility using these two birth cohort studies disagree, with economists finding declining income mobility (Blanden et al., 2004) and sociologists finding no such decline in class mobility (Goldthorpe and Mills, 2004). Both 'sides' have sought to reconcile these differences but, not surprisingly, they both reach the separate conclusions that their own findings are superior (Blanden, 2013; Erikson and Goldthorpe, 2010). There clearly are issues around data quality and measurement error that are likely to play a contributory role but also there are simply different conceptual frameworks which makes a straight comparison between these approaches difficult.

Parents can also influence children's outcomes through the wealth effect. Karagiannaki (2012) examines the effects of parental wealth holdings on children's outcomes in early adulthood: parental wealth holdings when children were teenagers are associated with a range of outcomes at age 25.

²³ In addition some research on this topic has been conducted using the British Household Panel Survey; see for example Nicoletti and Ermisch (2007).

She explores four outcomes: higher educational attainment, labour force participation, earnings and homeownership. For all outcomes she finds positive associations with parental wealth, which operate over and above the influence of parental education and income. The strength of estimated associations varies across outcomes with education exhibiting the strongest association. For earnings the association is mainly driven by the indirect effect of parental wealth on children's educational attainment while for homeownership this is through the direct effect of parental wealth transfers. Further analysis that examines the importance of financial wealth and housing wealth separately shows that housing wealth is more strongly associated with higher educational attainment than with financial wealth. However, important effects are also estimated for financial wealth (especially at low wealth levels) pointing to the importance of financial constraints for low wealth/financial indebted households.

3.11 Conclusions: Appraisal of the interdependence and the 'national story' of inequality drivers and their social impacts

In this chapter we have shown how social indicators have evolved over the last 30 years and how these relate to inequality trends. While it is not always possible to relate these changes to changes in inequality it is clear that while average outcomes are often influenced by a range of factors social gradients in outcomes have remained stubbornly high and in some cases have widened. Unfortunately we don't always have long time series covering the full 30 year period we are interested in for all of the social outcomes/variables. As the greatest changes occurred in the 1980s it would be particularly interesting to have series that covers this period.

The evidence we have on material deprivation (2005-2009) shows falling rates of material deprivation, particularly among under 18s, and poverty persistence (1991-2008) but increases in poverty persistence among households with children after 2003. As child poverty rates have fallen this could mean that the most disadvantaged families remained in poverty over this time (selection). Material deprivation rates follow a strong income gradient but so too does the share reporting that they don't have a particular item because this is something that they do not want or need and there is some evidence that families adapted to lower income over the economic recession by re-evaluating 'need'.

When we examine trends in life and death we find that while women have continued to delay childbearing to later ages, with the mode shifting from age 25 in 1982 to age 31 in 2010, after fairly constant rates between 1980 and 2005, fertility rates have trended upwards. This took many demographers by surprise and was certainly not a feature of historical population projections. There

is some speculation that part of this upward trend is due to improved maternity arrangements and more generous cash benefits for children. At the other end of life we find falling death rates, steeper for men than women but with a strong social class gradient that appears to steepen for men. In addition infant mortality and neonatal mortality rates also fell over the period, continuing long run downward trends. The falls for infant mortality are greater than for neonatal mortality which paradoxically is likely to be due to advances in antenatal and neonatal medicine.

Not surprisingly these lower mortality rates have led to increases in life expectancy (at birth, age 25 and age 65). These increases are greater for men, who on average have lower life expectancy than women, and life expectancy is projected to continue increasing. Social gradients in life expectancy at birth have persisted despite increases in overall life expectancy.

When individuals are asked about their self-perceived general health, over the limited period for which we have data (2005-09), we find increasing shares of men and women who perceive their general health to be very good.

The relationship between crime and inequality is not straightforward, as crime is affected by a whole range of factors and policies, but increasing economic divisions between individuals and limited opportunities to succeed financially for some groups could be related to increases in particular crimes such as theft and burglary. Poverty brings with it considerable personal strain and strain on personal relationships, increases in in poverty, particularly long-run entrenched poverty, could give rise to increases in domestic abuse. We find increases in recorded crime rates over the 1980s, particularly the late 1980s through to the early 1990s when inequality increased. There have been falls since 2002 but overall crime rates remain above those recorded in 1981. We have shorter time series for the analysis of particular crimes (over the 2000s) but here we find falling theft, robbery and burglary crime rates and falls in domestic abuse.

Prison populations are clearly affected by a whole range of factors, not just the crime rate, such as sentencing policy, historical crime rates, crime solving, etc. From 1980 prison populations were relatively stable up to 1993 after which there were big increases up to 1997 and further increases since 2001.

With increasing relative child poverty rates over the 1980s, up to over one-third of all children, and a fall since the end of the 1990s to the mid-2000s, we thought it would be informative to examine trends in youth prison populations. We find no discernible trend over the 2000s but a fall in young people being held in custody in secure estates (particularly after 2007/08).

Perceptions of crime and worry about burglary, car crime, violent crime and local crime all fell between 1992 and 2010/11 but perceptions of national crime, no doubt influenced by media reporting of crime, are higher and we find no downward trend over this period.

4. Political and Cultural Impacts

4.1 Introduction

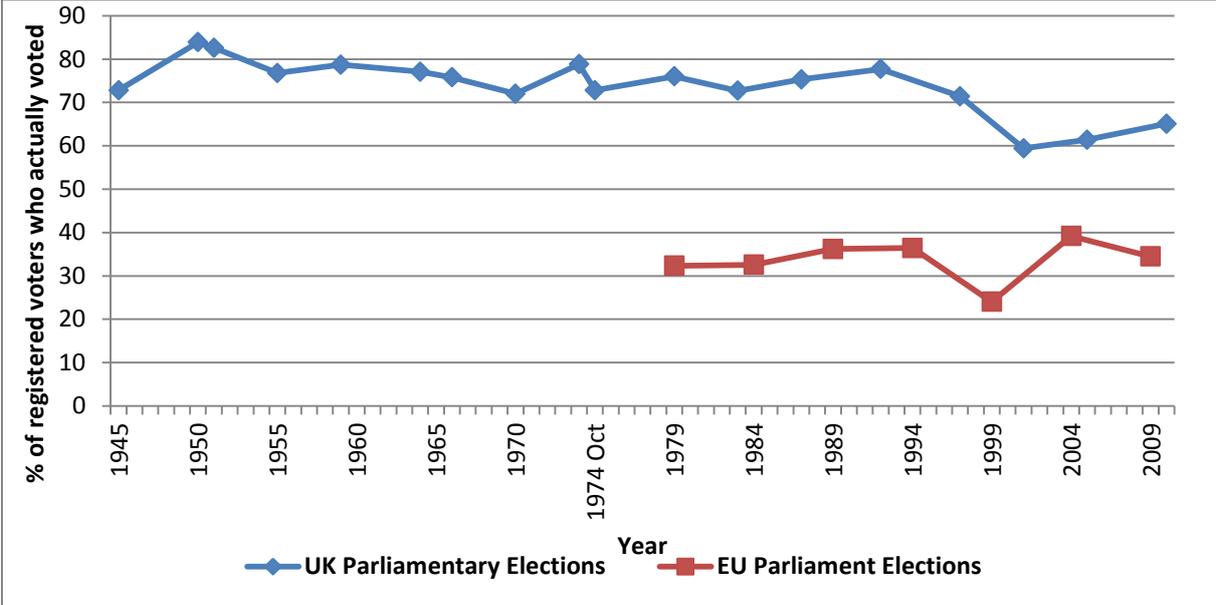
In this section we examine trends in political and culture variables and relate these to trends in inequality. Where information is available we look at gradients in social class and education and assess how these have changed over time in relation to inequality trends.

4.2 Political and civic participation

We begin by looking at a number of indicators of political and civic participation. Where data is available we provide a breakdown by social class and/or highest level of education to help to understand the relationship between these indicators and inequality. As with previous indicators, these show simple correlations and do not show causal relationships.

Voter turnout provides an indication of the extent to which citizens are actively engaged, or participating in, the political system. It is a legal requirement for UK citizens to register on the electoral roll but voting in elections is voluntary. Voter turnout, the share of the eligible population voting in for UK parliamentary elections and EU parliament elections is shown in Figure 4.1. Voter turnout for UK parliamentary elections in the four elections held between 1979 and 1992 was between 73 and 79 per cent. In 1997 voter turnout fell from 78 per cent in 1992 to 71 per cent and fell further to 59 per cent in 2001. Voter turnout increased to 66 per cent in 2010. However, analysis of the IDEA data shows that the share of the eligible population who registered to vote in 2010 fell to an historical low of 93%. The longer time series shown in this figures highlights the fact that these rates are low from a historical perspective. Voter turnout in EU parliament elections is considerably lower, reaching a low of 24 per cent in 1999 and peaking at only 39 per cent in 2004. There is no discernible trend in voter turnout rates for EU parliament elections in contrast to the downward trend in voter turnout in UK parliament election.

Figure 4.1 Voter turnout for the UK (1979-2010): % of registered voters who actually voted



Source: International Institute for Democracy and Electoral Assistance (IDEA): Voter Turnout Dataset
 Note: Voter Turn-out ("of the only or final round") is defined as "the percentage of registered voters who actually voted"

Using a different data series, British Election Survey micro data, we are able to show overall self-reported turnout rates and a breakdown by social class where this information is available. Figure 4.2 shows the overall percentage of the eligible UK population who voted in the nine general elections held between February 1974 and May 2005 (micro data covering the May 2010 election was not available at time of writing). The results show the fall in voter turnout in the three general elections held since 1992, as was shown in the IDEA data albeit at higher rates, from 83-88% turnout in the 1974-1992 elections to 79% in 1997, 73% in 2001 and 74% in 2005. Where data are available in 1983, 1992, 1997 and 2005 we find a social class gradient with the professional and managerial classes more likely to vote than the partly skilled and unskilled classes. In 2005 the differences between classes was wider than in previous years; 67% of individuals in Class V voted in the general election compared to 85% of individuals in Class I. The change in the occupational classification (from SOC90 to SOC2000) that came into effect in 2001 may have contributing to this increased spread, but the primary cause is not clear at this time. Although not directly comparable due to differences in data collection and classification scheme, information from Ipsos MORI²⁴ (who conduct many political polls) provides some evidence of turnout in the May 2010 general election. Turnout for individuals in Social Grade²⁵ AB was 76% compared with 57% in Social Grade DE. In 1995 turnout rates were 83%

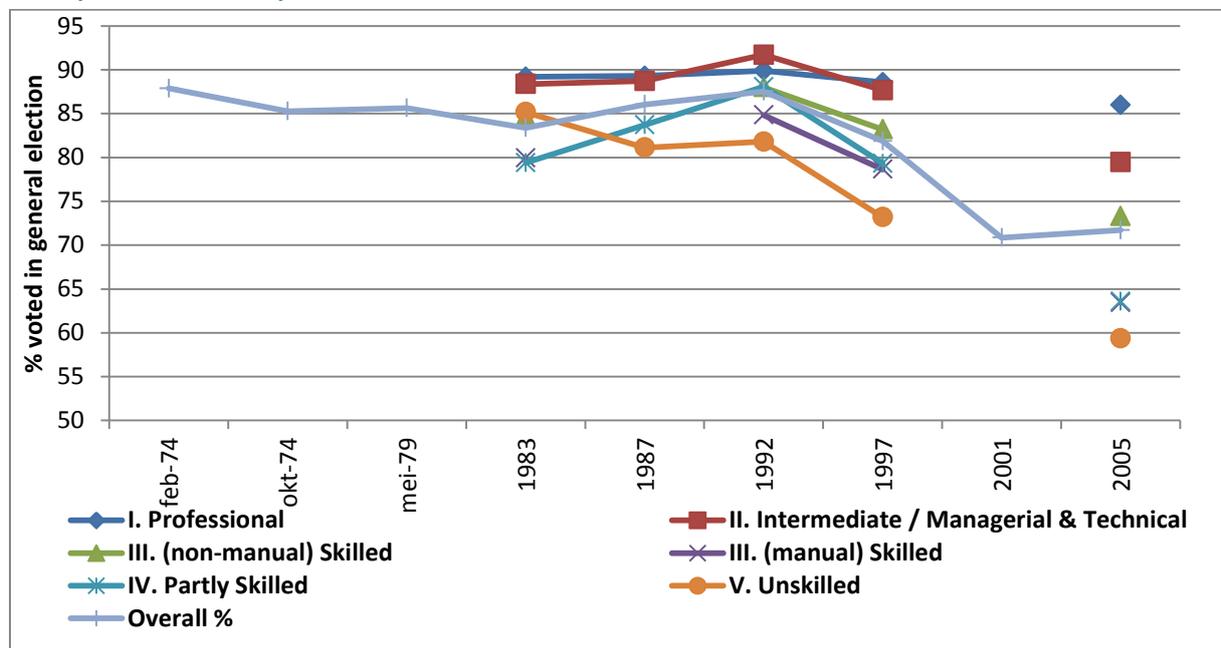
²⁴ <http://www.ipsos-mori.com/researchpublications/researcharchive/poll.aspx?oItemId=2613&view=wide>

²⁵ Originally developed by the National Readership Survey, Social Grade is demographic classification scheme favoured by a number of market research organisations. A High managerial, administrative or professional; B Intermediate managerial, administrative or professional; C1 Supervisory, clerical and junior managerial,

and 77% respectively. This represents a fall of 20 percentage points for Social Grade DE individuals but only 7 percentage points for Social Grade AB. This provides further evidence that the social gradient in voter turnout has steepened in the UK.

There does not appear to be a contemporaneous correlation between changes in inequality and changes in voter turnout, although turnout is lower after 1990 than before when inequality is higher and the social gradient in voter turnout has steepened. This could be a symptom of entrenched levels of high inequality being accompanied by disillusionment with politics and disengagement for those in less advantaged positions.

Figure 4.2 Share of eligible population who voted in each general election (1974-2005), by social class (where available)



Source: British Election Survey micro data.

Another form of participation we look at is membership of trade unions. Trade union membership has virtually halved in the UK in just over 30 years, falling from an historical peak of 13.2 million in 1979 down to 7.3 million in 2010-11 (Figure 4.3). The main fall occurred between 1979 (13.2 million) and 1995 (8 million). The shorter series for union density²⁶ in Great Britain, also in Figure 4.3, shows how this fall in membership translates to falls in density (for all in employment and among employees). Union density among employees has fallen from 39 per cent in 1989 to 26 per cent in 2012-13. There have also been big changes in the profile of union members, partly reflecting

administrative or professional; C2 Skilled manual workers; D Semi and unskilled manual workers; E State pensioners, casual or lowest grade workers, unemployed with state benefits only.

²⁶ The question on trade union membership was introduced in the Labour Force Survey in 1989, which is used to compute union density.

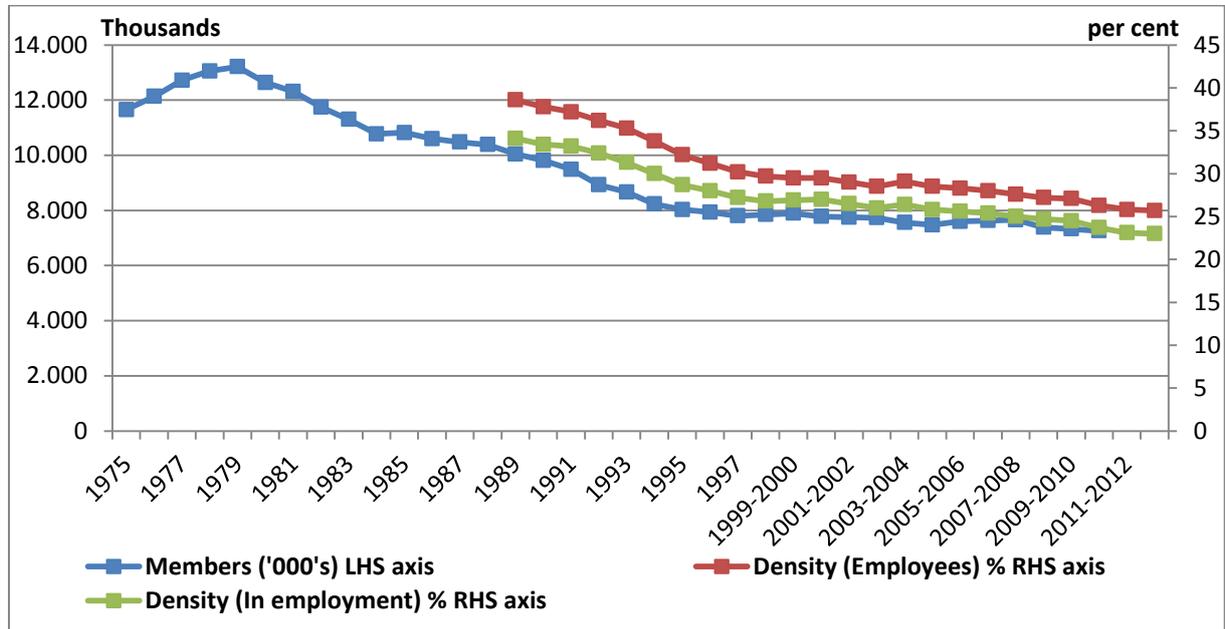
industrial restructuring over the 1980s with a move away from manufacturing to services and partly due to demographic changes in the profile of employees. Between 1995 and 2000 trade union membership levels were very similar in the private and public sectors (around 3.5 million; a bit higher in the public sector and a bit lower in the private sector) and changed very little over this five year period, although trade union density is much higher in the public sector (BIS, 2012; BIS, 2013). Over the 2000s these trends diverged with falls in membership in the private sector up to 2010 and then increasing, and increases in membership in the public sector up to 2004, remaining fairly stable before falling from 2010. In 2012 there were 3.9 million trade union members in the public sector compared with 2.6 million members in the private sector (ibid.). These changes represent a fall in density in the private sector from 21.4% in 1995 to 14.4% in 2012 and a much smaller decline from 61.3% in 1995 to 56.3% in 2012 in the public sector. The falls in density in the public sector occurred exclusively among men and greater falls in density for men were found compared to women in the private sector. Overall union density for female employees is greater than for male employees and this has been the case since 2002, prior to which union density was greater among male employees. Female trade union employee members now account for the majority of trade union employee members in the UK (54.5% in 2012). Some of these changes are due to changes in employment and differences in the impact of the current economic recession in more recent years. For example, following the 2008-09 recession employee numbers in the private sector initially fell then recovered, while employee numbers in the public sector initially rose, before austerity measures led to falls in the two most recent years.

There is a wide distribution of union density by occupation and industry reflecting historical factors and traditions, effectiveness of the unions involved and to some extent the nature and size of the workplaces.

It is certainly clear from Figure 4.3 that union membership fell sharply over the period that inequality rose most dramatically. This was a period which Margaret Thatcher, the then Prime-minister, 'took on the unions', famously in the mining sector but also in other sectors and was a period of high conflict between the government and the unions. Membership fell as industry was restructured with the demise of the coal industry and a shift away from manufacturing towards services and unemployment soared from 1979 to the mid-1980s. A considerable amount of research has looked at the relationship between unions and inequality. Gosling and Lemieux (2004) estimate that the effect of de-unionization over the 1980s and 1990s led to increase male wage inequality but had little effect on female wage inequality (partly due to differences in the profile of union jobs). They estimate that de-unionization can account for 34 per cent of the increase in male wage inequality in the UK

between 1983 and 1998, with little effect for women, for whom the decline in the unionization rate was much smaller.

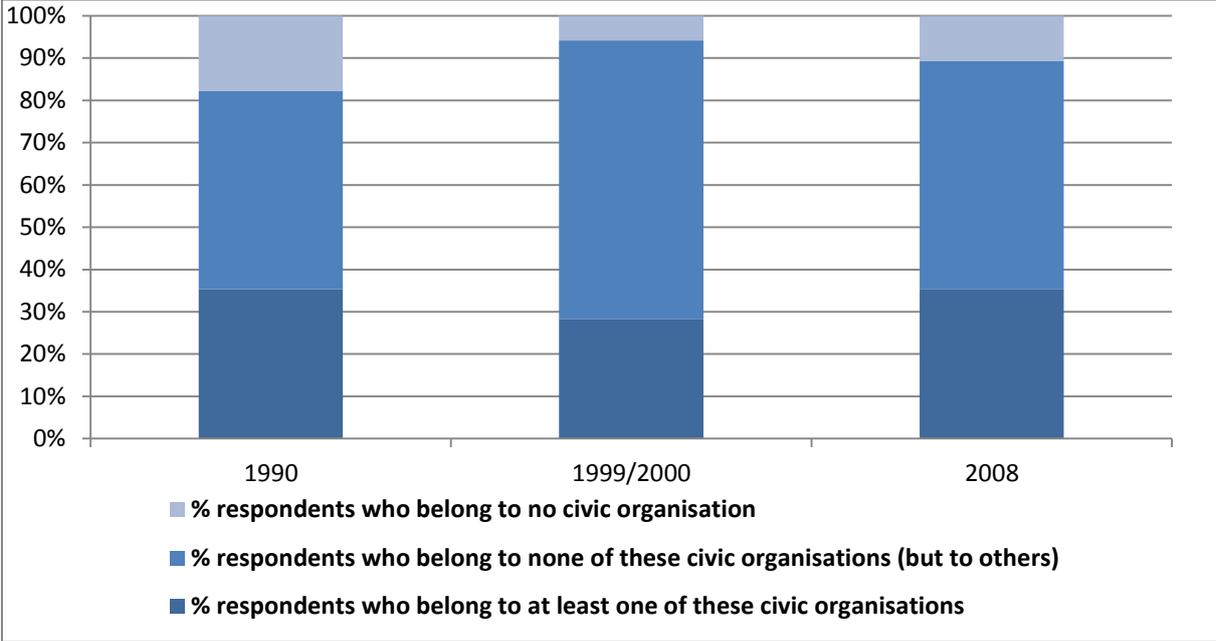
Figure 4.3 Trends in union membership and union density



Sources: (1) Members – Certification Office <http://www.certoffice.org/Publications/Annual-Reports.aspx> (2) Density - Labour Force Survey, Office for National Statistics

Finally in this section we look at participation in civic organisations. In Figure 4.4 we show the share of the GB adult population belonging to a civic organisation. From the full list of possible organisations available in these data (European Values Study) we have identified a number of key organisations: Welfare Organisations, Religious or Church Organisations, Cultural Activities, Local Community Action, Third World Development/Human Rights, Environment, Youth Work, Women's Groups, Peace Movement, Voluntary Health Organisations, 'Other Groups'. We have data for three years: 1990, 1999/2000 and 2008. We find that around one-third of the population belongs to a key civic organisation, with a low of 28 per cent in 1999/2000.

Figure 4.4 Share of population belonging to civic organisations – Great Britain



Source: European Values Study

4.3 Trust in others and in institutions

In this section we look at trust in others and trust in various organisations. In a more unequal population trust between groups could be lower than in a more equal population. In addition if inequality increases between professionals and the general population or at least between those in power or powerful positions and the general population then trust in organisations such as, inter alia, the government, the legal system could fall. For trust in various organisations we use information from the Eurobarometer Series. These data provide population estimates but we are not able to look at differences between social classes or education groups. We start by looking at trust in the UK parliament. Devolution to Scotland with the formation of the Scottish Parliament in 1999 and the transfer of some powers to the Welsh Assembly (1998) and the Northern Ireland Assembly has reduced the reach and power of the UK parliament; however it remains the National parliament and the supreme legislative authority. The Eurobarometer series has collected information on trust in the UK parliament since 2003. Figure 4.5 shows that over this eight year period around one-quarter of respondents report a tendency to trust the UK parliament, but this hides a considerable amount of fluctuation between these dates. Trust in the UK parliament tended to increase in the first half of this period, peaking in July 2007 at just over 41%, then declined and reached a low of 17% in July 2009. So even at the peak only a clear minority of the population expressing a tendency to trust in the UK parliament.

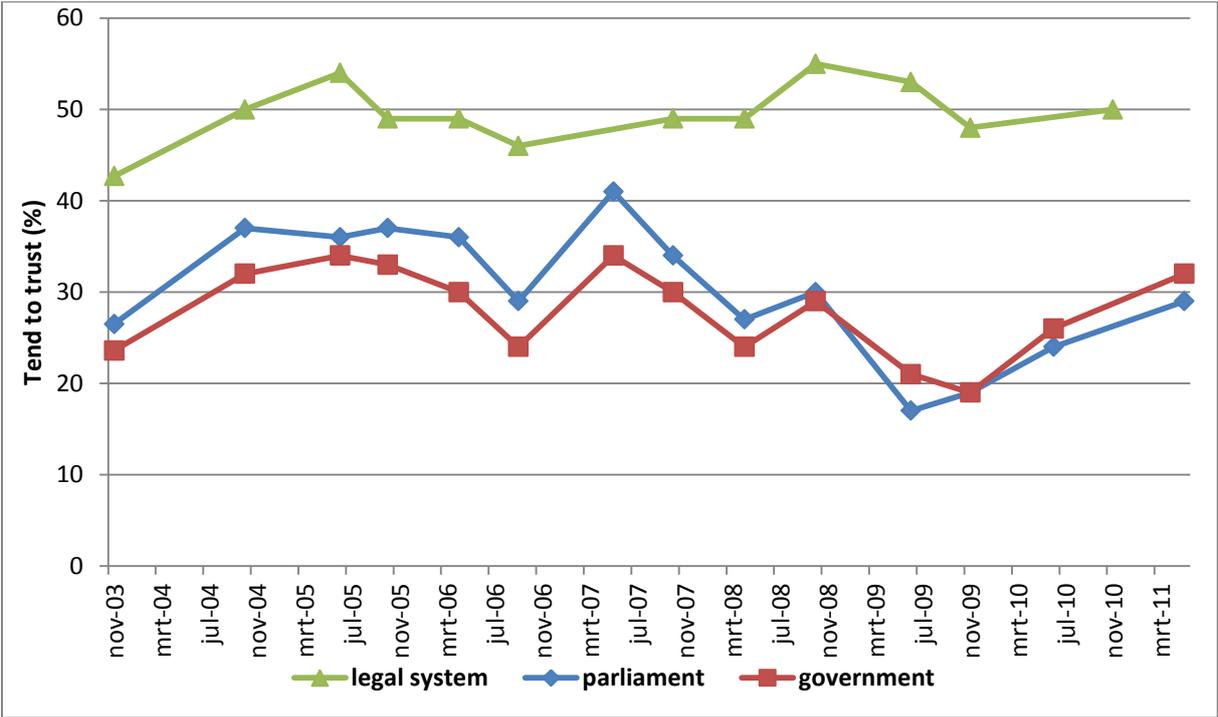
There is no clear trend that looks like it could be related to changes in inequality, instead it is most likely that major events have affected reported trust in parliament. Unfortunately this time series is not long enough to see the impact of trust on the UK parliament relating to the start of the second Gulf war in March 2003 but this may provide an explanation for why the series starts at a fairly low level in November 2003. The leak and subsequent publication in 2009 (from May) by the *Daily Telegraph* of the revelation that UK parliament MPs had abused their expenses claims is the most likely explanation for the near halving of respondents reporting trust in the UK parliament from 30% (October 2008) to 17% (July 2009). Since this low point trust has recovered to 29% in March 2011 but overall trust in the UK parliament is low.

The second indicator we look at is trust in the UK government. The pattern that this indicator follows over time mirrors that of trust in the UK parliament. The peak is not as high and the lowest point is not as low but clearly the same factors affect these two indicators. During this time period general elections were held in 2005 and 2010 (in addition Gordon Brown became prime minister in June 2007).

Figure 4.5 shows the percentage of respondents to the Eurobarometer series who reported that they tend to trust the UK legal system. There is a little fluctuation over this time period (November 2003 to November 2010), broadly trust remains fairly stable at around 50%, which is higher than trust in the UK parliament and government.

There is no obvious relationship between these indicators and changes in inequality.

Figure 4.5 Share who tend to trust in UK parliament, government and legal system



Source: Eurobarometer

Notes: "I would like to ask you a question about how much trust you have in certain institutions. For each of the following institutions, please tell me if you tend to trust it or tend not"

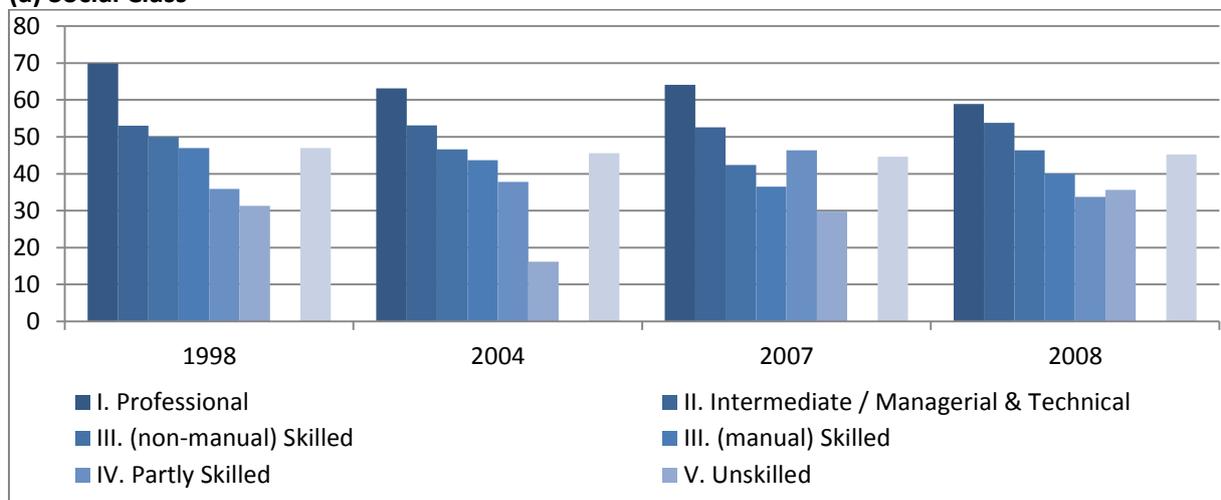
We now turn to trust in others. For this indicator we use information from the British Social Attitudes Survey²⁷. We only have four observations over a ten year period (1998, 2004, 2007 and 2008). The advantage with the BSAS is that we are able to analyse overall percentages by social class (Figure 4.6a) and education groups (Figure 4.6b) allowing us to explore the relationships with inequality. Overall there is little change between these time periods in the share of respondents agreeing that most people can be trusted; a slight fall from 47 per cent in 1998 to 45 per cent in 2008. Looking at the breakdown by social class we see a strong gradient with a much higher percentage of individuals in Social Class I (professionals) agreeing that most people can be trusted (71%) than individuals in Social Class V (unskilled) (26%). There isn't a clear time trend over this 10 year period but there is a definite reduction in the differences between social classes. This compression is mainly driven by a fall in trust among individuals in Social Class I and an increase in trust among individuals in Social Class V. The figure for Social Class V in 2004 looks like an outlier. It is not clear what has influenced this change.

²⁷ From 2005 onwards, a new weighting approach reduces non-response bias and adjusts the sample to the regional sex and age profiles of the population, in addition to maintaining the weighting component that corrects for household selection probabilities that favour small households over the selection of people in large households (Stafford 2009).

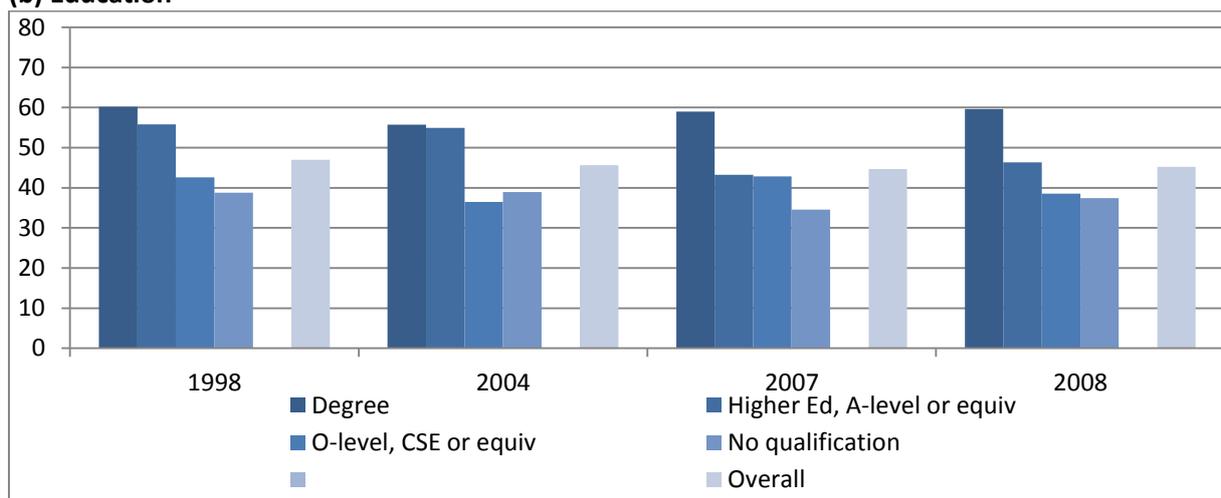
The same information can be broken down by highest level of education (Figure 4.6b). Here we also find a gradient with individuals holding a least a Degree level qualification reporting the highest level of trust in other people (around 60%) down to the lowest share among individuals with no qualifications (around 38%). There are some changes over time (particularly for those with A-levels up to Degree level qualifications and those with O-levels or equivalent qualifications) who both record a fall in trust overtime of around 10 percentage points but no clear overall trend. In contrast to the breakdown by Social Class we do not find a compression in the differences between the top and bottom group but more between the second highest education level and lower groups.

Figure 4.6 Share agreeing that most people can be trusted

(a) Social Class



(b) Education



Source: British Social Attitudes Surveys

Notes: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in life?"

4.4 Political Values and Legitimacy

In this section we begin by looking at the population shares supporting left and right political values. We try and relate these findings to changes in inequality and to assist this we show the breakdowns by education and social class groups. We then look at political legitimacy examining a range of indicators including support for the European Union and membership, the extent to which individuals feel that their family background limits their ability to succeed, perceptions of inequality and whether or not government should redistribute income and the perception that the poor are lazy.

UK parliamentary elections are based on a First Past the Post (simple plurality) electoral system which has led to the domination of a small number of political parties. In England Labour, Conservative and Liberal Democrat parties capture the vast majority of votes. Labour and the Liberal Democrats have tended to position themselves on the centre-left with the Greens and Respect further to the left (both hold a UK parliamentary seat). The Conservatives position themselves on the centre-right and are challenged on the right by UKIP (UK Independence Party, established in 1993) and to a lesser extent the far right BNP (British National Party, a splinter group of the National Front formed in 1982). The Conservative party for some time has been split on the issue of Europe and this has given rise to the growth in support for the Eurosceptic UKIP party. UKIP currently has 11 of the 73 UK seats in the European Parliament. Pockets of support for the far-right BNP has led to little electoral success, gaining 1.9% of the 2010 general election vote, 0.7% in 2005 and 0.2% in 2001 but have never gained a UK parliamentary seat. They currently hold one European Parliament seat. In the Scottish party system additionally the Scottish National Party (SNP) and the smaller Scottish Socialist Party (SSP) position themselves to the left of Labour. In Wales the nationalist Plaid Cymru party positions itself on the centre-left.

Although the UK parliament remains the Sovereign state, since the late 1990s a system of devolution has emerged with Scotland, Wales and Northern Ireland each being granted varying degrees of self-governance. In 1999 a Scottish Parliament was established with a Scottish Government headed by a First Minister. In 1998 a National Assembly for Wales was established with a Presiding Officer and a Northern Ireland assembly with a First Minister. In Northern Ireland the political parties can be divided into unionists (mainly the the Democratic Unionist Party (DUP) and the Ulster Unionist Party; in favour of maintaining the union), the republican/nationalist parties (Sinn Féin and the Social Democratic and Labour Party (SDLP)) and a number cross-community parties such as the Alliance Party and the Green Party. These new tiers to the UK parliamentary system, along with greater plurality in the voting systems they have adopted has brought greater diversity.

Beneath the national governments exists a complex system of local government with elected Councils and in some areas directly elected Mayors. There is greater scope for smaller parties and independents to gain a voice in these elections. The move towards greater localism and greater plurality is perhaps behind the increase in the share of votes being cast for parties outside the three major UK parties. Dunleavy and Gilson (2010) show that across a range of polls prior to the 2010 general election the combined support for UKIP, the Greens, the BNP and the Nationalist parties in Scotland and Wales rarely fell below 12%. This is an increase from 8-9% in the mid-2000 and 5% just prior to the 2001 general election.

The issue of European membership and a more general examination of the UK relationship with Europe continues to divide the Conservative party and since the 2007 financial and economic crisis a more hostile voice against EU membership has garnered support. In the 2013 local elections for English and Welsh councils (outside London) UKIP make big gains. Although UKIP didn't win overall control of any local council they secured 147 local council seats (139 gains) and gained nearly a quarter of all votes cast (an eight percentage point increase from the 2009 local elections).

The left-right scale. The scale consists of five different statements to which respondents to the British Social Attitudes Survey can answer, "agree strongly", "agree", "neither agree nor disagree", "disagree" or "disagree strongly". These five statements are:

- Government should redistribute income from the better off to those who are less well off.
- Big business benefits owners at the expense of workers.
- Ordinary working people do not get their fair share of the nation's wealth.
- There is one law for the rich and one for the poor.
- Management will always try to get the better of employees if it gets the chance.

An additive index is then formed as a summary of the information gathered from the responses to these statements. Indices range from 1 (categorised as leftmost) to 5 (categorised as rightmost) (National Centre for Social Research 2009 237:239). These values are not necessarily those popularly considered to be held by individuals supporting extreme right or extreme left political views. To some extent, the definitions of being politically left or right are arbitrary, which is why the construction of the leftmost is a little different to the rightmost.

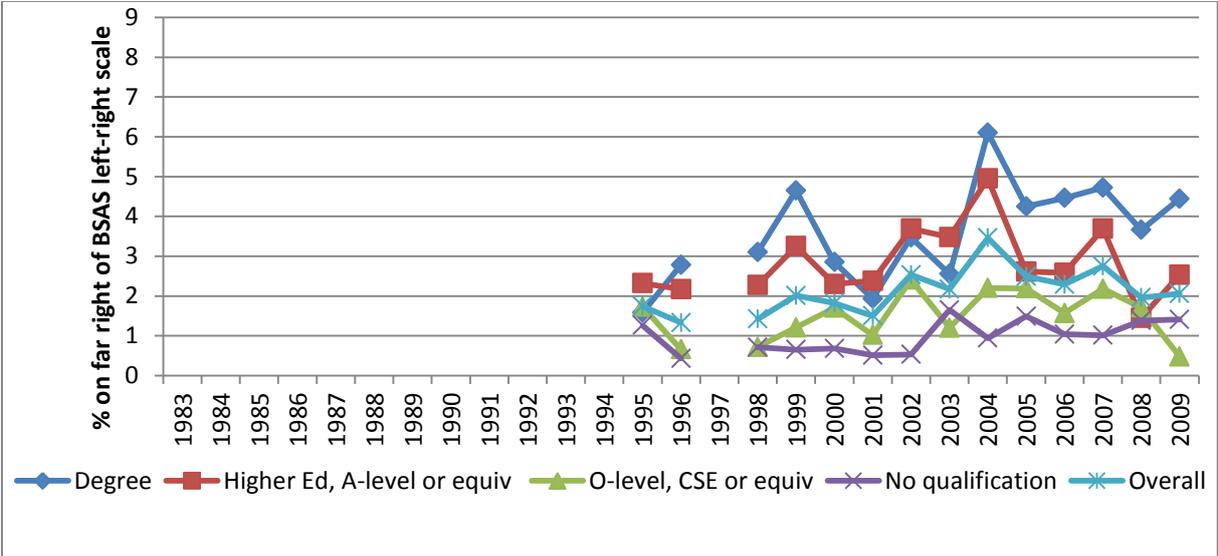
Figure 4.7a shows the percentage of those on the right (index score greater than 4) of the BSAS left-right scale from 1995 to 2009. Overall we find that only a very small fraction of the population is classified as having far right political values. There is some evidence of a small increase in far right political values but this must be seen in the context of very limited support for these values. We do find evidence of differences between education groups with the higher qualified more likely to

express extreme right political values and those with no qualifications the least likely to express support for these values. We also find an increase in the differences between education groups over time.

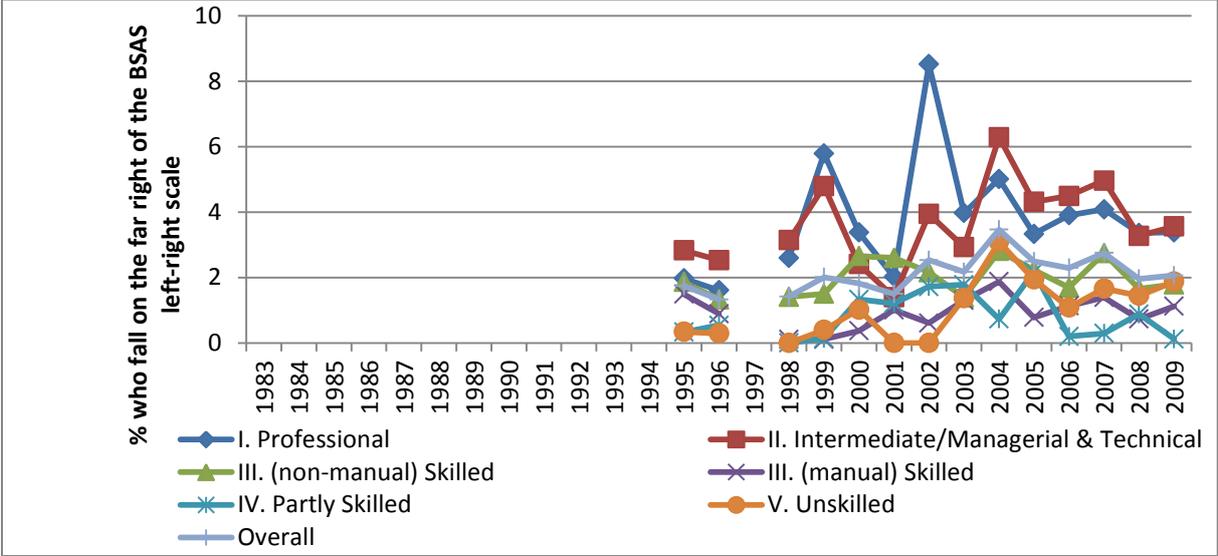
Figure 4.7b shows the same information broken down by social class. The profession and managerial classes are more likely to express rightmost political values with classes III(M), IV and V the least likely. These may seem at odds with popular perceptions of those supporting extreme right political values but this may be to do with the values that make up this scale (documented above).

Figure 4.7 Share on the far right of the BSAS left-right scale

(a) Education



(b) Social Class



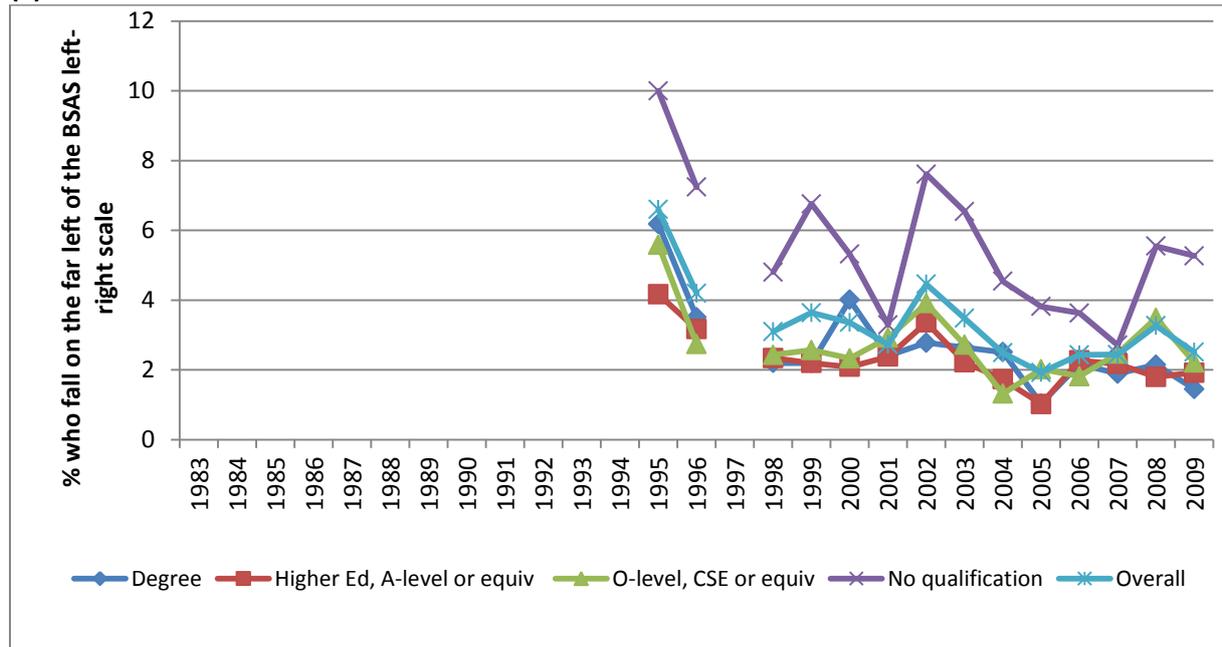
Source: British Social Attitudes Survey microdata.

If we look at the other end of the scale to gauge support for leftmost political values we find falling overall support (Figure 4.8). This categorisation captures a larger share than for those supporting

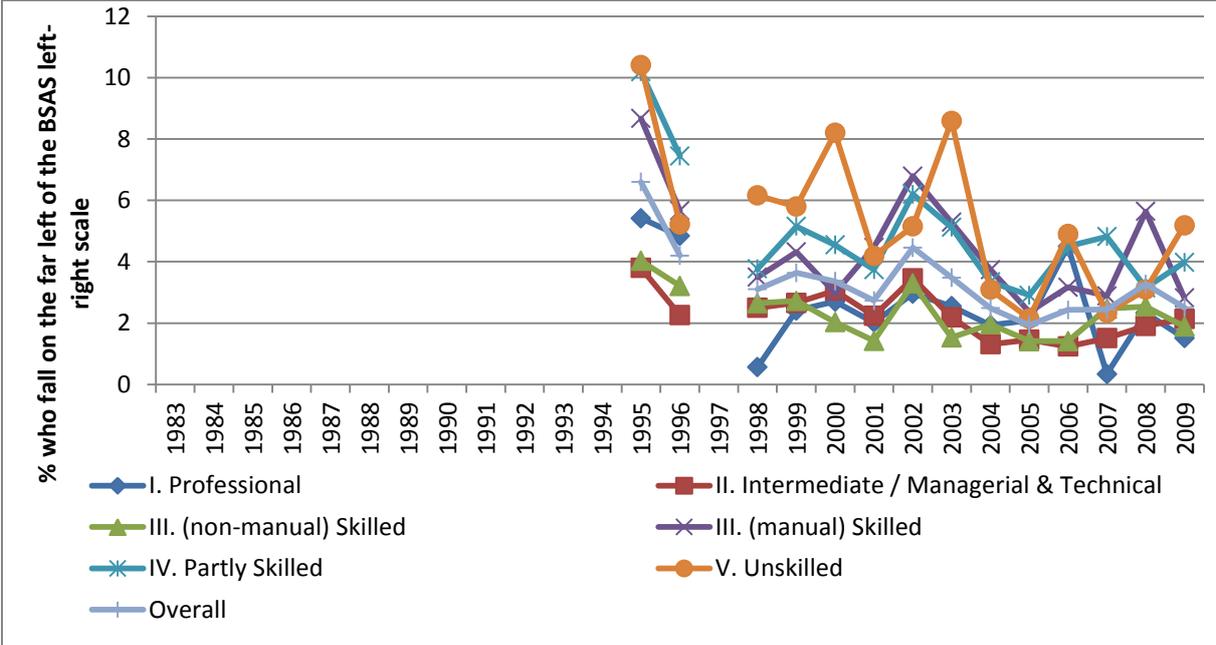
rightmost values which is likely to be due to the values included in the index and the cut-off. These figures should be used to consider time trends rather than levels. Individuals with no qualifications are most likely to express leftmost political values and individuals with intermediate and higher level qualifications are the least likely (Figure 4.8a). The differences between education groups appear to be largely stable over time.

Figure 4.8 Share on the far left of the BSAS left-right scale

(a) Education



(b) Social Class



Source: British Social Attitudes Survey microdata.

Figure 4.8b shows the results from the same series broken down by social class. We find evidence of a social class gradient with the main distinction between Social Classes I, II, IIINM, who are least likely to express extreme left political values, and Classes IIIM, IV and V, who are most likely to express extreme left political values.

An alternative datasource, the World Values Survey, asks survey respondents to position themselves on a left-right scale by asking the following question: “In political matters, people talk of “the left” and “the right”. How would you place your views on this scale, generally speaking”? This question was asked in the UK in 1981, 1990. The results show that over this period individuals are increasingly likely to position themselves in the middle of the scale, alongside a general shift to the “left” (although not the extreme left) and away from the right. This occurred over a period of increasing inequality (Table 4.1).

Table 4.1 Position on a left-right scale - percentage

	1981	1990	1999
Left	3.70	3.40	3.00
2	1.50	2.70	3.40
3	5.60	8.20	8.30
4	9.70	9.60	11.30
5	33.40	34.00	44.40
6	16.00	15.70	13.80
7	11.90	12.20	7.30
8	9.50	9.00	6.00
9	2.20	1.90	1.10
Right	6.40	3.40	1.40
Total (=100%)	967	1360	812

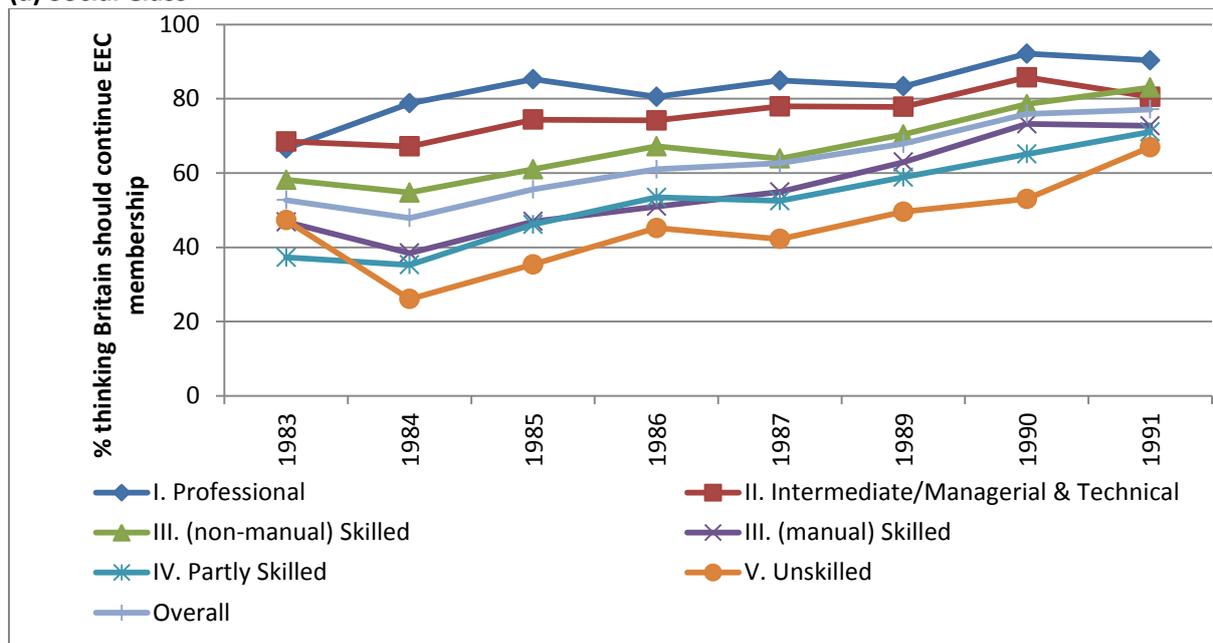
Source: World Values Survey

Figure 4.9 shows the percentage of individuals who responded to the BSAS and agreed that Britain should continue European Economic Community (EEC) membership (the EEC was renamed the European Community in 1993). Figure 4.9a shows a general upward trend between 1983 and 1991 from around one-half to around three-quarters (52% to 76%), an increase within each Social Class, a social class gradient with higher percentages of individuals in Social Class I, II and III (NM) agreeing that Britain should continue EEC membership than individuals in Social Class III (M), IV and V and a reduction in the differences between social classes (gradient).

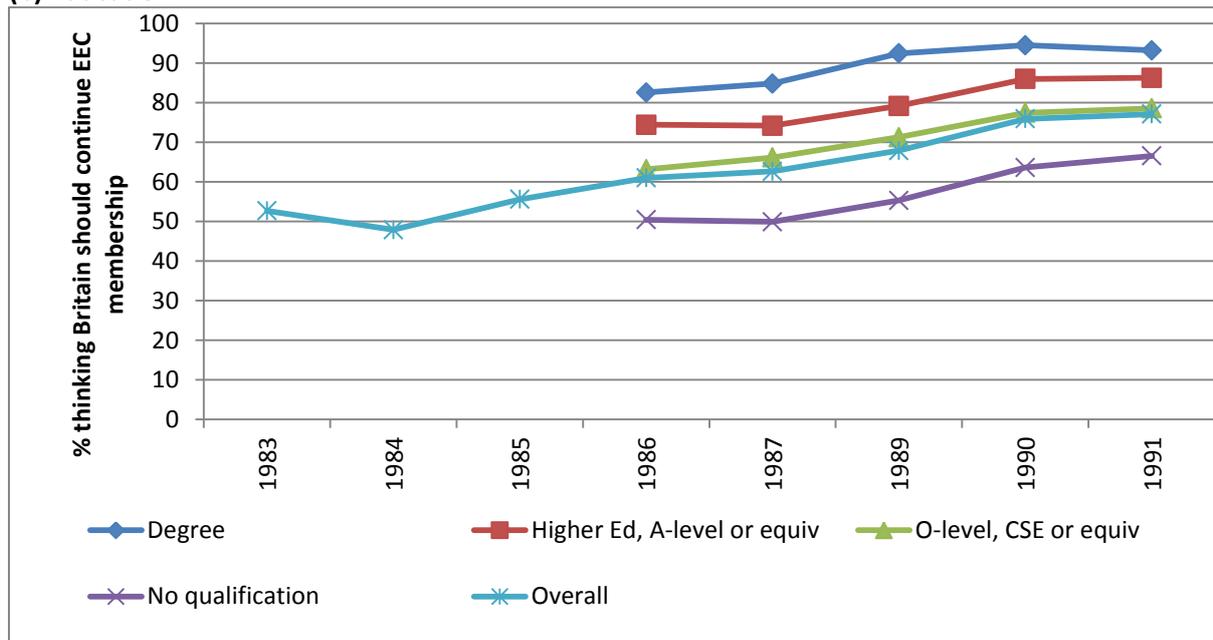
Figure 4.9b shows the same information by highest education level, starting from 1986 (highest qualification was not available in the BSAS in 1983, 1984 or 1985). We find a similar pattern with individuals with higher levels of qualifications more likely to agree that Britain should continue EEC membership than individuals with lower and no qualifications. Similarly we find that by 1991 there is a discernible reduction in these differences. It seems unlikely that this trend is driven by changes in inequality. Inequality increased over the period that support for EEC membership increased and differences between social groups narrowed.

Figure 4.9 Share agreeing that Britain continues EEC membership

(a) Social Class



(b) Education



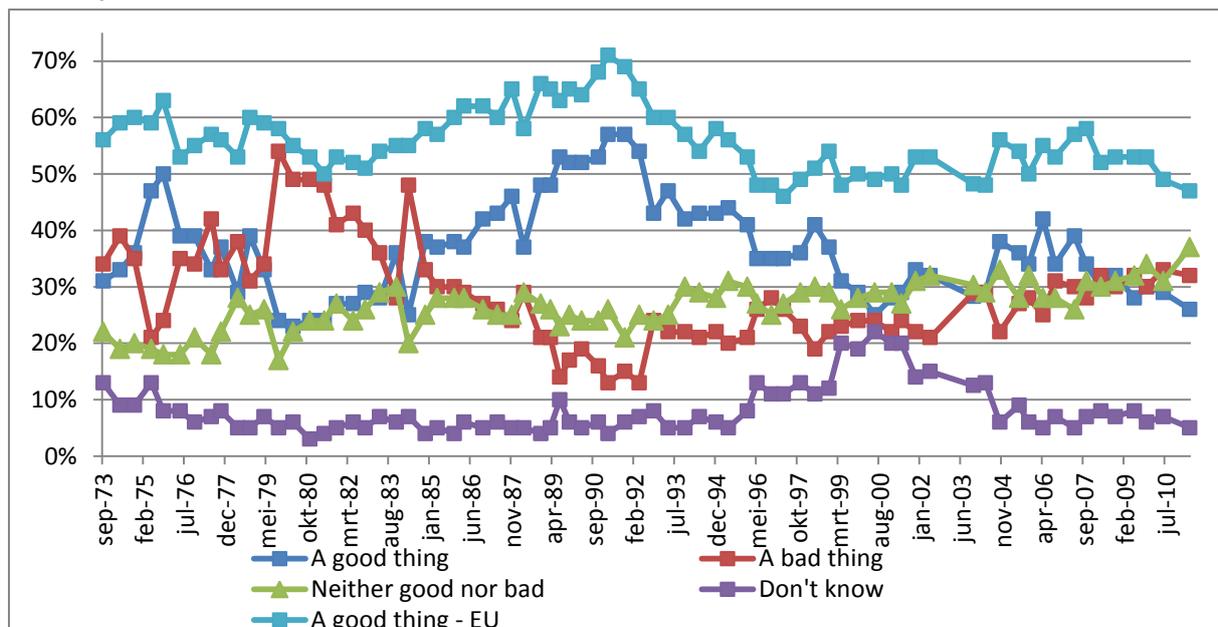
Source: British Social Attitudes Surveys

From the Eurobarometer series we can look at the long term trend in the percentage of individuals saying that membership of the European Community (Common Market) is a good thing, a bad thing, neither good nor bad or don't know from September 1973 to May 2011 (Figure 4.10). Over this period there is an increase in indifference from 22% in September 1973 to 37% in May 2011. This series shows that less than one-third of respondents think that membership is a good thing at the start and end of this period. However, there is considerable fluctuation between these two dates.

There are a number of peaks and troughs throughout the period. The first low point is in 1979 (the election of the Conservative government led by Margaret Thatcher) (23%) in October 1979 54% of respondents indicated that they felt that membership was a bad thing, then increasing to reach a peak of 57% in 1991 (1992 Maastricht treaty) with only 13% saying that membership was a bad thing. The big drop observed in October 1992 no doubt followed from the fact that Britain crashed out of the European Exchange Rate Mechanism in September 1992. The dips shown in November 1983-April 1984 and November 1987-April 1988 are close to general elections (June 1983 and June 1987) both of which returned the Thatcher Conservative party to power but both election campaigns provoked a considerable amount of negative opposition to the European Community; an issue that divided the Conservative party. Since the peak in 1991 support for the EC has generally declined and ended the period at 26% in May 2011. Interestingly the low point in June 2000 (25% “good thing”) was associated with an increase in the share stating that they “didn’t know” (22% up from 5% in May 1995) rather than an increase in the share expressing the opinion that membership was a bad thing.

The dashed line in Figure 4.10 shows the EU average of respondents expressing the opinion that membership of the European Community (Common Market) is a good thing for their country. This shows the lower support in the UK compared with the EU average but with the exception of the big drop in opinion in 1978-1984 and May 1998-October 2004 the trends are very similar. The gap was widest in October 1979 (34 percentage points) and narrowest in May 1998 (10 percentage points).

Figure 4.10 Share of people saying that membership of the European Community (Common Market) is...



Source: Eurobarometer

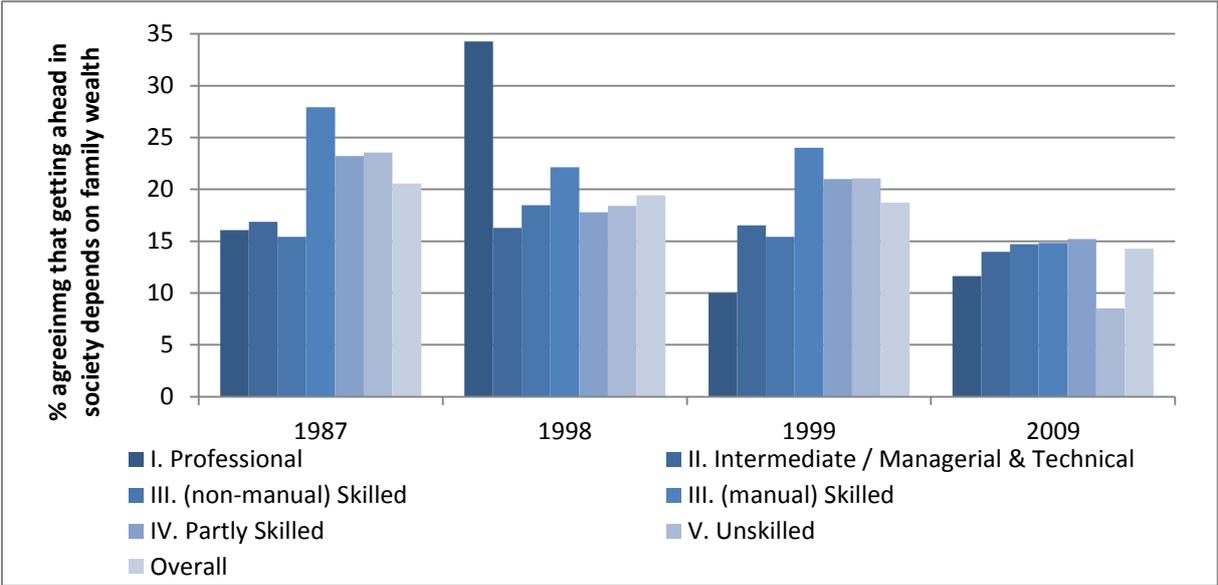
Note: “Generally speaking, do you think that (your country’s) membership of the European Community (Common Market) is ...?”

Figure 4.11a shows the percentage of individuals agreeing that to get ahead in life, it is “Essential” or at least “Very important” to come from a wealthy family by Social Class in four years covering a 22 year period (1987, 1998, 1999 and 2009). It is difficult to draw many conclusions about the relationship with social class from the information in this figure. In 1987 and 1999 there appears to be a negative social class gradient but this relationship is not clear in 1998 and 2009. The figure for professionals in 1998 looks like an outlier. Overall it can be seen that there has been a decline in the share of individuals who think that wealth is “Essential” or “Very important” for getting ahead in life over this 22 year period, by 2009 only around 10-15% think this is the case.

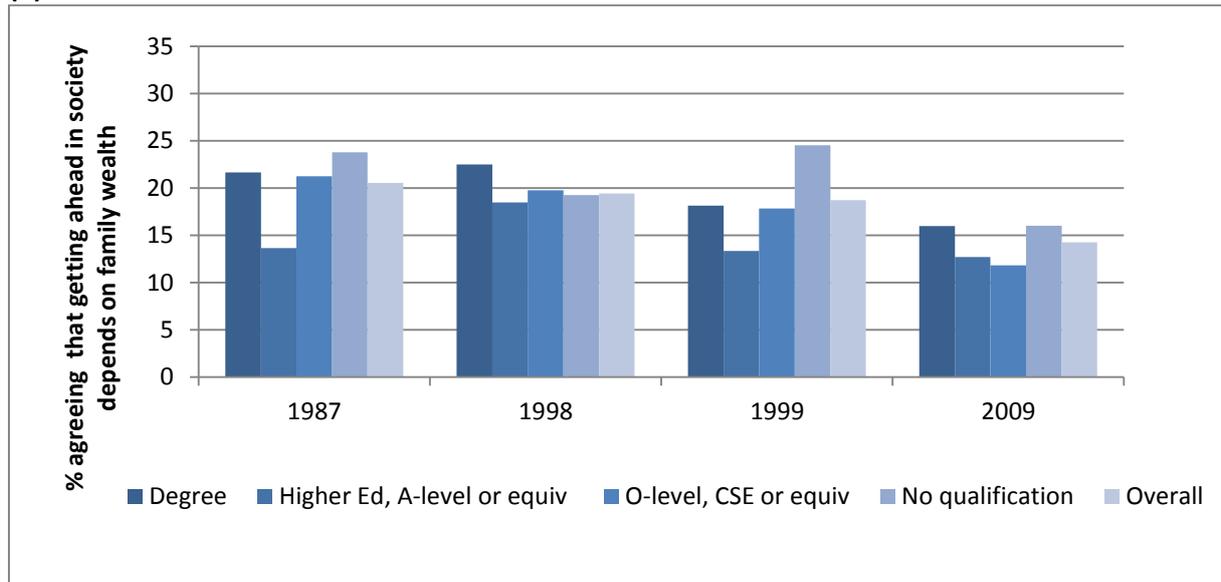
The same information broken down by highest level of qualification shows an interesting pattern (Figure 4.11b). Far from a gradient we find that the most and least qualified individuals are most likely to think that a wealthy family background is Essential/very important for getting ahead in life. The differences between educational levels fell between 1987 and 2009.

Figure 4.11 Share agreeing that getting ahead in society depends on family wealth

(a) Social class



(b) Education



Source: British Social Attitudes Surveys

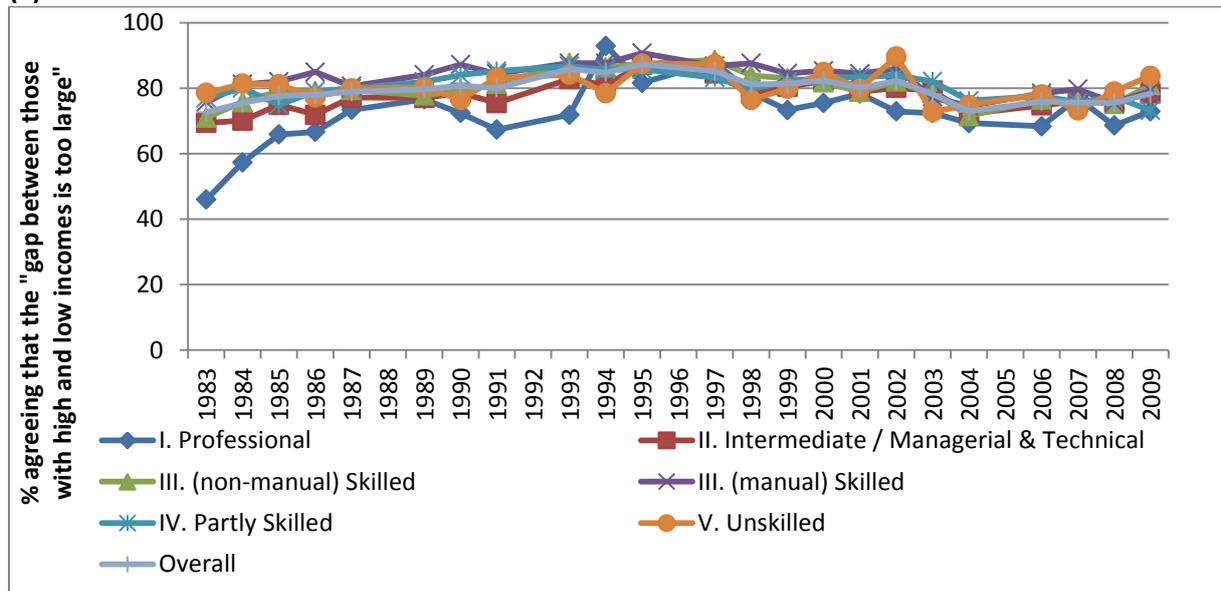
Notes: "How important is coming from a wealthy family" – "Essential or Very important"

4.5 Values about social policy and welfare state

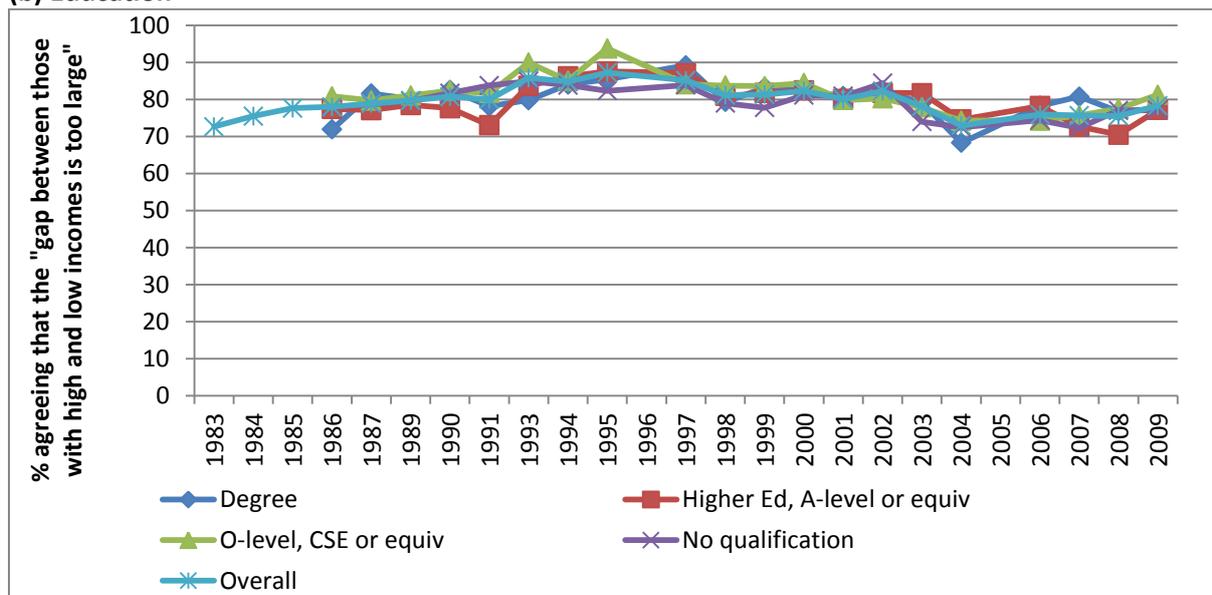
In this final section we look at a range of indicators for social policy values and the welfare state. Firstly we look at the percentage agreeing that inequalities are "too large". We use information from the British Social Attitudes Survey which provides a long time series covering over 25 years and allows us to break down the overall trend into social class (Figure 4.12a) and education level differences (Figure 4.12b).

Figure 4.12 Share agreeing inequalities are "too large" in the country

(a) Social class



(b) Education



Source: British Social Attitudes Surveys

Notes: "Thinking of income levels generally in Britain today, would you say that the gap between those with high incomes and those with low incomes is (too high)?"

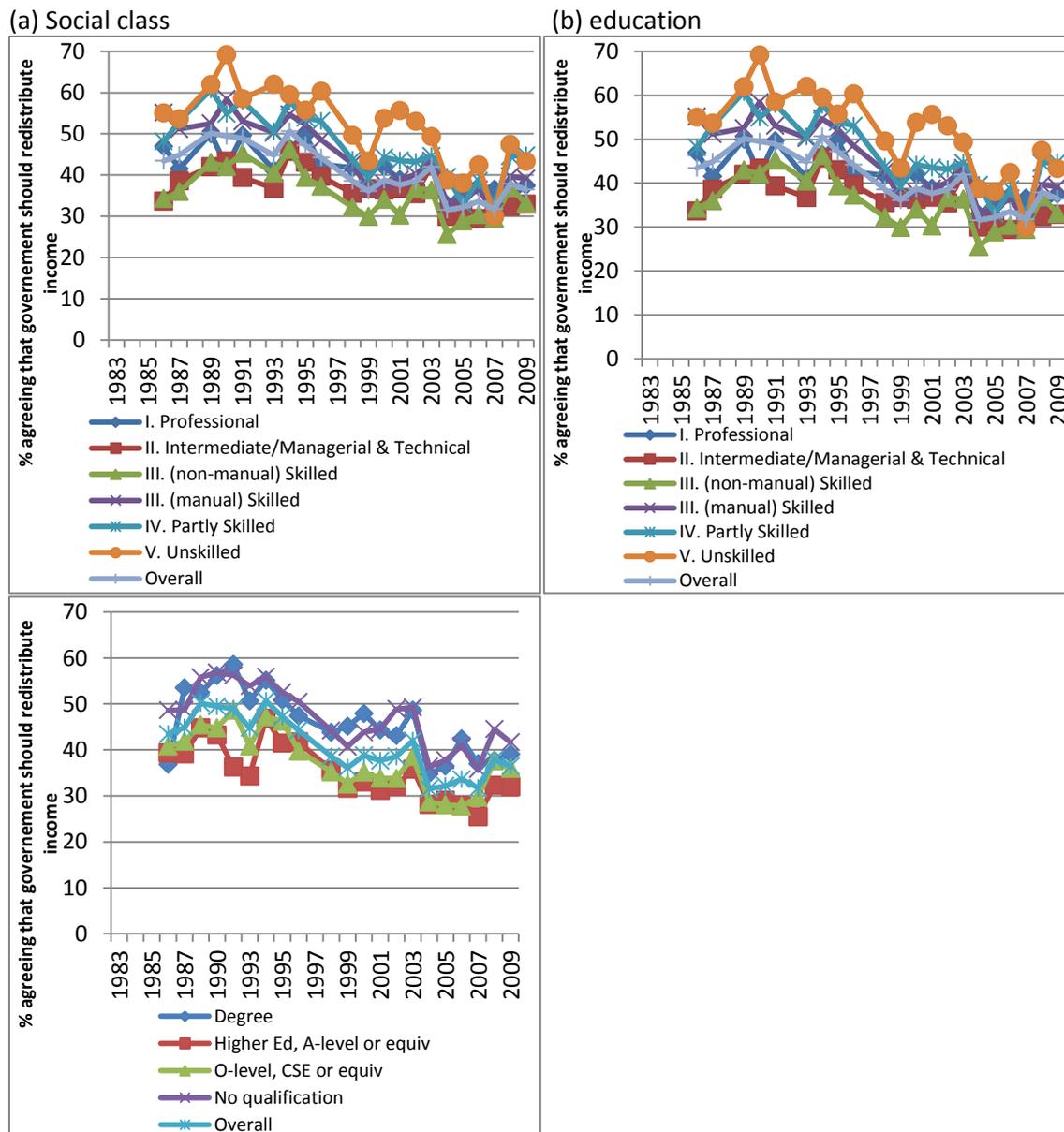
Looking first at the breakdown by social class (Figure 4.12a) from 1983 to 2009 we find that the vast majority think that the gap between those with high incomes and those with low incomes is too large. In 1983 70-80% thought that income inequality was too large. This increases to 80-90% in 1994/1995/1996, declining a little to 75-85% by 2009. There isn't a clear social class gradient; skilled manual workers (Social Class III(M)) tend to be the most likely to think that income inequalities are too large and professionals (Social Class I) are generally the least likely to think so.

Next we look at whether individuals agree that the government should redistribute income from the better off to those who are less well off. An interesting pattern is shown between social classes in Figure 4.13a. Professionals (Social Class I) tend to be in the middle with higher shares of individuals in Social Class III (skilled manual), Social Class IV (partly skilled) and Social Class V (unskilled) agreeing that the government should redistribute and individuals in Social Class II (Intermediate/Managerial and technical) and Social Class III(NM) (Skilled Non-Manual) least likely to agree that the government should redistribute. Overall we observe a downward trend over this 23 year period and an apparent reduction in the differences between social classes.

A clear pattern is evident between education groups (Figure 4.13b). Individuals with the highest and lowest levels of education are more likely to agree with redistribution than those in between; that is the group most likely to benefit from redistribution and the group most likely to 'lose' income through redistribution. Overall the period of rising inequality (1980s and early 1990s) and the period of entrenchment of high inequality levels that followed, the share of individuals who agree that the

government should redistribute income has fallen despite the majority view (shown in figure 4.12) that inequality is too high.

Figure 4.13 Share agreeing that the government should redistribute income from the better-off to those who are less well-off



Source: British Social Attitudes Surveys

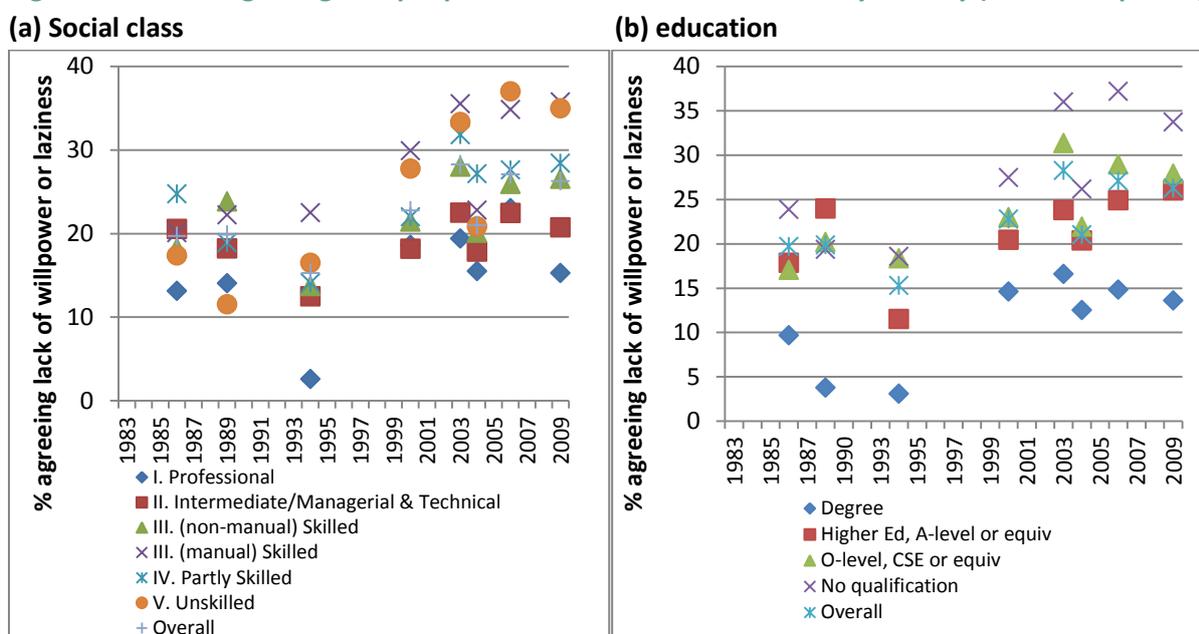
Notes: "Government should redistribute income from the better-off to those who are less well-off". Those who "agree" and "strongly agree".

Next we analyse opinions on why there are people who live in need. One of a number of potential explanations respondents to BSAS can choose between is "Because of laziness or lack of willpower" (see note beneath Figure 4.14 for more details). We look at the percentage of respondents who indicate that this explanation comes closest to their opinion. We have observations for 8 years over a

23 year period (1986-2009) and are able to look at differences between social class and education levels. There is evidence of a social class gradient (Figure 4.14a) although not strictly monotonic or consistent across years there does appear to have been an increase in dispersion. Individuals in Social Class I and II are least likely to think that those who live in need are lazy and individuals in Social Class III (M) and V are generally the most likely to think that those who live in need are lazy²⁸.

Differences between groups are clearer when we look at education levels (Figure 4.14b). With the exception of 1989 we find that higher levels of qualifications are associated with lower shares expressing the opinion that individuals live in need because they are lazy. We do find evidence that there has been an increase over time in this opinion among all education groups and a greater spread between education groups.

Figure 4.14 Share agreeing that people live in need do so because they are lazy (or lack willpower)



Source: British Social Attitudes Surveys

Notes: “Why do you think there are people who live in need? Of the four views on this card, which one comes closest to your own? (Because of laziness (or lack of willpower).)” The wording of the question changed after 1994 which means that there is a break in the series. Up to 1994 the response is “because of laziness” and post 1994 this changes to “because of laziness or lack of willpower”. This could explain the higher values observed post 1994.

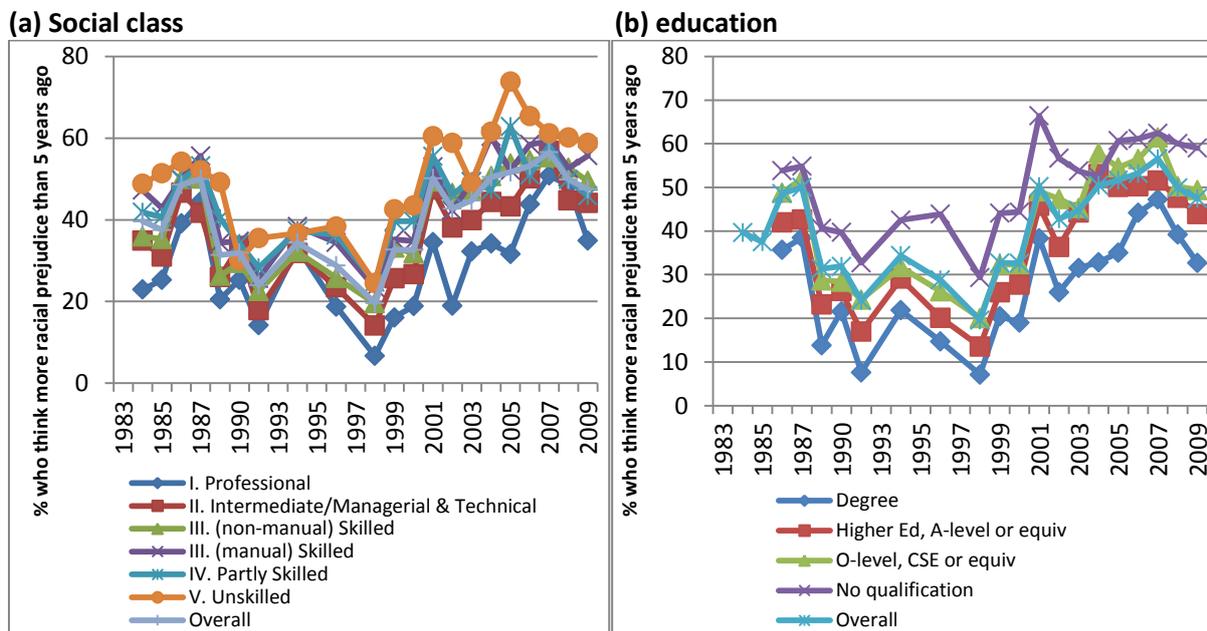
Finally in this section we look at ethnic tensions. The best indicator we could find with a sufficient time series is a question in the British Social Attitudes Survey which asks respondents if they think that there is generally more racial prejudice in Britain now than there was 5 years ago. Figure 4.15a shows the responses to this question broken down by social class. Overall we can see that this

²⁸ It is not clear why the values for 2004 are out of line with other years.

indicator of ethnic tensions generally fell between 1984 and 1998 and then increased to the end of the series in 2009. There is a clear discernible social class gradient with individuals from Social Class I much less likely to report perceived increases in racial prejudice than individuals from Social Class V.

When we look at the same information by education level we see much greater spread between groups and higher levels of education associated with lower shares who perceive an increase in racial prejudice (Figure 4.15b). In 2009, 35% of individuals with a degree level qualification or higher think that there is more racial prejudice than 5 years earlier compared to 60% of individuals with no qualifications.

Figure 4.15 Share who think that there is generally more racial prejudice in Britain now than there was 5 years ago



Source: British Social Attitudes Surveys

Notes: (1) “Do you think there is generally more racial prejudice in Britain now than there was 5 years ago, less, or about the same? (more now)”; (2) This question is available at the start of the BSAS in 1983, but this year is excluded from the analysis, as the answers differ from the rest of the series

4.6 Conclusions: Appraisal of the interdependence and the ‘national story’ of inequality drivers and their cultural and political impacts

In this chapter we have shown how cultural and political factors have evolved over the last 30 years and how these relate to inequality trends. In many cases strong social gradients are evident and increases in some of these gradients, such as voter-turnout, raise some serious concerns about uneven political participation and voice.

The extent to which individuals/households are divided by economic means can also affect the way they are divided culturally and the extent to which they feel engaged, and in fact engage, with political and civil society. One dimension of this is voter turnout. Over the period 1980 and 2001 there was a downward trend in UK parliamentary election voter turnout. Voter turnout was 78 per cent in the 1992 general election compared with 59 per cent in the 2001 election. The 1999 EU parliament election was also a low point (24 per cent) but no time trend is detectable in voter turnout rates for EU parliament elections in the UK. There is a social class gradient in voter turnout with professional and managerial classes more likely to vote in elections than unskilled and partly skilled classes. Social class differentials increased between the 1992/1997 elections and the 2005 election.

Divisions can also affect individuals trust in institutions and even in other people. Trust in UK parliament and government is low and seems to be largely affected by political events (MPs' expenses scandal etc). Trust in the UK legal system is higher and while there is some fluctuation over time there is no particular trend over the period 2003-2010. When we look at trust in other people we find the overall rate fairly stable over the period 1998-2008 and the social class gradient has become more compressed (widest in 2004), mainly due to a fall in the extent to which professionals believe other people can be trusted.

In terms of wider participation and membership we look at support for EEC membership and find that this has increased over the 1980s (with a social gradient which narrowed between 1983 and 1991). We find that support for the European Community fluctuates over time, is lower in the UK than the EU average and appears to be influenced by political events. The current economic crisis has led to a deterioration in support for the EU and a rise in political parties that oppose EU membership (in particular UKIP).

We also have some information on how individuals feel that family background (family wealth) is dependent on getting ahead. We find a fall in the overall share of people agreeing with this view. Individuals from lower social classes and, interestingly, with high level and low level educational qualifications are more likely to agree with this view than others. However, we find that social class and educational differences fall over the period 1987-2009. When asked about the reasons why some individuals are poorer, we find the share saying that the reason is that they are "lazy" fell over the period 1985-1994 and then increases up to 2003, since then following a fluctuating path. Individuals with degree level qualifications and above are least likely and those with no qualifications are most likely to believe the poor are simply lazy.

Another measure of the extent to which individuals/societies are inclusive and willing to include people from outside, is racial prejudice. The evidence we have on the extent to which individuals perceive an increase in racial prejudice over the previous five years followed a downward trend between 1987 and 1998 but then increased from 1998 to 2008: a period which was marked by large increases in immigrants entering the UK. Professional classes and individuals with degrees are the least likely to report an increase while the unskilled classes and those with no qualifications are the most likely to express this view.

When asked about the size of inequalities present in society, the vast majority of the UK population think that inequalities are too large. This share increased over the 1980s as inequality increased and then fell through to 2005, after which it has increased again. When individuals are asked whether the government should redistribute from the most well-off to the least well-off, 51 per cent in 1994 agreed. The share fell to 36 per cent in 1999 and then increased between 1999 and 2003 and thereafter fluctuated. Individuals at both ends of the educational spectrum are most likely to agree with government redistribution from the most well off to the least well off.

5. Effectiveness of Policies in Combating Inequality

5.1 Introduction

The thirty year period covered by this report spans a number of distinct policy regimes demarcated by political terms of government. Between 1979 and 1997 the Conservative party were in power first led by Margaret Thatcher (1979-1992) and then John Major (1992-1997) and over this period it is fair to say that there was little political concern about rising inequality and therefore little by way of policies designed to combat it. Inequality was seen as important for growth, creating incentives for people to work harder and improve their position and income. However, high rates of unemployment (particularly long duration unemployment) associated with the recessions in the 1980s and early 1990s and the industrial restructuring of the 1980s meant that many people were excluded from the labour market. As shown throughout this report, the 1980s was the period in which inequality increased most dramatically in the UK and analysis has shown that changes in taxes and benefits over the period of the Conservative government had a direct impact on rising income inequality (Adam and Browne, 2010). Although the Labour party, in government between 1997-2010 (led by Tony Blair 1997-2007 and by Gordon Brown 2007-2010) didn't explicitly design policies to redistribute income and reduce inequality, policies designed to tackle child poverty and reform the pension system and a major social investment programme in health and education had strong redistributive elements. Since May 2010 a Coalition government made up of the Conservative party and the Liberal Democrat party has been in power. The Coalition government's approach to tackling the economic crisis has focused on cutting spending and shrinking the size of the welfare state. The latest evaluation conducted by the IFS suggests that the fall in income inequality since the crisis has been driven by falling real earnings alongside benefit entitlements growing in line with prices. They project that this fall is temporary and by 2015/16 inequality will have been driven up by cuts in the working age welfare budget and no further falls in real earnings (Brewer et al., 2013).

In this chapter we examine the effectiveness of policies in terms of combating inequality over this thirty year period. We focus on wage-setting, taxation and public expenditure.

5.2 Labour Income

Labour market institutions such as trade unions and Wages Councils²⁹ were in decline throughout the 1979-1997 Conservative terms (Wages Councils were finally abolished in 1993 by the Trade Union Reform and Employment Rights Act 1993; although the Agricultural Wages Board survived until 2012) contributing to the rise in wage inequality. However the Equal Pay Act 1970 which had come into force in 1975 and general improvements in women's educational attainment and increased work orientation all contributed towards reducing the gender pay gap. The strength of institutions in relation to wage setting has been shown to be effective in moderating inequality. In this section we start by examining the impact of the National minimum wage and then turn to wage bargaining.

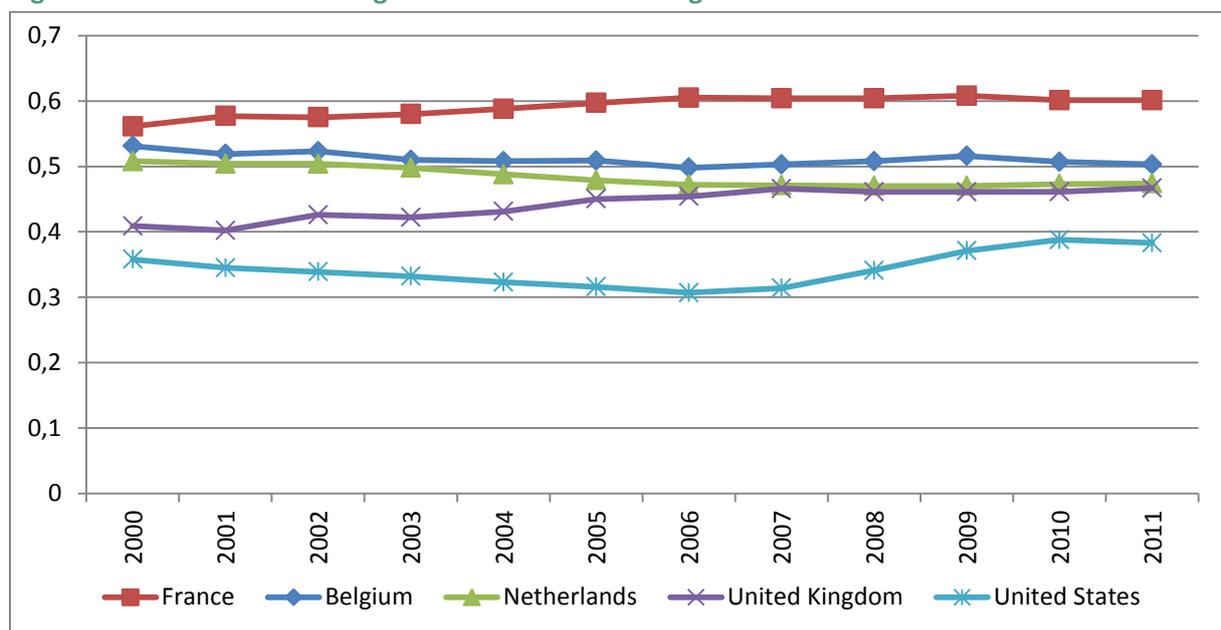
A National Minimum Wage (NMW) was introduced by the Labour government in April 1999. The Wages Councils that had existed in some industrial sectors set wage rates for some workers but as the manufacturing sector declined from the 1970s they covered fewer and fewer workers. The introduction of a NMW in 1999 therefore marked a significant change with a legally enforceable national minimum covering all employees in the UK aged 22 or over, with lower rates for employees aged 18-21 years and those in the first 6 months of a new job receiving accredited training (development rate). There have been a number of changes in the policy over time such as the extension to 16-17 year olds in October 2004 (currently £3.68, increasing to £3.72 in October 2013), the introduction of an apprenticeship rate in October 2010 (currently £2.65, increasing to £2.68 from October 2013), the inclusion of 21 year olds in the adult rate from October 2010 (currently £6.19, increasing to £6.31 in October 2013). Alongside the introduction of a NMW a commission – the Low Pay Commission (LPC) - was set up to monitor the impact of the NMW and to make annual recommendations to the government in terms of uprating, coverage and other desirable policy developments. Each year the government defines a remit identifying special issues that it would like the LPC to report on and a budget is provided to enable it to do so and each year the LPC makes recommendations to the government.

Figure 5.1 shows the value of the minimum wage relative to median wages in the UK and for four other OECD countries (France, Belgium, the Netherlands and the United States) between 2000 and 2011. Out of these five countries the UK minimum wage is set at the smallest proportion of median wages after the US. Between 2001 and 2007 the minimum wage increased relative to the median in the UK while it fell in the Netherlands and from 2007 onwards minimum wages in these two countries were at around 46 per cent of national median wages. Minimum wages in France are set at

²⁹ Wages councils, originally founded in 1909, brought together representatives from employers and workers within specific sectors along with independent members to set the pay (normally minimum wages) and conditions within that sector. The scope of the Wages Councils was reduced by the Wages Act 1986.

the highest rate relative to median wages out of these five countries, increasing from 56 per cent in 2001 to around 60 per cent from 2005 onwards. The US which has the lowest minimum wage rate relative to the median saw the relative value of the minimum wage fall between 2000 and 2006 (36 per cent to 31 per cent) but since the economic crisis the relative value of the minimum wage increased (39 per cent in 2010). The figures in this chart illustrate the relatively modest rate of the UK NMW when it was introduced. The above inflation increase in 2002 increased its relative value and further increases brought it close to the relative values of minimum wages in Belgian and the Netherlands.

Figure 5.1 Gross minimum wages relative to median wages of full-time workers



Source: OECD – <http://stats.oecd.org/Index.aspx?DataSetCode=MIN2AVE>

Notes: United Kingdom – national minimum wage relative to median hourly earnings of full-time adult employees; France – Minimum wage rates (annual averages) relative to median annual earnings of full-time workers in the private and semi-private sector; Belgium - Minimum monthly wage (annual averages) for experienced workers aged 22 and over; Netherlands - Minimum weekly earnings for persons aged 23 to 64 (annual average) relative to median annual earnings of full-time employees (including overtime payments); United States - Federal minimum hourly wage rate relative to median usual weekly earnings of full-time employees (hourly average).

Following the introduction of the NMW it was estimated that the NMW affected 6-7% of employees who had been earning beneath the NMW rate prior to its introduction and initial estimates found that the minimum wage (although brought in at a very cautious level; partly due to measurement error in the estimate of the number of employees that would be affected) led to a small reduction in wage inequality (Dickens and Manning, 2004). A more recent study, commissioned by the LPC, found modest spill-over effects with direct affects up to the 6th percentile, at which the spill-over effect was largest, raising wages by about 7% more than in the absence of the minimum wage. In contrast to

findings from previous studies this study also found that the effect stretched up the pay distribution - wages were raised by about 4 per cent at the 10th percentile and still over 1 per cent at around the 20th percentile (Butcher, Dickens and Manning, 2012a; 2012b). While the overall impact of the NMW on earnings inequality has been found to be modest it has had a big impact on extreme low pay and the shape of the bottom end of the wage distribution. Extreme low pay has virtually been abolished and the gap between the lowest paid and the median has narrowed but the UK is marked by the second highest rate of low pay in the OECD behind the US (those earning less than two-thirds of the national gross median hourly full-time wage, 2009) (Plunkett and Hurrell, 2013). The bunching of the wage distribution at the minimum wage does suggest that it is not just a wage floor but has become a 'going rate' for many low paid employees.

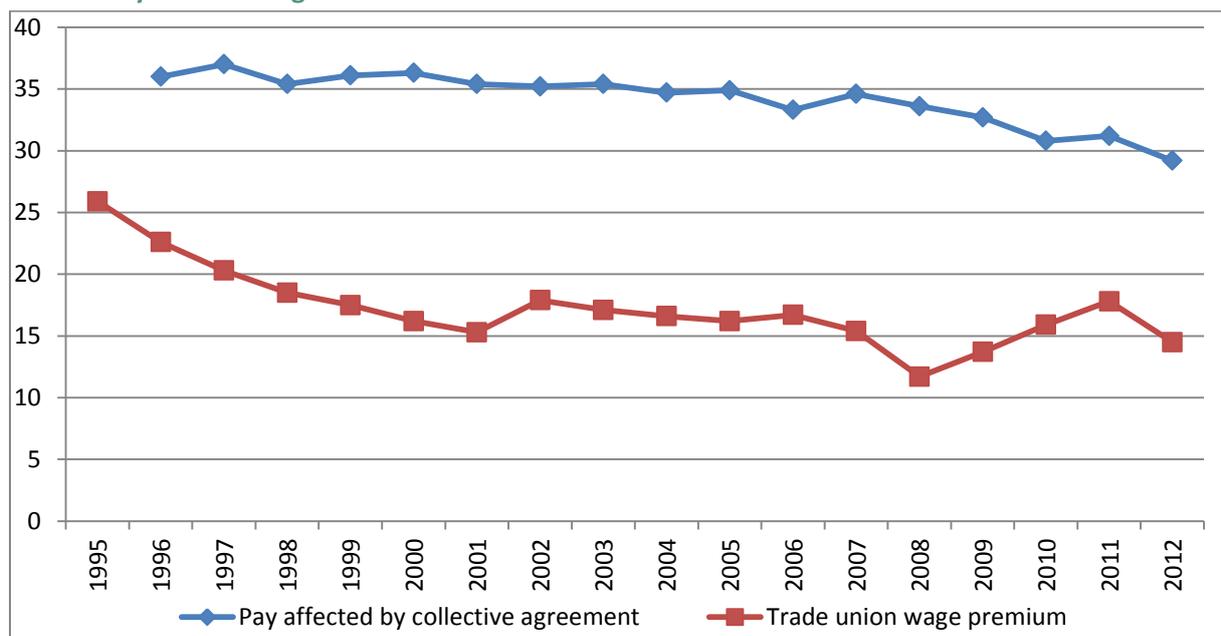
Since 2001 there has been a campaign for a UK Living Wage whereby employers voluntarily agree to pay a wage that meets a Minimum Income Standard³⁰. The amount is based on what households need in order to have a minimum acceptable standard of living. Decisions about what to include in this standard are made by focus groups comprising members of the public. The Living Wage is therefore rooted in social consensus about what people need to make ends meet. Two rates are set; one for London (which incorporates a relative measure of earnings into its formula) (£8.55 November 2012) and one for the rest of the UK (£7.45 November 2012). Employers who sign up must ensure that all employees are paid at least the Living Wage. This includes individuals who work on a regular basis at the employer's premises for a subcontractor, such as cleaners or security staff. Almost 100 employers have signed-up; many are high profile employers such as universities, hospitals, Local Councils, solicitors, accountants and political parties, alongside charities and voluntary sector organisations.

Unlike a number of European countries there is no formal collective wage bargaining in the UK. To a certain extent wage settlements by the largest employers set industry standards and although unions play an active role in negotiating these pay deals there no co-ordinated national or even sectoral wage setting agreements in the private sector. Caps can be set for wage increases in the public sector, including pay freezes, and there are usually annual or bi-annual wage negotiations for public sector employees for the different sub-sectors (police, teachers, civil servants, health workers, etc) although pay agreements can set wage increases over a longer period of time. Figure 5.2 shows the estimated trend in the share of employees whose pay is affected by collective agreement from 1996 to 2012, starting at 37 per cent and falling to a low of 29 per cent in 2012 with most of this fall occurring after 2007. Figure 5.2 also shows the trend in the estimated average trade union wage

³⁰ <http://www.minimumincomestandard.org/livingwage.htm>

premium. This is defined as the percentage difference in average hourly earnings of union members compared with non-members. This premium takes no account of differences in earnings due to differences in the characteristics of the two groups of employees or of their jobs which will explain some of the difference at a point in time and changes to the premium over time. For example, trade union members are more likely to be working in professional occupations, in full-time permanent jobs, to be highly educated, work in the public sector and are increasingly older workers (BIS, 2013). This premium fell continuously from 26 per cent in 1996 to 15 per cent in 2001, first rising and then falling further to a low of 12 per cent in 2008 after which it increased to 18 per cent in 2011. Such an increase could have occurred from lower paid union members losing their jobs first in the fiscal contraction and could reflect historically agreed wage settlements (ie agreed prior to the recession) coming into force. The premium occurs a dramatic fall between 2011 and 2012 from 17.8 per cent to 14.5 per cent, reflecting pay freezes in the public sector.

Figure 5.2 Trends in average trade union wage premiums and share of employees whose pay is affected by collective agreement



Source: Department for business, innovation and skills (BIS, 2013), based on Labour Force Survey

Notes: Collective agreement coverage is defined as the proportion of employees whose pay and conditions are agreed in negotiations between the employer and a trade union.

5.3 Taxation

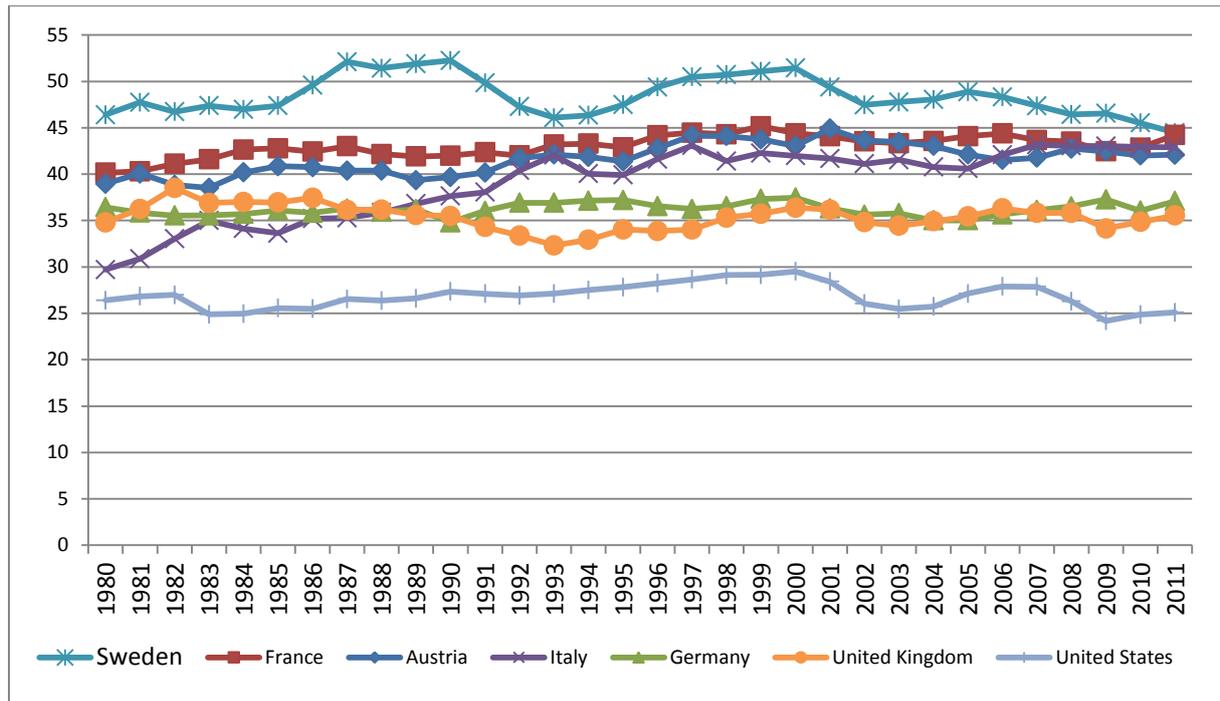
It was shown in Chapter 2 how the collective effect of direct and indirect taxation in the UK is broadly neutral in terms of its impact on household income inequality but that the revenue received through taxation that is used to fund welfare cash benefits greatly reduces inequality. In this section we look at what share of GDP is collected in tax revenues both overall and by origin.

Tax receipt is affected by tax policy – tax rates and schedules – but also the economic cycle as tax revenues increase as employment, income and profits increase and fall during recessions. An examination of tax receipts as a percentage of GDP allow us to observe periods where tax revenue increases/decreases were more or less than changes in GDP.

Total tax receipt as a percentage of GDP (Figure 5.3) has fluctuated around 35 per cent since 1980. Over this period, tax receipt increased from 1980 and peaked in 1982 at 39 per cent. This was a time when unemployment was increasing as the UK headed into a severe recession. Receipts then fell to a low of 32 per cent in 1993 (this was the highest point of unemployment during the early 1990s recession). After that tax receipts increased to 35 per cent in 1998 (through a period of falling unemployment) and then throughout the term of the Labour government (1997-2010) tax revenue fluctuated fairly closely around this point.

The international comparative evidence included in Figure 5.3 shows the lower share of GDP collected in the form of tax revenues in the US, at around 10 percentage points lower than in the UK, and the higher share collected in Sweden, over 10 percentage points higher than in the UK, but from 2000 tax revenue as a percentage of GDP has been on the decline in Sweden. The share fell from 51 per cent to 44 per cent by 2011, matching the share collected in France and very similar to the shares in Italy (43 per cent) and Austria (42 per cent). Italy is another country that has undergone a big change over the 30 year period, with tax revenues increasing in the lead up to the introduction of the Euro in 1992; increasing from 30 per cent in 1980 to 43 per cent in 1993. The UK and Germany collect very similar shares of GDP in the form of tax revenues and, apart from periods influenced by recessions (early 1990s in UK) they both follow similar fluctuating paths around 35 per cent.

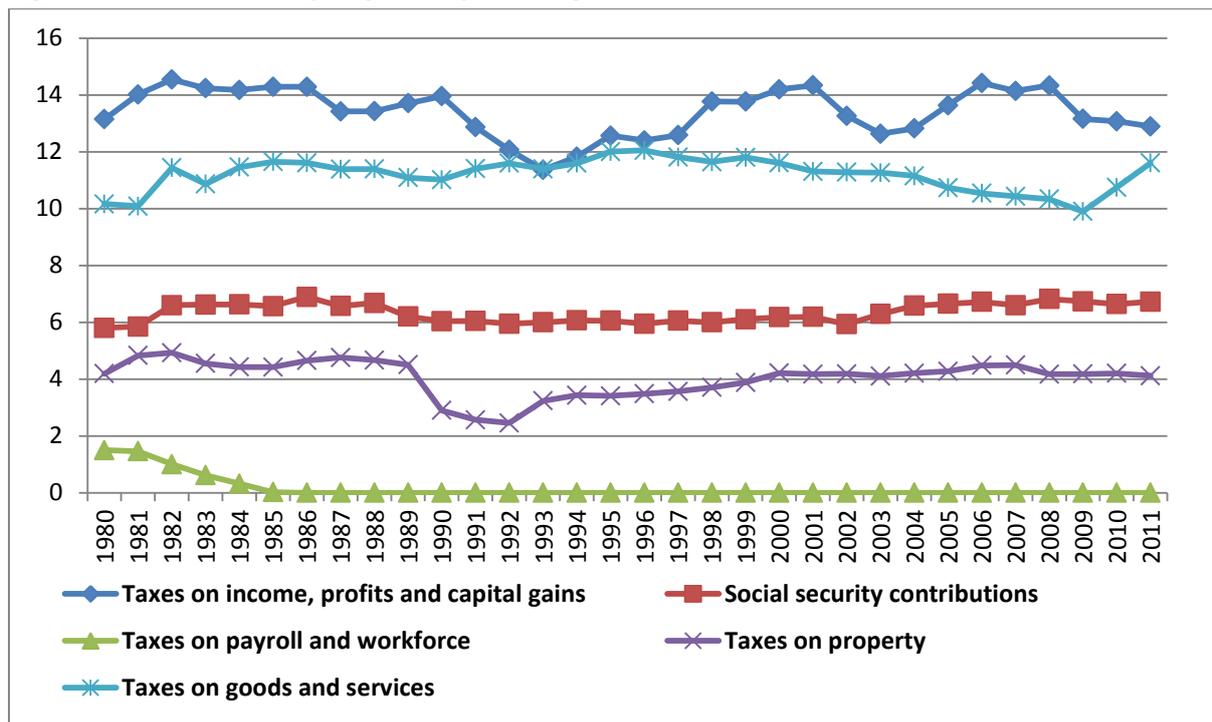
Figure 5.3 Tax revenue as percentage a of GDP



Source: OECD <http://stats.oecd.org/Index.aspx>

Figure 5.4 details the breakdown of tax revenue by origin (as a percentage of GDP). Tax on income, profits and capital gains is the largest source of tax revenue. The early 1990s recession affected tax revenues from this source, and not surprisingly, the trend fairly closely follows that observed for total tax revenue in Figure 5.2. The second most important form of tax revenue is tax on goods and services, which increased from 10 per cent of GDP in 1980 to a high of 12 per cent between 1995 and 1997. Since 1997 the revenue from tax on goods and services has fallen continuously returning to 10 per cent of GDP in 2009 before increasing to 11.6 per cent in 2011. This increase is related to the increase in the Value Added Tax (VAT) from 17.5 per cent to 20 per cent in January 2011 and the temporary reduction to 15 per cent during 2009. Tax revenue from social security contributions amounts to around 6 per cent of GDP and revenue from taxes on property around 4 per cent of GDP. The lower share observed between 1990 and 1993 might be explained in part by the early 1990s recession but also by the introduction of the hugely unpopular Community Charge ('Poll tax' – a flat rate per capita tax) in 1990, replacing a system of rates (based on the notional rental value of people's homes). The Community Charge was replaced by the Council Tax in 1993 which is related the value of property in 1991. The high reliance of tax revenue on taxes on goods and services and social security contributions and the low level of tax on wealth (property) explains why the UK tax system has proved to be ineffective in combatting inequality.

Figure 5.4 Tax revenue by origin as a percentage of GDP



Source: OECD.stat

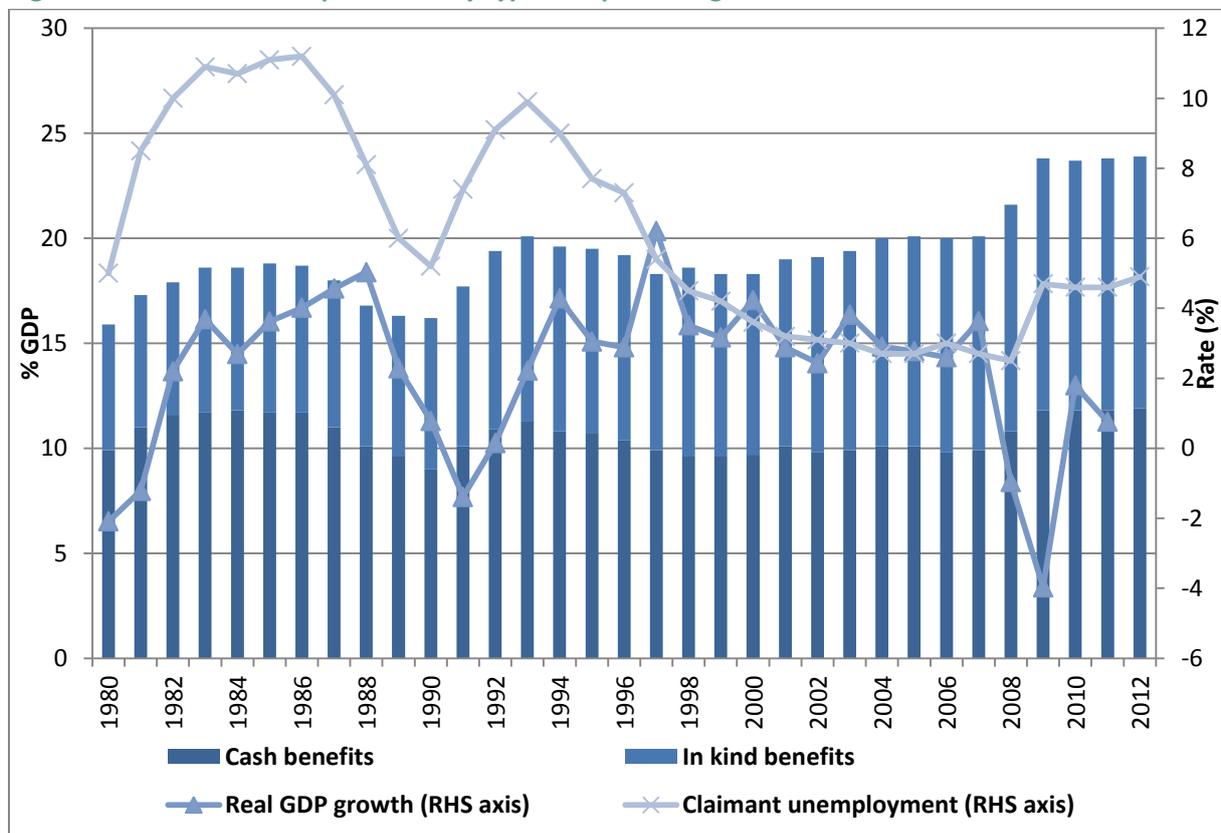
Notes: Taxes on payroll and workforce covers taxes paid either as a proportion of payroll or as a fixed amount per person, and which do not confer entitlement to social benefits (no longer applied in UK).

5.4 Social Expenditures

In this section we examine the other side of the balance sheet by looking at social expenditure. Figure 5.5 shows public social expenditure as a percentage of GDP for cash benefits and in-kind benefits. As with tax revenue, public social expenditure is affected both by public policy and the economic cycle. The figure also includes series for real GDP growth and the claimant unemployment rate and by comparing these series with the public expenditure series demonstrates how the claimant unemployment rate series follows the same path as the series covering public expenditure on cash benefits. As a share of GDP, public social expenditure was higher on average under the 1997-2010 Labour government than under the 1979-1997 Conservative government. This was driven by an increase in social investment (in kind benefits) rather than an increase in cash benefits which largely remained unchanged throughout the Labour term averaging at 10 per cent which was lower than the 11 per cent average over the Conservative term. Cash benefits as a share of GDP increased since the financial crisis starting in 2007 to nearly 12 per cent. This is the same share as that observed 1982-1987 although the claimant unemployment series shows that the claimant unemployment rate 2009-2012 was less than half the rate 1983-1986 (although, as shown in Chapter 2, the claimant definition of unemployment now captures a much smaller proportion of unemployment than in the past and ILO rates in the current crisis are around 2/3rds of the rates observed in the 1980s recession). The

biggest change has been for the share of GDP being spent on social investments (in kind benefits), increasing from 6 per cent in 1980 to 8.8 per cent in 1996 (under Conservative governments) and then from 8.4 per cent in 1997 to 10.2 per cent in 2007 (under Labour governments). Since the start of the economic crisis in 2007 public social expenditure on in kind benefits increased to 10.8 per cent in 2008 and has remained at around 12 per cent 2009-2012. This increase is affected by the fact that a contraction in GDP increases the share of expenditure when the actual level of expenditure remains unchanged (this can also be observed in previous recessions). While there have been significant cuts in public expenditure introduced by the Coalition government since 2010 some of the large areas of public budget have been protected and we explore the detailed break down further in Figure 5.6 below.

Figure 5.5 Public social expenditure by type as a percentage of GDP

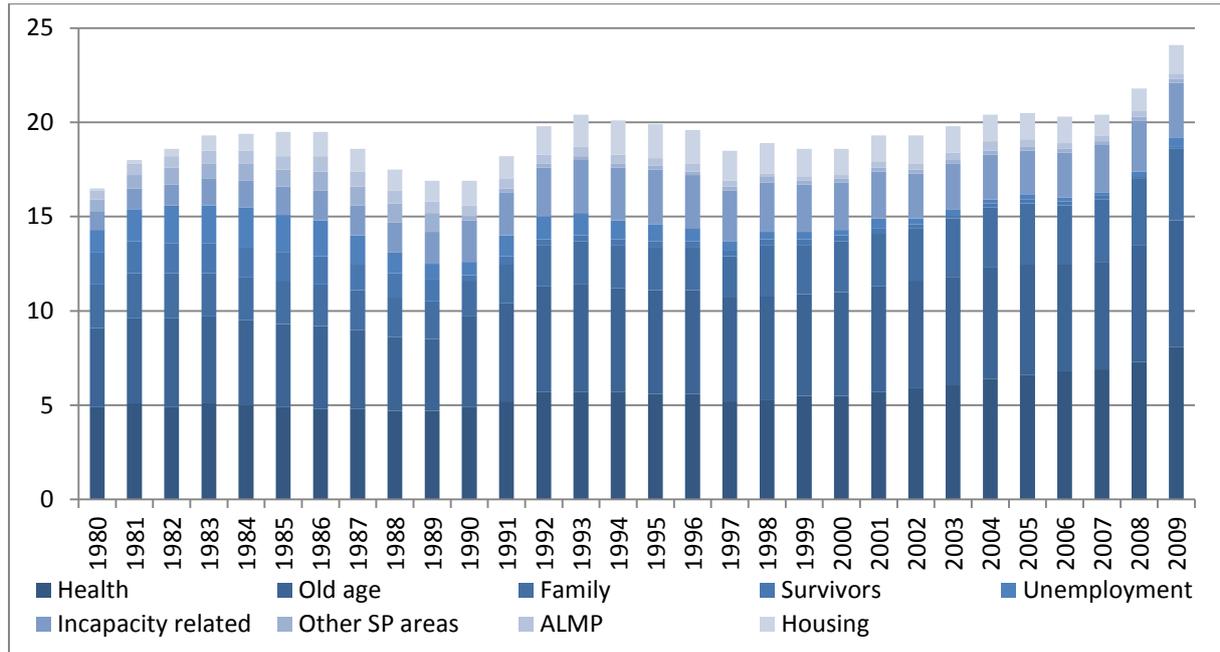


Source: Public expenditure and GDP statistics from OECD.stat. Claimant unemployment data from ONS; the rate is computed as the number of people claiming JSA (or equivalent unemployment benefit) divided by the claimant count and the number of workforce jobs in May of each year.

Trends in public social expenditure by function are only available up to 2009 from this data source (Figure 5.6). Expenditure on Health and Old age make up the largest components of public social expenditure; between them accounting for over half of all such expenditure. In addition there has been an upward trend in the share of GDP being spent on these two areas from around 9 per cent in

the 1980s to around 11 per cent in the 1990s, further increasing to around 12.5 per cent prior to the financial crisis of 2007. The further increases since then have been driven by the fact that the health budget has been protected under the Coalition government and therefore as GDP shrank in the recession health expenditure now represents a larger share of GDP. Expenditure on Old age has been affected by increases in life expectancy and increases in generosity of old age pensions. The health budget was expanded under the Labour government as part of its 'catching up and keeping up' agenda in an attempt to improve health outcomes and address underinvestment in the health service (Vizard and Obolenskaya, 2013). Other big changes that have occurred over this period are the increases in social expenditure on housing which is likely to reflect the shift away from providing social housing to help with housing expenditure in the form of cash benefits. However the share being spent on housing looks too low in the 1980s which does suggest that the in kind estimates of housing expenditure (in the form of social housing provision) are not included in this series in the earlier period. The fall in expenditure on unemployment mirrors the fall in claimant unemployment shown in Figure 5.5 above and will also be affected by the fact that since 2003 the child elements in means tested benefits have been paid in the form of a child tax credit (means tested but payable in and out of work) rather than as part of unemployment benefit and this will be classified under the Family category in these statistics.

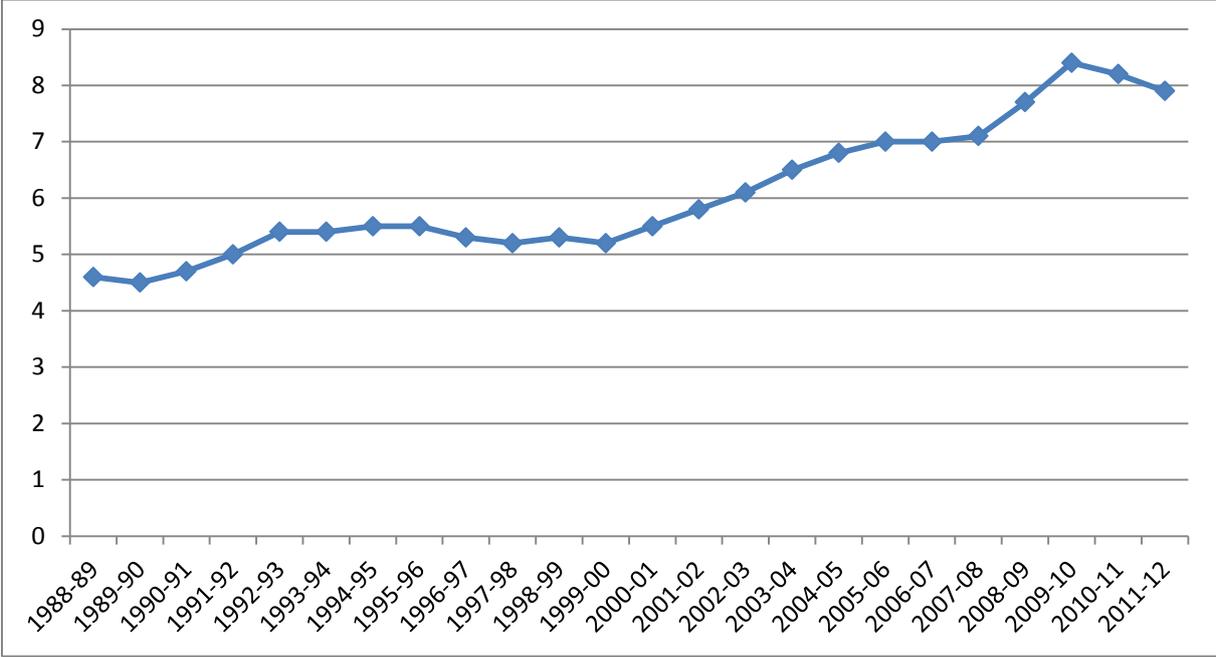
Expenditure on unemployment, as you would expect, increases during periods when unemployment is high, but expenditure on Active Labour Market Programmes (ALMP) seems to be determined more by policy than unemployment trends. There are increases in expenditure on health, old age, housing, incapacity and family (as a share of GDP), most occurring from 1995 onwards although some increased earlier (eg incapacity and housing).

Figure 5.6 Public social expenditure (cash and in kind) by function, % GDP

Source: OECD.stat

Using national data it is possible to examine some of these trends in more detail. Figure 5.7 shows changes in health expenditure as a share of GDP from 1988-89 which can be extended up to 2011-12. This series shows the big increases in health expenditure by the Labour government since 1999, increasing from 5.2 per cent in 1999/2000 to a peak of 8.4 per cent in 2009/10 and although this budget has been largely protected expenditure fell to 7.9 per cent of GDP in 2011-12. We saw in Chapter 3 that there have been improvements in a range of health outcomes reflecting the increase in health expenditure but that social gradients have remained for many health outcomes. The Labour government specifically set a Public Sector Agreement (PSA) targets to reduce health inequality but arguably not enough was done to direct health expenditure to effectively tackle health inequalities.

Figure 5.7 Health expenditure (% GDP)



Source: HM Treasury, Public Expenditure Statistical Analyses (PESA): Public Spending National Statistics 2012

Next we look at the share of GDP spent on disability related benefits (Figure 5.8). Incapacity Benefit (replaced Invalidity Benefit and some elements of Sickness Benefit in 1995) and was paid to those individuals below State Pension age unable to work due to illness or disability who had paid sufficient National Insurance contributions. Income Support (means tested) was payable to individuals unable to work due to illness or disability who had insufficient NI contributions to qualify for Incapacity Benefit (Income Support figures are not shown in this figure). Incapacity Benefit and Income Support (claimed on the basis of incapacity to work) was replaced by the Employment and Support Allowance (ESA) from October 2008 for new claimants and the stock of claimants is being gradually migrated onto ESA (to be completed by 2014), which has contributory and means tested elements. The switch between IB and ESA is clear from Figure 5.8. To qualify for ESA applicants are required to undertake a “Work Capacity Assessment”. If as a result of this assessment applicants are deemed limited in their capacity to work they qualified for ESA, if not they were moved on to Jobseekers Allowance. Among ESA claimants, individuals who are assessed to be able to undertake some work-related activity qualify for the work-related activity component of ESA and have to undertake work-related activities and attend work-focused interviews.

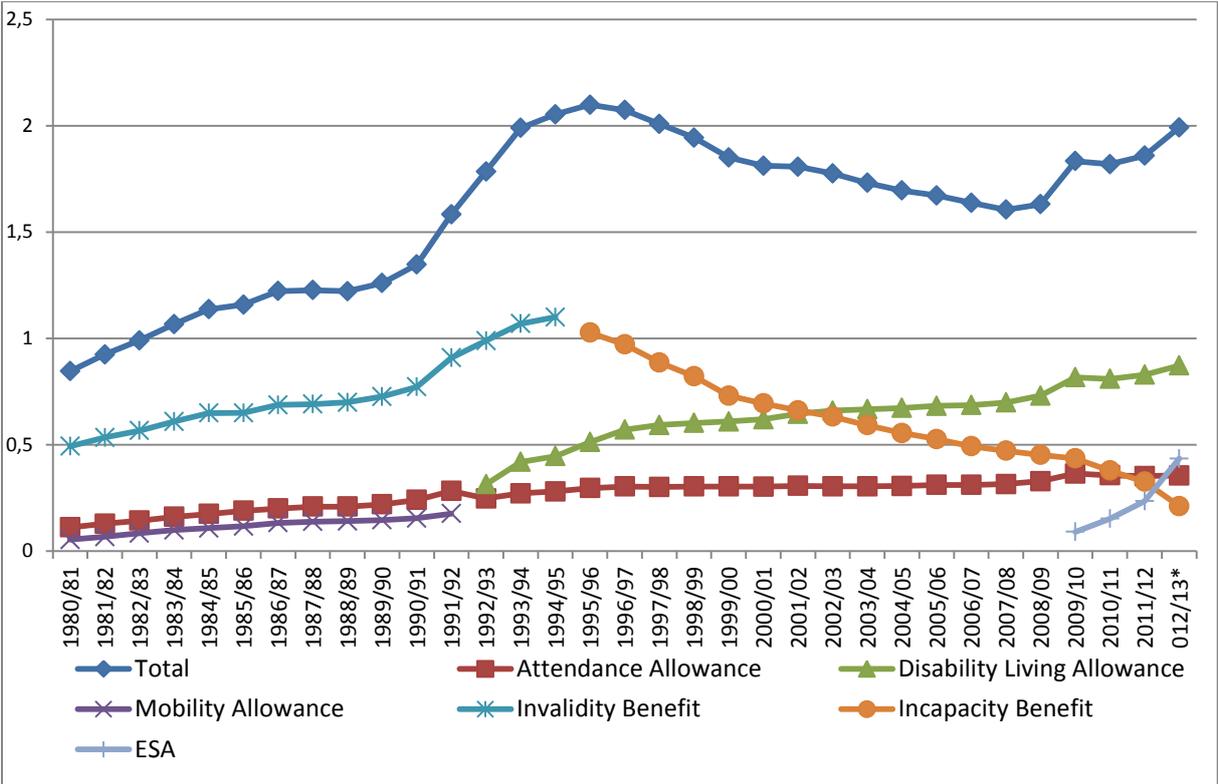
In terms of the overall evolution of expenditure on disability related benefits shown in Figure 5.8 the time since 1980/71 can be divided into four distinct periods. Between 1980/81 – 1989/90, as a share of GDP, expenditure on these benefits increased gradually from 0.8 per cent to 1.3 per cent, followed by a big increase up to 1995/96 (a point where unemployment peaked) to 2.1 per cent of GDP, then

fell through to 2007/08 following the path of unemployment before increasing sharply following the 2007 financial crisis and is estimated to be 2 per cent of GDP in 2012/13.

The majority of disability benefits are paid to working age people and there was concern that in the 1990s unemployed working age individuals were being moved on to disability related benefits to manipulate unemployment statistics. There was also an incentive for individuals to claim these benefits due to their greater generosity relative to unemployment benefits and the fact that there was no work-search conditionality related to receipt of these benefits. A number of reforms have meant that these incentives have been greatly reduced. In 1997 the incoming Labour government announced that its 'preferred' measure of unemployment was based on the ILO definition rather than being based on benefit claims. This measure is less susceptible to manipulation of claimant status although clearly status can influence individuals' behaviour, perceptions and the reporting of their status in household surveys. Changes to entitlement and conditionality associated with benefit receipt (including the introduction of ESA) have been tightened up over time and more help in the form of employment advisers and technology has been available to assist in work search. The Disability Discrimination Act (DDA) 1995 made it unlawful to discriminate against people in respect of their disabilities in relation to employment (and the provision of goods and services, education and transport). Since the Act employers have been required under the law to make "reasonable adjustments" to workplaces to accommodate disabled employees. These changes, along with tax credits and various grants have helped increase employment among disabled people.

Figure 5.8 also looks at different categories of disability benefits. In 1992 Mobility Allowance became the mobility component of Disability Living Allowance (DLA) which also includes a care component. DLA is a non-means tested, non-contributory benefit (due to be replaced by a new Personal Independence Payment between 2013 and 2016 for those aged 16-64) payable to individuals under the age of 65 who have personal care and/or mobility needs as a result of a mental or physical disability. DLA has been on an upward trend since it was introduced. Attendance Allowance is available to people claiming after age 65 for a care component only and expenditure as a share of GDP has gradually increased for this benefit. DLA and Attendance Allowance are payable in and out of work and therefore expenditure on these benefits doesn't tend to be cyclical

Figure 5.8 Disability, Incapacity and Industrial Injuries benefits expenditure: Total and working age (% GDP)



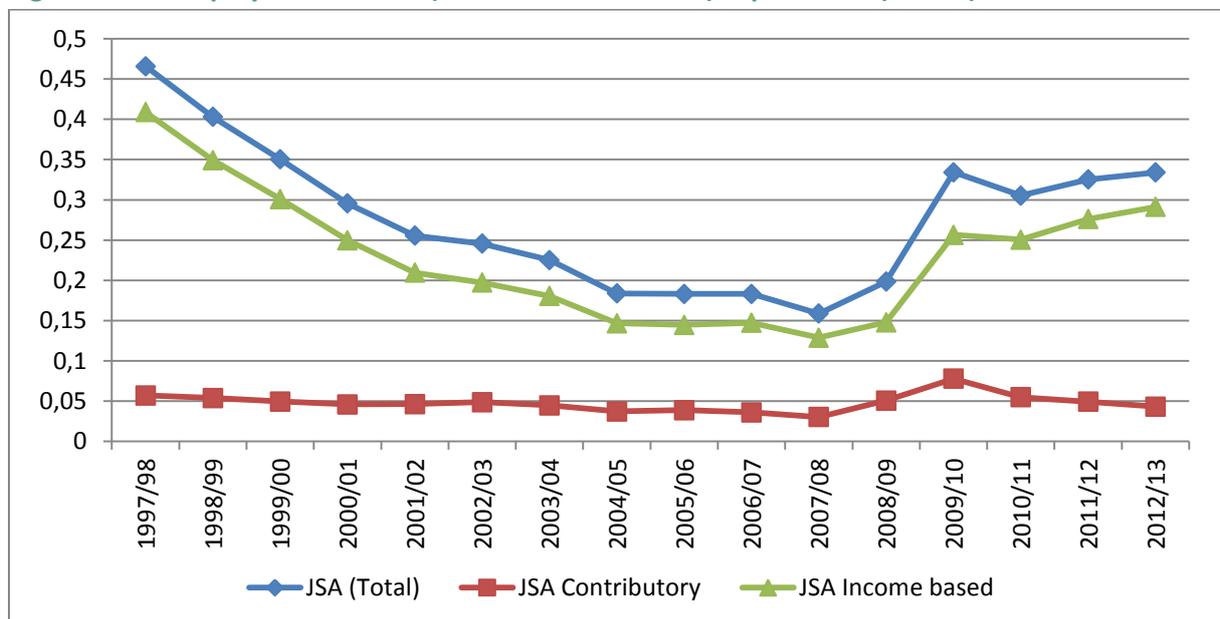
Source: Department for Work and Pensions, Benefit Expenditure Tables (Budget 2013); ONS (GDP series)

Notes: * 2012/13 figures are estimated. ESA - Employment and Support Allowance. These figures will underestimate the share of GDP expenditure on disability related benefits as the GDP series is for the UK while benefit expenditure is for GB.

Next we turn to expenditure on unemployment benefit. A major change occurred in September 1996 when Jobseekers Allowance (JSA) was introduced, replacing Unemployment Benefit (UB) and Income Support (IS) for unemployed people. UB was payable for 12 months and entitlement was gained through National Insurance contributions made prior to becoming unemployed, and IS was means tested and payable to those who didn't have a sufficient contribution record and those who were still unemployed after 12 months (or the point when their UB entitlement ran out). JSA has two elements, a contribution based element for those with a sufficient contribution record and a means tested income based element for the rest. Entitlement to the contribution based element was shortened to 6 months and claimant work search activities were much more closely monitored than previously, and beyond an initial period became a condition of benefit entitlement. With the introduction of a major active labour market programme - the New Deals - from 1997 onwards greater conditions were placed on entitlement to unemployment related benefits, job seekers were monitored to a greater extent and depending on the claimant group, unemployed people could be required to take up various options (subsidised employment, education and training, voluntary work) after a fixed length of time.

Figure 5.9 shows trends in JSA expenditure as a percentage of GDP since it was introduced in 1996. The share fell sharply as employment increased through to 2004/05 and then stabilised before increasing as unemployment rose following the 2007 financial crisis. The majority of expenditure on unemployment benefit is on means tested (income based) benefits reflecting the fact that the unemployed tend to have poor employment histories and have insufficient NI contribution records to qualify for the contribution based JSA or have exceeded the 6 month limit of this benefit entitlement. Since 2009/10 income-based JSA expenditure (as a share of GDP) has continued to rise while contribution-based JSA expenditure has fallen. This in part reflects increases in long term unemployment.

Figure 5.9 Unemployment benefit (Jobseekers Allowance) expenditure (% GDP)



Source: Department for Work and Pensions, Benefit expenditure and caseload tables 2013.

Notes: These figures will underestimate the share of GDP expenditure on JSA as the GDP series is for the UK while JSA expenditure is for GB.

Unemployment benefits and more broadly welfare benefits are on the verge of another major upheaval with the planned introduction of Universal Credit in 2013. It will span in and out of work benefits for low income households replacing: income-based Jobseeker's Allowance, income-related Employment and Support Allowance, Income Support, Child Tax Credits, Working Tax Credits and Housing Benefit³¹.

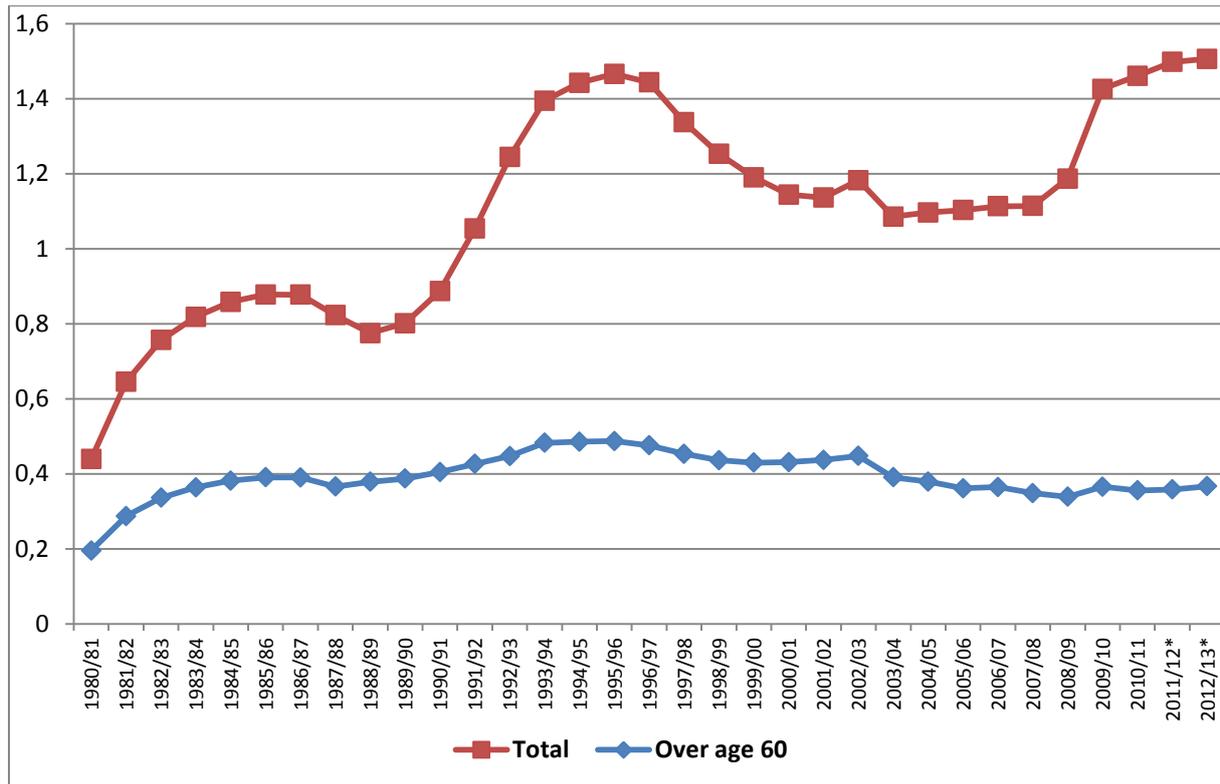
As discussed in Chapter 3 low income households can claim assistance with their housing rent in the form of Housing Benefit (support with housing costs will be paid through the Universal Credit from

³¹ For more information on Universal Credit see <http://www.dwp.gov.uk/policy/welfare-reform/universal-credit/>

2013). Figure 5.10 shows how Housing Benefit (HB) expenditure as a share of GDP has increased since the early 1970s. It also shows that the majority is paid to the working age population and that expenditure is pro-cyclical. Although the share of GDP spent on housing benefit did fall during the period of employment growth 1997-2007 it remained at an historically high level for a period of economic expansion. This no doubt reflects increases in housing costs associated with large increases in house prices (particularly in the 2000-2007 period). In terms of overall expenditure on housing this increase is partly offset by a reduction in the stock of social housing (Council houses) but the increase has still caused some concern and there have been a number of attempts to reform this benefit. Concern has focused on the generosity of this benefit and also the complex way it interacts with other benefits and affects work incentives. In April 2013 the Coalition government introduced a Benefit Cap³² for working age people (£350 a week for single people, £500 a week for lone parents and couples with and without dependent children) living in four council areas and plan to roll it out nationally between July and September 2013. This cap will not only include HB but clearly individuals with high housing costs will be most vulnerable to the cap and prior to the introduction of Universal Credit it is HB claims that are being reduced if total eligible benefit receipt is above the cap. Concern has been expressed about the likelihood that this will lead to greater social segregation (particularly in cities with high housing costs) and the fact that low income households will be forced to live in the lowest cost most disadvantaged areas with limited work opportunities. It will be some time before an assessment can be made of the impact of these changes on inequality. The government claims that they will improve work incentives but many charities are raising concerns about the impacts on homelessness, fragile families and children.

³² For details of which benefits will be included in the cap see <https://www.gov.uk/benefit-cap> (last accessed 15 July 2013).

Figure 5.10 Housing Benefit expenditure: total and claimants over 60 years (% GDP)



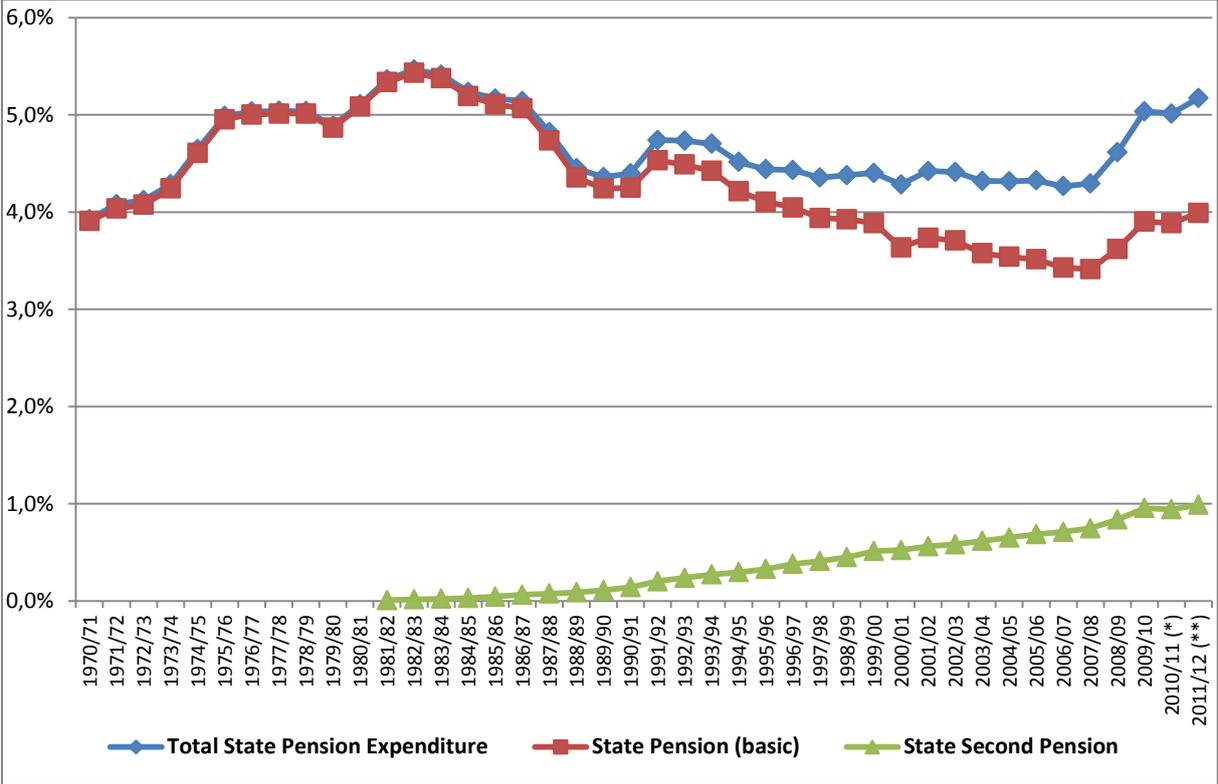
Source: Department for Work and Pensions, Benefit Expenditure Tables (Budget 2012); ONS (GDP series)

Notes: 2011/12* and 2012/13* are based on forecasts. These figures will underestimate the share of GDP expenditure on Housing Benefit as the GDP series is for the UK while benefit expenditure is for GB.

The second largest component of expenditure we examine in this section is State Pension expenditure (Figure 5.11). There are two main state provided pensions. The Basic State Pension for which entitlement is based on NIC record over the working life. This pension is paid at a flat rate with different levels for single pensioners and couples. The State Second Pension is earnings related, originally introduced as the State Earnings Related Pension Scheme (SERPS) in 1978 and replaced by the State Second Pension (S2P) in 2002³³. From 2016-17 the basic state pension and the second state pension will be replaced by a single-tier pension for everyone below the state pension age. This will mean the end of earnings-related state pension provision in the UK. It can be seen from Figure 5.11 that expenditure on the State Second Pension (SERPS/S2P) has increased as people's entitlement has increased but by far the greatest share of State Pension expenditure is on the State Basic Pension.

³³ The reports by the Pensions Commission provide a comprehensive analysis of the UK pension in 2004/05 <http://www.webarchive.org.uk/wayback/archive/20070802120000/http://www.pensionscommission.org.uk/index.html> (last accessed 26 September 2012).

Figure 5.11 State Pension expenditure: Total, Basic and Second Pension (% GDP)



Source: Department for Work and Pensions, Benefit Expenditure Tables (Budget 2011); ONS (GDP series)

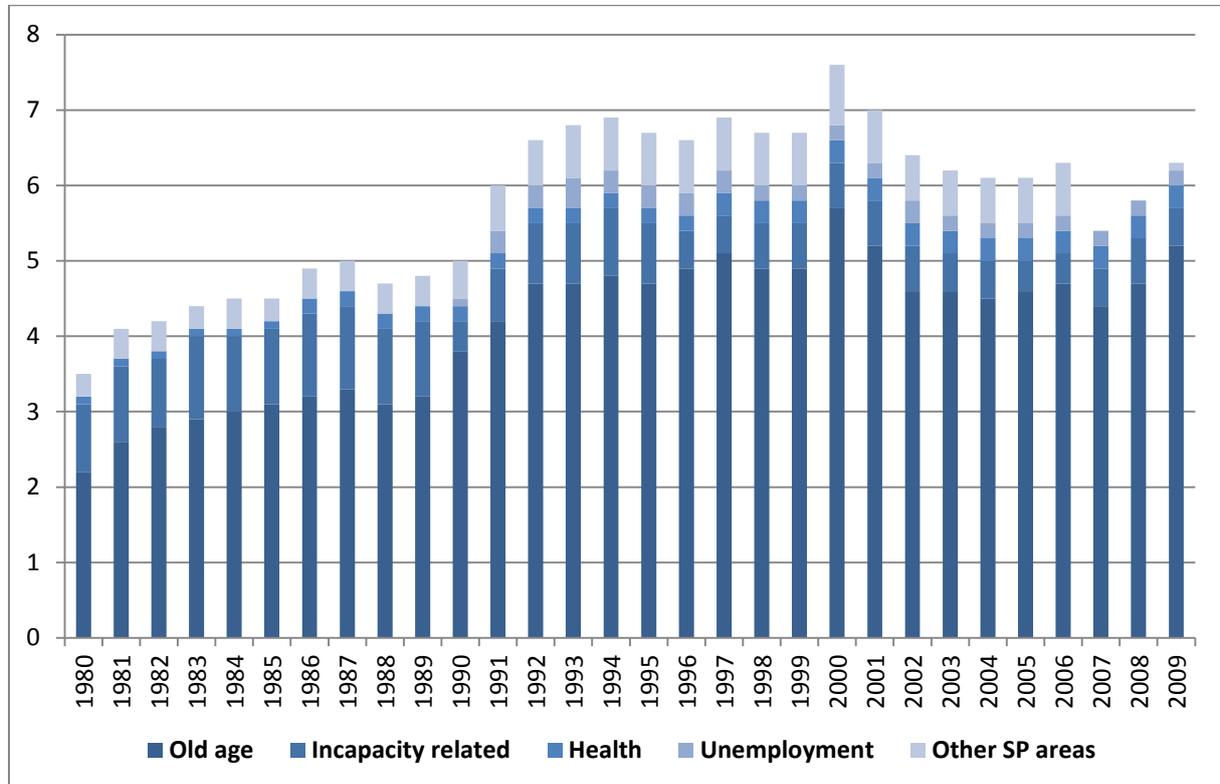
Notes: 2010/11* figures are based on estimates; 2011/12 figures are based on forecasts.

There are also a number of other benefits available to people who have reached retirement age including Pension Credit, which tops-up the income of low income pension households and an extra payment for people who have saved some money towards retirement, a Winter Fuel Payment (introduced in 1997) and a Cold Weather Payment (covering periods of very cold weather). In addition pensioners are entitled to additional universal benefits such as free off-peak travel on local buses and in some areas other forms of transport, free prescriptions for medication, free sight tests, free TV licences for over 75s and some additional means-tested benefits such as housing benefit, council tax benefit.

Finally in this section we look at trends in voluntary and mandatory private social expenditure up to 2009. High levels of private expenditure could be inequality enhancing where private resources dictate access to services. Figure 5.12 shows how private expenditure on old age has increased over this period reflecting the growth in private pensions for employees who ‘contracted out’ of the State Second Pension (SERPs prior to 2002), and the self-employed and others (such as carers). This figure demonstrates the very small share of private expenditure on health in the UK, although it has increased over time. Further work is required to understand in the UK context what comes under private expenditure on unemployment in these OECD data. It could include employer provided

redundancy payments, for example. It is not clear why private expenditure on incapacity related as a share of GDP fell after 1989. This category includes employer provided sickness and industrial injury benefits but does require some further investigation.

Figure 5.12 Voluntary and mandatory private social expenditure, % GDP



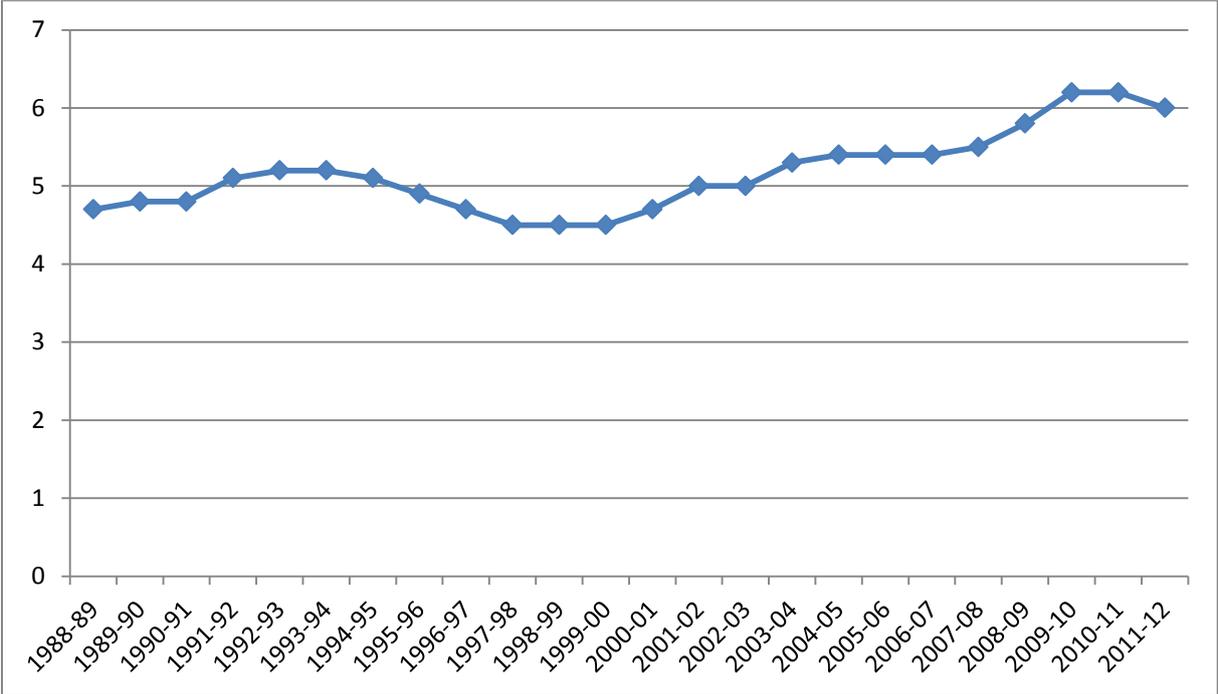
Source: OECD.stat

5.5 Education expenditure

During the first half of the 1980s education expenditure remained fairly constant in real terms (falling as a share of GDP) after which there was real terms growth but it wasn't until the big increases after the late 1990s did public expenditure on education increase as a share of GDP (Chowdry and Sibieta, 2011). An assessment of public expenditure on education using official statistics conducted by IFS estimates that over the Conservative government 1979-1997 there was an average annual real increase in education spending of 1.5 per cent. Splitting the Labour governments' time in office into the three terms they estimate that in the first term (April 1997-March 2001) average annual real terms growth was 2.9 per cent per year, increasing to 6.2 per cent per year in the second term (April 2001-March 2005), falling back a bit to 3.8 per cent in the third term (April 2005-March 2010). The fastest growth areas under the Labour government were capital spending on schools, early years spending and further education spending. The shift towards private financing of higher education meant that this area of expenditure grew the most slowly.

Figure 5.12 shows the trend in overall public expenditure on education as a percentage of GDP since 1988/89. The increase in the early 1990s is associated with the recession and the fact that the education budget was relatively protected. The increase since 1999 reflects the high priority given to education by the Labour governments. Not only did expenditure increase overall but there was a stronger redistributive element in funding for schools and a wide range of targeted initiatives aimed at the poorest children. This led to rising attainment and a narrowing of the attainment gap, particularly since 2004/05 (McKnight et al., 2005; Lupton et al., 2009).

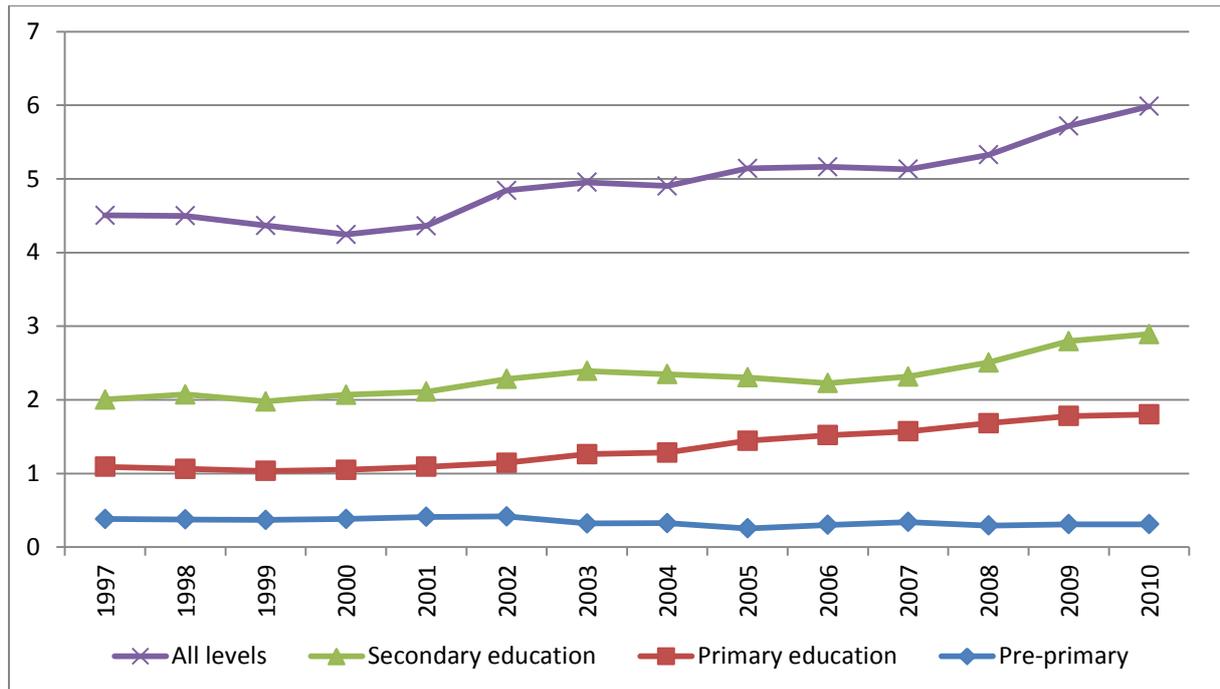
Figure 5.13 Public expenditure on education, % GDP



Source: HM Treasury, Public Expenditure Statistical Analyses 2012

In terms of public expenditure on education in the UK, we have internationally comparable data by education level from 1997 (Figure 5.14). The breakdown by level shows the increase in the schools budget, particularly at the primary level after 2002.

Figure 5.14 Public expenditure on education as a % of GDP



Source: OECD.stat

Over recent years a number of key changes have occurred in the provision and financing of schools and universities that have implications for inequality. In England (education provision and funding is different in the devolved administrations of Scotland and Northern Ireland, and to some extent Wales), funding from central government has traditionally been provided to Local Education Authorities (LEAs) based on a formula (population size and to some extent educational need). LEAs distribute funds to local schools whilst retaining a share of the budget to fund central provision of some services (insurance, building maintenance, admissions, training, etc.). This model has started to change, firstly with the introduction of Academy Schools by the Labour government in 2000. These schools were typically set up in deprived areas where educational attainment was poor, they are self-governing (educational charities) and have greater freedom in terms of the curriculum they offer (although they do have to meet core subject requirements) but are still subject to school inspections. Instead of receiving funding through the LEA their funding comes straight from central government. The Academy programme has been expanded under the coalition government, no longer limited to 'failing schools' or deprived areas and added to with the Free School programme designed to increase diversity and choice by allowing parent groups, private education providers and groups of teachers to apply to open a Free School (ministers, along with guidance from official at the Department for Education decide which applications are successful). Similar to Academies these schools have greater freedoms than LEA schools and receive their funding directly from central government.

To address inequalities and in recognition of the extra costs of education provision for certain categories of pupils, schools are given greater per pupil funding for certain categories of children³⁴. For example those in receipt of Free School Meals (currently set at £900 per annum for each disadvantaged pupil). Additional resources are also available for children classified as having Special Educational Needs (SENs). However, it is up to the schools to decide how this additional budget is spent and it is not always directly spent on the pupils concerned.

5.6 Conclusions: Appraisal of the ‘national story’ of policies affecting inequality, intended or unintended

In terms of policy, a review of the evidence on the impact of the NMW (introduced in 1999) suggests that it has had a small impact on reducing wage inequality. While the NMW has virtually eradicated extreme low pay, its conservative level and other characteristics of the UK labour market leaves the UK with the second highest low pay rate across the OECD.

The high reliance on indirect taxes and social insurance contributions coupled with low rates of tax on wealth means that tax policy overall is broadly neutral in terms of the distribution of income across households. It is how they tax revenue is spent that has the greatest effect on income inequality. Public social expenditure as a share of GDP is influenced by the economic cycle (GDP growth and unemployment in particular). There was a growth in in-kind benefits between 1999 and 2004, reflecting the Labour government’s social investment policies in health and education which both benefited from real terms increases. While there have been improvements in educational attainment and health outcomes, inequalities have proved to be harder to tackle.

³⁴ The pupil premium (introduced in April 2011) is allocated to schools to work with pupils who have been registered for FSMs at any point in the last six years. Schools also receive funding for children who have been looked after continuously for more than six months, and children of service personnel. This replaced various FSM premiums.

Summary table for UK Country Report

	1980s	1990-1997	1997-2007	2007-2013	Figure #
Inequality trends					
Income inequality	↗↗	↗	→	→	2.1
Wage inequality	↗	↗	↘	→	2.10
Consumption inequality	↗	↘↗	↘		2.15
Wealth inequality			↘		Table 2.1
Relative poverty	↗↗	→	↘	↘	2.5
Social impacts					
Material deprivation			↘	↗	
Fertility	→	↘	↘ (2002)	(2002) ↗	3.6
Teenage pregnancy	↗	↘	↘	↘	3.6
Mortality	↘	↘	↘	↘	3.9
Childhood obesity		↗	↗	→	3.15
Self-reported health	↘	↘	↗	→	Table 3.2

Crime	↗	↗	↘	↘	3.19
Prison population	→	↗	↗	↗	3.22
Well-being	→	→	↗	→	3.27
Intergenerational mobility	↘→		→		
Political and cultural impacts					
Voter turnout	→	↘	↘	↗	4.1
Turnout social gradient	→	↗	↗↗	↗	4.2
Civic participation		↘	↗		4.4
Trust			→		4.6
Inequality too high	↗	↗	↘	↗	4.12
Govt should redistribute		↗	↘	↗	4.13

References

- Acheson (1998) Independent Inquiry into Inequalities in Health Report (The Acheson Report), London: TSO.
- Adam, S. and J. Browne (2010) 'Redistribution, work incentives and thirty years of UK tax and benefit reform', Institute for Fiscal Studies (IFS), Working Paper 10/24.
- Atkinson, A. B. (2005) 'Top Incomes in the UK over the 20th Century' *Journal of the Royal Statistical Society: Series A* (Statistics in Society), 168(2): 325–43.
- Atkinson, A. B. and A. Leigh (2010) 'The Distribution of Top Incomes in Five Anglo-Saxon Countries over the Twentieth Century', IZA Discussion Papers 4937, Institute for the Study of Labor (IZA).
- Bastagli, F. and J. Hills (2013) 'Wealth accumulation, ageing and house prices', Chapter 4 in Hills, J., Bastagli, F., Cowell, F. A., Glennerster, H., Karagiannaki, E. and A. McKnight *Wealth in the UK: Distribution, Accumulation and Policy*, Oxford: Oxford University Press.
- Bell, B. and J. van Reenen (2010) 'Bankers pay and extreme wage inequality in the UK', CEP Special Report, CEPSP21, London: Centre for Economic Performance.
- BIS (2012) *Trade union membership, 2011* – Nikki Brownlie, Department for Business, Innovation and Skills,
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32192/12-p77-trade-union-membership-2011.pdf
- BIS (2013) 'Trade Union Membership 2012: Statistical Bulletin', May 2013, Department for Business, Innovation and Skills
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/204169/bis-13-p77-trade-union-membership-2012.pdf
- Blanden, J. (2013) 'Cross-country rankings in intergenerational mobility: a comparison of approaches from economics and sociology', *Journal of Economic Surveys*, Vol. 27, 1, 38-73.
- Blanden, J., Goodman, A., Gregg, P. And S. Machin (2004) 'Changes in intergenerational mobility in Britain' in M. Corak (ed) *Generational income mobility in North America and Europe*, Cambridge: Cambridge University Press.
- Blundell, R. and Preston, I. (1998) 'Consumption inequality and income uncertainty', *Quarterly Journal of Economics*, vol. 113, pp603-40.
- Brewer, M., Browne, J., Hood, A., Joyce, R. and L. Sibieta (2013) 'The Short- and Medium-Term Impacts of the Recession on the UK Income Distribution', *Fiscal Studies*, Volume 34, Issue 2 (pages 179–201)
- Butcher, T., Dickens, R. and A. Manning (2012a) *The Impact of the National Minimum Wage on the Wage Distribution*. Research Report for the Low Pay Commission. February.
- Butcher, T., Dickens, R. and A. Manning (2012b) 'Minimum wages and wage inequality: some theory and an application to the UK', CEP Discussion Paper No 117. London: Centre for Economic Performance, London School of Economics.

- Chowdry, H. and L. Sibieta (2011) 'Trends in education and schools spending', IFS Briefing Note BN121, London: Institute for Fiscal Studies.
- Clifton, J and W. Cook (2012) *A long division: closing the attainment gap in England's secondary schools*, London: IPPR.
- Cowell, F. A., Karagiannaki, E. and A. McKnight (2012) 'Mapping and measuring the distribution of household wealth: A cross-country analysis' GINI Discussion Paper 71, <http://gini-research.org/articles/papers>
- Cribb, J., Joyce, R and D. Phillip 'Living standards, poverty and inequality in the UK: 2012', IFS Commentary C124. London: Institute for Fiscal Studies.
- DfE (2012) GCSE and Equivalent Attainment by Pupil Characteristics in England, 2010/11, Statistical First Release, SFR03/2012, <http://www.education.gov.uk/rsgateway/DB/SFR/s001057/sfr03-2012.pdf>
- Dickens, R. and A. Manning (2004) 'Has the National Minimum Wage Reduced UK Wage Inequality?', *Journal of the Royal Statistical Society. Series A (Statistics in Society)*, Vol. 167, No. 4, pp. 613-626.
- Dickens, R. and A. McKnight (2008) 'Changes in earnings inequality and mobility in Great Britain 1978/9-2005/6' CASEpaper 132, London: Centre for Analysis of Social Exclusion.
- Dunleavy, P and C. Gilson (2010) 'What about the 'Other' parties?' <http://blogs.lse.ac.uk/politicsandpolicy/archives/369> posted on 12 March 2010.
- Erikson, R. and J. H. Goldthorpe (2010) 'Has social mobility in Britain decreased? Reconciling divergent findings on income and class mobility', *The British Journal of Sociology*, Vol. 61, 2, 211-230.
- Goldthorpe, J. H. and C. Mills (2004) 'Trends in intergenerational class mobility in Britain in the late Twentieth Century' in R. Breen (ed) *Social mobility in Europe*, Oxford: Oxford University Press.
- Goodman, A. and Z. Oldfield (2004) 'Permanent differences? Income and expenditure inequality in the 1990s and 2000s', Institute for Fiscal Studies Report No. 66.
- Gordon, D., Adelman, L., Ashworth, K., Bradshaw, J., Levitas, R., Middleton, S., Pantazis, C., Patsios, D., Payne, S., Townsend, P. and Williams, J. (2000), *Poverty and social exclusion in Britain*, York: Joseph Rowntree Foundation.
- Gosling, A and T. Lemieux (2004) 'Labor Market Reforms and Changes in Wage Inequality in the United Kingdom and the United States', in Card, D., Blundell, R and R. B. Freeman (eds) *Seeking a Premier Economy: The Economic Effects of British Economic Reforms, 1980-2000*, University of Chicago Press.
- Gregg, P., Harkness, S. and S. Machin (1999) 'Poor Kids: Trends in Child Poverty in Britain, 1968-96' *Fiscal Studies*, Vol. 20, No. 2, pp. 163-187.
- Gregg, P. and Wadsworth, J. (2003), 'Workless Households and the Recovery', in Dickens, R., Gregg, P. and Wadsworth, J. (Eds), *The Labour Market under New Labour: The State of Working Britain*, Palgrave Macmillan.
- Hick, R. (2012) 'On 'Consistent' Poverty' CASEpaper No. 167 London: Centre for Analysis of Social Exclusion.

- Hills, J. and F. Bastagli (2013) 'Trends in the distribution of wealth in Britain', Chapter 2 in Hills, J., Bastagli, F., Cowell, F. A., Glennerster, H., Karagiannaki, E. and A. McKnight (2013, forthcoming) *Wealth in the UK: Distribution, Accumulation and Policy*, Oxford: Oxford University Press.
- Home Office (2010) Recorded Crime Statistics 1898 – 2001/02 (Excel File). Available from: <http://www.homeoffice.gov.uk/publications/science-research-statistics/research-statistics/crime-research/crime-stats-1898-2002> [last accessed February 13, 2012]
- Home Office (2011a) User Guide to Home Office Crime Statistics. Available from: <http://www.homeoffice.gov.uk/publications/science-research-statistics/research-statistics/crime-research/user-guide-crime-statistics/user-guide-crime-statistics?view=Binary> [last accessed February 10, 2012]
- Home Office (2011b) Crime in England and Wales 2010/11: Findings from the British Crime Survey and police recorded crime (2nd Edition). Edited by R. Chaplin, J. Flatley and K. Smith. Home Office: London. Available from: <http://www.homeoffice.gov.uk/publications/science-research-statistics/research-statistics/crime-research/hosb1011/hosb1011?view=Binary> [last accessed February 10, 2012]
- Home Office (2011c) Data Tables – Crime in England and Wales 2010/11 (Excel File). Available from: <http://www.homeoffice.gov.uk/publications/science-research-statistics/research-statistics/crime-research/hosb1011/> [last accessed February 13, 2012]
- Home Office (2011d) Homicides, Firearm Offences and Intimate Violence 2009/10: Supplementary Volume 2 to Crime in England and Wales 2009/10 (2nd Edition). Kevin Smith (ed.) Kathryn Coleman, Simon Eder and Philip Hall. Home Office Statistical Bulletin. Home Office: London. Available from: <http://www.homeoffice.gov.uk/publications/science-research-statistics/research-statistics/crime-research/hosb0111/> [last accessed February 13, 2012]
- House of Commons (2009) Health Committee – third report Health Inequalities <http://www.publications.parliament.uk/pa/cm200809/cmselect/cmhealth/286/28602.htm> (last accessed January 2013).
- Jin, W., Joyce, R., Phillips, D. and L. Sibieta (2011) 'Poverty and inequality in the UK: 2011' IFS Commentary C118. Institute for Fiscal Studies.
- Johnson, B. and A. Al-Hamad (2011) 'Trends in socio-economic inequalities in female mortality, 2001–08. Intercensal estimates for England and Wales', Health Statistics Quarterly, Office for National Statistics.
- Jones, F., Annan, D. and S. Shah (2008) 'The distribution of household income 1977 to 2006/07', *Economic and Labour Market Review*, Vol 2, 12. Office for National Statistics.
- Karagiannaki, E. (2012), 'The effects of parental wealth on children's outcomes in early adulthood', GINI Discussion Paper 58, <http://www.gini-research.org/articles/papers>.
- Langford, A. and B. Johnson (2010) 'Trends in social inequalities in male mortality, 2001–08. Intercensal estimates for England and Wales', Health Statistics Quarterly 47, Office for National Statistics.
- Lupton, R., Heath, N. and E. Salter (2009) 'Education: New Labour's top priority', in Hills, J., Sefton, T. and K. Stewart (eds) *Towards a more equal society? Poverty, inequality and policy since 1997*, Bristol: Policy Press.

- Machin, S. (2011) 'Changes in UK wage inequality over the last forty years', in Gregg, P. and J. Wadsworth (eds) *The labour market in winter: the state of working Britain*, Oxford: OUP.
- Machin, S. (2010) 'Changes in UK wage inequality over the last forty years', in Gregg, P. and J. Wadsworth (eds) *The labour market in winter: the state of working Britain*, Oxford: OUP.
- Marmot, M. (2010) *Fair society, healthy lives (The Marmot Review)*, Strategic Review into Health Inequalities in England post 2010, www.ucl.ac.uk/marmotreview
- Marmot, M. (2009) *Tackling Health Inequalities: 10 years on*, The Department of Health.
- McKnight, A. (2009) 'More equal working lives? An assessment of New Labour policies' in Hills, J., Sefton, T. and K. Stewart (eds) *Towards a more equal society? Poverty, inequality and policy since 1997*, Bristol: Policy Press.
- McKnight, A., Glennerster, H. and R. Lupton (2005) 'Education, education, education...: an assessment of Labour's success in tackling education inequalities' in J. Hills and K. Stewart (eds) *A more equal society? New Labour, poverty, inequality and exclusion*, Bristol: The Policy Press.
- McKnight, A. (2000) *Trends in Earnings Inequality and Earnings Mobility: The Impact of Mobility on Long Term Inequality*, Employment Relations Research Report Series 8, London: Department of Trade and Industry.
- Ministry of Justice (2012) Youth Justice. Youth custody data: Monthly data and analysis custody report – December 2011 (Excel file). Published on 10 February 2012. Available from: <http://www.justice.gov.uk/publications/statistics-and-data/youth-justice/custody-data.htm> [last access February 14, 2012]
- Ministry of Justice (2010) Prisons and probation. Offender management statistics quarterly bulletin: 2010 Annual tables (Excel file). Available from: <http://webarchive.nationalarchives.gov.uk/+http://www.justice.gov.uk/publications/statistics-and-data/prisons-and-probation/oms-quartlery.htm> [last accessed February 14, 2012]
- National Centre for Social Research (2009) *British Social Attitudes: 25th report 2008/2009 Edition*. ed. A. Park, J. Curtice, K. Thomson, M. Phillips, E. Clery. SAGE: London.
- Nicoletti, C. and J. Ermish (2007) 'Intergenerational earnings mobility: changes across cohorts in Britain', *The B.E. Journal of Economic Analysis and Policy*, 7, 1-36.
- OECD (2011) *Divided we stand: why inequality keeps rising*, Paris: OECD.
- OECD (2010) PISA 2009 Volume 11: Overcoming social background: equity in learning opportunities and outcomes, Paris: OECD.
- ONS (2011a) 'Trends in life expectancy by the National Statistics Socio-economic Classification 1982-2006', Statistical Bulletin, Office for National Statistics.
- ONS (2011b) *Social Trends 41 – Health*, Office for National Statistics.
- ONS (2011c) 'Life expectancy at birth and at age 65 by local areas in the United Kingdom, 2004–06 to 2008–10', Statistical Bulletin, Office for National Statistics.
- ONS (2012a) 'Mortality in the United Kingdom, 2010', <http://www.ons.gov.uk/ons/rel/mortality-ageing/mortality-in-the-united-kingdom/mortality-in-the-united-kingdom--2010/mortality-in-the-uk-2010.html>

- ONS (2012b) 'General Lifestyle Survey, 2011', Office for National Statistics
- Pawson, H and C. Fancy (2003) *Maturing assets: The evolution of stock transfer housing associations*. Joseph Rowntree Foundation, The Policy Press.
- Pike, R. (2012) *Patterns of pay: results of the Annual Survey of Hours and Earnings 1997 to 2011*. Office for National Statistics.
- Plunkett, J. and A. Hurrell (2013) *Fifteen years later: A discussion paper on the future of the UK National Minimum Wage and Low Pay Commission*, London: The Resolution Foundation.
- Stafford, R. (2009) *British Social Attitudes 2009, User Guide*. National Centre for Social Research. London.
- Stewart, M. B. (2011) 'The changing picture of earnings inequality in Britain and the role of regional and sectoral differences', *National Institute Economic Review*, 218.
- Townsend, P. (1979), *Poverty in the United Kingdom*, Harmondsworth: Penguin Books.
- Vizard, P. and P. Obolenskaya (2013) 'Labour's record on health (1997-2010)', SPCCWP02, CASE, London School of Economics.
- White, C., F. van Galen, F. and Y. H. Chow (2003) 'Trends in social class differences in mortality by cause, 1986 to 2000', *Health Statistics Quarterly* No. 20, Office for National Statistics.